THE FIXED LAW OF PATENTS

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AS ESTABLISHED BY THE SUPREME COURT OF THE UNITED STATES AND THE NINE CIRCUIT COURTS OF APPEALS

By
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TO

ADELBERT MOOT, Esq.,

REGENT OF THE UNIVERSITY OF THE STATE OF NEW YORK, MEMBER OF THE NEW YORK BOARD OF STATUTORY CONSOLIDATION, ETC.

THIS BOOK IS DEDICATED BY HIS ERSTWHILE PUPIL AND LIFELONG FRIEND.

PREFACE TO THE SECOND EDITION

A SECOND edition of this work is made necessary by the large number of important decisions reported since the first publication. A considerable number of these — notably the Supreme Court decisions in the Expanded Metal Case, the Mimeograph Case and the Westinghouse Transformer Case — have worked changes of importance.

These many decisions have been excerpted and added in an Appendix Chapter, and include 225 U. S. and 194 Fed. Rep. The classification, section headings and numbers are identical with the body of the work. This chapter contains also excerpts from a number of other cases which were insufficiently covered in the first edition.

The Brief Survey Chapter has been revised throughout to meet these changes and additions.

The tables of cases have been entirely reset, and the Table of Cases Excerpted has been much amplified.

The Patent Statute Digested Chapter has been made to conform to changes in statute, especially those of the Federal Judicial Code.

Such general revision has made necessary an entirely new General Index.

This occasion gives opportunity to express my appreciation of the numerous and kindly commendations of this work by bench and bar alike.

W. M.

BUFFALO, September, 1912.

PREFACE

In other days, an introduction was called an "advertisement." It advertised what the book contained — what it stood for. The writer reverts to this ancient custom, and here proceeds to indicate the character and scope of this work, the plan of construction, and how it may be used.

The first fact to be advertised is that this book is written primarily and chiefly for the general practitioner — for the lawyer looking for general principles. Questions of patent law, which are both simple and settled, arise from day to day in general practice. To put the answers to those questions between the thumb and finger of the busy lawyer is my prime object.

Nevertheless, since the book gathers up, in the language of the decisions, the appellate law, it should be of interest to the specialist who, unless he has digested the law for himself, will hardly have such a compilation.

It is an orderly statement of the fixed law of patents in the exact language of the court, except in minor instances where such course is not possible. It is, therefore, absolutely authoritative, because it is what the courts have said, and not what I, or anyone else, may think they have said.

The fixed law of patents comprises the decisions of the Supreme Court of the United States, the decisions of the nine Circuit Courts of Appeals, and the Patent Statute. Nothing else can be regarded as fixed law.

The book does not cover pleading, practice, or procedure, except as to matters peculiar to patent law; it does not cover patent soliciting; it does not cover trade-marks or copyrights.

The entire work is founded upon the principle that *a patent is a monopoly created in contravention of the common-law, and that every decision must, therefore, root back in a statute.* Every main proposition is accordingly worked out from the statute. No other plan can be in harmony with the facts.

No one of the two thousand appellate decisions relating strictly

to patents, stating or reiterating any principle or rule, has been intentionally omitted; and in many cases the principle or rule has been restated and reiterated with seeming prolixity. But it is not wise to omit any. Each case differs from every other; and what is seeming repetition is but a repeated application of a principle to varying facts and conditions. And yet, quite a number of appellate decisions yield no quotation in this work. This is so because those cases turned upon questions of fact or claim construction.

No rule is stated upon the authority of a court of original jurisdiction. No matter what the rule may be, or how long or how much respected, a rule of a circuit court is not fixed law. A remarkable example of this is seen in Mayor *v.* American, 60 Fed. 1016; 9 C. C. A. 336, where a rule established in Brooks *v.* Jenkins, 3 McLean, 432; Fed. Cas. 1953, was reversed in the Second Circuit after more than fifty years of general and unquestioning following. And while the consequent omission of many familiar rules renders the work incomplete, in a sense, it places it without the pale of flux and gives it the character of a code, rather than the detail of a digest. Here it is also to be remarked that I have declined to quote as fixed law a statement of a judge sitting in circuit even when such statement has been quoted verbatim and approved by the appellate court. I do not believe that law by adoption is fixed law, and it would seem that I am following high authority in taking this position. (Westinghouse *v.* Stanley, 138 Fed. 823; 71 C. C. A. 189).

In the preparation of the material for this work, I have personally read and excerpted from every appellate patent decision containing any point of law. No reliance whatever has been placed upon syllabus of court or reporter. This has been necessary for many reasons, but chiefly three: First, the syllabi of reported patent decisions, by reason of the abstruse and technical subject-matter, are often vague and unreliable, and in some cases absolutely misleading. Second, all of the questions passed upon in a given case are rarely included in the syllabus; and this is as true when the notes are made by the court as when they are made by the reporter, for the court views the opinion from the cause itself, and often regards unessential a holding of importance because the case itself did not hinge directly thereon. Third, most rules are founded upon authorities cited in direct connection with the statement of the rule; and as the authority for the rule is well-nigh as important as the rule itself, the collection of such authori-

ties to accompany the statement of the rule has made a detailed study and analysis of every opinion indispensable.

In addition to such a study of the entire text of every decision, this work has necessitated, — (1) Making a condensed statement of every point of law *in the exact language of the decision*, wherever possible. (2) Classifying these quotations under titles and section headings. (3) Appending to each quotation the authorities, if any, upon which the ruling was founded. (4) Repeating the ruling as necessary to bring it under all necessary titles to prevent overlooking a decision by going to a wrong title. (5) Making a corresponding analysis of the patent laws so that each title may read out from the statute. (6) Tabulating and cross-referencing the titles and section-headings so that the general practitioner, without detailed familiarity with patent law terminology, may at once find all the fixed law on any subject. (7) Appending a table of cases quoted from with section references; the name of the judge writing the opinion; whether affirming or reversing the court below, with reference to the opinion below if reported; names of dissenting judges, if any; and in C. C. A. decisions the circuit, and the names of the judges sitting; also, in many cases, memoranda of other cases bearing upon the patent under review. (8) Preparing a table of cases cited by the courts as authority for rulings made. (9) Giving with each case the volume and page of all standard reports containing the case.

At the solicitation of lawyers whose opinions I value I have preceded the main body of the work with a chapter entitled "A Brief Survey of the Fixed Law of Patents." This was not a part of the original conception; it is supplemental — written in the freedom of personal expression — and stands in contrast with the fixed, authoritative character of the body of the work.

I have not hesitated, in some instances, to express my opinion upon certain rulings; but these are always appended in such form as to be readily distinguishable from the law.

The method of citing cases is an innovation. Titles have been curtailed. Life is too short to give descriptive titles. It is sufficient to say "National *v.* Interchangeable," rather than "The National Hollow Brake Beam Company *v.* The Interchangeable Brake Beam Company." The time has gone by when learned judge or lawyer may give from memory the titles of the leading cases.

A labor of this character, growing out of the necessities of my practice, cannot be free from faults. Years teach consciousness of one's own frailty, and a deeper respect for the greatness of great

minds. Yet great minds are fallible, and from time to time I have not hesitated to dissent from a rule or holding, knowing that criticism founded on conviction born of experience, is never unwelcome to a broad mind.

In dedicating this book to my preceptor, counselor, and friend, Adelbert Moot, Esq., I am but recognizing the fact that it is not ourselves alone, but contact with lofty minds, that inspires us to our best work.

WILLIAM MACOMBER.

BUFFALO, August, 1909.

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A BRIEF SURVEY OF THE FIXED LAW OF PATENTS[1]

INTRODUCTORY. — This chapter is a bird's-eye view of the main body of the work. It takes up, in order, the main titles and aims to state the general conclusions which are evidenced by the collocation of appellate rulings. Its value lies in affording a comparison of views. The user of the book may examine a question in the light of the quotations from the law. He may draw his own conclusions and then compare them with those of the author. Such a comparison will be helpful whether the conclusion of the one tallies with that of the other or not. What is sought is the true vision — to extricate ourselves from the inert mass of decision and digest and get to higher ground. The aim of this chapter is to enable the practitioner — not the patent specialist alone, but the every-day lawyer, to gather up the living forces of the law and apply them to the solution of immediate problems.

The principles of the patent law are not so difficult or recondite as they are commonly regarded. The common hesitation in approaching a question of patent law is a traditional fear rather than a substantial reality. This book would fail of a main purpose if it did not enable the lawyer in general practice to meet and effectually dispose of the ordinary questions arising in the realm of patents.

This survey should serve another purpose: It should make evident the fact that the patent law of today is the result of a natural, progressive development along broad, sane lines; that it is, in the main, natural, logical, and therefore simple. It should make it evident that the great principles are fixed; and being fixed, that Congress should be slow, very slow, in disturbing the structure by tampering with the statutory foundation upon which it is builded.

ABANDONMENT, §§ 1-20.

It is to be observed at the outset that a patent creates nothing that did not before exist. The patent secures to the inventor, for

[1] The references to cases and sections in this chapter are *inclusive* of the Appendix Chapter, which has section numbering identical with the body of the work.

a definite period, the exclusive right to enjoy what has been created in his own mind, that which already exists; it secures to the public a full disclosure of that which already exists. The common law recognizes no quality of property in such a creation, and consequently there could be no abandonment of that which had no existence as property. The Constitution and the statutes give to invention the character of an inchoate right which the inventor may, by compliance with the statutes, transform into a substantial property right. It follows, then, that abandonment must reside in the acts of the inventor by which he has deprived himself of the right to establish or enjoy the monopoly which he might have secured.

Since abandonment is a forfeiture which places a right beyond possible recall, and since courts do not favor forfeitures, the evidence must be clear and convincing beyond doubt. An invention may be abandoned either before or after application for patent, or even after the patent issues; but there is a wide difference between abandonment of an invention and abandonment of an application. The latter does not necessarily constitute abandonment of the invention at all. An application may be abandoned or forfeited, and renewed repeatedly, so long as the applicant remains within the time and terms of the statute.

While abandonment may occur either in the active or passive voice, it is rare that the evidence shows a positive act. Usually it is a case of sleeping on one's rights or of unconscionable delay under cover of experimental use; and occasionally, just after the close of the eleventh hour, the inventor essays to recover a monopoly in a thing which his foresight was not clear enough to appreciate and which was revealed to him only by the sagacity of others. An inventor may not sit with folded hands to let others prove the utility of his invention; nor may he, under cover of experimental use, prolong the life of his monopoly. On the other hand, the courts are gentle with the struggling inventor who is acting in good faith; and they give wide margin for experimental use (see Elizabeth *v.* American, 97 U. S. 126; § 414) where the invention requires the test of time or use to demonstrate its utility.

It has been said repeatedly, as stated above, that abandonment may occur either before or after application; but it must be borne in mind that the statute makes a distinction between public use and abandonment (Sec. 4886). While it is true that public use has been regarded as constructive abandonment since the act of 1836, National *v.* American, 176 Fed. 79, § 2, it is also true that, as abandonment is purely constructive or presumptive under the statute,

and has nothing to do with the question of intent, Western Glass *v.* Schmertz, 185 Fed. 788, § 2, it is a question of law, and not a question of fact, Corrington *v.* Westinghouse, 178 Fed. 711, § 2. Public use for two years is an absolute bar which cannot be excused and which operates without reference to the intent of the inventor or any construction of his conduct. It is not uncommon for the courts to use the term abandonment where the condition is one of public use for more than two years.

Abandonment by failure to claim or by amendment of application and acquiescence in the ruling of the Patent Office in restricting the scope of a claim is true abandonment (§§ 199–215); and here the inventor is often deprived of a substantial right by the conduct of his solicitor in following the line of least resistance in the prosecution of an application.

ABATEMENT, §§ 21–23.

While it is true that a sole plaintiff or complainant, suing in his own right, having disposed of his entire interest in the patent and controversy is unable to further prosecute the cause, it is equally true that, where there is a successor capable of assuming the burden, and who promptly takes steps so to do, the action does not necessarily abate. The question is one of continuity rather than personality; and the courts are little disposed to hang the fate of a cause upon so uncertain an event as the life of a person, real or artificial.

ACTIONS, §§ 24–27.

Actions for infringement are separately considered under infringement, injunction, defenses and pleading. (§§ 447, 535, 308, and 789). Qui tam actions or actions for false marking need not be considered.

Actions to compel issue of a patent lie under Sec. 4915; and the action must be brought within the jurisdiction including the official residence of the Commissioner of Patents. In such case the court will pass upon the entire question of patentability and right to a patent; and the mandate of the court when filed in the Patent Office, unless stayed by appeal, becomes binding upon the Commissioner. Since appeal lies to the Court of Appeals, D. C., and since such appeal does not involve a patent right, it is not appealable to the Supreme Court. Dunham *v.* Seymour, 161 U. S. 235, § 143. Such an action may grow out of the ordinary rejection of an application, or out of a decision in interference, or out of the issue of a patent to the wrong person. Three important rules have been established in Greenwood *v.* Dover, 194 Fed. 91, § 25:

1. That an action to compel issue is an original proceeding and is in no sense an appeal from the Department, or from the Court of Appeals, D. C.

2. That the complainant may carry his date of invention back of that of the Patent Office proceeding and that in evidence before the Court of Appeals, D. C.

3. That to overcome the decision of the Patent Office as affirmed by the Court of Appeals, D. C., the complainant must introduce evidence which will overcome the presumption of priority of the decision of that court, and more.

Actions to cancel letters patent can be brought only by the Government. A grant once issued by the Commissioner can not be recalled; nor can a patent be cancelled in a collateral proceeding. The Bell Telephone Case, 167 U. S. 224, clearly established the conditions under which such an action will lie.

Actions under Sec. 4918 for delimiting the rights under issued patents having conflicting or overlapping claims are considered under § 587, interfering patents.

ADJUDICATIONS, §§ 28–37.

It would seem that a prior adjudication should be conclusive between parties and privies to the suit; but the possibility of presenting new defenses, under cover of newly-discovered evidence, and the restrictions laid upon the question of privity (§ 386), render a prior adjudication devoid of true finality in most cases.

The utter chaos into which we have fallen with reference to the finality of a prior adjudication as determining the status of a patent is well illustrated by Consolidated *v.* Diamond, 157 Fed. 677, and the other cases involving the Grant patent. This patent has been held valid in the Southern District of New York, the Southern District of Ohio, the Northern District of Georgia, and by the Circuit Court of Appeals of France. The Circuit Court of Appeals for the Sixth Circuit held the patent void for want of invention. Squarely in the face of the last-named decision the Circuit Court of Appeals for the Second Circuit held the patent valid. Here we have the case of a grant of the Government held void in certain parts of the United States, held valid in other parts, and thereby under a cloud throughout the rest of the land. And no right of appeal lies. That the framers of the Constitution and the authors of the patent statutes never contemplated such a condition is evident. The utter failure of comity between our circuit courts of appeals presents a situation, relatively speaking, as repugnant to the spirit of the Constitution as the secession of a state from the

Union. But with the precedent of the certification of this case to the Supreme Court and its final decision (220 U. S. 428) and the plain provision now existing for such certification (Jud. Code, Sec. 239), this evil should disappear.

And the decision in Kessler *v.* Eldred, 206 U. S. 285, is a step which does little more than add confusion to uncertainty. In that case Eldred, the owner of a patent, sued Kessler, a manufacturer of electric cigar lighters, in the district of Indiana. The court found non-infringement and dismissed the bill. Subsequently Eldred sued Kirkland, another manufacturer of similar cigar lighters, in the Western District of New York, was defeated at circuit, but prevailed in the Circuit Court of Appeals. Eldred next sued Breitweiser, a user of Kessler lighters, in the same district (W. D. N. Y.). While this last suit was pending, Kessler filed a bill in the Northern District of Illinois against Eldred to enjoin him from prosecuting any suit against him for alleged infringement of the patent by purchase, use or sale of any cigar lighter manufactured by Kessler and identical with the lighter in evidence before the court in the first suit. The Supreme Court held that the original judgment conclusively settled the right of Kessler to manufacture and sell his manufactures free from all interference from Eldred by virtue of the patent there adjudicated, and granted the relief prayed for. Here, then, is the situation, in part at least: If one buys a cigar lighter from Kessler in Illinois or anywhere else he may use it anywhere, even in the Second Circuit where the patent has been held valid. If one buys that cigar lighter from any other maker than Kessler, he may use it in the Seventh Circuit and not infringe; but if he brings it into the Second Circuit and uses it he at once infringes. If one makes such a lighter in the Second Circuit he infringes; but he may carry it into the Seventh Circuit and use it freely. If a user of such cigar lighters were sued in the Second Circuit by Eldred for infringement of his patent and an injunction asked, the court would have to exclude from its restriction (as was done in the case of Consolidated *v.* Diamond) all lighters made by Kessler. What might happen in any one of the other seven circuits one may only surmise. With all respect for the Supreme Court, the author submits that the mark was entirely missed in the failure of that court to recognize that this unspeakable chaos has its origin in the utter repugnancy to common rights of that portion of the act which closes the right of appeal to the Supreme Court. The Circuit Court of Appeals has recognized the great uncertainty of this ruling (Hurd *v.* Seim, 191 Fed. 832, 835) and has indicated that it should be further reviewed by the Supreme Court.

However, there are certain holdings co-related to adjudications which are more harmonious. These are considered under comity, § 250, and res judicata, § 893.

ADMINISTRATOR, EXECUTOR, OR COMMITTEE OF AN INSANE INVENTOR, §§ 38–41.

Prior to the amendment to Sec. 4896 on May 23, 1908, there was no provision for application by the legal representative of an insane person. Even as thus amended the statute does not cover the case of an inventor living and sane, but incapacitated for making application; and since the two-year limit of public use is absolute, rigid, a case might well arise where an application would be barred by two years public use while the inventor was incapacitated by a passing illness.

A license, personal in its nature, does not pass to the representatives of a deceased licensee; but an assignment or license, alienable during the life of the holder, does so pass; and an executor or administrator entrusted with an interest in a patent upon which the deceased might have brought suit, may sue for infringement.

AGGREGATION, §§ 42–51.

The distinction between an aggregation and a true combination is not always clear. The main test lies in examination of the result — the function performed. If that result is the *sum* of the several actions of the elements, it is an aggregation; if it is the *product* of those actions — if the action of one element so modifies the action of another that the resultant action differs from the sum of the separate actions — it is a true combination. Of the cases quoted under this title the most interesting and instructive are Dunbar *v.* Eastern Elevating Co. and Goss *v.* Scott (§§ 48 and 45). In the Dunbar case, an elevator with a fixed leg for entering the hold of a vessel was old. A movable elevator with a leg capable of entering the hold of a vessel was old. Dunbar took an elevator of the stationary type and mounted a movable leg on a track in front of the stationary elevator, so that when a vessel came alongside the elevator and the fixed leg was entered at one hatch, the movable leg could be moved to enter another hatch at whatever distance from the former, and thus the cargo could be unloaded from two points into a common elevator. That the invention was of large value and was licensed generally no one questioned: but the Circuit Court of Appeals for the Second Circuit reversed the court below without hesitation on the ground that there was no modification of function, the one by the other, and that the result

was aggregation and mere mechanical skill. The printing press case is especially interesting because there we find the court holding one patent valid and another patent void in the same suit on the ground that the one covered a true combination while the other was for a mere aggregation.

There are patents covering so-called "systems," such as systems of electrical operation or control, which present serious problems in aggregation. Many of these patents show a fine quality of mechanical and engineering skill, but are destitute of that quality which characterizes true invention. The holding of the Second Circuit in Western *v.* Rochester, 145 Fed. 41 (§ 698) is indicative of the trend of future decisions in such cases.

Of course the Rubber Tip Pencil Case (Reckendorfer *v.* Faber, 92 U. S. 347) is standard authority on this question as related to articles of manufacture; but the writer has always regarded that case as involving mechanical skill, pure and simple. It did not rise, in his opinion, even to the dignity of a clever aggregation.

AMENDMENT, §§ 52–57.

In view of the remarks made in § 53, only brief comment need be made here. The underlying principle governing the question of broadening the scope of a patent by amendment to the body of the specification is this: If the original description disclosed the subject-matter of the amendment, then the amendment, if justified by the state of the art, is proper. If, on the other hand, the original description did not so disclose the subject-matter of the amendment, there is no foundation for the amendment. The statute makes no provision for the filing of a supplemental oath to justify the introduction of new matter, although the Supreme Court had inferentially approved of it, Steward *v.* American, 215 U. S. 161, § 780. The Patent Office Rules do make such provision. Whether such practice is justifiable or not the appellate courts have not yet determined.

The most serious problems are those where the applicant has injected into the specification matters of improvements, afterthoughts, and statements to broaden the scope of the patent. When such amendments are made after long delay and after the accruing of intervening rights, as in the case of Mayo *v.* Jenckes, 133 Fed. 527 (§ 54) they are unwarranted. These common attempts to broaden the patent consist both in amendment to the description and to the claims. While the applicant may always amend to make his description and his claim as broad as his disclosure, the grant may never go beyond that point; for the moment it does, the applicant exceeds the statute, which requires, as a condition

of the grant, a disclosure of the exact monopoly sought, in such full, clear and exact terms as will enable a person skilled in the art to make and use the same. This question arises and is considered more fully under the title of claims — construction, §§ 188–230.

ANTICIPATION, §§ 58–108.

The grant of a patent is prima facie evidence of novelty, and conversely, that it is not anticipated. The weight of this presumption is not great. It may be re-inforced somewhat by evidence of large utility and use, but nevertheless the judicial mind approaches this question with little predilection in favor of the patent. And so it should be; for both the patentee and the public are entitled to an adjudication, which shall be exhaustive of the state of the art and broadly conclusive of the questions in controversy. As has been so well said by the First Circuit in Millard *v.* Chase, 108 Fed. 399, (§ 681), it is the duty of the court, unhampered by the framing of the issues by the parties, to pass upon the scope and validity of the claims in the interest of the public.

Since no general test of anticipation exists, or can exist, we must content ourselves with aids like the following:.

1. As an invention in order to receive the protection of the law must be so described as to enable one, without experiment, assistance or advice to make and use the same, so an alleged anticipation must disclose the invention so clearly that it may be made or used by those skilled in the art without resort to the patent under attack for necessary information.

2. Anticipation may not be read out of the patent in question and into the alleged anticipation. It is easy to do so after the fact (see § 693).

3. Anticipation cannot be made out by finding one element here, and one there; nor can it be made out by the ingenious elucidation of doubtful and uncontemplated functions of an old device by expert testimony.

4. The analogousness of an anticipation is "proportioned inversely to the distance from which it is brought."

5. The "infringement-if-later" rule is not of universal application. Infringement is not the unqualified antithesis of anticipation.

An abandoned experiment can never anticipate. So long as it is an experiment it is not an invention. If it is reduced to practice, made operative, it is no longer an experiment. Experimental use is quite a different thing. An abandoned device to be an anticipation must disclose the idea of means to such a degree that nothing more than ordinary mechanical skill is necessary to make it per-

form the required function. A mere conception, however complete and exact, is not enough. On the other hand, it is immaterial that the anticipating device, so long as it was complete and operative, never was used practically. But it happens not infrequently that an alleged anticipation is brought out of a scrap-heap, attic, or store-room and clothed with the dignity of perfect anticipation. Such devices must be viewed with a conservatism commensurate with the enthusiasm or complacency with which they are produced. Nevertheless, if the anticipation is evident, the non-use cannot discredit the showing.

Anticipation, once fairly established, the burden of proof shifts to the complainant, and in addition to this burden is the obligation to establish invention anterior to the anticipating exhibit with no less certainty than is required to establish anticipation.

Combining old elements is a favorite expedient of the expert. He dissects the patent in suit to break up and destroy its entirety. Having done this, it is ordinarily easy to find one element or sub-combination in one patent, another in another, and so on. The danger in such an attack lies not so much in the building-up of combinations from old devices and patents as in the clever and misleading dissection of the patent in suit which reduces it to a mere aggregation, where "anticipation on the installment plan" may be applied with much show of sincerity.

A more complete and condensed statement of the general rule upon evidence of anticipation than that in Coffin *v.* Ogden, 85 U. S. 120, (§ 71), is not to be found. Nor can anything be added to the statement of Judge Coxe in American *v.* Wagner, 151 Fed. 576, (§ 72), upon the evidential value of models. Expert evidence of anticipation, like expert evidence in general, divides under two heads: First, that class which elucidates the constructions and enables the court the more readily to form a correct judgment. Second, that class of evidence which, concluding with a jurat, elucidates nothing, and having settled the law and the fact, leaves nothing for the court to decide.

Parol evidence of anticipation must be certain, clear, and free from suspicion. Since the Barbed Wire Case, 143 U. S. 275, the courts have been properly suspicious of oral proofs of anticipation — suspicious of fading memory and conscious or unconscious bias. Yet there are cases, like that of National *v.* Stolts, 157 Fed. 392, (§ 74), where parol evidence alone is sufficient to defeat a patent on the ground of anticipation. Whether the proof be in the form of a tangible device, a prior patent, or the oral testimony of witnesses, it must be sufficient to carry the question clear of doubt.

A patent is a substantial right, and the evidence to destroy it must be, in its way, no less substantial.

Foreign use alone does not anticipate. It is only when such use is brought to this country in the form of definite knowledge prior to the date of the domestic invention — only when it becomes "known" in the sense required by Sec. 4886 — that it can operate as an anticipation. Mere knowledge of the fact that a certain thing is done abroad is not enough.

A patent or publication in a foreign country, in order to become an anticipation, must be a full and clear disclosure which will enable one to practise the invention of the patent in suit without its use as a side-light. The loose methods which obtain in many foreign countries as to the drafting of specifications and claims render it necessary to view such disclosures with much suspicion. Loose and general statements may be twisted into seeming anticipation.

An interesting question of carrying the date of invention back of a foreign patent is raised in Welsbach *v.* American, 98 Fed. 613, (§ 82).

As above stated, the "infringe-if-later" rule is not of universal application. It rarely happens that the alleged anticipation is a Chinese copy of the device of the patent under fire. Questions of equivalency, identity, diversity, transposition of parts, and many other questions are usually present to complicate the examination.

The rule as to anticipation by a prior inoperative device is this: If the inoperativeness is a mere matter of lack of mechanical development, the essence of the invention being clearly present, such defect will not prevent anticipation; but if the inoperativeness resides in an inherent defect and lack of elements in necessary combinative relation, then the anticipation fails.

Since every inventor is charged with knowledge of the prior art, so a witness claiming knowledge which will anticipate is charged with that exactness of knowledge which enables him, wholly independently of the patent in suit, to disclose the invention in operative completeness. Anything short of this is insufficient. Mere knowledge of ti ientific principles involved will not answer; the knowledge must the means essential to put them to use. Nor will knowledge lar device in another art performing a different function d knowledge must match up with the vital features of the inve..tion, else it fails.

Anticipation by a mere paper patent is a subject upon which the circuit courts of appeals are not in perfect accord. A reading of the cases under §§ 92–99 will show the different leanings. Neces-

sarily, a clear showing, whether the patent be paper or otherwise, must be anticipation; but when the paper patent must be construed, explained, and made to fit the case, it clearly has not the same weight as a patent which has gone into use and demonstrated its practical utility. And this, too, is as it should be; for when we must rest anticipation partly upon a prior patent and partly upon the construction we must place upon it, we have the right to insist that our construction shall rest upon a substantial thing, and not upon something that has a doubtful standing in the realm of realities.

The earlier idea that a process cannot be anticipated by a machine which discloses the process is doubtful, Johnson *v.* Chisholm, 115 Fed. 123; Model Bottling Mach. *v.* Anheuser-Busch, 190 Fed. 573, § 100.

As a single use for more than two years is an absolute bar to a patent, so a single prior use is sufficient to anticipate. Neither number of uses nor number of persons knowing to such use matters. A single use by a single person, if duly proved, anticipates. But a mere accidental use, or the fact that the prior device might, in the light of the patent in suit, have been put to the use in question, is not anticipation.

Finally, the question of a doubtful anticipation may be resolved, in many cases, from surrounding circumstances. A well organized showing of anticipation may be so utterly repugnant to ordinary human conduct and condition as to discredit itself. On the other hand, while it may be impossible to find absolute, item for item anticipation in the prior art, it may be so evident that the inventor was nothing more than a borrower from prior or analogous arts that his invention merits scant respect. Generally speaking, anticipation is a problem demanding a careful analysis of the subject-matter, a careful balancing of the proofs adduced, and the exercise of a sound common sense which recognizes the human element and the personal equation.

APPEALS, §§ 109–144.

Only such matters relating to appeals are considered in this work as relate particularly to patent causes. There are excellent general works on the subject, and anything more than a very brief review of the rules peculiar to patents would be out of place.

Appeals from orders granting injunctions are so intimately connected with the subject of injunctions that they are preferably there considered. (§§ 535–545).

While the Circuit Court of Appeals Act cut off appeal to the Supreme Court in patent causes, except appeals from the Court of

Appeals, D. C., and while the Judicial Code repealed § 699, R. S., thus cutting off appeals from the Court of Appeals, D. C., and thus raised that tribunal to the position it deserved — on a par with the nine circuit courts of appeals — a question of jurisdiction is appealable to the Supreme Court from any of these courts.

Assignments of error are too often based upon the opinion of the court. This is bad practice. The assignments should be directed to that which the court decreed or refused to decree as raised by the pleadings. A general assignment would seem to be good; and the appellate court may, of its own motion, raise a question not assigned, when an error by the court below is evident. The assignments should raise the issues on appeal in an orderly manner and without prolixity; and the brief and argument should be directed thereto. Where an appellant sets forth a number of assignments and fails to refer in any manner, either in his brief or upon the argument, to certain of his counts, such counts will be assumed to have been abandoned. When a multitude of unnecessary assignments is made, the court will not consider them seriatim.

Certification to the Supreme Court must be upon a definite, stated proposition of law upon which the court specifically asks instruction.

A cross-appeal from a decree holding certain claims valid and infringed and certain other claims void or not infringed cannot be filed by the complainant until final hearing.

Appeals in law actions are strictly limited to a review of questions of law raised by exceptions regularly taken. Questions of fact will not be considered; and this holds when a jury has been waived.

ARBITRATION, § 145.

There is no statutory provision for trial by arbitration, and but one ruling of the appellate courts strictly relating thereto. It would seem that, as parties are generally bound by stipulations of counsel and as a stipulated record on appeal is good, *In re* Grove, 180 Fed. 62, § 136, a stipulation, regularly made upon the record, to try out an infringement cause before an arbitrator should give his decision substantially the same force and effect as that of a judge sitting in circuit.

ART, §§ 146–148.

As stated in § 147, the term "art" has had a beneficent use in the patent law. Nothing is to be added to what is said under that section except to raise the following question: If the Supreme

Court held Bell's telephone invention to be an "art" and capable of the broad construction given it (Telephone Cases, 126 U. S. 1, § 148), why should that court hold Westinghouse's air-brake invention not to be an "art" and patentable only as a mechanical improvement? (Westinghouse *v.* Boyden, 170 U. S. 537, § 686).

ASSIGNMENT, §§ 149–176.

The patent is an entirety and can be subdivided only as authorized by law. Joint owners are, unless the assignment specifically provides to the contrary, tenants in common. The owner of the smallest fractional part holds, so far as the enjoyment of the monopoly is concerned, as much as the holder of all the rest. No accounting can be had between common tenants. A patent cannot be divided by claims. A title interest in a patent is either, —

1. The whole patent,
2. An undivided share of that exclusive right, or,
3. An exclusive territorial right.

The first and third holders may sue alone. The second must join co-owners. Anything short of these three is a mere license. Waterman *v.* Mackenzie, 138 U. S. 252, § 150.

An invention is assignable either before or after patent. An assignment of an application is recordable in the Patent Office, but an assignment of future inventions is not. An assignment may contain conditions and reservations; and, when recorded, such conditions and reservations are notice to a subsequent purchaser either when set out in the assignment or referred to as contained in another and unrecorded writing. An action to compel assignment will lie, and an interest in a patent may be reached by a creditor's bill. Under Sec. 5046 a trustee in bankruptcy acquires title to a patent interest. A copartnership or corporation may hold title to a patent; but the assignment of an interest merely for the benefit of the copartnership terminates with the copartnership. An assignment by a corporation need not be under seal.

The Supreme Court has settled a question long dubious in holding that a state court may pass upon a question of ownership and compel an assignment, even though the complaint asks for injunctive relief, New Marshall Engine *v.* Marshall, 223 U. S. 473, § 151. And the decision in Nat. Wire Bound Box *v.* Healy, 189 Fed. 49, § 151, is a wise application of the broad principles of equity compelling assignment to preserve the patent monopoly in a case of warring factions.

But by far the most significant ruling of recent years is that of the Supreme Court in Henry *v.* Dick, 224 U. S. 1, § 157, which holds

clearly that the physical property and the monopoly property in a patented thing are distinctly separable, and that the one may be sold without the other.

The evidential value of a recorded assignment underwent a severe shock in the decision of Mayor *v.* American, 60 Fed. 1016, (§ 158). The Second Circuit therein reversed the rule in Brooks *v.* Jenkins, 3 McLean, 432, which was established in 1844, and which had been generally followed as establishing an assignment as primary evidence and prima facie proof of the execution and genuineness of the original document. In Standard *v.* Crane, 76 Fed. 767 (§ 158) the Seventh Circuit disapproved the holding of the Second Circuit and reaffirmed the rule of Brooks *v.* Jenkins. The amendment of Mar. 3, 1897, to Sec. 4898 appears to have met this situation of conflict; at least it shifts the burden to the party questioning the validity of an assignment duly verified as therein provided.

A bare license is unassignable, and does not pass to legal representatives. A license may be parol or may arise by implication.

A territorial right, unless specifically restricted, gives the owner the right to sell the product made under the patent outside the territory to which his manufacture is restricted.

As to notice, the recording of an assignment has the effect, in most cases, intended by Congress; but a full reading of Waterman *v.* Mackenzie, 138 U. S. 252; Waterman *v.* Shipman, 55 Fed. 982; and National *v.* New Columbus, 129 Fed. 114, are commended to put one on his guard.

ATTORNEYS, §§ 177–181.

Possibly quite enough has been said on this subject under § 140. The applicant is bound by the acts and omissions of his solicitor; and while he is not bound by his arguments, he is prejudiced thereby if they partake of the nature of admissions. Most of us have, at some time, had the disagreeable duty of informing a client that he has no claim which would enable him to prosecute an infringement of the invention he had actually made and which he supposed was protected by the claims of his patent.

BANKRUPTCY, §§ 182–183.

There have been no appellate holdings under the present bankrupt act, and no discussion of the rulings upon the former act is necessary.

CLAIMS, §§ 184–248.

The claim marks the boundary of the close of the patent. It not only marks the line between the new and the old, but it marks the advance as well. Not only must the claim indicate where the progress begins, but it must disclose the limit of the advance made, else the patentee might close the door to future progress. Duff *v.* Forgie, 59 Fed. 772, § 204.

It is about the claim that the conflict centers, from its filing in the Patent Office to the final decree of the appellate court. This is necessarily so because the claim, though it may be likened to the description in a deed which marks the bounds of a parcel of land, deals not with a tangible thing, but with an idea of means — a mental product. The inexactness of mind and language always leaves the claim what it is — merely an approximation, more or less remote, to an exact disclosure of what a certain mind has accomplished.

It is a reasonable rule of construction that the claim should be as broad as the invention. Wagner *v.* Wycoff, 151 Fed. 585, § 222. But it does not follow in the least that, when the claim is clear, unmistakable and definitive of something less than the description and drawings show, it can be expanded to become co-extensive therewith. It is only when the claim clearly indicates such an intended construction and intent on the part of the patentee, together with clear proof of the generic importance of the invention, that the courts are in the least disposed to vary the rule that the claim may be restricted, but not broadened, by reference to the description.

While it is a general rule that greater liberality of construction is applied to a generic claim than to an improvement claim (§ 197), there are exceptions. There are those improvements which are in a very proper sense generic, improvements which, in the long line of attempts, cancel prior failures and accomplish a long-sought end. An invention may be broad and generic — advancing a broad forefront; or it may be narrow and yet generic — going far but not wide in the art. Bell's discovery was broad and generic; but it was the improved transmitter which made long distance telephony possible.

A claim may be limited by the active or passive act of the applicant. He may fail to claim, or he may — perhaps even in his attempt to claim broadly — employ terms of limitation. (§ 229).

It is a common error to suppose that the use of such expressions as "means" for doing this or that broadens the claim. Such is not the case; for we must first translate the "means" into the

specific element or combination disclosed in the specification or drawing, and then, and then only, if it be permissible, apply the doctrine of equivalents. But by far the most common form of limitation is by amendment of the claim. Limitations imposed by the Patent Office and submitted to by the applicant, broadly speaking, are conclusive. (§ 207). But it must not be assumed that all amendments are limitations. (§ 208). An amendment may define or specify the more clearly and yet not limit. More than this, an amendment may broaden the claim; and an amendment may so broaden the claim as to have much the same effect as broadening the claim by reissue. (§ 199).

The claim must be construed in view of the prior art, (§ 224), and it is chiefly this factor which determines the spirit in which the rules of construction shall be applied. And the construction of the claim in the light of the description and drawings and of the prior art has been a source of great confusion, notwithstanding the repeated plain statements of the courts. As the Supreme Court has said, "some persons seem to suppose that a claim in a patent is like a nose of wax which may be turned and twisted in any direction, by merely referring to the specification so as to make it include something more than or something different from, what its words express." White *v.* Dunbar, 119 U. S. 47, § 223. Now the reason for this confusion lies, apparently, in our failure to perceive that, while the claim may not be twisted like a wax nose, the rules for construction of the claim *may be.* When the court has made up its mind, in view of the disclosure of the patent and the prior art, that a claim should be sustained — when the court has applied judicial acumen and common sense to the problem — it has little difficulty in making the rules of construction soften and yield. And when, in like manner, it is evident that the claim should be defeated, the "nose of wax" character of the rules readily adapts itself to the occasion. And it is not in the wise bending of these rules that injustice is done; but rather, in those rare cases where the court has forgotten, for the moment, the paramountcy of its own promptings and followed a hard-and-fast rule of construction.

Reading in elements, when such course does not broaden the claim or serve to save it from palpable invalidity, may be justifiable, although the general rule is to the contrary. (§ 220). Omitting elements to broaden a claim is never justifiable, (§ 218); except in the case of a generic claim, and then only when such course does no violence to the plain disclosure of the patent and omits no element definitely specified by the patentee as marking one of the limits of his invention.

A condition frequently encountered is that where, if the claim be given the construction and scope to establish infringement, it must be held void for anticipation (§ 216); and the tendency is generally to apply the "valeat quam pereat" rule (§ 228) to save the patent by finding non-infringement. Here it is believed the duty of the court should be to thus apply the rule where the patent discloses substantial utility; but to refuse to apply that rule when the patent is indubitably trivial, and thus protect the public against an apparent but unwarranted monopoly.

A discussion of this title might be extended almost indefinitely. It might be carried into the domain of equivalency, infringement and invention. It is enough to conclude by referring to the opinion in Reece *v.* Globe, 61 Fed. 958, quoted in extenso under § 222, as clearer and more comprehensive than anything that could be written here.

COMITY, §§ 250–257.

As stated by the Supreme Court, "comity is not a rule of law, but one of practice, convenience, and expediency." (§ 250). This subject has already received attention under the title adjudication.

Between circuit and circuit the rule may well obtain, when the patent and proofs are the same. Naturally a circuit court of appeals is in no sense called upon to follow the decision of a judge sitting in circuit on the ground of comity. Between circuit courts of appeals, if any conclusion may be drawn, it is that stated in Imperial *v.* Crown, 139 Fed. 312, § 253, that an appellate court, in justice to the parties, will make an independent examination of the case, and will, if it can without violence to its own judgment, follow the decision of another appellate tribunal of like jurisdiction. But if the court finds a substantial ground of difference of opinion, it will not hesitate to disregard the question of comity. The Supreme Court, never controlled by the decision of another tribunal, will, however, accord due weight to the decisions of courts of appeals. In general, the gravity of comity increases with the number and concordance of prior holdings. (§ 256).

COMMISSIONER OF PATENTS, § 258.

The acts of the Commissioner of Patents are presumably right, but they are never conclusive (except where some form of estoppel makes them so as between the parties) as to a question of novelty, utility, or prior use. (§ 261). It is not within his power to recall a patent grant once issued. McCormick *v.* Aultman, 169 U. S.

606, § 26. Nor can he limit the scope of a patent by formulating an interference claim. Reed *v.* Smith, 123 Fed. 878, § 208.

COMPOSITION OF MATTER, §§ 264–266.

Both a composition of matter and an article of manufacture are specified as patentable subject-matter in Sec. 4886; and there is a distinct difference between the two. In the one, the patentable quality resides in the novel combination of ingredients; in the other, the novelty of the article itself. The validity of a patent upon a composition of matter depends upon the disclosure of the elements in novel combination (§ 266), while the article of manufacture depends upon the inherent characteristics of the article itself. (§ 775).

CONGRESS, §§ 267–268.

Nothing need be added to what is said in §§ 267–8.

CONTEMPT, § 269.

This subject is considered under §§ 536, 577.

COPARTNERSHIP, § 270.

As has been seen, (§ 155), an assignment to a copartnership for the use of the copartnership terminates therewith. A copartner holding no interest in the patent cannot sue for infringement. The question of acquisition of an equitable interest in a patent used in the firm business is one which can be determined only in the light of the articles of agreement between the parties and the conditions of acquisition and use of the patent itself.

CORPORATIONS, § 271.

Matters relating to infringement and injunction as affecting corporations are considered under §§ 479–82 and 547. For matters of assignment see § 156. Dissolution and merger of a corporation pending suit does not work abatement. (§ 21). A license arising by implication is unassignable and expires with the corporation.

COSTS, §§ 272–277.

While the patent statute specifically provides for the recovery of costs, the courts follow the general rules of practice in apportionment and taxation. A mere question of costs cannot be made the subject of appeal.

The provisions as to disclaimer in Secs. 973 and 4922, R. S.

apply not only to cases strictly within the rule, but the courts in their discretion have extended the rule to the point where, if on appeal a complainant succeeds in part and part of the claims sued on are held void for want of novelty, costs will be divided. In like manner, if a complainant refuses to declare the claims alleged to be infringed and on appeal abandons all but certain of such claims, he will not recover costs. (§ 277). But where suit is brought for infringement of a process and the machine for carrying out the process, and the process patent is held good, but the machine patent bad, costs will not be denied. (§ 277). When a defendant escapes on an issue not pleaded, the complainant will recover costs below, but neither party will recover costs of appeal. (§ 277). Corporation officers improperly joined as defendants may recover costs in both courts.

The courts are very properly exercising discretionary powers in denying costs in cases where the record has been unduly padded or extended by the party otherwise entitled to costs.

DAMAGES, §§ 278–299.

As stated in § 279, the terms "damages" and "profits" are often confused. We have damages in equity and we have defendant's profits as a measure of damages in actions at law. Likewise there is confusion between the rules of evidence relating to damages and rules establishing the measure of damages.

What is the measure of damages? The Supreme Court tells us that "there cannot, in the nature of things, be any one rule of damages which will equally apply to all cases. The mode of ascertaining actual damages must necessarily depend upon the peculiar nature of the monopoly granted." Seymour *v.* McCormick, 16 How. 480, § 290. Again, "the profit made by the defendant and that lost by the plaintiff are among the elements which the jury may consider." Philip *v.* Nock, 84 U. S. 460, § 290. Again, "where profits are the proper measure, it is the profits which the infringer makes." Burdell *v.* Denig, 92 U. S. 716, § 290. Again, "established license fees are the best measure of damages that can be used." Clark *v.* Wooster, 119 U. S. 322, § 292. Again, "evidence of an established royalty will undoubtedly furnish the true measure of damages." Birdsell *v.* Coolidge, 93 U. S. 64, § 294. Again, "the verdict of the jury must be for the actual damages sustained." Birdsell *v.* Coolidge again under § 285. Should we turn to the subject of profits (§§ 837–842) we would find the same seeming confusion, both of terms and of what constitutes a measure of damages or standard for computing profits. But these quotations

are not given to show conflicting rules, but to impress the statement first quoted that "*there cannot, in the nature of things, be any one rule of damages which will equally apply to all cases.*" There are cases where the measure is the defendant's gains; there are cases where the measure is the plaintiff's losses; there are cases where both may enter in; there are cases where a license fee is the criterion; there are cases where an established royalty is the measure; there are cases where the measure is the entire profit of a defendant's business; there are cases where it is only a small fraction of that profit; there are cases where the full damages are but nominal; and there are cases where the damages are substantial, but absolutely impossible of computation under any existing rule. It would be a person of great hardihood and small experience who would undertake to formulate a universal, fixed, invariable rule of damages.

Actual damages must be actually proved and not left to speculation (§ 280, 295). While there are two or three cases which would seem to imply that some discretion and latitude might be left to the jury, these have not been generally followed. It may not be that the evidence must put an exact multiplicand and multiplier into the hands of the jury; but it certainly must be that the evidence shall enable the jury to determine, without guesswork or speculation, these two factors. Kude *v.* Westcott, 130 U. S. 152, § 295. Where damages are to be recovered in equity it would seem that greater latitude of proof might be admissible before a master. Mast *v.* Superior, 154 Fed. 45, § 286. But that case also teaches that even the court may not disregard the canons and arbitrarily determine the damages.

Increasing the damages under the statute is a discretionary power of the court, and will not ordinarily be disturbed on appeal. The grounds for the exercise of that power are the conduct of the defendant — wilful or improvident. There is no appellate rule justifying an increase of damages on the ground of inadequacy of reward under the proofs in the absence of a contributing act of the defendant.

Damages become liquidated only upon the day of the verdict or the coming in of the master's report. It follows that interest can be added only from that day.

The difference between damages at law and in equity is stated in Coupe *v.* Royer, 155 U. S. 565, § 285. And since a court of equity will not assume jurisdiction solely for the assessment of damages or ascertainment of profits (§ 371), it would seem, in view of Brown *v.* Lanyon, 148 Fed. 838, § 285, that the statement above made

that cases may arise where damages are evident but unmeasurable under the rules is justified.

It is evident that where an established license or royalty measure exists damages may be ascertained; but in cases where no such measure exists resort must be had to

1. Plaintiff's actual damages in terms of,
   a. Losses of sales which he would otherwise have made,
   b. Losses by reduction of prices due directly to the unlawful competition, or,
2. Gains of defendant measured in terms of,
   a. Gains directly traceable to the infringement, or,
   b. Savings made by the use of the infringing subject-matter over what he might have saved by the use of other means open to his use outside the realm of patent protection, or,
3. Possibly a combination of some of these conditions.

In each of these cases the evidence must reach home without question. If loss of sales, it must be certain that they would have come to the plaintiff and no one else but for the diversion by the defendant. If reduction of price, it must appear that the infringement was the proximate and sole cause. If gains, they must stand separated from other contributing factors. If savings, the comparison between the economy of the invention of the patent and common and free means must be free from all speculation or estimation.

Mitigations and deductions are to be made with the same exactitude as the proofs of damages. They need not be catalogued here; but if the same general principles are applied that are well known in the business world in charging the account of a department with proper items of costs and expenses, proper deductions may be ascertained.

In the proofs, the burden is upon the plaintiff or complainant except as to deductions and mitigations. The main features have been indicated. We now come to the subject of segregation. The rule of Garretson *v.* Clark, 111 U. S. 120, as reduced to its final terms in Westinghouse *v.* N. Y., 140 Fed. 545, § 845, is this:

1. If damages are sought on only a part of the machine or device, "the patentee must in every case give evidence tending to separate or apportion the defendant's profits and the patentee's damages between the patented features and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative."

2. If damages are sought on the whole machine, "he must show by equally reliable and satisfactory evidence that the profits and

damages are to be calculated on the whole machine, for the reason that the entire value of the whole machine as a marketable article is properly and legally attributable to the patented feature."

Taking this rule as construed in the Westinghouse case, we have, as a practical consequence, —

1. That small number of cases where the profits may be entirely and unerringly attributed to the infringement, and to nothing else.

2. That small number of cases where perfect segregation is possible.

3. The great majority of cases where the profit is clearly due in part, and in part only, to the patented subject-matter, and where segregation is an utter impossibility.

With the refinements of this rule, as stated under § 279, the point had been reached where recovery of substantial damages or profits was impossible in the class of cases in the third group above mentioned. The decision of the Supreme Court in Westinghouse *v.* Wagner, quoted in extenso under § 845, sets the proper limit to this rule, and makes it subject to the broader rule of onus probandi. After the plaintiff or complainant has proved (1) that there are substantial profits or damages attributable to the patented improvement, (2) that they have been confused and mixed by the defendant, and (3) that segregation by plaintiff or complainant cannot be made with definiteness, — then the burden shifts to the defendant, as it should.

DEFENSES, §§ 306–322.

Since the statute makes distinct and separate provision for defenses in patent causes, the subject is treated separately from pleading and practice. The subject of notice under the statute is, however, included with pleading under § 795.

The five defenses which the statute provides and which may be pleaded with the proper notice, are all affirmative defenses which attack the patent as an entirety, and which, if proved, render the patent to all intents and purposes void and of no effect so far as the claims sued on are concerned in the circuit in which such verdict or decree is made final on appeal. It is not a repeal of the grant, nor can the grant be cancelled in a collateral proceeding under any circumstances; but when a patent has been held void as to all of its claims by an appellate court on any one of the statutory grounds that may be pleaded, the grant, for that jurisdiction at least, is silenced. And since the establishment of any one

of these five defenses is so far-reaching, it follows that the pleading and proofs must have that inerrancy which is necessary to warrant a court in declaring null and void that which has been done by a department of the Government in the performance of the duty to it charged by law.

Since defenses are essentially a part of the subject of pleading and practice so ably treated by the text-books, the following brief comment on the few general defenses which have been passed upon by the appellate courts is sufficient.

Those defenses which attack the grant — such as unwarranted acts of the Commissioner, defective grant or specification, invalidity of reissue and non-patentability — must be pleaded with the same certainty, and where necessary to enable the plaintiff or complainant to meet the special matters alleged as best he may, with like notice as a defense under the statute. Defenses of license or res judicata may be raised by plea or answer. The defense of non-infringement is by way of excuse; but when the defendant raises this defense and attempts to justify his acts under a subsequent patent, he is on thin ice. Buser *v.* Novelty, 151 Fed. 478, § 312. The defense of non-utility, in like manner, is beset with danger; for one may not justify an act in one breath and deny its commission in the next.

DEMURRER, §§ 323–327.

A demurrer which attacks the validity of a patent on its face is a proper pleading where the invalidity of the patent is evident. But such a demurrer will be sustained only when it is clear that no evidence could be adduced which could possibly overcome the fatal defects visible to the naked eye. It is to be noted, however, that there is a tendency to extend the range of judicial notice in deciding upon a demurrer of this character. It is believed that this tendency, while it has the merit of hastening determination and saving expense of litigation, is one fraught with danger. Knowledge is never exact; memory is treacherous; and often we discover a supposition upon which we have traveled half a lifetime to be founded in error. It is only when this judicial prerogative concerns itself with the plainest of propositions that it is within the limits set by experience.

Demurrers and other special pleadings are abolished by the new Supreme Court Equity Rules.

DESIGNS, §§ 328–337.

Between the opinion in Gorham *v.* White, 81 U. S. 511, and that in Smith *v.* Whitman, 148 U. S. 674 — the latter modifying

the former — we may approach the essential characteristics of a patentable design. It is clear that the foundation of a patentable design must be something more than mere mechanical skill, something more than artistic arrangement. It must be a distinct product of the brain, as much as the invention of a machine, though not from the same corner of the brain. It has been said that the test of infringement is whether the design in question would, to the eye of the ordinary observer, appear to be the same as the design of the patent. Such a rule is proper in the case of a trademark; but it is referred to here as showing how the courts have, at times, wholly missed the mark in the consideration of the essentials of a true design. A true design appeals to something more than the eye in the ordinary sense of that term. It appeals through the eye to the artistic consciousness — not by any particular feature, contour or configuration, or even a collocation of elements, as in the case of a trademark — and awakens a response in the mind of the person possessed of a sense of art. If it falls short of this, if to the person with this sense it is merely peculiar or ornamental, it is not the creation by one mind of that which awakens a response in the mind of another, which constitutes true design invention. It follows, necessarily, that so-called "mechanical" designs are not patentable, and that one may not reinforce a mere trademark by patenting it as a design.

The penalty provision of the amendment of Feb. 4, 1887, is narrowly limited by the clause "knowing that the same has been so applied." This seemingly limits the penalty to willful manufacturer or copyist; and excuses the innocent purchaser or dealer. Gimble *v.* Hogg, 97 Fed. 791, § 336. And it also appears from the decision in that case that the notice necessary to charge a person with the penalty must be something more than the ordinary notice of marking the design patented.

DISCLAIMER, §§ 339-345.

The distinction between a disclaimer and a reissue is, broadly speaking, that the one limits and the other corrects. The object of a disclaimer is to enable a patentee who, through inadvertence, accident or mistake, has claimed more than he should, to avoid having his patent fall under the statutory defenses. We need not consider the effect of the failure to disclaim before suit, since that question has arisen under the title of costs. (§ 274). It is evident that the patentee, in a case where the necessity of a disclaimer is not evident on the face of the patent in view of the prior art, may await the decision of an appellate tribunal. Gage *v.* Herring,

107 U. S. 640, and Thompson *v.* Bushnell, 96 Fed. 238, both under § 340. But while the courts give the patentee the benefit of every doubt as to the necessity of disclaiming, they look with little patience upon him who seeks to use this provision, especially designed for his protection, as a means for broadening or extending the scope of his claim. Hailes *v.* Albany, 123 U. S. 582, § 344.

The rule requiring disclaimer before decree in case one claim is held valid and another void is followed in some circuits and repudiated in others (see § 344). This must remain an unsettled question until pronounced upon by the Supreme Court.

DISCOVERY, §§ 346–347.

The two quotations under this title should be contrasted with the majority opinion in Westinghouse *v.* Boyden, 170 U. S. 537, § 686, especially the following:

"For such discoveries and such inventions the law has given the discoverer and the inventor the right to a patent as a discoverer for the useful art, process, method of doing a thing he has found, and as inventor for the means he has devised to make his discovery one of actual value. Other inventors may compete with him for ways of giving effect to the discovery, but the new art he has found will belong to him and those claiming under him during the life of his patent." — Telephone Cases.

"To say that the patentee of a pioneer invention for a new mechanism is entitled to every mechanical device which produces the same result is to hold in other language, that he is entitled to a patent for his function." — Westinghouse Case.

While these statements are, theoretically, perfectly reconcilable, the applications made in these two cases are in absolute contradiction. Bell did not patent the undulatory theory of sound; neither did Westinghouse patent the discovery in pneumatics which made his invention possible. Both patented means for utilizing their discoveries.

This is not the first time the writer has criticized the Westinghouse decision, nor will this be the last; for while he is not and never has been in any way concerned with the event of that controversy, he agrees with the four dissenting Supreme Court justices and many of our ablest patent lawyers in regarding it as contrary to the spirit and trend of other decisions, as depriving great genius of its just reward, and as putting a premium upon that sort of thievery that comes to the front and brazenly makes its claim under an improvement patent nearly every time a great inventor has explored far and added a large domain to the known and useful in life.

In some degree, at least, the Westinghouse decision has been modified, and the criticisms above have been justified since they were written, by the Expanded Metal Case (Expanded *v.* Bradford, 214 U. S. 366, § 817). A discovery may be a "happy thought," as in the Expanded Metal Case, or it may be a pure accident, Byerly *v.* Sun, 184 Fed. 455, § 347.

DIVISIONAL PATENTING, §§ 348–355.

The underlying principles of this subject came up for consideration and statement before Judge Taft in Thomson-Houston *v.* Ohio, 80 Fed. 712, § 350. Notwithstanding the fact that, in another circuit, another brilliant mind has differed therefrom, it will be assumed, as a very safe position, that the law laid down by Judge Taft will not be disturbed. It is sufficient to refer to that opinion for all that it covers. It is clear that one application for a patent may be a continuation of a former application, Model Bottling Mach. *v.* Anheuser-Busch, 190 Fed. 573, § 352, and that the dates of filing of several co-pending applications ripening into patents cannot be used one against another to anticipate, Century Electric *v.* Westinghouse, 191 Fed. 350, §§ 349, 354.

There are cases, like some of those under §§ 352 and 355, where it is evident that the aim of the patentee has been to extend or strengthen his monopoly without additional or further invention. Now, these are not really cases of divisional patenting at all, but attempts at justification of double patenting under guise of divisional patenting. The moment this situation is perceived it is easy to apply the proper rules — the rules of double patenting — without any strain upon the rules of divisional patenting.

DOUBLE PATENTING, §§ 356–361.

A deal of unnecessary discussion has occurred under this title. When the Supreme Court said in Suffolk *v.* Hayden, 70 U. S. 315, that if two patents be granted for the same invention the latter is void, there was nothing more to say. The court did not say that the rule applied only to patents to different applicants or that it did not apply to two patents to the same applicant. But inasmuch as it was not clearly understood as applying to cases of two patents for the same invention to the same applicant, the court repeated and specified and particularized the rule in James *v.* Campbell, 104 U. S. 356; McCreary *v.* Penna. 143 U. S. 459; and in the Barbed Wire Case, 143 U. S. 275, (all under § 356) until it would seem that so simple, self-evident, and so unavoidable a rule should have percolated down through the intellects of our profession.

But, alas, it has not so done; and to this day our courts are obliged to tell us the old, old story every time we come into court with a patent which has been taken out to strengthen the redoubt of a former patent to the same inventor. The writer speaks feelingly and from experience upon this subject.

But it is not always clear which of two patents is the senior. It has been held that, where there is no other guide, the priority of numbering must control. Crown *v.* Standard, 136 Fed. 841, § 359. But in Electric *v.* Brush, 52 Fed. 130, § 361, it was held that the complainant might elect between the two. It would seem — although it has not been so held — that, since a disclaimer in the earlier patent made by the inventor cannot make the later patent good, by parity of reasoning of two patents of the same date to the same inventor the Government issuing both grants should be barred from disclaiming the grant to the patentee of the broader of the two patents.

DRAWINGS, §§ 362–363.

Only one remark need be made in connection with the appellate rulings on this subject. Not only is it unnecessary that the drawings should be working drawings, but it is not even necessary that they should be pictorial of the apparatus of the patent. Drawings speak a universal language. The American engineer reads a Japanese drawing with no knowledge of the language or even the reference characters employed, and vice versa. Symbolism has become to a large degree universal and uniform, especially so in electrical engineering. It is enough if the drawing contributes its part and agrees with the description in disclosing the invention to one skilled in the art.

EMPLOYER AND EMPLOYEE, §§ 364–369.

If the rule of Agawam *v.* Jordan, 74 U. S. 583, § 368, that persons employed, as much as employers, are entitled to their own independent inventions, and the further rule of the same case quoted under § 369, that suggestions from another, made during the progress of experiments, in order that they may be sufficient to defeat a patent, * * * must have furnished such information to whom the communication was made that it would have enabled an ordinary mechanic, without the exercise of any ingenuity and special skill on his part to construct and put the improvement in successful operation — if these rules are borne in mind, the ground is cleared materially. The right to patent an invention and the right to its use are two quite separate matters. The suggestion

of the idea of means — the conception which constitutes the act of invention — may originate with either party; and with whichever party this conception originates, provided only it is a completed conception requiring only ordinary mechanical skill to put it in terms of materials, there lies the right to patent. At the same time the right to the title of the patent may have, by agreement or in consequence of the inter-relation of the parties, passed entirely to the other party, or a lesser interest may have been established.

An implied license arising under the various conditions disclosed in § 366 is essential to industrial progress. If the rule were otherwise, if on the one hand employees could control the monopoly of the improvements occurring in the regular course of business, the manufacturer would be stopped in his progress; if, on the other hand, all rights were denied employees, much of the impetus of progress would be lost. The question of an implied license is further considered under § 756, and the general rules established by the circuit courts of appeals and there quoted should be read. Generally speaking, a shop license arising out of employment relations, is personal and non-assignable; but such right may be succeeded to by a corporate successor if the inventor acquiesces therein. Lane *v.* Locke, 150 U. S. 193, § 366. It is clear that a contract which robs an employee of all right to future invention is unconscionable (§ 365); and contracts between employer and employee are not divorced from the governing principles of equity.

EQUITY, §§ 370–372.

Two comparatively recent cases show how a court may or may not apply the principles of equity to the end that strict adherence to case and precedent may not defeat justice or smite the sense of right. In the case of Nat. Wire Bound Box *v.* Healy, 189 Fed. 49, § 371, the Circuit Court of Appeals, passing over the case law by which it might have decided the suit and defeated the monopoly of the patents in question, applied the broad principles of equity to the warring factions — as might be done between warring copartners — and made each do his share toward restoration of peace and fair dealing, and thus saved an important series of inventions. In the case of Henry *v.* Dick, 224 U. S. 1, § 898, the Supreme Court, by a literal following of case and precedent, and not applying the broad rules of equity, rendered a decision which called forth one of the strongest of dissenting opinions and aroused public criticism nation wide. The record made it plain — and there appeared no effort to deny the fact — that the Dick Company was seeking to

perpetuate its monopoly in an article the patent for which had long since expired, and this it was seeking to do by a hard-and-fast following of the Button Fastener Case. The Supreme Court handed down a perfectly logical case-law decision; and by so doing paved the way for a reactionary statute or ruling at some near day which will demolish the wholesome rule (properly administered) of the Button Fastener Case. This it did when, as I see it, the facts would have justified the court in saying to the Dick Company: "You are not here with clean hands; you have been attempting to extend your expired monopoly by a contract arrangement which, in these circumstances, is unconscionable. You claim to be seeking equity, but you are not doing it. You are attempting to invoke the power of the courts to help you drive out of business a competitor who is making that which you once monopolized but have surrendered to the public upon the expiration of your patent." Such broad and equitable treatment would have been a happy disposition of an ugly question, the dealing-out of justice, and the prevention of recrudescence of a problem which will not remain quiet until satisfactorily settled by judicial decision or statutory enactment.

Upon this subject nothing need be added, except to refer to the specific subjects considered under §§ 717–720.

EQUIVALENTS, §§ 373–380.

Undoubtedly the essentials of an equivalent stated by Robinson and approved in Duff *v.* Forgie, 59 Fed. 772, § 373, are well stated so far as mechanical elements are concerned; but it is doubted if the second essential therein named is applicable at all times to a chemical combination. Tyler *v.* Boston, 74 U. S. 327, § 373. At least this is true: Since the range of equivalency varies directly with the quality or degree of invention, making the doctrine a rule of judgment rather than a final test, it follows that a kindred resiliency exists as to the construction of essentials. Not that the courts will disregard these essentials, but that they will determine their presence or absence in the same spirit the invention is approached.

This doctrine, built up step by step by the courts, is, perhaps, the most beneficent of all rules. It gives the court the power to accord to a generic invention the reward it deserves. It also gives the court the much-needed power to limit minor inventions and improvements to a monopoly commensurate with the small addition made to the sum-total of human knowledge.

As to identity, the rule in Union *v.* Murphy, 97 U. S. 120, § 379, covers the ground as completely as any single definition can. But

the real problem in applying this doctrine, just as in the determination of anticipation or infringement, resides in the lack, in most cases, of an obvious similarity of the elements or lack of absolute identity of function, or, often in the lack of both these conditions. In other words, it is not the application of the doctrine, but the marshalling of the conditions precedent to its application, that renders the problem serious.

ESTOPPEL, §§ 381–387.

The general principles of estoppel are not peculiar in patent cases. Such principles as that the estoppel must be definite, mutual, and definitely proved are all well known. An interference adjudication, in the absence of privity, does not operate as an estoppel. A vendor-patentee and a licensee are both estopped to deny the validity of a patent; but to what extent either may limit the scope of the patent by showing the prior art is a delicate, and as believed, an unsettled question. Smith *v.* Ridgley, 103 Fed. 875, § 384; Elgin *v.* Creamery, 80 Fed. 293, § 385.

A former licensee may, after the expiration of the license, act as a stranger toward the patent. Stimpson *v.* Stimpson, 104 Fed. 983, § 385. As has been remarked under adjudications, the rule of privity is so strict that the conclusiveness upon a real party behind a prior litigation is often hard to establish, since, in such a case, it is difficult, if not impossible, to establish mutuality. Since an estoppel bears some of the characteristics of a forfeiture, it is not looked upon with favor.

EVIDENCE, §§ 388–411.

Of course, the patent itself is prima facie evidence of the existence of the monopoly, and that it was created in due form of law; but it must never be assumed that this fact, nor the fact of large utility, nor long acquiescence, nor a long and vigorous ordeal in the Patent Office, counts for anything to speak of in the face of a substantial attack by a defendant.

While the defense of anticipation must be made with the statutory notice, the practice of extending the privilege of showing the state of the prior art without notice (cases under § 389) render it possible to make a substantial defense by so limiting the patent as to defeat the charge of infringement in many cases.

As stated under the title anticipation, the evidence to show invalidity by prior patent, publication, or use must be indubitable. The common practice of putting in evidence under regular notice

a great array of prior patents is not without danger. Forsyth *v.* Garlock, 142 Fed. 461, § 390. The better practice is to introduce only those of distinctly anticipatory character under notice, and introduce separately such as are purely concerned with the prior art. The plaintiff or complainant may rebut, but the defendant may, in the discretion of the court, be denied surrebuttal on a question of anticipation. St. Paul *v.* Starling, 140 U. S. 184, § 392.

The method of taking depositions, either in law actions or in equity, must follow Federal law and practice. §§ 395, 401. The evidential value of an assignment duly recorded has been reviewed under assignment, § 158. The cases of Elevator *v.* Crane, 76 Fed. 767, and Mayor *v.* American, 60 Fed. 1016 under that title should be read in connection with Paine *v.* Trask, 56 Fed. 233, under § 396.

The rule as to exhibits in Overweight *v.* Improved, 94 Fed. 155, § 397, is certainly one to be exercised with great care. In this age of specialization, complexity and refinement in engineering the court would be assuming a great burden and a large risk in many cases should it follow this rule, take to itself the province of the expert, and give to an exhibit a value in evidence perhaps unwarranted under proper explanation and interpretation. And this leads to a remark concerning expert evidence. The function of the expert is to give evidence which will enable the court to determine matters of law and fact, (Norton *v.* Jensen, 49 Fed. 859, § 398,) and not to usurp the functions of counsel or court; (Osgood *v.* Metropolitan, 75 Fed. 670, § 398) and the too common idea that the value of expert evidence lies in a count of noses deserves the reprimand to be found in American *v.* Cleveland, 158 Fed. 978, § 398.

In concluding this subject the writer wishes to repeat the advice he received when a student and which has been of great value: "Remember that every great law-suit turns upon a single issue. Find the pivot and direct all your energy to swing the case your way upon it. Do not be led away; direct your evidence and your argument to the pivotal point." These were the words, as nearly as they can be recalled after the lapse of nearly forty years, of one of our greatest patent lawyers, one of our great judges, and the greatest scholar of the law I have ever known — Judge Henry R. Selden.

EXPERIMENT, §§ 412–417.

Absolutely nothing need be added to the quotation from Eastman *v.* Mayor, 134 Fed. 844, given under § 412.

FOREIGN PATENT, §§ 419–424.

This entire subject, confused as it has been rendered by the bungling statements of the act of 1870 and later by the hardly more lucid amendment of 1897, and finally utterly changed in aspect by the act of 1903, has, fortunately, been simplified and largely set at rest by the decision of the Second Circuit in Welsbach *v.* Apollo, 96 Fed. 322, § 420, and the First Circuit in Sawyer *v.* Carpenter, 143 Fed. 976, § 420. The Welsbach case seems to close the controversy over the old law; the Sawyer case seems to mark the line between the old and the new. To these pronouncements nothing need be added except to refer to the decision in Heap *v.* Tremont, 82 Fed. 449, quoted under § 424, and the remarkable decision of Hennebique *v.* Myers, 172 Fed. 869, § 421, where each of the three judges wrote an opinion, no two of which are in agreement.

FRAUD, § 425.

The less said upon this subject the better. Experience teaches that those cases where fraud can be proved are few and trivial; that those cases, few but not trivial, fail in the proofs.

FUNCTION, §§ 426–427.

It is clear that a function cannot be claimed; but as said in Continental *v.* Eastern (§ 427) the distinction between a practically operative mechanism and its function is difficult to define. Here is the field of contention. Once determined to be functional or non-functional the claim is readily disposed of; but a reading of all the cases leave court and counsel without criteria for determining whether a claim is or is not functional. The signal instance to illustrate this point is, of course, Westinghouse *v.* Boyden, 170 U. S. 537, § 686.

IMPROVEMENT, §§ 430–444.

An improvement is one of the patentable classes provided by the statute. (Sec. 4886). Except for the particular meaning given this term, it might be said that any invention not a broad or basic discovery would be an improvement; but such is not the meaning commonly given the term. The courts generally use it as denoting an invention which marks an advance in a known art It may be great or small — in fact, an improvement may be truly generic, revolutionary in an art, and entitled to a range of equivalency substantially as great as a generic invention. Chicago *v.* Miller, 133 Fed. 541, § 435; Columbia *v.* Kokomo, 143 Fed. 116,

§ 435; Wagner *v.* Wycoff, 151 Fed. 585, § 435. So it is evident no strict definition of an improvement may be given, although the statement in McCormick *v.* Talcott, 61 U. S. 402, § 434 defines an ordinary narrow improvement.

A mere carrying forward, a mere perfecting in a mechanical sense, or mere improvement in the product do not constitute patentable improvement. To be patentable there must be the exercise of the inventive faculty which lifts it above mechanical skill. A reasonably good distinction is drawn in Thomson-Houston *v.* Lorain, 117 Fed. 249, § 437. As will be seen, when we come to the tests of invention, utility and use go far in determining a doubtful case. Indeed, utility may save an improvement from falling over the line of mechanical skill; and the range of equivalency which will be accorded an improvement patent is often best determinable by the part the patent has had in the useful arts. This subject recurs with those of invention and infringement, and is one of large importance. Reference to those titles should be had.

INFRINGEMENT, §§ 445–532.

No general definition, no general rule, no general test of infringement exists. The number of issued patents has passed the million mark. Each patent has afforded opportunity for a condition of infringement in some sense differing from that of every other patent. Each patent is supposed to disclose a novel combination or creation, and every infringement suit is a new problem. While the various rules and tests are of large value in the interpretation and decision, it is only when one follows the methods of such master minds as have been able to rise above fitting the facts to a rule, mastered the facts, decided the question in the quiet of their own consciences, and then, perhaps, found a rule to ornament their wisdom, that justice is done. In taking a general view of the many rulings on this subject they will be regarded as guides, rather than fixed rules, and will be taken up in much the same order in which they are presented in the body of the work.

An addition to a combination, construction or process avoids infringement only when such addition destroys the unity of the invention and makes it something else. So with mere change of form, impairing or increasing efficiency, or change of location or other modification which does not destroy the essence of the invention does not avoid infringement. But ever since O'Reilly *v.* Morse, 15 How. 62, § 459, it has been clear that, where form is the essence of invention, change of form does avoid infringement. Change of the number of parts or substitution of one material

for another are subject to the same rule. The rule as to combinations is well stated in U. S. *v.* Berdan, 156 U. S. 552, § 464. A combination, to be patentable, must possess the qualities of interaction which effect a new or different result from that of any element or the summation of the separate results of all the elements — else it is a mere aggregation. It is only when (1) something is added which changes the action and function of the combination; or (2) when something is omitted which produces such change; or (3) when some element is substituted which cannot be held an equivalent for that which was omitted, that infringement is avoided. And here, of course, we are bound by the limits the patentee has set in his claim. As said in Fay *v.* Cordesman, 109 U. S. 408, § 466, if the patentee specifies any element as entering into the combination, either directly by the language of the claim or by such a reference to the descriptive part of the specification as carries such elements into the claim, he makes such element material to the combination, and the court cannot declare it to be immaterial. But in applying this rule, we have no right to forget the rule of equivalency and of interpretation, as was done in Kinzell *v.* Littrell, 67 Fed. 926, § 473, and declare unqualifiedly that "it is immaterial that the elements claimed in the patent of plaintiff and omitted in defendant's device are not of the essence of the real invention." The rule of equivalency as applied to combinations has been said to be construed most strongly against him who alleges infringement. Erie *v.* American, 70 Fed. 58, § 468; but this is in contradiction of the Supreme Court rule in Gill *v.* Wells, 89 U. S. 1, § 468, and of nearly every other case quoted under that section. The distinction between claims for combinations and claims not strictly so regarded is generally academic and artificial rather than real in most cases; and if we were to have one rule for combinations and another for the few claims that have not that characteristic, we should add confusion to no purpose.

Before passing to the next subject in order, a word should be added concerning assignments. As between the assignor and assignee of a territorial right the rules of Keeler *v.* Standard, 157 U. S. 659, § 450; Hobbie *v.* Jennison, 149 U. S. 355, § 512, and Simpson *v.* Wilson, 4 How. 709, § 175, permit the sale of articles outside the territory assigned and vice versa. The effect of these rules can be avoided between the parties only by specific agreement, and as to third parties limitation may be imposed only by bringing such party within the terms of such limitation by some such restriction as that of Heaton *v.* Eureka, 77 Fed. 288, as construed and approved in Henry *v.* Dick, 224 U. S. 1, § 898 and National *v.*

Schlegel, 126 Fed. 733, § 899. The general principles of estoppel apply alike to inventor-assignor and assignee. It does not lie in the mouth of an inventor to attack that which he has assigned, though he is not estopped from denial of infringement. So with the assignee holding a title or interest under the patent. A licensee may not use his privilege to make and store up large quantities of articles, terminate the license, and then market the articles so made and escape infringement. Pelzer *v.* Binghamton, 95 Fed. 823, § 510.

The general rules of contributory infringement have been mainly settled by Judge Taft in Thomson-Houston *v.* Ohio, 80 Fed. 712, § 477. In this review of general principles, to do otherwise than to call attention to the wide divergency of opinion between Cortelyou *v.* Johnson, 145 Fed. 933 and Henry *v.* Dick, 224 U. S. 1 (both under § 477), and to invite a comparison between the Dick Case and Leeds *v.* Victor, 213 U. S. 325, § 474, is unnecessary. Courts and attorneys alike differ upon this question. With the belief that it is as yet to be finally settled, I make no further comment.

Corporations as infringers are subject to the same rules as natural persons. The rule as to personal liability of an officer or director appears to have undergone a change. The old tort feasor rule of such cases as Graham *v.* Earle, 92 Fed. 155, § 481, and National *v.* Leland, 94 Fed. 502, § 481, seems to have been largely abandoned. Western *v.* North, 135 Fed. 79, § 481, Cazier *v.* Mackie-Lovejoy, 138 Fed. 654, § 481, and Scott *v.* Fisher, 145 Fed. 915, § 481. And it would seem a sound rule that an officer of a joint-stock company is not personally liable for the acts of infringement of the company. National *v.* Stolts, 135 Fed. 534, § 480. But it is believed that, as the general tendency is and must continue to be to look beneath the device and shield of corporate fiction and reach the individual wrongdoer, the vigorous statement in Weston *v.* Empire, 177 Fed. 1007, § 481, is significant of future trend.

Division or union of elements, and in the case of additions or subtractions which do not destroy the unity of the invention, does not avoid infringement; but there are cases, such as stated in Dunlap *v.* Willbrandt, 151 Fed. 223, § 485, where division or union would destroy the law of the structure or go beyond the limits set by the inventor in his claim.

The question of infringement is one of fact. The questions of construction which precede it are of law. The evidence, therefore, may bear upon either proposition. The conduct of the defendant may have some weight, but it can never be controlling (§ 487);

and it is never enough to shift the burden of proof. Evidence of identity of function is very persuasive, but until reinforced by a construction of the elements of the claim and those of the alleged infringement to establish ground for identity it cannot be conclusive. In short, the evidence of infringement must be specific and cannot be inferred. Imhauser *v.* Buerk, 101 U. S. 647, § 494. Once established, a single act is sufficient. Hutter *v.* De Q. Bottle, 128 Fed. 283, § 494; but proof of threatened acts is insufficient. Gray *v.* Grinberg, 159 Fed. 138, § 494. Collateral matters, such as utility (§ 495) or co-pendency of applications in the Patent Office without interference (Mann *v.* Hoffmann, 104 Fed. 245, § 496) or the issue of a patent to the defendant (Hardison *v.* Brinkman, 156 Fed. 962, § 496) may have some corroborative effect, but they are not dynamic. Quite as important as these rules are those which guide in the construction of the claim and of the infringement complained of. These have arisen under anticipation, §§ 71–77; claims, §§ 188–230; evidence, §§ 389–393 and 401–411; and will also arise under invention, §§ 620–638, and in cases of reissue under §§ 871-879.

The moment a generic invention makes its impress upon the industrial world, a swarm of parasites is hatched, and they begin their attack. It is to screen the real public benefactor, in some small degree, from the onslaught of these insects that such rules as that of McCormick *v.* Aultman, 69 Fed. 371, § 497, are designed. And it is proper that a generic patent should not be subject to the presumptions against its infringement which attach to lesser and mere improvement patents, Century Electric *v.* Westinghouse, 191 Fed. 350, § 497.

While the Government may not be subjected to the ordinary processes of infringement prosecution, it may be reached through the Court of Claims, and compensation awarded, even if the prohibition of injunction does not lie. (§ 498). By the act of June 25, 1910, the Court of Claims was given jurisdiction of infringement suits against the Government, and the Government given the same right of defense as an individual infringer (see § 428). And the scope of this enactment has been passed upon by the Supreme Court, Crozier *v.* Krupp, 224 U. S. 290, § 498.

The question of identity has been summed up in a single sentence: "There must in the ordinary patent be identity of means and identity of operation as well." American *v.* Cimiotti, 123 Fed. 869, § 502. And the rule in Thomson *v.* Western, 72 Fed. 530, § 503, is sound as well as clever.

The subject of infringement by importation or exportation is

comprised in a few cases, and the rules cited under § 505 are comprehensive.

There may be infringement by an improvement or of an improvement. This was settled as long ago as Evans *v.* Eaton, 7 Wheat. 356, § 506. In the case of infringement by an improvement there generally arises the question of the scope of the prior patent and the application of the doctrine of equivalents. When the alleged infringement is of an improvement, we may have both the question of equivalency as respects the prior patent and that of limitation of the improvement patent by the prior art, including the prior patent. Where the case is of improvement against improvement the rule well stated in Ries *v.* Barth, 136 Fed. 850, § 507, that the presumption is that each is an independent improver in a common, open field, will go far in simplifying the issues.

In the earlier days, when an infringer was regarded as a tort feasor with instincts not far removed from the criminal, the question of intent had much significance — silent if not otherwise. With the passing of time the infringer has lost somewhat the garb of a brigand, is held up to a higher standard of knowledge and business conduct, is presumed to know the law better than ever before, is presumed to know the state of the art and the existing patents relating to his business, and is neither coddled nor punished along moral lines. (§ 508).

The grant of a right under a patent must carry enough with it to insure the enjoyment of the grant. If one buys the right to use a machine that he may reap benefit from selling the product, the grantor may not stop him because he holds a patent upon the product; but the reverse condition would not follow. If a person buys the right to use or sell a product or article of manufacture and does not secure the right to use the process or machine, he cannot justify his lack of foresight by infringing the process or machine. Here, again, the doctrine of Henry *v.* Dick, 224 U. S. 1, § 510, which clearly establishes possible divorcement between property right in a machine and property right in the monopoly covering the machine, seems a contravention of substantive law.

The infringement of a process is subject to the same rules as a machine, so far as they may be applied — such as the omission or addition of an element or the use of an equivalent. But it is evident that, as a process consists, in most cases, of a series of steps or a series of chemical actions or material modifications which cannot be observed or compared by the eye of the court; and since also the function or result itself is, often, not distinguishable by

the naked eye, the ordinary tests of mechanical identity of elements or function cannot be applied. It follows that, in such cases, the evidence must be largely that of experts and persons skilled in the art. Matheson *v.* Campbell, 78 Fed. 910, § 519. And it is due to this obscurity that the rule of equivalents is somewhat modified. As was said in Tyler *v.* Boston, 74 U. S. 327, § 373, "the term equivalent, when speaking of machines, has a certain definite meaning, but when used in regard to chemical action of such fluids as can be discovered only by experiment, *it only means equally as good.*" Here the test as expressed by the words in italics passes over from an independent comparison of the elements to a comparison of results. But it must not be assumed that this test applies to those process cases where analysis is plain and free from empiricism.

The use or sale of a product, the production of which involved the infringement of a machine or process, when the product itself is not patented as an article of manufacture, is not infringement. Welsbach *v.* Union, 101 Fed. 131, § 521.

In Stimpson *v.* Railroad, 4 How. 380, § 522, the rule was laid down that an infringement cannot be sued for which took place prior to the surrender of the original patent. At that time the rule was that a surrender for the purpose of obtaining a reissue extinguished all rights which existed under the original grant. Moffat *v.* Garr, 66 U. S. 273, § 887. But in Peck *v.* Collins, 103 U. S. 660, § 887, the question whether a surrender under the act of 1870 extinguished all rights was raised but not answered. The court went a step farther in Allen *v.* Culp, 166 U. S. 501, § 887, and in McCormick *v.* Aultman, 169 U. S. 606, § 887, answering the question certified by the Circuit Court of Appeals in McCormick *v.* Aultman, 69 Fed. 371, § 887, held distinctly that when a reissue was sought and refused as to certain claims, on the return of the original patent such claims were not thereby rendered void. Now, taking this change of holding, what is its effect as to infringement occurring prior to surrender and reissue? It is thought that there is no appellate determination of this question.

What constitutes infringement by carrying repairs to the point of reconstruction is well illustrated in Goodyear *v.* Jackson, 112 Fed. 146, § 524. The ultimate test is whether the act is a rehabilitation or a re-creation of the idea of means. Wilson *v.* Simpson, 9 How. 109, § 524. In the case of the bale tie of American *v.* Simmons, 106 U. S. 89, § 524, or the knitting needle of the Goodyear case, the infringement is evident. So it would be in a case like Pacific *v.* Alaska, 100 Fed. 462, § 523, where nothing of the old

machine remained but the legs. But between these lies debatable ground, like that of Morrin *v.* White, 143 Fed. 529, § 523. There it would seem clear that the replacement of a single tube of the battery would be legitimate repair; but as the essence of the invention resided in the emplacement of the entire battery of tubes, then a replacement of the entire battery would be a re-creation, and therefore infringement. Such a case illustrates how narrow the margin between legitimate repair and infringement may be.

The tests of infringement naturally run parallel with the rules of evidence of infringement. The anticipation test — "that which infringes if later anticipates it earlier," and vice versa, which has been considered at length under anticipation, is a test, not a final test by any means, but yet one which has its proper uses. The most general and practical test is to compare the two devices in connection with a comparison of results produced. Cimiotti *v.* American, 198 U. S. 399, § 526. The test of interchangeability, where element for element may be substituted, is wellnigh conclusive; but such substitution is not ordinarily obvious or easy. Where the plain rules of equivalency may be employed to assist in such substitution the rule is applicable. As utility may turn the scale in a doubtful case of invention, so it may, if great care is exercised, illuminate the question of infringement. But it must be remembered, as said in Winans *v.* Denmead, 15 How. 330, § 530, that success of complainant and defendant, the one compared with the other, is no test of the question of infringement.

Defenses to the charge of infringement have been, in some measure, considered under infringement §§ 308–322. Nothing further need be added, since the circumstances surrounding each case must determine the character and course to be taken.

INJUNCTIONS, §§ 533–579.

Injunctions in patent causes are not marked by departure from general rules. The statute gives the "power to grant injunctions according to the course and principles of courts of equity," (R. S. 4921) and specifies no further. The same distinction exists between preliminary or provisional injunctions and final or perpetual injunctions as in other fields of equitable jurisdiction. But this distinction — this definite line of separation — is too often lost sight of; for while a final and perpetual injunction is, when the complainant has shown his right under a living patent to equitable relief on final hearing, a matter of right, a preliminary or provisional injunction is never a matter of course but *always* a matter of judicial discretion. Comity may have its weight; a prior ad-

judication may have much more weight; but a court entrusted with this most powerful of all legal enginery is never deprived of the safeguard of discretion in its use until a higher tribunal has taken jurisdiction and with it the responsibility attached.

To entitle a complainant to an injunction pendente lite, at least three features must be present.

1. The title to the patent and right to sue must be clear.
2. The infringement alleged must be clear.
3. Something more than the mere prima facie of the grant must be shown.

To these some might add irreparable injury and insufficient remedy at law; but it is thought that the decision of the Supreme Court in Continental *v.* Eastern, 210 U. S. 405, § 574, by implication, will render any positive showing, beyond the averment of the bill, unnecessary.

It is evident that the title must be clear, and that if it is doubtful by reason of some right claimed by defendant (§ 569), or is assailed and put in doubt (§ 571), the relief will be withheld.

It is also evident that, upon an ex parte showing, the court will not attempt to solve the question of infringement in the face of conflicting proofs (§ 564).

Those showings constituting "something more" than the prima facie of the patent which are essential are either public acquiescence, prior adjudication, or some existent condition which is the fair equivalent of one or the other of these two. It is not possible to define that condition which constitutes or fails to constitute acquiescence with absolute universality of application, as will be evident from reading the cases under §§ 554 and 563; but it is clear that the acquiescence must be common and public, and due to the existence of the patent, and not to extraneous causes. The mere fact that the public has not attempted to make, use or sell the thing patented is not enough; the forbearance to do so must appear to be due to the patent in question. Blount *v.* Société, 53 Fed. 99, § 554; Hall *v.* General, 153 Fed. 907, § 563.

Stronger than acquiescence is clear proof of the establishment of the patent and right to injunctive relief by prior adjudication. A very conservative statement of the rule is that of Wilson *v.* Consolidated, 88 Fed. 286, § 561. But again it must be observed that sound discretion controls even in these circumstances. Sprague *v.* Nassau, 95 Fed. 821, § 570; Hatch *v.* Electric, 100 Fed. 975, § 570. A clear summary of the general principles is given in Electric *v.* Edison, 61 Fed. 834, § 561.

There are cases where injunction pendente lite is clearly necessary

to preserve the status quo, where none of the ordinary considerations is the moving cause. But these are the peculiar conditions of a case which cannot be previsioned by any rule. In the case of Hall *v.* General, 153 Fed. 907, § 567, and quoted fully under that section, are the main conditions which preclude the granting of a preliminary injunction. It does not follow that all these six points must have been negatived to establish the complainant's right to the order asked, but it is clear that any one of several of these points would have been sufficient to warrant denial of the relief sought.

It is clear that non-use by complainant of the patent sued on is not a reason for refusing a preliminary injunction. Continental *v.* Eastern, 210 U. S. 405, § 574. Expiration of the patent of course prohibits the granting and ends the life of an injunction granted. (§ 550.) A bond in lieu of injunction is within the discretion of the court (§ 546); and the conduct of the defendant has its weight (§ 555). Ordinarily the positing of laches as a reason for denying injunctive relief is a doubtful proceeding; for excusing one's own act on the ground of remissness of another does not appeal to a court of equity. Punishment for the violation of an injunction is adequately reviewed in Bullock *v.* Westinghouse, 129 Fed. 105, and Christensen *v.* Westinghouse, 135 Fed. 774, quoted extensively under §§ 577 and 578.

Coming now to the subject of appeals from injunction orders, it is first to be noted that we are no longer in doubt about what is appealable. By Sec. 129, Judicial Code, an injunction order "granted, continued, refused, or dissolved" is appealable.

Without going into details, the following propositions seem settled by the various decisions cited under §§ 535–545:

1. The appellate court will go no further than to determine whether sound discretion has been exercised.

2. If, in the determination of this question, the entire record must be reviewed, and if the proofs are adequate, the appellate court will make final disposition of the case.

3. That such appeal does not stay other proceedings unless so ordered.

4. That neither comity nor prior adjudication will prevent an appellate court from acting upon its own independent judgment based upon its own investigation of the facts.

Appeals from contempt orders are permissible only as now prescribed by the Supreme Court in In re Christensen, 194 U. S. 458, § 538.

In conclusion it may be observed that, while the restrictions now

put upon the Mop Case rule by the Supreme Court render possible the recovery of substantial damages and profits in a large number of cases heretofore practically deprived of such right, still relief by injunction is the main and most effective protection to a patent. The rules, now so well established, will be applied with greater wisdom and uniformity than in the past.

INTERFERENCES, §§ 580–585.

Upon this subject nothing need be added to § 581, except to call attention to the cases of Morgan *v.* Daniels, 153 U. S. 120, and Electric *v.* Carborundum, 102 Fed. 618, both quoted from under § 584. Seemingly, these cases should set at rest the question of supposed conclusiveness of an interference proceeding.

INTERFERING PATENTS, §§ 586–587.

In view of the decision of Palmer *v.* Lozier, 90 Fed. 732, § 587, patentees will be slow to invoke relief under 4918 R. S.; since it is now quite possible that the parties, each coming into court with a patent, may both leave that court empty handed.

INVENTION, §§ 588–702.

Under this title an entire volume might be written; but such a course is not in keeping with the aim of this book. The subject is too large to gather up and treat in perspective. Consequently, the following course will be pursued: The main divisions will be taken up in the order of the text, each division constituting a paragraph with the title and section numbers in heavy faced type.

Abandonment, § 590. The subject of abandonment has been reviewed under that general title (§§ 1–20). As here employed, it relates to re-invention and abandoned experiments. It is at once evident that an abandoned experiment cannot operate as a bar to an invention, since it is both an abandoned thing and a thing that never was patentable, else it would not have been an experiment merely. The re-invention of a thing which has never materialized sufficiently to constitute anticipation is as much entitled to protection by patent as if the original invention and abandonment had never occurred. But if the re-invention follows an abandonment which was preceded by a disclosure of the invention to the public, such re-invention or discovery cannot recall that which has become public property and make it the subject of a patent.

Adaptation, §§ 591–593. In reading the quotations under these

sections one notes the recurrence of the qualifying word "mere," such as "mere" arrangement or grouping, "mere" strengthening or increasing weight is not invention. Such is the qualification of the rule. Whether any act of adaptation has ever risen above that qualifying word we need not speculate. It is enough that it might, and the courts can frame no rule which will bar to an inventor a right which the statute gives him. These remarks apply to §§ 652 and 665 under mechanical skill, and to § 707.

Aggregation, §§ 594–597. This subject has been fully considered under §§ 42–51.

Beneficial use and scope, § 598. The underlying principle here may be illustrated by Wells *v.* Curtis, 66 Fed. 318. In that case Judge Severens was entirely right in saying that "an afterthought perceived from subsequent experience or scientific inspection or analysis" and the application of the means disclosed to perform the uncontemplated function did not involve invention. But let us suppose that such "experience," or "inspection and analysis," had resulted, from the exigencies of the case, in some modification of the means. A single step thus taken goes beyond the scope of the patent. Why? Because there would have been *a change in the combination* effecting the result. This is the test. As we must look both to means and result to establish identity, so we can say the performance of an uncontemplated function is a beneficial use belonging to the patentee *only* when, upon investigation, we find the means employed present, item for item, and unmodified in their combinative relation, Diamond Rubber *v.* Consolidated, 220 U. S. 428, § 598.

Carrying forward, § 599. The rule here is evident; but in Bullock *v.* General, 149 Fed. 409, the limit is well noted. In the ordinary course of manufacture, improvements are made in numbers beyond counting; but now and then comes a time when the advance along a certain line slows down and almost stops. At that point someone takes a step — often a small one, but one which turns the halt into progress again. This may be true invention, and yet have the appearance of mere carrying forward. Mere carrying forward is but another name for mechanical skill (§ 654). Invention intervenes only when another sort of mental faculty has come into play; and to decide whether such an event has transpired is often one of the most difficult of problems.

Change of form, §§ 600–602. Taking the rule of Evans *v.* Eaton, 7 Wheat. 356, § 600, and that of Winans *v.* Denmead, 15 How. 330, § 602, we have this statement: A change of form without change of principle is not patentable; but when form is the essence

of the invention, it may be patentable. As the Supreme Court said in Diamond Rubber *v.* Consolidated, 220 U. S. 428, § 602:

> But the law has other tests of invention than subtle conjectures of what might have been and yet was not. It regards a change as evidence of novelty, the acceptance and utility of change, even as demonstration.

The same rule is applied in mechanical skill, § 655.

Combinations, §§ 603–612. The essence of a true combination lies in the coaction of the elements. As elsewhere said, in an aggregation we have merely the *sum* of the functions; in a true combination the *product* of the elemental functions. This statement is open to the criticism that the result of a true combination is not a multiplication of things, but a modification of elemental functions. True, but the comparison is helpful. It is not necessary that the actions should be synchronous. International *v.* Dey, 142 Fed. 736, § 603. But the combination, broadly viewed, must be an entirety. The four limitations which must be put upon a combination are well summarized in Gill *v.* Wells, 89 U. S. 1, § 605. The result may be old if the combination is novel; and the fact that the elements are all old does not negative the novelty of the combination. Columbus *v.* Robbins, 64 Fed. 384, § 608. When both combination and result are old invention is wanting. It will be presumed that the elements of a combination claim are old unless specifically claimed. A claim for a sub-combination is good, Parks *v.* Booth, 102 U. S. 96, § 611; but the disclosure of the patent must be sufficient to comply with the statutory requirement. Thomson-Houston *v.* Black River, 135 Fed. 759, § 611.

Date of completion, § 613. While in the absence of other proof, the date of application for patent will be taken as the date of invention, the date may be carried back to the date of actual invention. The exact location of this point is often difficult, but as a general proposition it may be stated that the date of invention has arrived when the inventor is able to so disclose the product of his thought that another might, from such disclosure, put the idea of means into use. But there are cases where the question of completion as determining priority between two rival applicants or patentees is difficult. Judge Holt, in Automatic *v.* Pneumatic, 166 Fed. 288, § 860, has attempted a complete review of this phase of the subject. Certainly the effort is elaborate and labored, but, in my opinion, some of his conclusions, if not unwarranted, are subject to material modification. This subject will recur under reduction to practice, §§ 860–867.

Definitions, § 614. One will find a long, and perhaps the best, study of this problem by Justice Brown in McClain *v.* Ortmayer, 141 U. S. 419. A most interesting view is that of Judge Grosscup in Brown *v.* Crane, 133 Fed. 235, quoted under this section. Modern psychology finds absorbing interest in the study of such phenomena, but so far as is known, these investigations have not served to aid us in the practical application of tests in the form of evidence. However, since the test of any alleged truth lies in subjecting the facts to our inner consciousness, we recognize invention, not by a fixed definition, but by the pronouncement of our own minds.

Dividing or uniting parts, § 615. This subject has been substantially covered under § 591. The case of Standard *v.* Caster, 113 Fed. 162, § 615, presents an interesting problem. It is believed that that case presents a close question.

Double or analogous use, §§ 616-618. Undoubtedly Potts *v.* Creager, 155 U. S. 597, quoted extensively under § 671, is the ruling case upon this subject. The distinction between double use and analogous use is not always clear. A double use is rarely, if ever, patentable, while in a so-called analogous use the analogy may be so remote as to involve invention. A clear case of double use is that of Jones *v.* Cyphers, 126 Fed. 753, § 616. Cases at the other extreme are those quoted under § 618. In view of such holdings as Voightman *v.* Perkinson, 138 Fed. 56, § 616, it is evident that the rule of Potts *v.* Creager will be applied with strenuousness in most cases involving analogous use.

Evidence of, §§ 620-638. In the case of Westinghouse *v.* Stanley, 133 Fed. 167, § 620, we have one type of acquiescence which is evidence of invention; in Wolff *v.* Dupont, 134 Fed. 862, § 620, we have quite another. In the former case there was the acquiescence of those engaged in the particular art where competition and struggle for improvement was very sharp; in the latter case the condition is much less forceful. The acquiescence in the Tesla inventions involved the strongest temptations, and the greater the temptation the stronger the evidence of acquiescence. It is believed that attempted evasion of a patent, where the evidence of such attempt is clear and the infringement is obvious, should be regarded as strong evidence of invention; but it is also believed that this rule should be given little, if any, weight when the competition of business leads one manufacturer to crowd close upon the line of the monopoly of another. In other words, the intent should govern. The rule is particularly adapted to the industrial parasite, not to a legitimate competitor. The extent to which commercial success may be employed to evidence invention de-

pends upon the circumstances of each case. It cannot be relied upon, but it is often most persuasive. Krementz *v.* Cottle, 148 U. S. 556, § 622. The unfixedness of this rule is illustrated in Westinghouse *v.* Union, 117 Fed. 495, § 622, where the court said:

"If there is any doubt upon the question of patentability, the practical and commercial results of the improvement must resolve such doubt in its favor." (p. 498).

"Its confessed commercial success, therefore, cannot be accepted as evidence of invention." (p. 501).

Clearly, these remarks could hardly be made with regard to the same patent, but they were made with regard to two patents in the same case. And the rule is the same as to efficiency. National *v.* Hedden, 148 U. S. 482, § 624; and also as to extensive use. Smith *v.* Goodyear, 93 U. S. 486, § 626. But, on the other hand, if commercial success, efficiency or extensive use may be evidence of invention, what shall be said of a patent that has lain dormant for years, and when suit for infringement is brought upon it, the defendant urges the converse of this rule? Suppose counsel says, "The question of invention is a doubtful or debatable one. If this patent had immediately shown large efficiency and had met with great commercial success, then the rules would apply and tip the scales in favor of the patent; but here is a case where the sign before the patent has been changed from plus to minus. Is not its failure as persuasive of want of invention as success might have been of invention?" While the statement in Campbell *v.* Duplex, 101 Fed. 282, § 637, so far as is known, is the nearest approach to a justification of this proposition, it is believed that it is an argument not without force. Obvious demand may have its weight, as stated in Commercial *v.* Fairbank, 125 Fed. 4, § 628; but Fay *v.* Mason, 127 Fed. 325, § 628, places a distinct limitation upon the rule, which, apparently, is this: If the obvious demand is at once and easily met, it is without force; but if the obvious demand is one met only with difficulty, there is evidence of invention. Since Reckendorfer *v.* Faber, 92 U. S. 347, § 629, the prima facie of a patent has stood for very little; and since Palmer *v.* Corning, 156 U. S. 343, § 629, its evidential value has become microscopic. Nor is the presumption of the grant reinforced by what occurred in the Patent Office. Canda *v.* Michigan, 124 Fed. 486, § 630; American *v.* Sample, 130 Fed. 144, § 630; Imperial *v.* Crown, 139 Fed. 312, § 630. But the effect of prior attempts and failures and turning failure into success is quite otherwise.

With the rule finally and well stated in Carnegie *v.* Cambia, 185 U. S. 403, § 631, we have at least one rule of evidence of invention which, when it can be applied, is not so open to qualification or diminution as to render it of little force. There is the simplicity of greatness and there is the simplicity of triviality. The one is clear evidence of invention; the other suggests mechanical skill. And here we may mark the distinction between patentees of inventions and inventors of patents. While use of the device of a patent by a defendant fairly establishes its utility, such utility by no means establishes patentable novelty. As a matter of fact, the statement that evidence of utility cannot be made to control the language of the statute which limits the benefit of the patent law to things which are new as well as useful is conclusive upon this point, and leaves utility as evidence of invention where it should be — in the same category with commercial success and large use. Grant *v.* Walter, 148 U. S. 547, § 636. And the recent decisions of the Supreme Court in Expanded *v.* Bradford, 214 U. S. 366, § 631, and Diamond Rubber *v.* Consolidated, 220 U. S. 428, §§ 625, 626 and 634, have done no more than sharpen and clarify the rules long since applied.

Force of nature, § 639. A force of nature is not patentable, nor may anyone so claim the utilization of such a force as to practically exclude another from employing it with other means. The Morse telegraph case at the beginning and the Cameron septic tank at the close of the series of cases upon this subject fitly begin and conclude a most uniform line of rulings.

Generic invention, §§ 640–643. One may choose his definition of a generic or "pioneer" invention from the many given under §§ 640–643. The statement in Westinghouse *v.* Boyden, 170 U. S. 537, § 641, that the word "pioneer" is "commonly understood to denote a patent covering a function never before performed" is open to serious criticism. In the first place it is altogether questionable whether that is the common understanding of the term. In the second place, it is of doubtful exclusiveness. For example, the "function" of the Edison lamp (Incandescent Lamp Case, 159 U. S. 465,) had been performed before, but the Edison incandescent lamp patent was a pioneer in the estimation of most people. If we now compare Edison's lamp patent with his film patent (Edison *v.* American, 114 Fed. 926, § 640) we have the distinction between a generic and specific invention clearly before us. The definition of a generic process in Mitchell *v.* Tilghman, 86 U. S. 287, § 641, is beyond all criticism; and the statement in the dissenting opinion of Mr. Justice Shiras in Westinghouse *v.* Boyden

(under § 644) that "a pioneer patent does not shut but opens the door for subsequent invention" is a verity. Men like Bell, Westinghouse, Cowles, Acheson, have each opened up great fields for invention. Giving to such as these protection commensurate with their genius — making improvements tributary to them — has in no wise retarded progress; but on the contrary, has given them opportunity to secure the co-operation of large capital to carry the fruits of their labors into common use. And there is need at this time for laying emphasis upon this statement of Justice Shiras. In the effort to suppress noxious monopoly there is a tendency, such as that from which the learned Justice dissents, to repress the monopoly of a generic invention. While the reward which the world bestows without patent upon a Franklin or a Crookes or a Koch or a Mendelieff or a Kelvin may be quite enough for these great benefactors, in order to encourage the leaders of our industries to invest their energies and their fortunes in bringing the benefit of great inventions to the people at large, the legitimate monopoly of the patent must be safeguarded. A striking example lies in a comparison of Bell and Cowles. Had the same recognition been accorded Cowles — a recognition finally awarded, but too late — that was given Bell, the industrial development of electrolytic synthesis would not have been delayed a decade, but on the contrary, the recognition of the monopoly of the field would have opened the way for capital and improvement alike, and both inventor and nation would have been the richer.

Immoral object, § 645. The decisions quoted under § 645 as to immoral use open a vista of large interest. The Animarium case properly withholds the implied sanction of a patent to an invention which may be, in the broader sense of the term, "immoral," i. e., lacking in truth of disclosure, or, affirmatively disclosing that which is untrue or pernicious. The slot machine case presents quite another problem. If the decision in this case is compared with the recent rulings of the Supreme Court as to the powers of the states to regulate the enjoyment of patent rights (Wilbur *v.* Virginia, 103 U. S. 344; Allen *v.* Riley, 203 U. S. 347; and Woods *v.* Carroll, 203 U. S. 358, all under § 920), it would seem that the decision in the slot machine case goes sufficiently far to protect the public through Federal intervention, leaving the states, under these Supreme Court holdings, the power to legislate for the specific protection of their inhabitants.

Improvement, §§ 646–8. This subject has been considered in connection with §§ 430–444, under the general title of improvement. It is enough to add here that it is thought that there has been no

better comment upon that which characterizes patentable improvement than the statement in American *v.* Universal, 151 Fed. 591, quoted under § 648. It is he who strikes out upon a new line or he who breaks through the barrier that invents — not he who adapts and adopts and adjusts. The distance traveled may be long or short; but so long as it goes through or around and arrives where either (1) no one had arrived before (a generic invention); or (2) arrived by a new route (a specific improvement) it is invention.

Manufacture, § 649. This subject will be fully considered in connection with §§ 772–775. As bearing directly upon the subject of invention the quotations from Kilbourn *v.* Bingham, 50 Fed. 697 and Cerealine *v.* Bates, 101 Fed. 272, under § 649, should be compared. While it is true that each case presents its own problems, to say that " there is no clear line of demarkation between what may be called a new article of commerce, not patentable though useful, and new articles of manufacture patentable as such," is wide of the fact. The line of demarcation is absolutely clear. Risdon *v.* Medart, 158 U. S. 68, § 649. It is never otherwise than that the inherent novelty must be of the article itself; never in its elements, else it is a process; not in the mechanical means by which it is produced, else it is a case of mechanical invention. Either of these may or may not be patentable. Undoubtedly what the court had in mind in the cereal case was that it is generally difficult to determine upon which side of the fixed line of demarcation the invention in question falls.

Mathematical formula, § 650. The one case cited under this section raises, not the question of patentability of mathematical or other formulæ, but whether a claim expressed in such terms is good. Formulæ and symbolism have long been used in the description and drawings, often with greater lucidity than could be attained in any other way; but when it comes to delimiting the invention by the claim, that is quite another matter. This rule has been successfully invoked, at least once, in securing a similar claim in the Patent Office; but it is thought it should be permitted only when the meaning of the formula employed has a definite and clearly understood meaning and only when the ordinary expressions fail of the purpose.

Means, § 651. The Supreme Court has repeatedly held that an invention must consist of a new and useful means of obtaining the end sought. But when that court came to consider the case of National *v.* Boston, 156 U. S. 502, § 650, the rule received considerable stretching to make it cover the case of an old device to a remotely analogous use, and held, " in that case it is the idea of

means, though old, that is patentable, and not the end attained." This is but shifting the difficulty to another point and saying that novelty is not an essential to patentable invention. Had the court said that the idea of means resided, not in the old device nor in the new use, but in the concept that the old device could be put to the new use, the attenuation of the rule might be evident, but less distortion would have occurred. How shall we apply this rule to an article of manufacture? The answer is not at hand.

Mechanical skill, §§ 652-666. If we had defined patentable invention and patentable improvement, we should have, by exclusion, defined mechanical skill. But we have not, nor can it be done. The utmost that can be done in any of these cases is to marshal the tests and criteria which aid in determining the question in each case. Under this sub-title of mechanical skill it is shown that adaptation, aggregation, carrying forward, change of form, uniting or dividing parts, increasing efficiency, adapting an old device to an analogous use or to a new use where the change is trivial, or using old elements to produce an old result without recombination, or making an article portable, or merely giving it strength — all these are mechanical skill. And yet we may not say that none of these acts, per se, may involve invention. As was said in Krementz *v.* Cottle, 148 U. S. 556, § 656, "it is not easy to draw the line that separates the ordinary skill of a mechanic versed in his art from the exercise of patentable invention." And this leads directly to a consideration of what range of knowledge or skill shall be imputed to "a mechanic versed in his art." In Brown *v.* King, 107 Fed. 498, § 657, a rule is laid down which is believed to proceed upon a wrong principle, and which illustrates the point in question. Clearly the invention in that case was not one which could have been produced by "the ordinary skill of a mechanic versed in his art." But the inventor chanced to be an engineer of large ability who went about the problem with the directness and certainty which comes of education and training, and produced the desired device. Now, is the question of invention to be decided by a measurement of the education and engineering skill of the *inventor*, or by the skill of "a mechanic versed in his art?" In the case under consideration the court took the inventor as the measure. Is this permissible? Or, taken the other way, must we say that in a given art the skill of a mechanic used as a standard must be commensurate with the highest skill evinced by some individual in the art? It is perfectly clear that, in a difficult and complex art — such, for example, as communication by means of electricity — the "mechanic versed in his art"

is not the lineman who climbs poles or the machinist who makes parts of the apparatus; but must this mechanic be an Edison, or a Bell, or a Marconi? To state the proposition is to show its absurdity. We may, therefore, lay down the following negative rules as to what constitutes the status of mechanical skill:

1. It cannot be measured in terms of the skill of the inventor to whom the patent issued.

2. It cannot be measured in terms of the highest genius in the art.

3. It cannot be measured in terms of the ordinary workman in the art.

And on the positive side it may be stated that mechanical skill must vary directly with the general advance of the art, and to some degree with the progress in general education. The education of to-day makes mechanical skill of what might have been inventive genius fifty years ago, Duncan *v.* Cincinnati, 171 Fed. 657, § 656. But as education has narrowed the in-field of invention, it has extended the out-field; and it will not do to apply limitations based upon engineering training to close the door of invention to genius merely because it happens to be trained genius.

Novelty, §§ 667-9. Are novelty and patentability convertible terms? Clearly not. While novelty is an essential to patentability, mere novelty is not enough; novelty plus the other factors which the statute prescribes constitutes patentability. Under § 667 will be found the laborious efforts of the courts to define and distinguish novelty. If one thinks that the courts must, in all these years, have arrived at some general statement or doctrine which may be crystallized into a general statement, let him read those cases and attempt it. It is, after all, but another instance of the fact that no man may write down and classify the activity of the human mind. As has been seen, the line between invention and mechanical skill is a shifting one. So is the line which separates patentable novelty from everything else. The statute makes novelty and utility the main qualifications of the right to patent. Of these utility cuts but small figure in the mass of decisions, except as evidencing novelty. Absence of novelty is the chief of the affirmative defenses. To the solution of the question are brought most of the rules and tests of the entire field of the patent law, even including some of the rules and tests of infringement. Novelty is a condition. It is indefinable, shifting and varying with each case. It is something to be decided — whether present or absent — by a jury or by the court exercising the functions of a jury. The statute makes the wise provision that in the trial of an equity cause, the court may in

its judgment empanel a jury to decide this question of fact. It is from failure to regard the subject of novelty — the mistake of treating it as a yardstick by which invention is to be measured — that so many decisions have been astray and reversed on appeal.

Old device, new use, §§ 670–73. A writer with any perception of his sphere of activity would not contemplate a discussion of this subject. He would merely refer to Potts *v.* Creager, 155 U. S. 597, § 671, and state that nothing more was to be said.

Old elements, new result, § 674; Old elements, old result, § 675. The employment of an old combination or process to effect a new result, as stated in Potts *v.* Creager, *supra*, depends upon the question of analogousness as to its patentability. But the fact that the elements of the combination are old in themselves, when the result is new, does not affect the question of invention. In fact, most combinations fall under this class. With old elements and an old result the question of invention depends upon whether the combination of the elements was old.

Old process, new use, §§ 676–8. And the same rules apply to processes. The rules of Potts *v.* Creager, 155 U. S. 597, § 671 and Penna. *v.* Locomotive, 110 U. S. 490, § 676, apply with equal force to processes and machines.

Omitting element, § 678. Subject to the qualification stated by the Supreme Court quoted under this section, just as omitting an element avoids infringement (§ 456) so it may involve invention. And it may be said also that he who performs a given function with the omission of an element formerly essential, without the addition of another element to take its place, may entitle himself to a broader claim than that of the former combination, although he may not draw to himself the quality of a pioneer and dominate the prior combination.

Patentability, §§ 679–684. A very substantial and useful volume has been written upon this subject alone. As to what constitutes patentability, no better expressions are to be had than the quotations under § 679 from Atlantic *v.* Brady, 107 U. S. 192, and Thompson *v.* Boisselier, 114 U. S. 1. How far the copendency of application or subsequent issue of a patent to another may evidence patentable difference is a question which, notwithstanding the decision in Kokomo *v.* Kitselman, 189 U. S. 6, and Ransome *v.* Hyatt, 69 Fed. 148, § 680, is an open question. The day upon which this paragraph was written the writer was shown two patents, upwards of eight years apart in issue, covering a composition of matter simply identical. Now, it is all very well to regard the subsequent issue of such a patent as a *presumption*, micro-

scopic as it may be; but the moment we dignify it as *evidence* it fails to square with the experience of any patent lawyer.

The position taken by the courts in Millard *v.* Chase, 108 Fed. 399, and Hurlbut *v.* U. S. Mailing, 124 Fed. 66, § 681, is absolutely sound. Too long have the courts followed the line of least resistance in regard to patents of evident invalidity. It may satisfy the demands of the case at bar to construe a patent, confessedly invalid for want of invention, so narrowly as to render infringement impossible; but the courts owe a duty to the public — to the industries of the country — as was clearly indicated in Atlantic *v.* Brady, 107 U. S. 192. under § 679 — to wipe out at every opportunity those patents which make no contribution whatever to human knowledge, but stand in the way of legitimate progress.

As to the patentability of a mental conception, undoubtedly the rule in Forgie *v.* Oil Co. 58 Fed. 871, § 682, is sound; but what shall be said of Bradford *v.* Expanded, 146 Fed. 984, § 682? Is one to be barred from patenting an article of manufacture because he has also invented patentable means for producing that article? This question was asked in the first edition of this work. The answer is to be found in Expanded *v.* Bradford, 214 U. S. 366, § 817, since decided. This question is merely raised, not answered. It is true, as has been said in LeRoy *v.* Tatham, 14 How. 156, § 683, that a principle, scientific or otherwise, is not patentable. It is the means for utilizing such a principle that is the subject-matter of a patent. An architectural design is not patentable. Jacobs *v.* Baker, 74 U. S. 295, § 684. The test here is evident: Novelty of design is not novelty of means employed. If such a design embraced novel mechanical means, it would be those means, not the design, that would be patentable.

Process, §§ 685–688. This subject will be more fully considered under the general title process, §§ 814–822. Perhaps enough has been said regarding the decision in Westinghouse *v.* Boyden, 170 U. S. 537, § 686. But the writer is under the profound conviction that the rule of that case marks a halt in the progress hitherto due to the protection of basic invention. Inventors and manufacturers alike, knowing this rule, are endeavoring to overcome its effect by the patenting of not only all detail improvements, but every possible modification that can be thought of. This is resulting in the issuance of a vast number of patents not used — not expected ever to be used — simply to close the door as best it may be done in the absence of the right to a claim for a mechanical process. Here it must be noted that this statement was made before the decision of Expanded *v.* Bradford, 214 U. S. 366, § 817.

Property of matter, § 689. Not the property of matter discovered, but the invention of a practical application of it, is patentable.

Result or function, § 690. To hold a function or result patentable would be subversive of the entire patent system. This subject has been previously considered under §§ 426–427. One remark should be added here. It is a common error to suppose that a "whereby clause" (that is, a clause following the statement of the combination of the claim stating, whereby this and that operate so and so to accomplish this certain thing — the function of the device) in some way makes the claim broader, or in some way makes the function performed a part of the claim. Recalling the rule that a function is not patentable at once shows the uselessness of such appendages to claims.

Scientific principles or laws, § 691. This subject has been generally considered under patentability §§ 682, 683.

Simplicity, §§ 692–693. This subject also has been reviewed under evidence, § 632, but the matter of ex post facto judgment (§ 693) should not be overlooked. The rule now clearly laid down in Carnegie *v.* Cambia, 185 U. S. 403, § 693, should set this matter at rest.

Simplification, § 694. This, like the question of simplicity of invention, depends upon whether it is a case of triviality or a stroke of genius.

Substitution, §§ 695–697. The long list of Supreme Court decisions leaves no question as to the non-patentability of mere substitution of one material for another. But Edison *v.* U. S., 52 Fed. 300, § 697, is typical of a case where substitution of material is clearly patentable. In that case not only was the carbon filament unknown, but its use so enlarged the old function as to take the vacuum lamp from the laboratory and make it an article of great usefulness. The test of patentability would, seemingly, depend upon both the novelty of the element substituted and the improved result; or, as in the case of Rainear *v.* Western, 159 Fed. 431, § 697, upon the novel substitution of a known element to effect an improved result.

Systems and arrangements, § 698. This subject has been adverted to under aggregation, §§ 42–51. In the note under Library Bureau *v.* Macey, 148 Fed. 380, § 698, is indicated that which may save a patent covering a "system;" but as there stated, it is the novel means employed — not the system or arrangement — that constitutes the patentable feature of the invention. So it may be with the numberless electrical systems patented. In many of them are

novel devices and combinations. The "system" claim comes near being functional in character, since it is the product of the employment of these devices which may be novel in connection with arrangements of wiring necessary to their conjoint or successive operation; but like the Library Bureau case, the invention resides in the devices which make the arrangement possible, rather than in the arrangement itself.

Tests of, §§ 699–700; Transposition of parts, § 701. These subjects have been considered under evidence and adaptation, respectively.

Utility, § 702. The decision in Rickard *v.* DuBois, 103 Fed. 868, § 702, is most suggestive. It raises the question, how many other patents are there which might come under this ruling? We are told there is a novel attachment for a loom to make "bargain" goods, i. e., goods with slight blemishes or defects which the loom would not make were it not interfered with. This may or may not be a harmless deception for the benefit of the "bargain hunter," but would such a device be patentably useful under the statute? From time to time the Patent Office rejects applications which would, if matured into patents, be subversive of good morals, on the ground of lack of statutory utility. Consider also the slot machine case under § 645. With the continually quickening moral sense of the public, the line will be drawn more sharply; and those inventions which distinctly and chiefly find their uses in practices brought under public condemnation will find scant favor with the courts.

INVENTOR, § 703.

Nothing need be added to the statement of the text.

JOINT INVENTIONS, § 704.

The general statement under this section is quite full. While not common, instances of joint patenting do occur, such as that in Standard *v.* Computing, 126 Fed. 639, or De Laval *v.* Vermont, 135 Fed. 772, where, through ignorance, the applicants supposed that the right to make joint application depended upon joint ownership.

JUDICIAL NOTICE, §§ 705–712.

The courts will take judicial notice of matters relating to novelty and patentability, and may refer to common sources of general information to refresh the recollection. They will also, to some extent, take judicial notice of the prior art. Beer *v.* Walbridge, 100 Fed. 465, § 709, and will decide matters in view of such knowl-

edge whether pleaded or not. Slawson *v.* Grand, 107 U. S. 649, § 708. In like manner public use may be the subject of judicial notice; and to inform itself on matters of patentability in general the court will be at liberty to refer to its own records for anything therein contained. Rumford *v.* Hygienic, 159 Fed. 436, § 711.

JURISDICTION, §§ 713–725.

The district courts have original jurisdiction of all cases of infringement, excepting that actions of that nature against the Government arise in the Court of Claims, which is now definitely provided for under the act of June 25, 1910 (see § 428). Appellate jurisdiction originally resided in the Supreme Court, but since the establishment of the circuit courts of appeals they have appellate and final jurisdiction of all actions of this nature, excepting only a question of jurisdiction of a Federal court, which lies to the Supreme Court. Of course a case may be certified to the Supreme Court, but this is outside the question of general jurisdiction. A controversy involving a patent, when the moving cause is a contract, is not, as such, one which is under the jurisdiction given by the patent statute. The distinction is well stated in Victor *v.* The Fair, 123 Fed. 424, § 714. The general rule as to equity jurisdiction is stated in the quotation under § 718 from Root *v.* Railway, 105 U. S. 189. When a court of equity has once acquired jurisdiction, its powers will be co-extensive with the necessity of dispensing full justice; as, for example, if matters of contract are incidental, they will be decided; and if jurisdiction were acquired through other conditions than those arising from infringement, and infringement were incidental in the case, the court would proceed to a full determination of the issues. Primarily, a court of equity takes jurisdiction in order to apply the remedies peculiar to equity, and will not take jurisdiction when the remedy at law is adequate. Keys *v.* Eureka, 158 U. S. 150, § 721, or merely for the purpose of assessing damages or profits. Truman *v.* Holmes, 87 Fed. 742, § 719. Generally speaking, an equitable title is insufficient to enable a person to sue for infringement. Milwaukee *v.* Brunswick-Balke, 126 Fed. 171, § 926. But it would appear that conditions might arise where an equitable interest might be sufficient. Hayward *v.* Andrews, 106 U. S. 672, § 720. While it is the general rule that jurisdiction will not be taken on the showing of any interest less than one of the three mentioned in Waterman *v.* Mackenzie, 138 U. S. 252, § 150, if the infringement is committed by the assignor against his assignee holding a license interest, such licensee may sue. Littlefield *v.* Perry, 88 U. S. 205, § 722. But a plea of license

cannot defeat jurisdiction. The question of residence as affecting jurisdiction remains unchanged in Secs. 24 and 48 of the Judicial Code, the latter section being a re-enactment of the act of Mar. 3, 1897, the provisions of which were additions to the existing law. Westinghouse *v.* Great Northern, 88 Fed. 258, § 723. It is unnecessary to enter into the subject of jurisdiction of state courts further than to remark that it is a general principle that if such court has acquired jurisdiction upon proper grounds it may, collateral to the main issue, enquire into the scope and validity of the patent, even where the complaint prays injunctive relief, New Marshall Engine *v.* Marshall, 223 U. S. 473, § 714; and that while one may not ignore an existing contract and sue for infringement, Am. Graphophone *v.* Victor, 188 Fed. 428, § 714, still where two causes of action exist, one cognizable by a state court and the other by a Federal court, the complainant may elect between the two remedies, Henry *v.* Dick, 224 U. S. 1, §§ 714, 718.

LACHES, §§ 726–732.

Since both laches and excuse for laches are negative in character, they do not appeal strongly to the courts. Laches may amount to abandonment as indicated in § 726. Delay in bringing suit to be effective must be very clear. When a patentee is making bona fide effort to protect his monopoly, he is not called upon to sue all infringers. Edison *v.* Sawyer-Man, 53 Fed. 592, § 729. But a patentee may not use his grant as a trap to catch game. Hohorst *v.* Hamburg-American, 91 Fed. 655, § 728. Whether poverty is an excuse for laches compare Woodbury *v.* Keith, 101 U. S. 479 with Leggett *v.* Avery, 149 U. S. 287, § 729. Contradictory as these rulings appear, it is thought no hard and fast rule may be laid down. Poverty is a relative term, and it must be viewed along with surrounding circumstances and conditions, as was done in McNeely *v.* Williames, 96 Fed. 978, § 727. The subject of laches as affecting injunction pendente lite arises under § 568.

LAW ACTIONS, §§ 733–737.

Conditions which warrant the bringing of an action at law for infringement are such as to render the proceeding rare. The special rules affecting such cases are few. It is now well settled that the court has power to direct a verdict when it is evident and clear that the plaintiff cannot recover; but it is to be observed that this is a ruling of law that recovery cannot be had, rather than the usurpation of the function of a jury in deciding a question of fact. It is the duty of the court, in instructing the jury, to define the scope of the invention in accordance with the claim. Holmes

v. Truman, 67 Fed. 542, § 736. And it is not proper to instruct as to abstract, recondite or hypothetical matters, or to read from the opinion of another judge upon the patent in suit. (§ 736). The subject of damages has already been considered. (§§ 280–299). Aside from the rules here noted and those relating to damages and to the statutory notice of evidence of anticipation (§ 795), the trial of a law action for infringement proceeds upon general and well-established lines. Some matters as to pleading arise under §§ 789–807.

LETTERS PATENT, §§ 738–748.

It has become customary to speak of a patent as a monopoly. This is not strictly correct, for a patent is, at most, but a limited monopoly, U. S. *v.* Bell, 128 U. S. 315, § 745; and the use of the term "monopoly" tends to bring the grant into ill-repute, owing to the general aversion to monopoly in trade and industry. A patent is more nearly a contract as stated in Krupp *v.* Midvale, 191 Fed. 588, § 741. A better statement has not been made than that in Seymour *v.* Osborne, 78 U. S. 516, § 745, which makes the patent neither a contract nor a monopoly, but a particular form of grant sanctioned by the Constitution for the specific purpose of promoting the useful arts. It is true, indeed, that a series of patents may afford the basis of an odious monopoly, National *v.* Hench, 83 Fed. 36, § 744; but any attempt to classify a patent monopoly as coming under any general anti-trust act must prove abortive (Bement *v.* National, 186 U. S. 70, § 744; Rubber Tire *v.* Milwaukee, 154, Fed. 358, § 744; Virtue *v.* Creamery, 179 Fed. 115, § 744) until specific legislation is had to reach cases of unconscionable monopoly cloaking themselves under legitimate patent monopoly for evil purposes. That specific legislation to reach such cases is sorely needed no one can question.

The property right in letters patent differs little from that of other incorporeal personalty. There is no obligation arising from the grant for the owner to make use of his invention, or, in the event of his failure so to do, any suggestion of abandonment of his right, Heaton *v.* Eureka, 77 Fed. 288, § 746. But it must be remembered that the award of a preliminary injunction lies in the sound discretion of the court (§ 543), and it is believed that a cold-storage patent has the moral factor against it. In fact, one cannot read the appellate decision in the Selden Case (184 Fed. 893) without feeling that the moral factor growing out of the delay and supineness of the inventor had its influence with the court, in spite of the assertions of the perfect legality of his course. While it is now the law

that a patent has all of the immunities given it by the Harrow Case (§ 744, supra) and the Dick Case (§ 898), it seems probable that these immunities will be circumscribed either by statutory enactment or by change of judicial view.

A defect in a grant may be fatal or not, according to the nature of the defect. In Marsh *v.* Nichols, 128 U. S. 605, § 742, the defect was the absence of the signature of the Assistant Secretary of the Interior, which arose purely by accident, and was fatal. In Western *v.* North, 135 Fed. 79, § 748, the defect was delay or irregularity of the Patent Office, and was held not sufficient to defeat the grant. With the more reasonable view of patents as contracts, rather than pure monopolies, it is doubtful if so drastic a holding as that of Marsh *v.* Nichols would now prevail.

LICENSE, §§ 749–764.

An ordinary license is neither assignable nor transmissible. Haffcke *v.* Clark, 50 Fed. 531, § 762. But it may be so continued, of course, by specific terms in the contract, or by conduct or implication. Lane *v.* Locke, 150 U. S. 193, § 751. It would seem that the Supreme Court has established a special rule regarding Government employees. McAleer *v.* U. S., 150 U. S. 424, § 756. The construction of a contract of license follows the general rules of construction of written instruments. Standard *v.* Leslie, 78 Fed. 325, § 753. The covenants are mutually binding, and such a covenant as agreeing to defend the patent for the protection of the licensee is good. U. S. Cons. *v.* Griffin, 126 Fed. 364, § 753. The rules of estoppel apply between licensor and licensee, but an estoppel does not arise to prevent a licensee from showing the prior art to define the limits of his obligation. American *v.* Helmstetter, 142 Fed. 978, § 754. A licensee may forfeit his rights, and if he does, by failure to pay license fees under the contract, he cannot regain his right by tender of the fees due. Platt *v.* Fire Extinguisher, 59 Fed. 897, § 755. A license may arise by implication, or may be made by parol, and, of course, the statutory license arises in favor of a device built with consent before patent application (R. S. 4899). A rather close question of shop license arose in Barber *v.* National, 129 Fed. 370, § 756. It is thought that case marks the limit of right of an employer. There are cases where the secured right to one device will carry with it, by implication and by the rule that the grantor is in duty bound to make enjoyment of the grant possible, the right to use another patented device. The trolley switch case (Thomson-Houston *v.* Illinois, 152 Fed. 631, § 756) is in point. There the complainant consented to the

installation of the apparatus, including its patented switch, necessary to the use of the electric locomotives sold to defendant. Subsequently complainant bought other locomotives to use in connection with the former from another maker, and used them in connection with the same switch installation. It was held that the license which went, by implication, with the sale of the locomotives of complainant's make entitled the defendant to use the switches in connection with the other locomotives. While this holding might, at first glance, seem extreme, it is evident that, in such cases, the line must be drawn somewhere; and since it was within the power of that complainant to have specifically limited the use of its switches to that in conjunction with its locomotives, so long as that was not done, the rule seems just. But the rule in Edison *v.* Peninsular, 101 Fed. 831, § 756, is questionable. Unless the contract otherwise provides, payment of royalties ceases with the life of the patent; and it is fair to presume that if the patent expires prior to its full limit by reason of the expiration of a foreign patent under the former rule, payment of royalties would then cease. The right to royalties depends upon what is claimed, not what is described in the patent. Western *v.* Robertson, 142 Fed. 471, § 671. And where the license was made before patent and covers more than materializes in the claim, the licensee is not bound to royalties upon that which is found unpatentable. Eclipse *v.* Farrow, 199 U. S. 581, § 760. The rule that the sale of a patented article by the assignee of a territorial right within his territory sets the article free from all territorial restrictions is fundamental. Hobbie *v.* Jennison, 149 U. S. 355, § 763. Any restriction of this rule would have to be the subject of a contract. Keeler *v.* Standard, 157 U. S. 659, § 763. The invalidity of a patent cannot be set up by a licensee as an excuse for nonperformance under his license until such fact has been established as a matter of law. Holmes *v.* M. McGill, 108 Fed. 238, § 764. A co-owner of a patent may license without the consent of the common tenant with him. Paulus *v.* Buck, 129 Fed. 594, § 764. The means for preventing this, and many other complications, is to make the co-owners tenants by the entirety — a course which is often desirable.

LICENSOR AND LICENSEE, §§ 765–767.

This subject has been generally treated above.

MACHINE, §§ 768–769.

To what has been said under § 768 nothing need be added. The question of the right to repair a purchased patented machine has been fully considered under §§ 523–524.

MACHINE AND PROCESS, § 770.

It is clear that the machine may be new and the process old, or the machine may be old and the process new, or both may be new. A difficulty sometimes arises in determining whether the patentable novelty resides in the machine or in the steps of the process wherein the machine is a material part. In such a case we must go back to the fundamental principles and determine whether that which is new arises from the interaction of the elements of the machine, modifying the function of each and thus affecting the result, or whether novelty resides in the action (result) of the machine combined with some other step in the process.

MACHINE AND PRODUCT, § 771.

So also a machine and its product may be either or both novel. But novelty of the machine does not make the result patentable. The result or product, as an article of manufacture, must possess inherent novelty independent of the machine which creates it. A patent may or may not cover both the machine and the manufacture; where it does not, he who buys the machine attains the right to the manufacture, although it may be separately patented. But the reverse would not hold — a right to use or sell the article of manufacture would not carry the right to the separately patented machine.

MANUFACTURE, §§ 772–775 (see § 649).

What has been said under § 772 as to the looseness in use of the term "manufacture" is re-emphasized. The statute makes it one of the patentable classes of invention. Why was this done? Clearly because there is a class of inventions of economic value which cannot be defined, measured, or tested in terms of an art, machine, or composition of matter. A patentable art consists in genius brought to bear upon matter and the laws of matter to effect a given result; so with a process. A machine consists in imposing upon mechanical elements the mind of the inventor, working in harmony with the laws of mechanics to effect a result. The production of a new article of manufacture may involve these inventive acts or it may not; and the novelty of the article cannot be determined by the criteria commonly applied to these classes of patentable invention. The novelty must inhere in the article itself. For example, the man who first produced soap, say, by combining animal fat and lye from wood ashes, produced a new article of manufacture — soap. The test here would be whether soap had ever existed before. Soap bark had existed before,

but soap bark, in composition and efficiency, differs materially from soap; moreover, it is in no sense an article of manufacture. But suppose that, subsequent to the fat-and-lye soap, another invented a soap made from a vegetable oil and soda. His process might differ materially, and as such be patentable; but soap as an article of manufacture had been discovered. In that case the slimy, unrefined article — soft soap — would be a perfect anticipation of the cake of translucent, mild and largely different toilet article now in use. The inherent quality is the same in both. Thus it is that an article of manufacture may be new and highly useful from a commercial point of view, and yet be very old and wholly unpatentable from the viewpoint of the statute. Union *v.* Van Deusen, 90 U. S. 530, § 775. Now, if this reasoning is sound, it must follow that the broad statement that the test of novelty must be the same in the case of a machine (Campbell *v.* Bayley, 63 Fed. 463, § 774) cannot be accepted. Suppose we take another comparison: Carborundum is produced by an electrolytic process. Carbide is made by an electrolytic process more or less analogous. The one yields an abrasive, the other a gas. Now, by tests which we should apply to a machine or process there might be identity sufficient to warrant anticipation or infringement; but would one venture to say that, as an article of manufacture, a carborundum grinder was identical with a charge of carbide in an acetylene gas generator? It has seemed that, in view of the somewhat confused statements of the courts, there is necessity of going back to such elemental propositions to set right the lines of reasoning regarding manufactures.

MARKING "PATENTED" §§ 776–777.

Failure to comply with the requirement of the statute does not affect the grant, but does affect the right to recover damages or profits. When failure to mark is raised by the pleadings and the complainant or plaintiff fails to make proof of compliance with the statute, damages and profits are barred. All this is clear; beyond is doubt. While it is too late to raise this question for the first time on appeal, may it not be raised by the proofs and made an issue without pleading? Again, suppose that, while the article has not been marked, the infringer has been in full knowledge of the patent, has openly and defiantly infringed, remains silent and raises the question for the first time after final hearing. Such has been held a bar to profits in a circuit court. This is clearly a subject which needs further pronouncement by the appellate courts, but not along the narrow and reactionary line of the Circuit

Court of Appeals for the Second Circuit, Crier *v.* Innes, 170 Fed. 324; Lichtenstein *v.* Phipps, 168 Fed. 578, § 777.

The law governing false marking and qui tam actions under § 4901, R. S., is stated in London *v.* Dunbar, 179 Fed. 506, § 777.

MORTGAGE, § 778.

A mortgage on a patent is recordable in the Patent Office under § 4898, R. S., and since a patent is incorporeal property, the recording of the patent is constructive delivery. Legal proceedings growing out of a mortgage, in the absence of any charge of infringement, are cognizable by state courts.

OATH, §§ 779–780.

The occasions wherein the oath becomes insufficient to support a patent are most frequently those where the specification or claim has been unduly expanded by amendment or reissue. This has been referred to under §§ 52–57. It is evident that if the disclosure of the application as filed was insufficient, the proper course is to file a supplemental oath which states both inventorship and the fact that the supplemental matter of the amendment was part of the original invention. American Lava *v.* Steward, 155 Fed. 731, § 780. But where the application has been unduly delayed and intervening rights have accrued, the rule analogous to that of reissues will apply. Mayo *v.* Jenckes, 133 Fed. 527, § 54.

OPERATIVENESS, §§ 781–782.

The patent itself is strong presumptive evidence of operativeness; infringement by a defendant is practically conclusive. Want of operativeness is most frequently charged against a generic patent which merely opens up a new field. In such case a complete or commercial disclosure is not to be insisted upon — certainly not to the same degree as in a minor improvement. Since mechanical skill varies both with time and circumstance, that which constitutes a disclosure sufficient to enable one skilled in the art to make and use must also vary. No hard and fast rule is possible.

PATENT OFFICE, §§ 783–787.

The Supreme Court in Steinmetz *v.* Allen, 192 U. S. 543, here extensively quoted, and the Second Circuit decision in Benjamin *v.* Dale, 158 Fed. 617, § 348, should serve to correct the rare acts of the Office open to objection. When any conflict arises between a rule or act of the Office and a statute, the statute must, of course, prevail. So in the case of any conflict of opinion between the Office

and a court. The statement in Boyden *v.* Westinghouse, 70 Fed. 816, § 785, that the Office employs the best engineering experts it can secure, and that therefore the action of such examiners is equivalent to the testimony of the highest experts, is a non sequitur for at least two reasons. First, it is a notorious fact that an examiner cannot give the time and study to a case that the expert does. Second, the expert is subjected to a rigid cross-examination; and the decision of the examiner is at most only on a par with the ex parte statements of an expert, as in the case of an affidavit on motion for a preliminary injunction; and to such statements, as has been seen, the courts never give overmuch weight.

PLEADING AND PRACTICE, §§ 788–802.

As stated in the preface, this work does not deal with pleading, practice, or procedure, except in so far as relates to matters peculiar to patent causes. Consequently no general review of the special rules quoted under this title will be attempted.

PRIORITY, §§ 808–812.

This subject is clearly related to that of anticipation, §§ 58–108, and reduction to practice, §§ 860–867. Where the question has arisen and been adjudicated between the same parties in the Patent Office, such adjudication, in the absence of a most persuasive moving consideration not there raised, is conclusive. Aside from this matter, the general principles of reduction to practice are reviewed in connection with the sections above mentioned.

PROCESS, §§ 813–822.

A process is generally distinguished from a machine in that it consists of a series of steps, as stated in Cochrane *v.* Deener, 94 U. S. 780, § 815; and the claim should be expressed in terms of the steps and not in terms of a machine employed. The rule of equivalents in processes is that stated in Tyler *v.* Boston, 74 U. S. 327, § 373 — that an equivalent means only equally good. As elsewhere stated, the elements or steps may be separately old, yet patentable in the combination of steps of the process. This is well illustrated in Lowther *v.* Hamilton, 124 U. S. 1, § 819. Process and product claims may be had in the same patent, but they must be separate claims. The product cannot be claimed in terms of the process, since it might be produced by another process. Goodyear *v.* Davis, 102 U. S. 122, § 821. Under the rule of Westinghouse *v.* Boyden, 170 U. S. 537, § 817, a mechanical process was held non-

patentable. But that opinion, at variance with previous law and, as it always seemed to me, illogical, was not to remain the law; and in Expanded *v.* Bradford, 214 U. S. 366, § 817, after reviewing the history of this question, Justice Day lays down the law which may be summarized thus: The invention or discovery of a process or method involving mechanical operations and producing a new and useful result, may, if independent of particular mechanism for producing it, be within the protection of the Federal statute.

PRODUCT, §§ 823–824.

It was remarked in the discussion of a manufacture (§§ 772–775) that, for example, he who first invented soap as an article of manufacture would not be anticipated by a somewhat similar natural article — soap bark. If we compare that statement with that in Cochrane *v.* Badische, 111 U. S. 293, § 823, there is apparent conflict. But there is no real conflict. In the alizarine case its commercial equivalent had been previously 'extracted from the madder root, but did not per se exist as a natural substance. In order to produce the article from the vegetable certain artificial means were necessary. Those means had been employed, and it already existed as an article of manufacture; and producing it by another process and by the employment of other materials did not confer patentability.

PROFITS, §§ 825–847.

The right to an accounting in equity is incident to the right to an injunction. The statute provides that the court may assess or cause to be assessed the amount to which the complainant is entitled. The assessment, when made by a master in chancery, is subject to review and revision by the court; but the court will not arbitrarily change the amount found or disregard the facts found by the master. The appellate court may, if the facts are clear and sufficient, revise the figures of the master conformable to the facts, without sending the report back. The two subjects, profits and damages, are so related and the rules so interwoven that the one cannot be studied separately from the other. Many matters bearing upon the subject in hand will be found under damages, §§ 278–299.

In Rubber Co. *v.* Goodyear, 76 U. S. 788, § 273, profits are defined as the gain made upon any business or investment, where both receipts and payments are taken into the account. If the discovery of the receipts and payments were easy, and the mere computation of the difference all there were to be done, the problem

of profits would be without incident. But such is never the case; for even in the simplest of accountings some problem is certain to arise. Nor does the "fruits of advantage" rule of Coupe *v.* Royer, 155 U. S. 565, § 837, do more than indicate that the profits may be either gains in the ordinary sense of that term, or savings, or both. The trustee ex maleficio rule of Wales *v.* Waterbury, 101 Fed. 126, § 841, which was rendered nugatory by Westinghouse *v.* New York, 140 Fed. 545, and now restored to its rightful place by Westinghouse *v.* Wagner, 225 U. S. 604, § 845, applies to all those cases where segregation has been rendered difficult, if not impossible, by the conduct of the defendant in mixing or concealing his gains. The dissenting opinion of Judge Sanborn in Westinghouse *v.* Wagner, 173 Fed. 361, § 845, which is made good law by the Supreme Court reversal of that case, is commended as a masterly statement of the law. As has been shown in connection with damages, the entire problem begins with segregation, and the inquiry is this: Does the nature of the invention and the incident of its infringement bring it under the first or second portion of the rule of Garretson *v.* Clark, 111 U. S. 120, § 845? If it comes under the first portion, before any of the ordinary computations of profits by way of receipts and expenses may be had, complete segregation must be made. If under the second portion of that rule, before the regular computation can be entertained, the proofs must show indubitably that the entire profits of the manufacture, use or sale were due to the patented feature. Thus before any accounting may begin, in the proper sense of the term, the rule of Garretson *v.* Clark must be fully satisfied. If, now, this has been done, the master may proceed, keeping in mind the general rule that his report is merely advisory to the court. Boesch *v.* Gräf, 133 U. S. 697, § 836. If the condition is one where the measure is the entire profits, the rule of Elizabeth *v.* American, 97 U. S. 126, § 838 and Rubber Co. *v.* Goodyear, 76 U. S. 788, § 839, apply. If it is a question of savings, the rule of Hohorst *v.* Hamburg-American, 91 Fed. 655, § 840, is to be followed. But the problem of savings may be as difficult as in Doten *v.* City of Boston, 138 Fed. 406, § 837, where any statement of savings in dollars and cents based upon tangible considerations is wholly impossible. How far one may go in making a general estimate, as was done in that case, is a matter of conjecture. Attempts have been made to show profits by analogy — by what others have done — but this is not permissible. Robbins *v.* Illinois, 81 Fed. 957, § 842. So far the burden has been upon complainant. If he has failed to segregate, recovery is impossible, unless he has shown right to the entire profits, or has shown, as provided in the

Westinghouse case, *supra*, (1) the presence of substantial gains by the defendant, (2) confusion, (3) impossibility of segregation by complainant. Of course, if the complainant can trace a loss (damage) back as a diversion by defendant, he may recover that item, not as damages, but as a profit made by the defendant. The burden now shifts to the defendant — provided only that the complainant has shown the obvious deductions to be made — and it becomes the duty of the defendant, if he can, to reduce the amount by direct deduction of the amount of profits or by deductions in terms of expenses. But he may not submit as an item general expenses, or losses, or "manufacturer's profits" (§§ 828-830). He may show actual items of cost, including ordinary salaries and commissions, but not managerial or proprietary salaries. An accounting is a post mortem. As to most matters of affirmative proof the defendant is defunct, and the master as coroner finds sealed lips as to those things he most needs to know. Even those who perform the autopsy will disagree. Nor is this the end of the trouble; for when the affirmative evidence is all in, the corpse revives sufficiently to deny so much as he is able, and re-expires.

PROTESTS, § 848.

As stated under § 848, there is no statutory provision for filing protests, or opposition to any issued patent; nor is there any method of testing or proving the validity, scope, or strength of any patent short of abiding possible infringement suit, and the long, expensive process that involves. To my mind, here is the weakest point in our patent system; for it leaves the patentee in uncertainty and makes patents, in many cases, a menace to industry. Space does not permit more than this remark upon this serious and growing evil.

PUBLIC USE, §§ 849–858.

The question of public use is not one of intent; it is a question of fact. It is not a thing to be mitigated or excused. The statute is absolute. Within the two-year limit full freedom exists. An application filed a moment inside the limit is as much on time as if filed on the day of invention. A moment later and the inchoate right is lost beyond all recall; and taking a narrow chance — postponing filing to prolong the life of the patent — has defeated many a patent. Such being the case, it is but just that the burden of proving public use is upon the defendant, and every question of doubt is to be resolved against such an allegation. As to what constitutes experiment, as was said under the title, experiment,

§ 412, there is nothing to be added to the decision in Eastman *v.* Mayor, 134 Fed. 844, there quoted extensively. Foreign use, unless resulting in patent or publication, does not anticipate, and in such case the date of use is that of the patent or publication — not the antecedent, actual use. Since Egbert *v.* Lippmann, 104 U. S. 333, § 854, the word "public" has had a meaning all its own when used to modify the word "use." When Romeo invents a corset steel and Juliet wears it next her heart, and that is public use, it is little wonder that an invention hidden within the confines of a fire and burglar proof safe is public use. Hall *v.* Macneal, 107 U. S. 90, § 854. The question does not turn upon the number of uses or upon the number of persons concerned in the use; although, if any doubt exists, numbers may be more or less persuasive. Whether a single sale would, in all cases, amount to public use seems to be questioned in Swain *v.* Holyoke, 109 Fed. 154, but its sufficiency is affirmed in National *v.* American, 178 Fed. 79, § 856.

PUBLIC USE PROCEEDINGS, § 859.

Nothing need be added to the statement under this title, except to remark that this proceeding should be combined with protest proceedings (§ 848), and made an effective measure.

REDUCTION TO PRACTICE, §§ 860–867.

Diligence is of importance when the question of priority, the question of competition for the right, arises. As to what constitutes reduction to practice, it is clear when we compare the earlier decisions, such as Seymour *v.* Osborne, 78 U. S. 516, § 862, with the Telephone Cases, 126 U. S. 1, § 865, that the rule has changed materially; and still later, in the Barbed Wire Case, 143 U. S. 275, § 864, we reach the final test, the "last step rule." It is evident that a literal following of the earlier rule, the actual construction in material form, would render void many patents. It would have defeated Bell's patent, very likely. The time when an invention must be reduced to practice by putting the idea into wood and iron is past. In the early days that course was largely necessary, just as the filing of a model was often necessary to the understanding of an invention. Clearly, then, it may be said that reduction to practice is no longer a matter of construction, building, trial, but the disclosure of the idea by any means — device, drawing, or verbal description — which will enable one skilled in the art to make and use the same. This test may render a sketch sufficient; it may render an experimental machine insufficient; for if the

idea of means, operative means, is disclosed, there is the invention; and any number of models or experimental machines — such as there were in the Telephone Case and in the Barbed Wire Case — if they fail to disclose the idea so that another may practise the alleged invention, — cannot lay the foundation for a patent. But where there is conflict and contest for priority, finer distinctions must be made and other tests resorted to. Judge Holt, in Automatic *v.* Pneumatic, 166 Fed. 288, § 860, has undertaken to codify the law on this subject, and, as previously noted, with questionable success. That opinion, however, is valuable for its collection of and comment upon most of the leading authorities.

REHEARINGS, § 868.

This subject is one of practice, and is not entered upon in this work.

REISSUES, §§ 869–889.

No single subject of the patent law has given rise to so much appellate ruling as the subject of reissues. The causes may have been, in many cases, as stated in Crown *v.* Aluminum, 108 Fed. 845, § 871, the greedy acts of unscrupulous persons and adventurers; but it is thought a more potent influence has existed in the attempts on the part of patentees to make their patents cover what they honestly believed to be their own inventions, but which, in point of fact, were not. The inventor is apt to have an unduly large idea of the child of his brain; the manufacturer an unduly large idea of his monopoly; and when either perceives others stepping beyond him in his own particular art, he fancies it to be a trespass upon what he honestly regards as his own close. It is only when we take such a charitable view of the seeming overreaching by reissue that it can be viewed with patience in many cases. The main, broad rules of reissue are to be found in three cases: Miller *v.* Brass Co. 104 U. S. 350, § 883; Topliff *v.* Topliff, 145 U. S. 156, § 883; McCormick *v.* Aultman, 169 U. S. 606, § 887. These rules are as follows:

1. That the reissue cannot cover another invention than that of the original.

2. That the reissue cannot cover what was described but not claimed after long delay and not even after brief delay if intervening rights have accrued.

3. That while a reissue claim may be enlarged, it can be done only when actual mistake has occurred, and then only without delay.

4. That in reissues for enlarging the scope of a patent, the rule of laches should be rigidly applied.

5. That the general purpose of the statute providing for reissues was to correct mistakes and errors, and not to enable the inventor, from time to time, to extend his monopoly so as to cover progress by others in his art.

6. That due diligence must be exercised in discovering the mistake in the original, and that, if it be sought for the purpose of enlarging the claim, the lapse of two years will ordinarily, though not always, be treated as evidence of abandonment of the new matter.

7. That the question whether the application was made within a reasonable time is, in most, if not all such cases, a question of law for the court.

8. That the court will not review the decision of the Commissioner upon the question of inadvertence, accident, or mistake, unless the matter is manifest from the record.

9. That the specification may be modified so as to make it more conformable to the exact right of the patentee, but the invention must be the same.

10. That if the patentee abandons his application for a reissue, he is entitled to a return of his original patent precisely as it stood when such application was made.

11. The tendency in the Seventh Circuit, and in some other circuit, perhaps, is to enforce these rules with so great rigor that any enlargement of a claim is practically barred, McDowell *v.* Ideal, 187 Fed. 814; Moneyweight *v.* Toledo, 187 Fed. 826, § 871.

While there are minor rules which might be stated, these are the main ones; and it is not necessary in this brief review to go further.

REOPENING CASE, §§ 890–892.

This is a question of practice which lies chiefly without this review. The general rule of Bresnahan *v.* Tripp, 99 Fed. 280, § 891, is that the new evidence must be so cogent and persuasive as to convince the court that if it had been presented, it would have resulted in a different decision; and this new evidence must be something more than cumulative; and must be newly discovered evidence, and not merely newly discovered materiality of old evidence. Lafferty *v.* Acme, 143 Fed. 321, § 991. And a case will not be reopened merely to enable a complainant to prove damages. Baker *v.* Crane, 138 Fed. 60, § 892.

RES JUDICATA, §§ 893–896.

This subject has arisen in connection with adjudication, §§ 28–37, and comity, §§ 250–257. The first and main inquiry is whether the issues were the same and the estoppel mutual. With these present, a position wellnigh impregnable is established. But lacking either of these, the courts are disposed to decide the case on its merits. A Patent Office decision is res judicata on a question of priority between the same parties when the contrary conclusion is not established by thoroughly convincing additional proof. Ecaubert *v.* Appleton, 67 Fed. 917, § 895.

ROYALTIES, § 897.

For a masterful, complete review of the subject of royalties, a reading of Judge Putnam's opinion in Western Union *v.* Am. Bell, 125 Fed. 342, § 897, is sufficient. It was said, with regard to licensees, §§ 749–764, that Eclipse *v.* Farrow, 199 U. S. 581, held that where the license was made before patent and the subject-matter failed, in part, to materialize in a claim, the licensee need not pay royalties upon the device found to be old. Under this title (§ 897) a quotation from the same case seems to hold to the contrary. But it will be seen that the defendant saw fit to retain the license contract after the claim had failed: and so electing, he could not escape its terms.

SECRET PROCESS OR MACHINE, § 898.

This subject arises in connection with unpatented inventions, §§ 930–935.

SALE OF PATENTED ARTICLE, § 899.

The extended quotation from Heaton *v.* Eureka, 77 Fed. 288, and that from Henry *v.* Dick, 224 U. S. 1, under this section need no further comment in view of what has been said under the title Equity, §§ 370–372.

SPECIFICATION, §§ 900–919.

As said in § 901, the term "specification" has been loosely used. In reading the decisions of early times, one finds it embracing description, claims, and even drawings — all that the patentee contributes to the grant; but most commonly to the description and claims. As employed here, it will be used in the present sense — as meaning the description only. The ancient rule was that the specification (description and claim) should clearly indicate both the new and the old, and distinguish them. Fancy that rule in force now! Consider what would be involved, say, in patenting a new

type-bar on a writing machine, if the patentee had to describe all else in the machine and disclaim all else save the type-bar. The present rule is that of Carnegie *v.* Cambia, 185 U. S. 403, § 903, which is, briefly, that the specification is addressed to those skilled in the art to which it pertains, and is sufficient if it may be understood by such skilled persons — assuming as a matter of course that such skilled persons are familiar with all that has gone before.

Mere verbosity or unskilled statement are not fatal defects; but verbosity may suggest triviality. Lyons *v.* Drucker, 106 Fed. 416, § 903. But where the defects are glaring and the patentee has had opportunity to correct the same by reissue, the courts will not look with favor upon such a patent. Matheson *v.* Campbell, 76 Fed. 910, § 904. In a basic patent less detail will be required. Electric *v.* Pittsburg, 125 Fed. 926, § 905. But where the invention is a narrow improvement, dependent for its novelty upon location, size, form, or any detail of construction, greater definiteness of specification is required. American *v.* Steward, 155 Fed. 731, § 904. The recital of equivalents, or statements disclaiming limitation to the specific construction or means shown and described neither add to nor detract from the patent. The function need not be described; nor need the beneficial uses be all known to the inventor. It is enough if he has fully described the means. A patent for a process should be definitive as to matters of elements, steps, and result. Cochrane *v.* Badische, 111 U. S. 293, § 914; but the statement quoted under § 914 from Electric *v.* Carborundum, 102 Fed. 618, is believed to be open to serious criticism if it be taken as a general proposition. Frequently the inventor (and his solicitor) is lacking in scientific knowledge, and in some cases an entirely false idea has possessed the mind of the patentee. These matter not so long as the real invention is described. The ideal specification (which has not yet been written) should, in the opinion of the writer, accomplish the following:

1. It should describe the essential elements which enter into the combination.

2. It should clearly indicate their co-action and operation.

3. It should do precisely what the claim should not — give a functional statement of the invention.

4. It should be simple in terms. The best expert, either in drawing a specification or in testifying for the benefit of the court, is simple, direct, and avoids so far as is possible technical terms.

5. It should avoid all laudation and all attempts to declare the basic character of the invention.

6. It should have a single aim: the disclosure of the invention to enable others skilled in the art to make and use the same. The specification is for the benefit of the public; the claim for the benefit of the patentee.

STATE STATUTES AND REGULATIONS AFFECTING PATENT RIGHTS, § 920.

The fact that a patent happens to be a form of personalty protected by Federal law does not exempt it from the common rules governing personal property. If we go back to the fundamental proposition, that the Federal grant creates nothing that did not before exist, but gives to the patentee the right to protect what he has created and provides a forum therefor, the entire proposition becomes simple. A state may not confiscate, by taxation or otherwise, or limit the plain rights of the grant; but the police power of the state may be exercised in the protection of its citizens, and the seal of the Patent Office no more exempts the holder thereof from the exercise of that power than does an internal revenue stamp issued by the Federal Government exempt the person owning the property to which it is attached.

STATUTE OF LIMITATIONS, § 921.

The amendment of Jan. 1, 1898, to Sec. 4921 renders the decisions cited under this title of little moment.

STATUTES RELATING TO PATENTS — THE PATENT STATUTE, §§ 922–923.

With the exception of Sec. 4887, relating to the effect of a foreign patent (discussed under §§ 419–424), the patent statutes, as established by the various acts of 1870–1–2, have remained without considerable change. The Federal Judicial Code, in effect Jan. 1, 1912, affects the patent law only as it gives original jurisdiction to the district courts and elevates the Court of Appeals, D. C. to its proper place beside the nine circuit courts of appeals. The meaning and construction of the various provisions are found only as they are scattered through the decisions of the appellate courts. The Supreme Court has construed these by the same rules of construction that it has applied to other statutes; and has held (Andrews *v.* Hovey, 124 U. S. 694) that a patent statute cannot be judicially settled until passed upon by that court. Since it is the practice of the circuit courts of appeals to certify unsettled questions of law to the Supreme Court, and since the Judicial Code makes definite provision therefor, it is the reasonable inference that, in the event

of a serious and controverted question of statutory interpretation arising, the rule of Andrews *v.* Hovey would be regarded as good and sufficient reason for certifying such a question to the Supreme Court, and also that conflict of decision between different circuits will be materially lessened. The analysis of the patent statute, containing the Patent Office annotations, and the sections of the Judicial Code relating to patents, appended as a separate chapter possesses utility.

THREATS, § 924.

This title needs no comment.

TITLE, §§ 925–927.

The title to a patent and the title to a thing protected by a patent are wholly separate and different things. In the absence of contract provision, the passing of the title to the thing patented frees the thing from the monopoly both in time and place. Only he who holds a legal title to a patent may, alone, sue for infringement; and what constitutes an actionable title is determined by Waterman *v.* Mackenzie, 138 U. S. 252, § 150. It is a wise rule that makes a prima facie record title good as against a collateral attack by an infringer, claiming no title in himself, who attempts to show that the title in complainant is only an equitable title that he may avoid infringement. Goss *v.* Scott, 108 Fed. 253, § 926. But while, under the circumstances of that case, the ruling was unquestionable, it is doubtful if such a rule may be made general. Attention is directed to Blackledge *v.* Weir, 108 Fed. 71, § 927. As elsewhere noted, it is often desirable that joint owners should hold by the entirety. This is a simple matter of assignment. For the peace of business and for the preservation of the monopoly some provision which will prevent the dissipation of the monopoly is desirable. Minor interests may be created by license or shop right. It is a familiar fact that most of the "patent-right frauds" have grown out of the sale of territorial rights — state, county, or township rights. It is a title that rarely is warranted.

UNPATENTED INVENTIONS, §§ 930–935.

An unpatented invention is, under common-law, common property. The constitution and the statute lift it one step higher and give it the character of an inchoate right. In that state it becomes assignable — not as a thing in being, but as an inchoate right. It has been held that a court of chancery cannot decree specific performance to convey property which has no existence. Kennedy

v. Hazleton, 128 U. S. 724, § 931. But it is clear that, when such inchoate right is matured into property, such right may be enforced. He who invents and keeps his invention a secret takes his chances under the common-law. By deciding so to do he abandons his inchoate right; and he who learns the secret lawfully has full right to the invention. It is only when the statute is complied with that the inchoate right becomes a patent right, and therefore, property. The several rights which may be secured in an invention before patent under R. S. 4899 are set out in Wade *v.* Metcalf, 129 U. S. 202, § 932. The right of an employer to the unpatented invention of an employee is a shop right only. Dable *v.* Flint, 137 U. S. 41, § 933. The distinction between one holding an invention in an unpatented state with no intent to protect it by patent, and one who is holding such an invention for experiment, perfecting, or merely biding his time within the two-year limit the statute gives him, is obvious. The one is abandonment; the other is not.

WORDS AND PHRASES, §§ 936–938.

As has been elsewhere remarked, it is a mistaken idea of patentees and patent solicitors that they may broaden a claim by the use of the term "means" or "means whereby." Observe the facts: The court must first turn to the specification and drawings and identify the "means" as indicating the specific devices shown and described. If there is any range of equivalency applicable, it can be applied only after the "means" have been translated into the specific elements shown. Manifestly, using such terms, instead of bringing in directly the elements shown, serves no good purpose, but places upon the court an additional burden — that of translation of terms into elements. The words "substantially as described," "substantially as set forth," are words of limitation, limiting the claim to the specific elements described. Pope *v.* Gormully, 144 U. S. 248, § 937. But compare this rule with that of Hobbs *v.* Beach, 180 U. S. 383, § 937. Clearly the latter rule is the one which has been followed generally, and followed in this manner: When the patent is generic and deserving of liberal construction, such words of limitation are given the least significance consistent with their use; where the patent is narrow or trivial, the rule is severely applied. The use of a "whereby clause" is useful in only one way: it may explain the claim by indicating its function. It adds nothing to the claim — nothing whatever — so far as concerns the actual combination.

And yet, in all these matters, it is clear that the courts employ

rules, not for the sake of the rules, but for the sake of justice. It is true of the patent law, perhaps as of no other branch of the law, that we find a rule brought into being and applied to the case in hand — a rule hard and harsh — and presently that rule is construed, mollified, and adapted, that it may still be used, still justice be done. Such has been the wise course of equity.

THE FIXED LAW OF PATENTS

ABANDONMENT.

Statutory provision § 1
General Rules § 2
After Application § 3
Amendment § 4 (*see* § 52)
Application
  Abandonment and renewal § 5
  Delay § 6
Constructive § 7
Decision of Commissioner — Not Final § 8
Division of Application § 9 (*see* §§ 348, 356)
Experimental Use § 10 (*see* § 412)
Evidence of § 11 (*see* § 388)
Failure to Claim § 12
Prosecution of Application § 13
  Of Interference § 14
  Of Renewal Application § 15
Piracy § 16
Prior Patent § 17
Public Use § 18 (*see* § 849)
Subsequent Patent § 19
Miscellaneous Rulings § 20
See —Anticipation §§ 60–1–2; *Claims* § 203; *Defenses* § 316; *Evidence* § 413; *Invention* § 590; *Reissue* § 870

§ 1. Statutory Provision.

Any person who has invented * * * unless the same is proved to have been abandoned, may * * * * obtain a patent therefor. R. S. 4886.

* * * Upon failure of the applicant to prosecute the same within one year after any action therein, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto. R. S. 4894.

* * * And upon the hearing of renewed applications preferred under this section, abandonment shall be considered as a question of fact. R. S. 4897.

Note: Prior to the amendment to Sec. 4894 on Mar. 3, 1897, the period of time mentioned was two years. In determining whether there is abandonment under the statute, it is therefore necessary to determine whether the patent was issued, or the application was filed before, that amendment went into effect.

The subject of abandonment also arises in connection with *Defenses* and *Invention*.

§ 2. General Rules.

Forfeitures are not favored in law, and the courts are always prompt to seize hold of any circumstances that indicate an election to waive a forfeiture. — Ins. Co. *v.* Egglestone, 96 U. S. 572; 24 L. Ed. 841.

Ins. Co. *v.* Norton, 96 U. S. 234.

It has not been, and indeed cannot be denied, that an inventor may abandon his invention, and surrender or dedicate it to the public. This inchoate right, thus once gone, cannot afterwards be resumed at his pleasure, for, where gifts are once made to the public in this way, they become absolute. — Pennock *v.* Dialogue, 2 Pet. 1; 7 L. Ed. 327.

Abandonment may be by express declaration or by conduct equally significant with language, as acquiescence in its use by others or by wilful or

negligent postponement of his claims, or by an attempt to withhold the invention from the public. — Kendall *v.* Winsor, 62 U. S. 322; 16 L. Ed. 165.

An abandonment is a dedication and like any other dedication, it should be clearly proved. It rests upon the intention of the inventor. If he expressly declares, or by his acts clearly shows, his intention to dedicate his invention to the public, a finding of abandonment would be warranted. But such a dedication should not be lightly presumed, because it surrenders a vested right of property. — Mast *v.* Dempster, 82 Fed. 327; 27 C. C. A. 191. But see 177 U. S. 485.

Clear evidence of an intention to dedicate an improvement to the public is indispensable to establish abandonment. The patent in suit and the application upon which it is based are persuasive proof that the inventor never intended to dedicate, and never did dedicate, the improvement they secure to the public. — Ide *v.* Trorlicht, 115 Fed. 137; 53 C. C. A. 341.

Mast *v.* Dempster, 82 Fed. 327; Woolen *v.* Jordan, 7 Wall. 583; Adams *v.* Jones, Fed. Cas. 57; Jones *v.* Sewall, Fed. Cas. 7495; McMillin *v.* Barclay, Fed. Cas. 8,902; Pitts *v.* Edmonds, Fed. Cas. 11,191.

§ 3. After Application.

An abandonment of an invention to the public may be evinced by the conduct of the inventor at any time, even within the two years named in the law. The effect of the law is, that no such consequence will necessarily follow from the invention being in public use or on sale with the inventor's consent and allowance at any time within two years before his application; but that, if the invention is in public use or on sale prior to that time, it will be conclusive evidence of abandonment, and the patent will be void. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

There may be an abandonment of an invention to the public, as well after an application has been rejected or withdrawn, as before any application is made. Such abandonment may be proved either by express declarations of an intention to abandon, or by conduct inconsistent with any other conclusion. — U. S. *v.* Whitney, 118 U. S. 22; 30 L. Ed. 53; 6 S. Ct. 950.

Planing *v.* Keith, 101 U. S. 479.

There is a material difference between the abandonment of an invention and the abandonment of an application for letters patent thereon, by failure to comply with section 4894, R. S. The first gives the invention to the public, and, once done, the act is irretrievable; but, besides the power conferred upon the Commissioner of Patents to relieve an applicant from an abandonment of his application under the statute, an application which has lapsed, or been rejected or withdrawn, may be renewed or repeated so long, we suppose, as the invention itself has not been abandoned by reason of a two years' public use or otherwise. — Western *v.* Sperry, 58 Fed. 186; 7 C. C. A. 164.

Planing Machine *v.* Keith, 101 U. S. 479; Kendall *v.* Winsor, 21 How. 322; Shaw *v.* Cooper, 7 Pet. 292; U. S. *v.* Whitney, 118 U. S. 22.

There may be abandonment before application or thereafter. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

There is a wide difference between the abandonment of an invention and the abandonment of an application. An abandonment of an application is not necessarily an abandonment of the invention, and after the application has been abandoned a valid patent for the invention may nevertheless be secured upon a new application, provided the invention has not gone into

public use or been upon sale for more than two years prior to the filing of the latter. In cases where the first application has not been abandoned, subsequent applications and amendments constitute a continuance of the original proceeding, and the two years' public use or sale which may avoid the patent must be reckoned from the presentation of the first application, and not from the filing of subsequent applications or amendments. — Hayes Young *v.* St. Louis, 137 Fed. 80; 70 C. C. A. 1.

U. S. *v.* Am. Bell Tel. Co. 167 U. S. 224; Colgate *v.* Western, Fed. Cas. 2,995; Michle *v.* Read, 96 O. G. 426; Thomson-Houston *v.* Winchester, 71 Fed. 192; Godfrey *v.* Eames, 1 Wall. 317; Smith *v.* Goodyear, 93 U. S. 486; Cain *v.* Park, 86 O. G. 797; Ex parte Stewart, 4 O. G. 665; Stirling *v.* St. Louis, 79 Fed. 80; Dederick *v.* Fox, 56 Fed. 714; Ligowski *v.* American, 34 Fed. 328.

The original application was abandoned for want of prosecution within the statutory period. Applicant attempted to give good and sufficient excuses to secure revival of the application, but failed. He then filed a second application but did not file the statutory oath. *Held:* The unavoidable conclusion is that the first application was abandoned; that the second application was not a continuation of the original solicitation, but the institution of a new and independent proceeding; that the patent is founded on the second application alone; and that the absence of any averment that the invention was not in public use or on sale in this country for more than two years before the latter application was presented to the commissioner is fatal to the cause of action for an infringement of the patent. — Hayes-Young *v.* St. Louis, 137 Fed. 80; 70 C. C. A. 1.

The abandonment of an application destroys the continuity of the solicitation of the patent. After abandonment a subsequent application institutes a new and independent proceeding, and the two years' use or sale which may invalidate the patent issued upon it must be counted from the filing of the later application. — Hayes-Young *v.* St. Louis, 137 Fed. 80; 70 C. C. A. 1.

Bevin *v.* East Hamilton, Fed. Cas. 1,379; Lindsay *v.* Stein, 10 Fed. 907; Lay *v.* Indianapolis, 120 Fed. 835; Mowry *v.* Barber, Fed. Cas. 9,892; Marsh *v.* Sayles, Fed. Cas. 9,199; Ex parte Simpson, Fed. Cas. 12,878; Carty *v.* Kellogg, 73 O. G. 285; Cain *v.* Park, 86 O. G. 797.

§ 4. Amendment.

Pending the application for this patent, he presented an amendment to his specification, whereby he described, and sought to include a construction substantially identical in form and details of construction with that made by the appellants, and the amendment was not allowed. Having acquiesced in that ruling, the patentee cannot be heard to insist that the matter so excluded is nevertheless covered by the patent. — Wells *v.* Henderson, 67 Fed. 930; 15 C. C. A. 84.

§ 5. Application — Abandonment and Renewal.

In our judgment, if a party chose to withdraw his application for a patent, and pay the forfeit, intending at the time of such withdrawal to file a new petition, and he accordingly does so, the two petitions are to be considered as parts of the same transaction, and both as constituting one continuous application, within the meaning of the patent law. — Godfrey *v.* Eames, 68 U. S. 317; 17 L. Ed. 684.

While the application remained before the commissioner, it repelled any inference of abandonment or dedication from the omission to again claim it. — Suffolk *v.* Hayden, 70 U. S. 315; .18 L. Ed. 76.

The renewal application was filed nearly 5 years after the original, and public use had been continuous from the first filing. *Held:* The language of this statute is plain (see 4894), and requires no aid from construction. The Patent Commissioners have always held that the second application cannot be considered a continuation of an abandoned application. — Lay *v.* Indianapolis, 120 Fed. 831; 57 C. C. A. 313.

Ex parte Livingston, 20 O. G. 1746; Hien *v.* Pungs, 68 O. G. 657; Ex parte Beggs, 50 O. G. 1130; Carty *v.* Kellogg, 73 O. G. 285; Lindsay *v.* Stein, 10 Fed. 912; Weir *v.* Morden, 21 Fed. 243; Kittle *v.* Hall, 29 Fed. 508; Walk. Pat. sec. 147; Rob. Pat. sec. 580.

§ 6. Application — Delay of.

Delay requisite for completing an invention or for a test of its value or success does not amount to abandonment. — Kendall *v.* Winsor, 62 U. S. 322; 16 L. Ed. 165.

Undoubtedly, an inventor may abandon his invention, and surrender or dedicate it to the public; but mere forbearance to apply for a patent during the progress of experiments, and until the party has perfected his invention and tested its value by actual practise, affords no just grounds for any such presumption. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.

Kendall *v.* Winsor, 21 How. 322; Pennock *v.* Dialogue, 2 Pet. 1.

The inventor was absolutely impecunious. For nearly nine years he struggled with poverty, with rejections of his application, with delays of his solicitor, but never admitted abandonment or gave up hope or effort. The application was three times renewed and finally allowed for what the applicant had contended. Held that even such a long delay, in view of condition and conduct did not amount to abandonment. — Smith *v.* Goodyear, 93 U. S. 486; 23 L. Ed. 952.

Dissenting: Bradley, Miller, Field.

Godfrey *v.* Eames, 1 Wall. 317.

A delay of some nine years after the invention was complete held to be abandonment. — Consolidated *v.* Wright, 94 U. S. 92; 24 L. Ed. 68.

It is sometimes said an inventor acquires an undue advantage over the public by delaying to take out a patent, insomuch as he thereby preserves the monopoly to himself for a longer period than is allowed by the policy of the law; but this cannot be said with justice when the delay is occasioned by a bona fide effort to bring the invention to perfection, or to ascertain whether it will answer the purpose intended. It is in the interest of the public, as well as himself, that the invention should be perfect and properly tested before a patent is granted. Any attempt to use it for profit, and not by way of experiment, for a longer period than two years before the application, would deprive the inventor of his right to a patent. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

Delay in applying for patent until foreign patent expires is abandonment. — Huber *v.* Nelson, 148 U. S. 270; 37 L. Ed. 447; 13 S. Ct. 603.

Nesbit's case, C. D. 1870, 106.

§ 7. Constructive.

If an inventor makes his discovery public, looks on and permits others to freely use it without objection or assertion of his claim to the invention, of which the public might take notice, he abandons his invention. — McClurg *v.* Kingsland, 1 How. 202; 11 L. Ed. 102.

Pennock *v.* Dialogue, 2 Pet. 14; Grant *v.* Raymond, 6 Pet. 248; Shaw *v.* Cooper, 7 Pet. 313.

But if the inventor allows his machine to be used by other persons generally either with or without compensation, or if it is, with his consent, put on sale for such use, then it will be a public use and on public sale within the meaning of the law. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

It has sometimes been said that an invention cannot be held to have been abandoned, unless it was the intention of the inventor to abandon it. But this cannot be understood as meaning that such an intention must be expressed in words. — Woodbury *v.* Keith, 101 U. S. 479; 25 L. Ed. 939.

Kendall *v.* Winsor, 21 How. 322; Shaw *v.* Cooper, 7 Pet. 292; Adams *v.* Jones, 1 Fish. P. C. 527.

His inaction, his delay, his silence, under the circumstances, were most significant. Though not express avowals of abandonment, "to reason's ear they had a voice" not to be misunderstood. They spoke plainly of acquiescence in the rejection of his application for a patent. They encouraged the manufacture and sale of his invention. — Woodbury *v.* Keith, 101 U. S. 479; 25 L. Ed. 939.

Where there is an entire abandonment of all expectation of succeeding in an invention and securing a patent under circumstances that justifies the formation of the expectation that the ideas of the inventor will always be free to the public, and the inventor clearly manifests his intentions to relinquish any rights thereto, the inchoate right to the patent thus abandoned cannot be resumed. But the law does not favor forfeiture, and, it being a question of fact whether there has been abandonment, all reasonable doubts must be resolved in favor of the patent. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

§ 8. Decision of Commissioner — Not Final.

The decision of the Commissioner in favor of the applicant, upon the question whether the invention has been abandoned, is not conclusive, but may be contested and reviewed in a suit brought for the infringement of the patent. — U. S. *v.* Whitney, 118 U. S. 22; 30 L. Ed. 53; 6 S. Ct. 950.

Planing *v.* Keith, 101 U. S. 479.

§ 9. Division of Application.

Pending consideration in the patent office, a subordinate claim became the subject of interference upon which a patent was issued, which proclaimed its divisional character. Subsequently the patents were issued upon the broad claims which had lingered in interference in the patent office, and it is not contended that the main invention has been in fact included in the claim for a series of shelves, etc. Such a construction is not demanded by decided cases, or by known principles of law. — Electric *v.* Brush, 52 Fed. 130; 2 C. C. A. 682.

The combination claimed in 1883 was shown in the drawing and specification of the earlier patent, but it was not claimed, and it was thereby irrevocably dedicated to the public by the appellant. A description of a device or combination which is not claimed in the drawings or specification of a patent estops the patentee from securing a monopoly of its use by a subsequent patent as well as by any other means. — M'Bride *v.* Kingman, 97 Fed. 217; 38 C. C. A. 123.

James *v.* Campbell, 104 U. S. 356; Adams *v.* Stamping Co. 28 Fed. 360.

The original patent in the present case was a divisional application, required by the Patent Office; consequently the description of the unitary structure or mechanism of the original patent, together with claims for combinations embracing the whole structure or apparatus, or combinations of the elements of the reissue with additional elements, such as the tension devise, did not work an abandonment or disclaimer of the combination specified in the reissue. — Thomson-Houston *v.* Black River, 135 Fed. 759; 68 C. C. A. 461.

Suffolk *v.* Hayden, 3 Wall. 315; Barbed Wire Case, 143 U. S. 275.

That an applicant having filed an application sufficiently broad to carry all the claims, may file a second application while the first is pending and divide the claims without abandonment, see Victor *v.* American, 145 Fed. 350; 76 C. C. A. 180.

§ 10. Experimental Use.

Experimental use for the purpose of testing the qualities of an invention is never public use, nor is there any proof that the delay operated to mislead others in taking up the invention and with greater diligence perfecting it. The case would be presented in a different aspect if another inventor had entered the field, induced by the supposed abandonment and misled by the delay. It is of no advantage to the public that an inventor should apply for his patent before he satisfies himself as to the best form in which to embody the invention, and the statute which provides that two years' public use shall not work a forfeiture clearly has no application to a case of merely uncompleted experimentation. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

Wood *v.* Rolling Mill, Fed. Cas. 17,941.

If, then, an alleged invention is in fact an invention, no subsequent abandonment of it can be said to be an abandoned experiment. At most, it is an abandoned invention. But an invention that has been abandoned is as much an anticipation and to as great an extent negatives novelty, as an invention that has not been abandoned. — Buser *v.* Novelty, 151 Fed. 478; 81 C. C. A. 16.

Gayler *v.* Wilder, 10 How. 496; Rich *v.* Lippincott, Fed. Cas. 11,758; Shoup *v.* Henrici, Fed. Cas. 12,814.

Note: It is evident in comparing this remarkable ruling with the authorities that the judge writing the opinion has made a general statement subject to very grave qualifications.

An abandoned experiment is an experiment that has been abandoned. As a mere experiment never amounts to anticipation, the epithet "abandoned" here is unnecessary. If, however, the machine or other thing is complete, and capable of producing the result sought to be accomplished, it has passed the experimental stage and becomes an invention; and in order that it may constitute an anticipation, it is immaterial how well it became known or how much it was used. Indeed, it has been held that if the alleged invention is complete and capable of producing the results sought to be accomplished, though it may never have been used, is an invention and an anticipation. — Buser *v.* Novelty, 151 Fed. 478; 81 C. C. A. 16.

Coffin *v.* Ogden, 18 Wall. 120; Reed *v.* Cutter, Fed. Cas. 11,645; Walker on Pat. sec. 71; Stitt *v.* Easton, 22 Fed. 649.

Note: These statements, as applied to the facts in this case, constitute a remarkable form of judicial reasoning.

§ 11. Evidence of.

The evidence of abandonment is clearly a question of fact for the jury. — Kendall *v.* Winsor, 62 U. S. 322; 16 L. Ed. 165.

Desertion of a machine, never patented, may be proved by showing that the inventor, after he had constructed it, and before he had reduced it to practice, broke it up as something requiring more thought and experiment, and laid the parts aside as incomplete, provided it appears that those acts were done without any definite intention of resuming his experiments, and of restoring the machine with a view to apply for letters patent. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Johnson *v.* Root, 2 Cliff. 123; Gayler *v.* Wilder. 10 How. 498; Parkhurst *v.* Kinsman, 1 Blatchf. 494; White *v.* Allen, 2 Cliff, 230.

It is quite certain that the action of the Commissioner granting the patent is not conclusive of the question whether there had not been an abandonment. — Woodbury *v.* Keith, 101 U. S. 479; 25 L. Ed. 939.

Abandonment may undoubtedly be proved within two years prior to the filing of the application, but it ought not be presumed, and it should be established by convincing evidence of the intention of the owner of the invention to dedicate it to the public. An abandonment is a dedication, and like any other dedication, it should be clearly proved. — Mast *v.* Dempster, 82 Fed. 327; 27 C. C. A. 191. But see 177 U. S. 485.

§ 12. Failure to Claim.

A failure to claim what has been described is abandonment and dedication; and a reissue to recover such unclaimed matter is subject to the rules of laches. — Miller *v.* Brass Co., 104 U. S. 350; 26 L. Ed. 783.

C's acquiescence in H's claim must be regarded, so far as he is concerned, as an abandonment of any right on his part to a patent for the same invention, and having deliberately rested in that acquiescence for a period of nine or ten years, it is too late according to the settled course of decisions in this court to resume his rights. — Hartshorn *v.* Saginaw, 119 U. S. 664; 30 L. Ed. 539; 7 S. Ct. 421.

What is described in the specification of a patent and not claimed is presumed to have been old. — Electric *v.* Boston, 139 U. S. 481; 35 L. Ed. 250; 11 S. Ct. 586.

Where an inventor describes all and claims only part of his invention he is presumed to have abandoned the residue to the public. — McClain *v.* Ortmayer, 141 U. S. 419; 35 L. Ed. 800; 12 S. Ct. 76.

An omission to claim a device or combination apparent on the face of the patent is abandonment and dedication of that part of the invention. — Underwood *v.* Gerber, 149 U. S. 224; 37 L. Ed. 710; 13 S. Ct. 854.

Miller *v.* Brass Co. 104 U. S. 552; Mahn *v.* Harwood, 112 U. S. 354.

It is possible that the inventor was entitled to a broader claim than that to which he limited himself; but if he described and claimed only a part of his invention, he is presumed to have abandoned the residue to the public. — Deering *v.* Winona, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

McClain *v.* Ortmayer, 141 U. S. 419.

An inventor, by describing an invention in a patent granted to him, does not necessarily preclude himself from patenting it subsequently. His omission to claim what he describes may operate as a disclaimer or abandonment of the matter not claimed; but it has no such effect when it appears that the matter thus described, but not claimed, was the subject of a pending application in the patent office by him for another patent. This was explicitly adjudged in Suffolk *v.* Hayden, 3 Wall. 315, and recognized as sound doctrine in the barbed wire case, 143 U. S. 275. — Thomson-Houston *v.* Elmira, 71 Fed. 396; 18 C. C. A. 145.

When a specific element is not claimed as a device by itself, it is, in effect, admitted that the particular element is old and was not invented by the patentee. — Overweight *v.* Improved, 94 Fed. 155; 36 C. C. A. 125.

3 Rob. Pat. sec. 923; Cornplanter Pat. 23 Wall. 181; Rowell *v.* Lindsay, 113 U. S. 97; Meter Co. *v.* Desper, 101 U. S. 332.

The statute requires the inventor to particularly point out and distinctly claim the improvement or discovery which he seeks to secure (R. S. sec. 4888), and that when he has made his claims he has thereby disclaimed and abandoned to the public all other combinations and improvements that are not mere evasions of the device, combination, or improvement which he claims. — Kinloch *v.* Western, 113 Fed. 652; 51 C. C. A. 362.

Keystone *v.* Phœnix, 95 U. S. 274; Mfg. Co. *v.* Sargent, 117 U. S. 373; McClain *v.* Ortmayer, 141 U. S. 419; Building Co. *v.* Eustis, 65 Fed. 804; Stirrat *v.* Mfg. Co. 61 Fed. 980; Adams *v.* Lindell, 77 Fed. 432.

His specifications and claims constitute a dedication to the public of every invention they disclose but do not claim. — Ide *v.* Trorlicht, 115 Fed. 137; 53 C. C. A. 341.

Adams *v.* Lindell, 77 Fed. 432.

That, although the patent may disclose distinct novelty, unless the novel feature is claimed, recovery is barred, see Robinson *v.* Chicago, 118 Fed. 438; 55 C. C. A. 254.

§ 13. Prosecution of Application.

The patent law favors meritorious inventors by conditionally conferring upon them, for a limited period, exclusive rights to their inventions. But it requires them to be vigilant in complying with the statutory conditions. It is not unmindful of possibly intervening rights of the public. An inventor cannot, without cause, hold his application pending during a long period of years, leaving the public uncertain whether he intends to prosecute it, and keeping the field of his invention closed against other inventors. — Woodbury *v.* Keith, 101 U. S. 479; 25 L. Ed. 939.

An inventor whose application for a patent has been rejected, and who, without substantial reason or excuse, omits for many years to take any step to reinstate or renew it, must be held to have acquiesced in its rejection, and to have abandoned any intention of further presenting his claim. — U. S. *v.* Whitney, 118 U. S. 22; 30 L. Ed. 53; 6 S. Ct. 950.

Planing *v.* Keith, 101 U. S. 479.

The failure of the applicant to prosecute his application within two years after any action is laches, which unexcused operates as abandonment. — Gandy *v.* Marble, 122 U. S. 432; 30 L. Ed. 1223; 7 S. Ct. 1290.

Butterworth *v.* U. S. 112 U. S. 50; Whipple *v.* Miner, 15 Fed. 117; Ex p. Squire, 3 B. &. A. 133; Butler *v.* Shaw, 21 Fed. 321.

The failure to prosecute appeal action within two years from any decision comes under the rule of sec. 4894. — Gandy *v.* Marble, 122 U. S. 432; 30 L. Ed. 1223; 7 S. Ct. 1290.

§ 14. Prosecution of Interference.

The contestant got the patent; and although complainant got a license under it, he got it at a pretty large price. But, whatever may have induced his action, it should be regarded as an admission of contestant's priority, fully sufficient to make out a prima facie case against him. If he could have answered this, it was his privilege to do so and he would, no doubt, have done it. As he did not, we must hold it to be decisive. — Shoemaker *v.* Merrow, 61 Fed. 945; 10 C. C. A. 181.

§ 15. Prosecution of Renewal Application.

We concur in so much of the opinion of the court below as holds that:

"If more than one application could be made, the final application must be made within two years after the allowance of the original application, the term 'the original application,' as used in this section, meaning the first application."

There is no ambiguity in the language of the statute as to the limitation of time within which the later application must be made. The provisions for withholding the patent upon the nonpayment of the final fee within six months, and for relief from the effect of such provisions, are imperative. — Weston *v.* Empire, 136 Fed. 599; 67 C. C. A. 374.

§ 16. Piracy.

If before his application for a patent his invention should be pirated by another or used without his consent, it can scarcely be supposed that the Legislature had within its contemplation such knowledge or use. — Pennock *v.* Dialogue, 2 Pet. 1; 7 L. Ed. 327.

The right of the plaintiff to his invention is compared to his right to other property, which cannot be divested by fraud or violence; and the case of Miller *v.* Taylor (4 Burr, 2303) where seven judges against four held, that at common law an author by publishing a literary composition does not abandon his right, is referred to as illustrative of the principle. — Shaw *v.* Cooper, 7 Pet. 292; 8 L. Ed. 689.

§ 17. Prior Patent.

Quaere; The defendant claims that an expired foreign patent for a specified and described invention is so substantial a limitation that it is in fact a bar to a subsequent United States patent for the same invention to the same inventor, and that an expired foreign patent for a subordinate feature of a described but unclaimed invention is a bar to a subsequent United States patent to the same inventor for the generic invention, because, by not taking out his foreign patent for the generic invention and by permitting the short term patent to expire, he had abandoned the generic invention to the world. The interesting questions of law which are involved in these two propositions will become practically important if the facts in the case require their decision. — Electric *v.* Brush, 52 Fed. 130; 2 C. C. A. 682.

Note: See Welsbach *v.* Apollo, 96 Fed. 332.

§ 18. Public Use.

Where the inventor practised his art as a completed invention for more than two years, taught it to a large number of persons and received pay for such

instruction, such use will be considered abandonment. — International *v.* Gaylord, 140 U. S. 55; 35 L. Ed. 347; 11 S. Ct. 716.

Smith *v.* Sprague, 123 U. S. 249; Consolidated *v.* Wright, 94 U. S. 92; Egbert *v.* Lippmann, 104 U. S. 333; Elizabeth *v.* Nicholson, 97 U. S. 126.

The invention was one which the inventor could have tested in his own home, and by use in his own family. He did not sell simply one or two and wait to see how they satisfied the purchasers or what defects were discovered by them; but the firm of which he was a member invited the public to buy, representing the beds to be unequalled, and continued to manufacture and sell them from month to month and from year to year, in the same manner as any other article in their stock was manufactured and sold; and each sale was made at a profit and with the contemplation of a profit. The experiment was not a testing for the purpose of discovering defects and perfecting the invention, but a testing of the market, and to see how the article would sell, or, as the inventor said, " to see how it will take with the trade." This was a trader's, and not an inventor's experiment. Such a use does not carve an exception out of the statute. — Smith & Davis *v.* Mellon, 58 Fed. 705; 7 C. C. A. 439.

Elizabeth *v.* Pavement Co. 97 U. S. 126; Egbert *v.* Lippmann, 104 U. S. 333; Manning *v.* Glue Co. 108 U. S. 462; Mfg. Co. *v.* Sprague, 123 U. S. 249; Andrews *v.* Hovey, 123 U. S. 267; Root *v.* Railroad Co. 146 U. S. 210.

Mere forbearance to apply for a patent until one has protected his invention, and tested it by actual practice, affords no just ground to presume its abandonment; nor will the use or sale of it within two years before the application is filed afford such ground, unless such use or sale is accompanied by other acts or by declarations which clearly evidence an intention to dedicate an improvement to the public. — Mast *v.* Dempster, 82 Fed. 327; 27 C. C. A. 191. But see 177 U. S. 485.

Agawam *v.* Jordan, 7 Wall. 583; Adams *v.* Jones, Fed. Cas. 57; Babcock *v.* Degener, Fed. Cas. 698; Jones *v.* Seewall, Fed. Cas. 7,495; McMillin *v.* Barclay, Fed. Cas. 8,902; Pitts *v.* Edmonds, Fed. Cas. 11,191.

§ 19. Subsequent Patent.

No. 260,653 states on its face that it is a division of case I in which other features of the invention were claimed, so that the public was not misled into the idea that unpatented portions of the invention had been abandoned. — Electric *v.* Brush, 52 Fed. 130; 2 C. C. A. 682.

So long as it was not in public use, and no one else had made and procured a patent for the same discovery, his right to apply for a patent was subject to no restriction. Even if he had forgotten the invention, or laid it aside, as worthless, — abandoned it, — he had the right to take it up again, and to proceed as if he had then first made the discovery. Even if he did acquire knowledge of the subsequent patent before his own patent was granted, it was only natural and right, as the quotation from the decision of the Supreme Court recognizes, that he should be stimulated to a fresh attempt to obtain a patent, it being clear beyond dispute that he was the first discoverer. (Referring to Planing Mill *v.* Keith, 101 U. S. 479.) — Western *v.* Sperry, 58 Fed. 186; 7 C. C. A. 164.

(This holding, as stated, is in my opinion, absolutely wanting in equity and an absolute misconstruction of Planing Mill *v.* Keith. The fact that Chief Justice Fuller concurred in the decision of this case would suggest that he must have done so on other grounds than the ruling here stated in the opinion of Justice Woods.)

§ 20. Miscellaneous Rulings.

The assignee of an abandoned invention takes no better title than the inventor has, and takes it subject to the abandonment. — Whitely *v.* Swayne, 74 U. S. 685; 19 L. Ed. 199.

The act of 1839 (sec. 7, Mar. 3, 1839, 5 Stat. at L. 354) as has repeatedly been held had no effect to invalidate the patent, unless there be proof of abandonment or of a use of the invention for more than two years prior to the application. — Beedle *v.* Bennett, 122 U. S. 71; 30 L. Ed. 1074; 7 S. Ct. 1090.

Dissented to JJ. Bradley, Field and Gray.
Reversed on facts, Andrews *v.* Hovey, 123 U. S. 267.

The answer in the case does not raise the question, — the abandonment alleged being of the invention, and not of the application for the patent. It is true that the respondents denied any information or belief whether " the letters patent " referred to in the bill of complaint, were issued in due form of law. If the respondents proposed to tender an issue of abandonment, it was necessary to do it by averments to that effect, specific and clear enough to be understood. — Western *v.* Sperry, 58 Fed. 186; 7 C. C. A. 164.

It sometimes happens that a device is abandoned for reasons wholly other than its own inherent qualities. As this machine is relied on by the appellant only as anticipatory, it is not necessarily of importance to inquire whether it possessed utility or was in all respects patentable, and we agree with the circuit court that it cannot be classed with mere abandoned experiments. — Packard *v.* Lacing, 70 Fed. 66; 16 C. C. A. 639.

Barr was employed under White. White made application for a patent and Barr signed the application as a witness. The claims were so restricted that White abandoned the application. Later Barr made application for and secured a patent on the same invention; and on the trial swore that the original invention was his and not White's, and that the reason he did not assert claim to it was because he was under White and was afraid of losing his position. Held: Both were free men, White, with the consent of the railway company, could discharge Barr at any time, and Barr at all times was at liberty to leave his employment. It would be carrying the rule a great way and to a dangerous extent to hold that anyone occupying a subordinate position is not to be bound by his acts, as between himself and his superior, because of a supposed fear upon the part of the clerk that, should he protest, he might lose his employment. His conduct under the circumstances, if he was in fact, or deemed himself to be, the inventor, is inexplicable, and runs counter to the general conduct of responsible human beings. — Barr *v.* Chicago, 110 Fed. 972; 49 C. C. A. 194.

Leary *v.* Railroad, 139 Mass. 580; Dougherty *v.* Steel Co. 88 Wis. 343; Reed *v.* Stockmeyer, 74 Fed. 186; Atlantic *v.* Brady, 107 U. S. 192.

What is meant by forgotten, or as Mr. Chief Justice Taney puts it, " finally forgotten? " It certainly does not mean that the value of the invention has not been realized and its use has been abandoned. Judge Taney says that these facts are not sufficient of themselves to prevent anticipation, if the invention is still in the memory of the prior inventor; thus recognizing that its value may not have been realized and its use may have been abandoned, and yet it may still be in the memory of the inventor. Robertson (Sic) says that it must be both " abandoned and forgotten," or " disused and unremembered." Possibly light is thrown on the meaning of the word by the fact that a forgotten invention is likened to a lost art or an unpatented or

unpublished foreign invention. — Buser *v.* Novelty, 151 Fed. 478; 81 C. C. A. 16.

Rob. Pat. Vol. 1, p. 323; Cahoon *v.* Ring, Fed. Cas. 2,291; Hall *v.* Bird, Fed. Cas. 5,926; Hartshorn *v.* Tripp, Fed. Cas. 6,168; Davis *v.* Brown, 9 Fed. 647.

Note: Like the entire opinion in this case, this is a remarkable holding.

ABATEMENT.

Assignment of Patent Pending Suit § 21
Death of Complainant § 22
Dissolution and Merger of Corporation § 23
See — Pleading § 800

§ 21. Assignment of Patent pending suit.

The equity rule, apart from the statutory or code provisions, is not the same with respect to the effect of assignments pendente lite by plaintiff and by defendant. "An assignment by a defendant of his interest in a litigation does not necessarily defeat a suit. The assignee may, at his own election, come in by an appropriate application, and make himself a party, so as to assume the burden of the litigation in his own name, or he may act in the name of his assignor." Ex parte Railroad Co. 95 U. S. 221. If a sole plaintiff, suing in his own right, assigns his whole interest to another, he is no longer able to prosecute the suit, because he is without interest in the litigation. Story Eq. Pl. sec. 348; Hoxie *v.* Carr, 1 Sumn. 173; Rose *v.* Fort Wayne, 63 Fed. 466. But this does not mean that the bill must be dismissed. The effect of the assignment is stated by Judge Story not to be "necessarily a destruction of the suit, like an abatement at law, where a judgment quod cassetur is entered. It is merely an interruption to the suit, suspending its progress until the new parties are brought before the court, and if this is not done at a proper time the court will dismiss the suit." — Ecaubert *v.* Appleton, 67 Fed. 917; 15 C. C. A. 73.

If a sole plaintiff, suing in his own right, assigns his whole interest to another, he is no longer able to prosecute the suit because he is without interest in the litigation. — Automatic *v.* Cutler-Hammer, 147 Fed. 250; 77 C. C. A. 176.

Ecaubert *v.* Appleton, 67 Fed. 917.

§ 22. Death of Complainant.

Since the present appeals were taken, the patentee has died, and the appellant now suggests that the causes of action do not survive, and the suits cannot be further prosecuted in the name of the legal representatives of the decedent. As to this, it is sufficient to say that what was called by Chief Justice Marshall, in Gordon *v.* Ogden, 3 Pet. 35, "the silent practice of the court" has always been the other way. It is every day practice to revive such suits, and the books are full of cases in which this has been silently done, no one apparently entertaining a doubt of its propriety. — Railroad *v.* Turrill, 110 U. S. 301; 28 L. Ed. 154; 4 S. Ct. 5.

§ 23. Dissolution and Merger of Corporation.

The dissolution of complainant under the N. Y. consolidation act in its merger with the new corporation did not work abatement of its right to continue the suit after such dissolution and consolidation. — Edison *v.* U. S. 52 Fed. 300; 3 C. C. A. 83.

ACTIONS.

General Statement § 24
To Compel Issue of Patent § 25
Cancellation of Patent § 26
Interfering Patents § 27
See — Administrator § 41; *Arbitration* § 145; *Assignment* § 151; *Defenses* § 306; *Demurrer* § 323; *Designs* § 336; *Equity* § 370; *Fraud* § 425; *Government* § 428; *Interferences* § 582; *Interfering Patents* § 586; *Law Actions* § 733; *Pleading and Practice* § 788; *Unfair Trade* § 929

§ 24. General Statement.

Actions for infringement of letters patent, of which the district courts of the United States have exclusive original jurisdiction under the Judicial Code, Secs. 24, 256, both at law and in equity, are considered separately under *Equity, Law Actions*, and *Jurisdiction*. Actions otherwise arising, of which the district courts have exclusive jurisdiction and which arise out of the Patent Statute, are the following:

§ 25. To Compel Issue of Patent.

Whenever a patent on application is refused, either by the Commissioner of Patents or by the Supreme Court of the District of Columbia upon an appeal from the Commissioner, the applicant may have remedy by bill in equity; and the court having cognizance thereof, on notice to adverse parties and other due proceedings had, may adjudge that such applicant is entitled, according to law, to receive a patent for his invention, as specified in his claim, or for any part thereof, as the facts in the case may appear. And such adjudication, if it be in favor of the right of the applicant, shall authorize the Commissioner to issue such patent on the applicant filing in the Patent Office a copy of the adjudication, and otherwise complying with the requirements of law. In all cases, where there is no opposing party, a copy of the bill shall be served on the Commissioner; and all the expenses of the proceeding shall be paid by the applicant, whether the final decision is in his favor or not. R. S. 4915.

Mandamus will lie to compel a ministerial officer to do what is required of him by law; but it will not lie to reverse his action when taken. — Holloway *v.* Whiteley, 71 U. S. 522; 18 L. Ed. 335.

Decatur *v.* Paulding, 14 Pet. 515.

The remedy by bill in equity under sec. 4915 applies only when the Commissioner decides to reject an application for a patent, on the ground that the applicant is not, on the merits, entitled to it. — Butterworth *v.* Hoe, 112 U. S. 50; 28 L. Ed. 656; 5 S. Ct. 25.

Will lie against the Commissioner. — Butterworth *v.* Hoe, 112 U. S. 50; 28 L. Ed. 656; 5 S. Ct. 25.

Com'r. *v.* Whiteley, 4 Wall. 522.

By sec. 739 and by the act of 1875 "no civil suit shall be brought before either of said courts (Circuit or District) against an inhabitant of the U. S. by any original process in any other district than that of which he is an inhabitant or in which he may be found at the time of serving the writ." We entertain no doubt that this statute applies to suits brought under sec. 4915. The Commissioner of Patents is by law located in the Patent Office, R. S. 476. His official residence is therefore at Washington, in the District of Columbia. — Butterworth *v.* Hill, 114 U. S. 128; 29 L. Ed. 119; 5 S. Ct. 960.

By sec. 739 and by the act of 1875, suits brought against the Commissioner of Patents under 4915 are limited to the jurisdiction of courts including

his official residence, which is, Washington. — Butterworth *v.* Hill, 114 U. S. 128; 29 L. Ed. 119; 5 S. Ct. 960.

The provision of sec. 4915 is that the circuit court may adjudge that the applicant "is entitled according to law, to receive a patent for his invention, as specified in his claim or for any part thereof, as the facts in the case may appear;" and that, if the adjudication is in favor of the right of the applicant, it shall authorize the commissioner to issue the patent. It necessarily follows that no adjudication can be made in favor of the applicant, unless the alleged invention for which a patent is sought is a patentable invention. The litigation between the parties on this bill cannot be concluded by solely determining an issue as to which of them first made the device. A determination of that issue alone, in favor of the applicant, carrying with it, as it does, authority to the commissioner to issue the patent to him for the claims in interference, would necessarily give the sanction of the court to the patentability of the invention involved. — Hill *v.* Wooster, 132 U. S. 693; 33 L. Ed. 502; 10 S. Ct. 228.

Where action is brought to compel issue of a patent under R. S. sec. 4915 the court will not only determine prior rights between the parties but will also adjudicate the patentability of the invention. — Hill *v.* Wooster, 132 U. S. 693; 33 L. Ed. 502; 10 S. Ct. 228.

Whether the original conception was Gillette's, whether he disclosed it adequately to Sendelbach, whether Sendelbach was chargeable as Gillette's agent in embodying the conception in the forms of the two claims, were questions of fact presented to the Patent Office tribunals on virtually the same evidence that is now adduced. To justify us in directing the issuance of a patent to Gillette, we should be shown very clearly that the adverse findings were erroneous. — Gillette *v.* Sendelbach, 146 Fed. 758; 77 C. C. A. 55.

When the patent was issued to the wrong person, the rightful owner may maintain an action to compel a surrender and reissue. — Appleton *v.* Bacon, 67 U. S. 699; 17 L. Ed. 338.

§ 26. Cancellation of Patent.

The bill was filed the day after the patent had expired and sought to set aside and annul all claims arisen thereunder. Held: that there remained nothing which could be the subject of a suit. — U. S. *v.* Goodyear, 76 U. S. 811; 19 L. Ed. 786.

A patent cannot be abrogated in a proceeding collateral thereto. — Rubber Co. *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

Jackson *v.* Lawton, 10 Johns. 23; Field *v.* Seabury, 19 How. 332; Foley *v.* Harrison, 15 How. 448.

An action to repeal or annul a patent on the ground of fraud or misrepresentation in obtaining the same can be brought only in the name of the Government by the Attorney General. — Mowry *v.* Whitney, 81 U. S. 434; 20 L. Ed. 858.

The ancient mode was by scire facias; but as this writ is not used in this country, the chancery jurisdiction is by bill. — Mowry *v.* Whitney, 81 U. S. 434; 20 L. Ed. 858.

U. S. *v.* Stone, 2 Wall. 525; Atty. *v.* Vernon, 1 Vern. 277; Jackson *v.* Lawton, 10 Johns. 24; King *v.* Butler, 3 Lev. 220.

Whether court of equity will annul patent when obtained without fraud or deceit, quaere. But we do not decide here whether a patent is absolutely void because the patentee is not the first inventor, nor whether a court of equity should set aside a patent where the party has obtained it without fraud or deceit believing himself to be the first inventor. — U. S. *v.* Bell Tel. Co. 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

These provisions, while they do not in express terms confer upon the courts of equity of the United States the power to annul or vacate a patent, show very clearly the sense of Congress that if such power is to be exercised anywhere it should be in the equity jurisdiction of those courts. The only authority competent to set aside a patent, or to annul it, or to correct it, for any reason whatever is vested in the Judicial Department of the Government, and this can only be effected by proper proceedings taken in the courts of the United States. — U. S. *v.* Bell, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

U. S. *v.* Stone, 69 U. S. 525; Jackson *v.* Lawton, 10 Johns. 24; Attorney *v.* Vernon, 1 Vern. 277; U. S. *v.* Hughes, 52 U. S. 552; also 71 U. S. 252; Moore *v.* Robbins, 96 U. S. 530; Moffat *v.* U. S. 112 U. S. 24; U. S. *v.* Minor, 114 U. S. 233; Colorado *v.* U. S. 123 U. S. 307; U. S. *v.* San Jacinto, 125 U. S. 273; Mowry *v.* Whitney, 81 U. S. 434.

While it cannot be successfully denied that the general powers of a court of equity include the right to annul and set aside contracts or instruments obtained by fraud, to correct mistakes made in them, and to give all other appropriate relief against documents of that character, such as requiring their delivery up, their cancellation, or their correction, in order to make them conform to the intention of the parties, it would seem to require some special reason why the Government of the United States should not be able to avail itself of these powers of a court of equity. — U. S. *v.* Bell, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

Before the government is entitled to a decree cancelling a patent for an invention on the ground that it has been fraudulently and wrongfully obtained it must, as in the case of a like suit to set aside a patent for land, establish the fraud and the wrong by testimony which is clear, convincing and satisfactory. — U. S. *v.* Bell Tel. Co. 167 U. S. 224; 42 L. Ed. 144; 17 S. Ct. 809.

The Government, therefore, if seeking simply to protect the right of an individual, ought not to be permitted to maintain a suit in equity to cancel that against which the individual has a perfect legal defense available in an action brought by or against him. — U. S. *v.* Bell Tel. Co. 167 U. S. 224; 42 L. Ed. 144; 17 S. Ct. 809.

See full discussion and cases in U. S. *v.* Bell Tel. Co. 167 U. S. 224; 42 L. Ed. 144; 17 S. Ct. 809.

It has been settled that when a patent has received the signature of the Secretary of the Interior, countersigned by the Commissioner of Patents, and has affixed to it the seal of the Patent Office, it has passed beyond the control and jurisdiction of that office, and is not subject to be revoked or cancelled by the President, or any other officer of the government. — McCormick *v.* Aultman, 169 U. S. 606; 42 L. Ed. 875; 18 S. Ct. 443.

U. S. *v.* Schurtz, 102 U. S. 378; U. S. *v.* Bell Tel. Co. 128 U. S. 315; Seymour *v.* Osborn, 11 Wall. 516; Cammeyer *v.* Newton, 94 U. S. 225; U. S. *v.* Palmer, 128 U. S. 262; James *v.* Campbell, 104 U. S. 356.

The only authority competent to set a patent aside, or to annul it, or to correct it for any reason whatever, is vested in the courts of the United

States, and not in the department which issued the patent. — McCormick *v.* Aultman, 169 U. S. 606; 42 L. Ed. 875; 18 S. Ct. 443.

Moon *v.* Robbins, 96 U. S. 530; U. S. *v.* Bell Tel. Co. 128 U. S. 315; Lumber Co. *v.* Rust, 168 U. S. 589.

The bill contains enough on its face and in its form, and in its signature by the attorney general, to bring it within U. S. *v.* Am. Bell Tel. Co. 128 U. S. 315. But in the development of proofs all allegations of affirmative or positive fraud dropped out; so U. S. *v.* Am. Bell Tel. Co. fails to reach the merits of the case. — Am. Bell Tel. *v.* U. S. 68 Fed. 542; 15 C. C. A. 569.

The rule of fraud applied and U. S. *v.* Am. Bell Tel. Co. 128 U. S. 531 explained and limited. — Am. Bell Tel. *v.* U. S. 68 Fed. 542; 15 C. C. A. 569.

§ 27. Interfering Patents.

Provision is made by Sec. 4918, R. S. for the determination of rights under issued patents, the claims of which overlap or interfere. The terms of the statute and the appellate law relating thereto will be found in full under *Interfering Patents.*

ADJUDICATION.

(*See* § 250)
General Statement § 28
Effect of § 29
Patent Office Decision § 30
Prior
  Conclusiveness § 31
  Different Parties § 32
  Estoppel on Complainant § 33 (*see* § 381)
  Judicial Notice § 34
  New Evidence § 35
Privity § 36
Stare Decisis § 37
See — Arbitration § 145; *Comity* § 250; *Commissioner of Patents* § 261; *Defenses* § 315; *Estoppel* § 381; *Injunction* §§ 541, 570; *Interferences* § 580; *Patent Office* § 785; *Res Judicata* § 893

§ 28. General Statement.

The general effect of adjudications, prior and collateral, in patent causes is similar to the general law. The Patent Statute makes no special provision on this subject, except as to special matters relating to the decisions of the Commissioner and those under him. In the following paragraphs the various general rulings of the courts are given. The effect of adjudications as *Estoppels* and *Res Judicata* will be found under those titles. The special applications as relating to *Injunctions* and other special matters will be found under those titles.

§ 29. Effect of.

An adjudication in the case of a patent is not only a judgment inter partes, but is a judicial construction of a grant by the government, and in a broad sense deals with and determines the rights of the public. A patent is sui generis. By it the public, through its authorized representatives, grants a monopoly for a term of years in consideration of the surrender of the invention to public use upon expiration of the term. When, upon judicial contest, a competent court has sanctioned the grant and determined the right thereunder, the monopoly thereby granted ought not to be permitted to be invaded except under a clear showing that the decision was wrong. — Electric *v.* Edison, 61 Fed. 834; 10 C. C. A. 106.

(The patent had been held valid in S. D. N. Y.; S. D. O.; N. D. Ga.; & Ct. App. Rep. of France. The C. C. A. 6th Cir. held the patent invalid).

The case in the Court of Appeals for the Sixth Circuit was not a proceeding in rem. The defendant in that particular suit has a decree on which . . . he could base a plea of res adjudicata. That plea would be as good in the other circuits as in the sixth. No other member of the public could plead that decree in any circuit. — Rubber Tire *v.* Milwaukee, 154 Fed. 358; 83 C. C. A. 336.

§ 30. Patent Office Decisions.

Patents are often granted with a view to leaving open, to be decided by the courts, questions which the Patent Office does not deem it proper to adjudicate against the applicant by withholding the patent. — Andrews *v.* Hovey, 124 U. S. 694; 31 L. Ed. 557; 8 S. Ct. 676.

The learned counsel for the defendants, who testified as an expert in the case, bears testimony as to the great experience and competency of these officials; and while we do not go so far as to hold that their decision upon this point is conclusive, (upon a question of reissue), as some of the courts are manifestly inclined to do, we are of opinion that the decision of competent experts, made after a full hearing, where both sides have been represented by able counsel, and not impeached by fraud or favoritism, has great persuasive force. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

§ 31. Prior — Conclusiveness.

While one infringer may succeed in defeating a patent under one of the statutory defenses, such action does not prevent another from being sued, or mulcted, in case he fails to produce the requisite evidence to maintain his defense. — U. S. *v.* Bell, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

The patent had been held void in one circuit by the Circuit Court and by the Circuit Court of Appeals. In another suit by the same complainant against a party who was a customer of the former defendant, the patent was held by the Circuit Court in another circuit to be void and on appeal to the Circuit Court of Appeals of that circuit, the patent was held valid. The defendant in the first suit brought action against the owner of the patent to restrain him from bringing suits in other circuits on said patent against his customers. On certification of the questions involved to the Supreme Court, it was held that the defendant in the first suit and the complainant in the suit to restrain such further actions, had no adequate remedy at law; that such action could be maintained in equity and that by an action in equity, the Circuit Court having jurisdiction of the party owning the patent, could restrain him from bringing action thereon in any Circuit either against the original defendant or against any of his customers, regardless of the fact that another Circuit Court of Appeals in another circuit had held the patent valid. — Kessler *v.* Eldred, 206 U. S. 285; 51 L. Ed. 1065; 27 S. Ct. 611.

Note: This decision of the Supreme Court effaces with a single stroke of the pen the accumulated holdings of the past 20 years. That the position is tenable with certain modifications is undoubted; but that serious modifications will have to be made is equally evident. A probable certification to the Supreme Court in the case of Consolidated *v.* Diamond, 157 Fed. 677, may serve to limit and locate this holding; but it is believed that nothing short of Congressional action amending the Circuit Court of Appeals act, can give relief from the utter chaos which now exists.

The patent had been held void in one circuit by the circuit court and by the Circuit Court of Appeals. In another suit by the same complainant against a party who was a customer of the former defendant, the patent was

held by the Circuit Court in another circuit to be void and on appeal to the Circuit Court of Appeals of that circuit, the patent was held valid. The defendant in the first suit brought action against the owner of the patent to restrain him from bringing suits in other circuits on said patent against his customers. On such action the following was certified to the Supreme Court.

Did the decree rendered by the Circuit Court in the District of Indiana in the suit of Eldred *v.* Kessler have the effect of making a suit by Eldred against any customer of Kessler's for alleged infringement of the Chambers patent by use or sale of Kessler's lighters a wrongful interference by Eldred with Kessler's business? To this the Supreme Court answered in the affirmative. — Kessler *v.* Eldred, 206 U. S. 285; 51 L. Ed. 1065; 27 S. Ct. 611.

Note: See this question considered in Consolidated *v.* Diamond, 157 Fed. 677. Look for Supreme Court decision on certification of that case.

The patent had been held void in one circuit by the circuit court and by the circuit court of appeals. In another suit by the same complainant against a party who was a customer of the former defendant, the patent was held by the circuit court in another circuit to be void and on appeal to the Circuit Court of Appeals of that circuit, the patent was held valid. The defendant in the first suit brought action against the owner of the patent to restrain him from bringing suits in other circuits on said patent against his customers. On such action the following was certified to the Supreme Court.

Did the decree in Kessler's favor rendered in the circuit court for the District of Indiana in the suit of Eldred *v.* Kessler, (the first suit) have the effect of entitling Kessler to continue the business of manufacturing and selling throughout the United States, the same lighter he had theretofore been manufacturing and selling without molestation by Eldred, through the Chambers patent? To this the Supreme Court answered in the affirmative. — Kessler *v.* Eldred, 206 U. S. 285; 51 L. Ed. 1065; 27 S. Ct. 611.

Note: See this question considered in Consolidated *v.* Diamond, 157 Fed. 677. Look for Supreme Court decision on certification of that case.

That where a cause has been once fairly tried, fully heard and finally decided, upon its merits, by a competent tribunal, the same question as between the same parties or their privies in interest, ought not to be tried over again see, Norton *v.* San Jose, 83 Fed. 512; 27 C. C. A. 576.

Parrish *v.* Ferris, 2 Black. 606; Cromwell *v.* Sac, 94 U. S. 351; Stout *v.* Lye, 103 U. S. 66; Johnson *v.* Wharton, 152 U. S. 252; Last Chance *v.* Tyler, 157 U. S. 683; Forsyth *v.* City, 166 U. S. 506; Norton *v.* Fruit Packing Co. 79 Fed. 793; Mining Co. *v.* Dangberg, 81 Fed. 73.

The decision of the Supreme Court in Potts *v.* Creager, 155 U. S. 597, is not technically determinative of this case, because the parties are different, and because the claims in issue now and then are not the same. So far as found applicable, the opinion of the Supreme Court will, of course, be followed. — Anderson *v.* Potts, 108 Fed. 379; 47 C. C. A. 409.

Though the former case might not prevent a renewed inquiry into the merits, we are persuaded that the pronouncements therein, in view of the Supreme Court's denial of appellant's application for a writ of certiorari should, in the interest of faith in the stability of judicial decisions, be adhered to by us as the law of the patent. — Rawson *v.* Western, 118 Fed. 575; 55 C. C. A. 403.

We should seemingly place ourselves in the attitude of reopening, upon substantially the same evidence, the question of the validity of the Grant

patent after the Supreme Court under its revising powers, had refused to re-examine the case. — Rubber Tire *v.* Victor, 123 Fed. 85; 59 C. C. A. 215.

In Kessler *v.* Eldred, Eldred, the owner of a patent, sued Kessler, a manufacturer of electric cigar lighters, in the district of Indiana. The court found non-infringement and dismissed the bill. Subsequently Eldred sued Kirkland, another manufacturer of similar lighters in the Western district of New York, was defeated at circuit, but prevailed in the Circuit Court of Appeals. Eldred next sued Breitweiser, a user of Kessler lighters, in the same district. While this last suit was pending, Kessler filed a bill in the Northern District of Illinois against Eldred to enjoin him from prosecuting any suit against any one for alleged infringement of the patent by purchase, use or sale of any cigar lighter manufactured by Kessler and identical with the lighter in evidence before the court in the first suit. The Supreme Court held that the original judgment conclusively settled the right of Kessler to manufacture and sell his manufactures free from all interference from Eldred by virtue of the patent there adjudicated, and granted the relief prayed for. Inasmuch as defendant here is a dealer, and as such may wish to sell tires manufactured by the Goodyear Company which has secured adjudication adverse to the patent in the Circuit Court of Appeals, Sixth Circuit, supra, the judge who heard the motion at circuit in view of the decision in Kessler *v.* Eldred inserted the following clause in the order:

"Nothing in this injunctional order shall prevent, or is intended to prevent or enjoin, the defendant from handling, using, or selling rubber tires and rims covered by the Grant patent, . . . manufactured by the Goodyear Tire & Rubber Company, having a right to manufacture, use, and sell such tires under a judicial decree in a litigation in the federal courts in the district of Indiana heretofore pending between this complainant and such parties, wherein it has been judicially determined that said Grant patent is invalid and void."

The complainants cannot now question the propriety of inserting this clause, because they have no appeal from an order refusing to issue injunction, and the clause is a refusal to enjoin tires made by the Goodyear Company. Defendant contends, however, that the reservation does not go far enough, that defendant should be left free to sell any infringing tires made in the Sixth Circuit, or in any circuit other than the Second, or that no injunction at all should have been issued. Kessler *v.* Eldred, as the Supreme Court itself remarked, was a case of novel impression, and in deciding it that court carefully confined the decision to the single point that the original judgment was conclusive upon the parties to it. As to the proposition that such adjudication afforded a defense to Breitweiser in the direct suit against him, it said: "Upon that question we express no opinion." It would seem that inferior courts should be cautious about extending the principle enunciated in that case beyond the limits within which it was there applied. The opinion opens up a new subject in patent law practice, and it is desirable, no doubt, that an early expression of opinion by the Supreme Court should be secured upon a record which will present its broader aspects, but we do not think it wise to certify the question to that tribunal upon this record. Besides, that question there is the further one whether upon the merits of the whole case the Second Circuit was right in holding the patent to be valid and infringed by a manufacturer other than the Goodyear Tire & Rubber Company. Should the Supreme Court reach the conclusion that this circuit erred in that respect, the further application of the Kessler *v.* Eldred rule would no longer cut any figure in the case, and by certifying it now we would have unnecessarily vexed that tribunal with a moot question. — Consolidated *v.* Diamond, 157 Fed. 677; 85 C. C. A. 349.

That where a manufacturing infringer, though not made a party to the suit, comes in and makes the substantial defense, such conduct operates as

an estoppel against such infringer in a subsequent suit to the extent of such former adjudication upon the patent; and for the purpose of determining the extent of such estoppel the court may examine the decision in such former case, see D'Arcy *v.* Staples, 161 Fed. 733; 88 C. C. A. 606.

Lane *v.* Welds, 99 Fed. 286; Penfield *v.* Potts, 126 Fed. 475; Cromwell *v.* Sac, 94 U. S. 351; Russel *v.* Place, 94 U. S. 606; Stearns *v.* Lawrence, 83 Fed. 738; Corcoran *v.* Canal. 94 U. S. 741; Last Chance *v.* Tyler, 157 U. S. 690.

§ 32. Prior — Different Parties.

The defendants in the case before us are other persons than the defendant in the former case, and of course are not concluded by the judgment in that case. But it must be expected that we should adhere to our former opinion upon a record substantially the same. — American *v.* Cleveland, 158 Fed. 978; 86 C. C. A. 182.

§ 33. Prior — Estoppel on Complainant.

The patent had been held void in one circuit by the Circuit Court and by the Circuit Court of Appeals. In another suit by the same complainant against a party who was a customer of the former defendant, the patent was held by the Circuit Court in another circuit to be void and on appeal to the Circuit Court of Appeals of that circuit, the patent was held valid. The defendant in the first suit brought action against the owner of the patent to restrain him from bringing suits in other circuits on said patent against his customers. On such action the following was certified to the Supreme Court.

Did Kessler's assumption of the defense of Eldred's suit against Breitweiser (Kessler's customer) deprive Kessler of the right, if that right would otherwise exist, of proceeding against Eldred in the state and district of his citizenship and residence for wrongfully interfering with Kessler's business? To this the Supreme Court answered in the negative. — Kessler *v.* Eldred, 206 U. S. 285; 51 L. Ed. 1065; 27 S. Ct. 611.

Note: See this question considered in Consolidated *v.* Diamond, 157 Fed. 677. Look for Supreme Court decision on certification of that case.

§ 34. Prior — Judicial Notice.

These proceedings (prior adjudications) were laid before us at this hearing, but, if they had not been, we, probably, would have been entitled to take notice of them, as they appear of record in this court. — Bresnahan *v.* Tripp 72 Fed. 920; 19 C. C. A. 237.

Butler *v.* Eaton, 141 U. S. 240; Aspen *v.* Billings, 150 U. S. 31.

§ 35. Prior — New Evidence.

It is believed that after an exhaustive litigation upon a patent which is of importance, and has been widely advertised, and after its careful re-examination and a favorable adjudication upon its validity by the appellate court, this class of paper affidavits in regard to priority by individuals, ought not to be permitted to delay the owner of the patent from receiving the advantages which accrue from his successful struggle with infringers. — New York *v.* Niagara, 80 Fed. 924; 26 C. C. A. 252.

Where a new defense is interposed, the evidence to support it must be so cogent and persuasive as to impress the court with the conviction that, if

it had been presented and considered in the former case, it would probably have availed to a contrary conclusion. — New York *v.* Niagara, 80 Fed. 924; 26 C. C. A. 252.

Electric *v.* Edison, 61 Fed. 834; Bresnahan *v.* Tripp, 72 Fed. 921.

While the prior litigation and these adjudications, for the reasons already stated, do not operate strictly as an estoppel, they do serve to forcibly confront us with conditions of stare decisis, considerations of public policy, consideration of laches, and considerations of the rule that the newly discovered evidence, to entitle a party to a rehearing and a reversal of prior adjudications must disclose clear and unmistakable anticipations of a patent which has been sustained on final hearing, on the ground that it involved invention. — Bresnahan *v.* Tripp, 99 Fed. 280; 39 C. C. A. 508.

The mere introduction of additional patents does not change the situation, unless they indicate that the prior art knew of devices not indicated by the patents in proof before the judge who heard the cause at final hearing. — Consolidated *v.* Hays, 100 Fed. 984; 41 C. C. A. 142.

§ 36. Privity.

Judgments are binding upon privies as well as upon parties, but only those are privies, within the meaning of the rule, who acquire their interest in the subject-matter of a suit subsequent to the suit. — Carroll *v.* Goldschmidt, 83 Fed. 508; 27 C. C. A. 566.

Ingersoll *v.* Jewett, Fed. Cas. 7,039; Freeman Judgm. Sec. 162; Campbell *v.* Hall, 16 N. Y. 575; Doe *v.* Earl, 1 Adol. & E. 783; Winslow *v.* Grindal, 2 Greenl. 64.

§ 37. Stare Decisis.

The rule of stare decisis is a salutory one, at least to the extent that a court should with reasonable stability adhere to its solemnly declared and authoritatively published decisions, in respect to similar situations, and upon questions depending upon similar facts which relate to general interests, as well as to private and particular interests, and in respect to which the public, in a measure, is supposed to adjust itself and its business affairs. Public policy requires the decision which involves general law, and the determination of facts, such as those involved in a patent which may concern the general public, should be adhered to, unless it shall subsequently be made clearly to appear that the decision and the findings were erroneous, when, it goes without saying, the decision should be corrected. The reasons which are so often given for holding that the judgment estops, not only as to every ground of recovery or defense actually presented, but also to every ground which might have been presented, are cogent reasons to be considered upon the question of reversing a long line of judicial decisions upon a rehearing grounded upon newly discovered evidence. — Bresnahan *v.* Tripp, 99 Fed. 280; 39 C. C. A. 508.

Southern Pacific *v.* U. S. 168 U. S. 1; Columb *v.* Mfg. Co. 84 Fed. 592; Stark *v.* Starr, 94 U. S. 477.

The case had been to the Supreme Court, considered on its merits, and a new trial ordered. Held: The Supreme Court having thus held, upon a consideration of the written instruments themselves, that the Cramer invention was not of a pioneer character, and that the alleged infringing device is essentially different in construction from that of Cramer, there was nothing left for the court below to do on the last trial of the case but follow the decision of the Supreme Court. — Cramer *v.* Singer, 147 Fed. 917; 78 C. C. A. 53.

ADMINISTRATOR OR EXECUTOR, OR GUARDIAN OF INSANE PERSON.

(*See* § 300)
Statutory Provision § 38
Powers of § 39
License § 40 (*see* § 749)
Right to Sue § 41
See — Attorneys § 177; *Death of Applicant* § 300

§ 38. Statutory Provision.

When any person, having made any new invention or discovery for which a patent might have been granted, dies before a patent is granted, the right of applying for and obtaining the patent shall devolve on his executor or administrator, in trust for the heirs at law of the deceased, in case he shall have died intestate; or if he shall have left a will disposing of the same, then in trust for his devisees, in as full manner and on the same terms and conditions as the same might have been claimed or enjoyed by him in his lifetime; and when any person having made any new invention or discovery for which a patent might have been granted becomes insane before a patent is granted, the right of applying for and obtaining the patent shall devolve on his legally-appointed guardian, conservator, or representative in trust for his estate in as full manner and on the same terms and conditions as the same might have been claimed and enjoyed by him while sane; and when the application is made by such legal representatives, the oath or affirmation required to be made shall be so varied in form that it can be made by them. The executor or administrator duly authorized under the law of any foreign country to administer upon the estate of the deceased inventor shall, in case the said inventor was not domiciled in the United States at the time of his death, have the right to apply for and obtain the patent. The authority of such foreign executor or administrator shall be proved by certificate of a diplomatic or consular officer of the United States.

The foregoing section, as to insane persons, is to cover all applications now on file in the Patent Office, or which may be hereafter made. — R. S. 4896, as amended May 23, 1908.

§ 39. Powers of.

Construed with reference to applications. — De La Vergne *v.* Featherstone, 147 U. S. 209; 37 L. Ed. 138; 13 S. Ct. 283.

§ 40. License.

A license to use a patented invention that does not contain words importing assignability is a grant of a mere personal right to the licensee which does not pass to his heirs or representatives and which cannot be transferred to another without the expressed consent of the licensor. — Bowers *v.* Lake Superior, 149 Fed. 983; 79 C. C. A. 493.

Hapgood *v.* Hewitt, 119 U. S. 227; Oliver *v.* Rumford, 109 U. S. 75; Troy *v.* Corning, 14 How. 193.

§ 41. Right to Sue.

When several executors have been appointed under a will and only one has qualified, that one may sue. — Rubber Co. *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

An assignment of a right to make, use and sell in a limited territory for a limited time is a mere license, and does not give an administrator a right to sue for infringements occurring after the death of the assignee. — Oliver *v.* Rumford, 109 U. S. 75; 27 L. Ed. 862; 3 S. Ct. 61.

AGGREGATION.

General Statement § 42
Arrangement of Parts § 43
Combination § 44
Duplication § 45
Manufacture § 46 (*see* § 772)
Old Elements
General Rule § 47
Independent Functions § 48
Old Results § 49
Old Function § 50
Utility — Patentability § 51
See — Invention §§ 594, 603, 653, 670

§ 42. General Statement.

The non-patentability of mere aggregations grows out of judicial construction of Sec. 4886, R. S., which limits patentable inventions to "any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof." The general rules and applications are given in the following sections, while the special applications of the rule to *Combinations* will be found under that title, and those specially relating to *Mechanical Skill* will be found under that sub-title under *Invention*.

§ 43. Arrangement of Parts.

Of course there is nothing in placing the sections (sectional book-case) one above the other, or the tiers of sections end to end, which is a mere duplication. — Globe-Wernicke *v.* Macey, 119 Fed. 696; 56 C. C. A. 304.

All those portions of the patent submitted to us relate to matters which were common in the arts, and common aside from the arts in the technical meaning of the word; and the details, therefore, concern merely mechanical skill, and in no degree inventive faculty. — Waterman *v.* Lockwood, 125 Fed. 497; 60 C. C. A. 333.

Rubber-Tip *v.* Howard, 20 Wall. 498; Perry *v.* Revere, 103 Fed. 314.

§ 44. Combination.

A mere aggregation of parts into a supposed combination producing no new function is not patentable. — Davis *v.* Parkman, 71 Fed. 961; 18 C. C. A. 398.

It is not easy, and perhaps not possible, to formulate a definition or test of a patentable combination of old elements, which will serve in all cases to distinguish it from a mere aggregation of the results of the several elements of which it is constituted. But it is safe to say that the effect produced by the combination must be new and useful, and not such as would suggest itself to the mind of an ordinarily intelligent person experienced in the art to which the supposed invention relates. — Thompson *v.* Chestnut, 127 Fed. 698; 62 C. C. A. 454.

§ 45. Duplication.

The functions of the two presses were not changed. A connection was made between them, and the product of the one subjected to the operation of the other. The connection by which this was done was a mere mechanical improvement, and which one skilled in the art could solve. The idea of so coupling up two presses so as to print larger paper was but the natural advance incident to new demands upon the art. — Goss *v.* Scott, 108 Fed. 253; 47 C. C. A. 302.

The test in such cases is not whether duplication exists, but whether duplication produces, not mere duplication of product or function, but a new unitary, additional result, and not the mere aggregate of prior, separate mechanism. The mere elements of the combination are immaterial. In

their individual relations they may be old, may be mere duplicates; but the test is not the character of the combining elements, but the result flowing from their being combined. — Goss *v.* Scott, 108 Fed. 253; 47 C. C. A. 302.

Parker *v.* Hulme, Fed. Cas. 10,740.

Mere duplication of parts is not invention. It is true that the assembling of old elements having a new mode of operation producing a more beneficial result does amount to invention. It is also well settled that there is no invention in merely selecting and putting together parts of different machines in the same art, where each operates in the same way in a new machine producing the same result. — Burnham *v.* Union, 110 Fed. 765; 49 C. C. A. 163.

Overweight *v.* Vogt, 102 Fed. 957.

§ 46. Manufacture.

The proposition that the doctrine of aggregation is restricted in its application to machines as distinguished from articles of manufacture, does not seem to be sustained by the decided cases. — Antisdel *v.* Chicago, 89 Fed. 308; 32 C. C. A. 216.

Hailes *v.* VanWormer, 20 Wall. 353; Reckendorfer *v.* Faber, 92 U. S. 347; Trimming *v.* Welling, 97 U. S. 7; Slawson *v.* Railroad, 107 U. S. 653; Bussey *v.* Mfg. Co. 110 U. S. 146; Hill *v.* Wooster, 132 U. S. 693; Rob. Pat. Sec. 154, 182, 185; Campbell *v.* Bayley, 63 Fed. 463.

§ 47. Old Elements — General Rule.

It is simply (coating a metal ring with imitation ivory) the application and the action of old and well-known modes and materials in an accustomed manner. It is a case of aggregation, not combination. — Rubber *v.* Welling, 97 U. S. 7; 24 L. Ed. 942.

Mere aggregation or subdivision is not invention. — King *v.* Gallun, 109 U. S. 99; 27 L. Ed. 870; 3 S. Ct. 202.

Hotchkiss *v.* Greenwood, 11 How. 248; Phillips *v.* Page, 24 How. 167; Brown *v.* Piper, 91 U. S. 43; Terhune *v.* Phillips, 99 U. S. 592; Atlantic *v.* Brady, 107 U. S. 192; Slawson *v.* R. R. 107 U. S. 649; Smith *v.* Goodyear, 93 U. S. 486.

If several old devices are so put together as to produce even a better machine or instrument than was formerly in use, but each of the old devices does what it had formerly done in the instrument or machine from which it was borrowed and in the old way, without uniting with other old devices to perform any joint function it seems that the combination is not patentable. — Brinkerhoff *v.* Aloe, 146 U. S. 515; 36 L. Ed. 1068; 13 S. Ct. 221.

Hailes *v.* VanWormer, 87 U. S. 353; Reckendorfer, *v.* Faber, 92 U. S. 347.

That a machine comprising old elements and combinations in which there is not conjoint action is not patentable, see Portland *v.* Hermann, 160 Fed. 91; 87 C. C. A. 247.

American *v.* Helmstetter, 142 Fed. 978; Beecher *v.* Atwater, 114 U. S. 523; Dunlap *v.* Willbrandt, 151 Fed. 223.

See also, Pickering *v.* McCullough, 104 U. S. 310; 26 L. Ed. 749; Watson *v.* Cincinnati, 132 U. S. 161; 33 L. Ed. 295; 10 S. Ct. 45.

§ 48. Old Elements — Independent Functions.

Concededly, Dunbar is entitled to the credit of originating the conception of using a second elevator as an adjunct to the ordinary grain elevator, which could be moved so as to reach the different hatches of the vessel, and dis-

charge into the main elevator; but his right to a patent cannot rest upon this conception alone. It must rest upon the novelty of the means which he contrived to embody in the conception and to carry it into practical application. He effected a new organization of a portable elevator, but if this did not involve invention, but was that which could have been done by the skilled mechanic by selecting known devices, applying them to their appropriate uses, and introducing such modification of detail to fit them for the new environment as would be dictated by experience and good judgment, the patent cannot be sustained. The circumstance that the same congregation of devices has never been assembled in a new location is not controlling, and is often of little value in determining the question of patentable novelty. Their assemblage may be nothing but another instance of the double use. — Dunbar *v.* Eastern, 81 Fed. 201; 26 C. C. A. 330.

Atlantic *v.* Brady, 107 U. S. 192; Aron *v.* Railway, 132 U. S. 90.

Each of these elements appears to operate separately to produce its own separate individual results, just as they might in connection with any other business where an exhaust fan was needed to draw away the air from a given place, and an elevator with endless belts and buckets to carry any given substance to another place or to a different level. There is nothing in the findings or in the case anywhere, to show anything more than a mere juxtaposition or aggregation. The combination to be patentable, must produce a different force or effect or result in the combined forces or processes from that given in their separate parts. There must be a new result produced by their union; or if not so, it is only an aggregation of separate elements. — Clisby *v.* Reese, 88 Fed. 645; 32 C. C. A. 80.

Reckendorfer *v.* Faber, 92 U. S. 347; Hailes *v.* Van Wormer, 20 Wall. 353.

The aggregation of these several old elements in one structure may have produced, and doubtless did produce, a hot air furnace that was some improvement upon the prior art, in the respect that they may have been stronger, more durable, or easier of construction. But these results were due to the function of each old element acting independently and by itself, without co-action with the other elements. A box put together with screws, mitred joints and dowel pins, may be an improvement, in appearance, strength and utility, upon one put together with nails alone, but the elements of screws, mitered joints and dowel pins is an aggregation of elements, each contributing its own function and not a patentable combination. — Spear *v.* Kelsey, 158 Fed. 622; 85 C. C. A. 444.

§ 49. Old Elements — Old Result.

An aggregation of old and well-known devices, operating in the old way, and producing no new result is not patentable. — Foos *v.* Springfield, 49 Fed. 641; 1 C. C. A. 410.

Hailes *v.* Van Wormer, 20 Wall. 353; Pickering *v.* McCullough, 104 U. S. 318; Royer *v.* Roth, 132 U. S. 201; Heating Co. *v.* Burtis, 121 U. S. 286; Florsheim *v.* Schilling, 137 U. S. 64; Mill Co. *v.* Walker, 138 U. S. 124; Union *v.* Keith, 139 U. S. 530; Electric *v.* LaRue, 139 U. S. 601; Aron *v.* Railway, 132 U. S. 84; Day *v.* Railway, 132 U. S. 98; Gardner *v.* Herz, 118 U. S. 180.

If Grant's construction is an aggregation of well-known parts, each part doing its own appropriate function in substantially the old way, it does not show a patentable invention, even though the sum of all the old results is a tire more serviceable or durable than shown in the old art. — Goodyear *v.* Rubber, 116 Fed. 363; 53 C. C. A. 583.

Hailes *v.* Van Wormer, 20 Wall. 353; Office *v.* Fenton, 174 U. S. 492; Richards *v.* Elevator, 158 U. S. 299; Overweight *v.* Vogt, 102 Fed. 957; Smith *v.* Nichols, 21 Wall. 112.

The mere bringing together of old parts and allowing each to work out its old effect, without producing some new product or result as a consequence of the union and cooperating action, is a mere mechanical juxtaposition. — Germer *v.* Art, 150 Fed. 141; 80 C. C. A. 9.

Goodyear *v.* Rubber, 116 Fed. 363; Overweight *v.* Vogt, 102 Fed. 957.

§ 50. Old Function.

The mere combination of a staple made and used according to well known methods with a washer, where neither modified the function of the other was mere aggregation. — Double Pointed *v.* Two Rivers, 109 U. S. 117; 27 L. Ed. 877; 3 S. Ct. 105.

The railway, the guard-plate, and the car, in function and in result, he left unchanged; and the spray-deflectors which he fixed to the latter are wholly inoperative until the water is reached and the entirely distinct and separate service of a boat becomes requisite. This requirement made it necessary, of course, that the toboggan should differ somewhat from those which had been used exclusively upon land, but the change which was made was merely structural, and did not involve invention. — Boynton *v.* Morris, 87 Fed. 225; 30 C. C. A. 617.

Maitland *v.* Gibson, 63 Fed. 840.

§ 51. Utility — Patentability.

The utmost that can be justly credited to the applicant is that, in their aggregation, he exhibited an appreciated realization of the utility of each of them. It does not appear that he so associated them as to produce any new result as the consequence of their union, and therefore, he did not create a patentable combination. — Roemer *v.* Peddie, 81 Fed. 380; 26 C. C. A. 440.

AMENDMENT.

Statutory Provisions § 52
General Statement § 53
Broadening Scope of Invention § 54
New Matter
Broadening § 55
Miscellaneous § 56
Delay § 57
See — Abandonment § 4; *Attorneys* § 178; *Claims* § 199; *Divisional Patenting* § 348; *Reissue* § 869; *Specification* § 902

§ 52. Statutory Provisions.

The fundamental provision as to amendment is in Sec. 4886, R. S., which provides that the inventor * * * "may, upon payment of the fees required by law, and other due proceedings had, obtain a patent therefor," and Secs. 481 and 483, R. S., which provide for the appointment of a Commissioner of Patents and the promulgation of rules by him for the conduct of applications. The specific provision as to amendment grows out of 4888 R. S., which prescribes in definite terms the requisites of an application; and Sec. 4889 provides for drawings. Under Sec. 4893, the Commissioner is required to cause an examination of the application to determine whether the applicant is, under the law, entitled to a patent: and Sec. 4894 places the statutory time-limit as to the completion of the application. Sec. 4897 provides for renewal applications; Sec. 4903 as to notice of rejection; and Sec. 4917 as to disclaimer. The statute also provides for the surrender and reissue of the patent; but as that is a subject quite by itself and the matter of amendment governed by other and different rules, that subject is found in full under *Reissue.*

§ 53. General Statement.

The decisions of the appellate courts are, except in isolated cases, unconcerned with the proceedings in and the regulations of the Patent Office. The legality of the grant and the effect of the proceedings in the Patent Office as determining the scope of the grant are the main considerations.

But it should be noted in this connection that the development of the American patent system has kept step with the marvellous growth of Art and Science. The inventor of today is not one who whittles and thinks; he is a trained thinker, and one who combines the art and science of today. The Patent Office examiner is no longer a mere clerk; he is a trained specialist, both in engineering and in the patent law. While many inventions are stumbled upon by untrained minds, and while there will always be examiners who never get beyond the clerical and the technical, in the main the domain of patents has passed over from the untrained to the most thoroughly skilled specialists. It would seem, under such circumstances, that the matter of preparing an application, examining and amending the same, and the clear statement of a claim should be a simple matter. Not so. Great inventions lie on the borderland of the known. It is easy, now, to say how Tesla should have described and claimed his inventions; it was not when the applications were filed. And there are two other facts which, in the consideration of the specifications and claims of a patent, should be in the mind of both judge and attorney: First, the examination in the Patent Office is the best that it can be under the niggardly policy of Congress, but far short of what it should be, for the simple reason that the constantly-increasing volume of business must be done and done by an insufficient and overworked force. Second, the lamentable fact is that a great proportion of applications are filed by solicitors wholly unqualified for the duty. One of our grave mistakes has been that, while we have raised the standard of efficieney in the Patent Office from year to year, both by internal development and by the addition of examiners of higher skill and training, we have placed no such requirements upon the patent solicitors. Only occasionally have the courts been outspoken on this subject, but he who runs may read, and he will read in the reports — shielded by judicial gentleness — a condemnation of the incompetency of the patent solicitor in general that is startling. Since this book is mainly for the use of the general practitioner, and since the highest duty of the lawyer is to conserve the interests of his client and to keep him out of litigation, I am constrained to place the strongest emphasis upon the necessity and ultimate economy of sending clients about to make application for patent to solicitors of recognized training and skill, both in law and in science.

§ 54. Broadening Scope of Invention.

So long as he did not change the structure of his device or invention, he had the right to change the specification, even though he did it with reference to the patent in suit issued for the same device, which was applied for and issued while his application was pending; and, the specification being as we find it, there is no support for the proposition that for the purpose of preserving the possibility of a function, which the patentee had repudiated before the patent issued, the claims, though worded differently, should be read so as to cover only the exact construction and relation of parts illustrated in the drawing. The proposition is not reasonable, nor, so far as we know, supported by authority. — Western *v.* Sperry, 58 Fed. 186; 7 C. C. A. 164.

Courts ought, therefore, to be more careful, under circumstances like those at bar (when amendment was not merely upon objection by the examiner, and not in view of anticipations found) to give a patentee the benefit of all the equities which can be raised in his behalf by any reasonable

implication, from what appears on the face of the amendments or from the transaction as it passed through the patent office. — Reece *v.* Globe, 61 Fed. 958; 10 C. C. A. 194.

Winans *v.* Denmead, 15 How. 330; B. & S. Fastener *v.* Ball, 58 Fed. 818; Leggett *v.* Avery, 101 U. S. 256; Morgan *v.* Albany, 152 U. S. 425; Sargent *v.* Lock Co. 114 U. S. 63; Sheppard *v.* Carrigan, 116 U. S. 593; Sutter *v.* Robinson, 119 U. S. 530; Crawford *v.* Heysinger, 123 U. S. 589; Watson *v.* Railway, 132 U. S. 161; Roemer *v.* Peddie, 132 U. S. 313; Caster *v.* Spiegel, 133 U. S. 360; Yale *v.* Berkshire, 135 U. S. 342; Dobson *v.* Lees, 137 U. S. 258; Corbin *v.* Eagle, 150 U. S. 38; Knapp *v.* Morss, 150 U. S. 221; Union *v.* U. S. 112 U. S. 624; Vulcanite *v.* Davis, 102 U. S. 222; Royer *v.* Coupe, 146 U. S. 524.

The amendment was filed within three months after the filing of the original specifications, and before, so far as appears, other inventors whose rights had been prejudiced had entered the field. Railway *v.* Sayles, 97 U. S. 554. The original drawings and specification sufficiently show and suggest the claims finally made, or at least are not inconsistent therewith. Hobbs *v.* Beach, 180 U. S. 383. Subject to the foregoing rules, an inventor may amend his specification so as to include therein all of the advantages within the scope of his invention. Singer *v.* Cramer, 109 Fed. 652. — Kirchberger *v.* American, 128 Fed. 599; 64 C. C. A. 107. See 215 U. S. 161.

The validity of such an amendment depends upon the question whether it brought in original matter, or was of something that might be fairly deduced from the original application. In the first instance the amendment would not be justified; in the latter it would. — Cleveland *v.* Detroit, 131 Fed. 853; 68 C. C. A. 233.

Michigan *v.* Consolidated, 121 Fed. 232; Hobbs *v.* Beach, 180 U. S. 396; Western *v.* Sperry, 58 Fed. 186; Sugar *v.* Yaryan, 43 Fed. 140.

It may be noted that these broad claims are not found in the original application for the Johns patent. They were not inserted until, five years after the application, and subsequent to the date of the Rowe patent, and to the time when the Rowe device was put upon the market. — Mayo *v.* Jenckes, 133 Fed. 527; 66 C. C. A. 503.

Note: This is a most important and far-reaching holding. It places the amendment of an application long coddled in the Patent Office upon substantially the same ground as a reissue wherein the claims are broadened after intervening rights. In my opinion it should be good law. Such a wholesome rule would do much to do away with the practice of delaying issue of patents unduly.

§ 55. New Matter — Broadening.

No doubt it is competent to amend the specifications while the application is pending, so long as it is done within the scope of the original application; but it is not competent, under color of this privilege, to introduce new matter. — Michigan *v.* Consolidated, 67 Fed. 121; 14 C. C. A. 232.

Railway *v.* Sayles, 97 U. S. 554; Eagleton *v.* West, 111 U. S. 490; Brush *v.* Julian, 41 Fed. 679; Kittle *v.* Hall, 29 Fed. 508; Refrigerating *v.* Featherstone, 49 Fed. 916; Refrigerating *v.* Featherstone, 147 U. S. 209; Western *v.* Sperry, 58 Fed. 186; Robinson, 561, 635.

The objection to new matter brought in by amendment of the specifications stands upon the same ground as when it is introduced upon a reissue, and in respect to the latter the statute declares that it shall not be done (sec. 4916). — Michigan *v.* Consolidated, 67 Fed. 121; 14 C. C. A. 232.

Railway *v.* Sayles, 97 U. S. 554; Eagleton *v.* West, 111 U. S. 490, Brush *v.* Julian, 41 Fed. 679; Kittle *v.* Hall, 29 Fed. 508; Refrig. *v.* Featherstone, 147 U. S. 209; Western *v.* Sperry, 58 Fed. 186; Robinson 561, 635.

The question of broadening an application by amendment is raised indirectly but not decided in Westinghouse *v.* New York, 96 Fed. 991; 37 C. C. A. 649.

We are unable to assent to the doctrine that an inventor is thus circumscribed by the words which he may first use to describe the advantages of his invention, and that he may not afterwards, on further consideration, either upon his own suggestion or that of his counsel, amend his specification so as to assert and maintain all the advantages which his device possesses. — Singer *v.* Cramer, 109 Fed. 652; 48 C. C. A. 588.

Reversed in 192 U. S. 265.

§ 56. New Matter — Miscellaneous.

In view of the entire change in the specification, as to the invention described, the patent, to be valid, should have been granted on an application made and sworn to by the administratrix. The specification, as issued, bears the signature of the deceased, and not of the administratrix, and it is sufficiently shown that the patent was granted on the application and oath of deceased, and for an invention which he never made. — Eagleton *v.* West, 111 U. S. 490; 28 L. Ed. 493; 4 S. Ct. 593.

See De La Vergne *v.* Featherstone, 147 U. S. 209.

The changes made in the application were manifestly to develop the newly conceived theory of the mode of operation, and to add claims for the process. If this was to be accomplished and the theory were to be embodied in practical means, the specifications should have been made to distinctly point out such means, as we have already pointed out. But in this regard the former specifications were retained. If the application as amended were to be construed as embodying such an invention as is now claimed, it was another and different invention from that for which the patent was originally sought, and, if an amendment having the consequence were permissible it should have been verified by the oath of the inventor. — American *v.* Steward, 155 Fed. 731; 84 C. C. A. 157.

Ry. Co. *v.* Sayles, 97 U. S. 554; Eagleton *v.* West, 111 U. S. 490; Kennedy *v.* Hazelton, 128 U. S. 667; Mich. Cent. *v.* Consolidated, 67 Fed. 121; Cleveland *v.* Detroit, 131 Fed. 853. See 128 Fed. 599.

§ 57. Delay.

If the applicant is under no obligation touching the delay, there is no rule of law by which it can be said that, because he may receive an incidental benefit therefrom, his purpose in relation thereto is unlawful. A man's motives will not make wrongful an act which, in itself is not wrongful. — Am. Bell Tel. *v.* U. S. 68 Fed. 542; 15 C. C. A. 569.

Heald *v.* Carey, 11 C. B. 977.

The inventor does not determine the measure of his rights or of his obligations. The law determines that for him, and if the government thinks that more speed is desirable in the interest of the public, it should change the law; the courts cannot do so. Nor can they exact of inventors any degree of diligence other than compliance with the statutory provisions. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

The claims sued upon are generic. Assuming that this concept of the patentee was complete when the patent was exhibited in the census office in 1890 (eight years before the patent application was filed) so as to be practicable and operative, the machine was sufficiently completed to obtain a patent (if the feature were patentable at all) upon the broad feature claimed. The accessories subsequently developed added nothing either to the concept, or to the operativeness of the mechanism embodying the concept. What followed, if anything, was not development or evolution, but improvement merely. And an inventor having grasped an idea and put it in mechanical form, may not wait to secure a monopoly upon the broad thought until everything in the nature of mere accessory improvement that makes it commercially better has been run out and perfected. To so hold would put it in the power of a patentee to hold back his improvement from the world indefinitely, obtaining in the end a patent that would exclude everything relating to the art, although the whole world had contributed to the perfecting, commercially, of his conception. — Universal *v.* Comptograph, 146 Fed. 981; 77 C. C. A. 227.

ANTICIPATION.

Statute Authority § 58
General Rules § 59
Abandoned Device or Experiment (*see* § 1)
  Anticipatory § 60
  Non-Anticipating § 61
  Application § 62
Analogousness
  Art § 63
  Use § 64
Anticipating an Anticipation — Burden of Proof § 65
Application § 66
Combining Old Elements
  Different Devices § 67
  Different Patents § 68 (*see* §§ 87–91, 693)
  Mechanical Skill § 69
Double Patenting § 70 (*see* §§ 348, 356)
Evidence of (*see* § 388)
  Burden of Proof § 71
  Device or Exhibit § 72
  Expert § 73
  Parol § 74
  Prior Patent § 75
  Rebuttal § 76
  Miscellaneous Holdings § 77
Experiment § 78 (*see* § 412)
Foreign Invention § 79
Foreign Patent or Publication (*see* § 419)
  Burden of Proof § 80
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  Same Inventor § 84
  Sufficiency § 85
" Infringe-if-Later " Test § 86
Inoperative Device § 87
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Old Elements or Device (*see* §§ 693)
  Different Use § 89
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Paper Patent
  Insufficient § 92
  Sufficient § 93
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  Insufficient § 94
  Sufficient § 95
Prior Patent
  Date § 96
  Insufficient § 97
  Sufficient § 98
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Process (*see* § 813)
  Machine § 100 (*see* § 768)
  Process Rule § 101
  Miscellaneous § 102
Public Use (*see* § 848)
  Sufficient § 103
  Miscellaneous § 104
Publication
  Insufficient § 105
  Sufficient § 106
Uncontemplated Use or Function § 107
Miscellaneous Rulings § 108
See — Defenses §§ 320, 321; *Demurrer* § 325; *Designs* § 334; *Evidence* §§ 389–93; *Infringement* §§ 483, 525; *Interfering Patents* § 586; *Judicial Notice* §§ 708–10; *Public Use* § 849; *Public Use Proceedings* § 859

§ 58. Statute Authority.

The provisions of 4886, R. S., upon which novelty (and conversely, anticipation) depends, are, —

1. Not known or used by others in this country, before his invention or discovery thereof;
2. Not patented or described in any printed publication in this or any foreign country before his invention or discovery thereof, or more than two years prior to his application;
3. Not in public use or on sale in this country for more than two years prior to his application;
4. Not abandoned.

And 4923, R. S., provides that, —

Whenever it appears that a patentee, at the time of making his application for the patent, believed himself to be the original and first inventor or discoverer of the thing patented, the same shall not be held to be void on account of the invention or discovery, or any part thereof, having been known or used in a foreign country, before his invention or discovery thereof, if it had not been patented or described in a printed publication.

While every rule of anticipation is founded in some one of these statutory provisions, the classification varies materially therefrom, and conforms rather to the acts and conditions which constitute anticipation.

§ 59. General Rules.

It is about as difficult to state a general rule of anticipation as it is to define invention. The difficulty with all such general rules, or attempts at general rules, is that when we come to apply them to a specific case, there are so many variations from the supposed conditions upon which the general rule is predicated that application is difficult, if not impossible. The following may, to a certain extent, be regarded as general rules:

Admitting the words " originally discovered " to be explained or limited by the subsequent words (act of 1800), still, if the thing had been in use, or had been described in a public work, anterior to the supposed discovery, the patent is void. It may be that the patentee had no knowledge of the previous use or previous description; still his patent is void; the law supposes he may have known it. — Evans *v.* Eaton, 3 Wheat. 454; 4 L. Ed. 433.

It was left for Bell to discover that the failure was due not to workmanship, but to the principle which was adopted as the basis of what had to be done. He found that the intermittent current could not be made under any circumstances to produce the vibrations of the human voice, but that the true way was to operate on an unbroken current by increasing and diminishing its intensity. This Reis never thought of, and he failed to transmit speech. Bell did, and he succeeded. Under such circumstances it is impossible to hold that what Reis did was an anticipation of the discovery of Bell. To follow Reis is to fail. To follow Bell is to succeed. — Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

Foreign use for more than two years, in absence of publication or use or sale in this country does not negative patentable novelty. — Gandy *v.* Main, 143 U. S. 587; 36 L. Ed. 272; 12 S. Ct. 598.

To sustain the defense of anticipation, it is necessary that the anticipatory matter should clearly show the invention subsequently patented in such manner as to enable any person skilled in the art or science to which it relates, to make or construct and practically use the invention for the purposes contemplated by the subsequent patent. — McNeely *v.* Williames, 96 Fed. 978; 37 C. C. A. 641.

Eames *v.* Andrews, 122 U. S. 40.

That an alleged anticipation must disclose a practically operative device and one which may be constructed by one skilled in the art without the exercise of invention, see Simonds *v.* Hathorn, 93 Fed. 958; 36 C. C. A. 24.

Hanifen *v.* Godshalk, 84 Fed. 649; Heap *v.* Tremont, 82 Fed. 449; Consolidated *v.* American, 82 Fed. 993; also 85 Fed. 662.

If the question of identity of method and result is doubtful, the doubt must be resolved in favor of the successful patentee, who had in a practical way, materially advanced the art. — Simonds *v.* Hathorn, 93 Fed. 958; 36 C. C. A. 24.

Washburn *v.* Gould, 3 Story, 122.

The statute (sec. 4886) conditions the grant that it shall not have been "in public use or on sale in this country for more than two years prior to" the application; and the policy of this provision and its strict construction against the patent are well settled. Egbert *v.* Lippman, 104 U. S. 333. Nevertheless, the evidence of such public use to defeat the patent must be clear and convincing. — American *v.* Warren, 141 Fed. 655; 72 C. C. A. 649.

Morgan *v.* Daniels, 153 U. S. 120.

The rule in Bates *v.* Coe, 98 U. S. 31, it is clear, can be applicable only to the one defense "that the improvement had been patented or described in some printed publication prior to the supposed invention." In order to come under the provision of the statute which authorizes that defense, the patent or publication relied on must be prior in point of time to the patent in suit. And it is perhaps true in respect to any form of defense that if a patent is referred to simply by number and date, without averment of earlier invention and use, or of the date of the application upon which it was granted, evidence of those particulars would not be competent, because not within the issue. But when the answer is framed, like this one, to show, not a prior patent or publication, but that the grantee of the patent in suit was not, and that the patentee of a patent of later date, issued upon an earlier application, was the first inventor, it is an anomalous proposition that the fact which the statute declares to be a defense cannot be established by any proof which, under the ordinary rules of evidence, is admissible. — Barnes *v.* Walworth, 60 Fed. 605; 9 C. C. A. 154.

Western *v.* Sperry, 59 Fed. 295.

§ 60. Abandoned Device or Experiment — Anticipatory.

The device in substantial anticipating form had been publicly used years before and was abandoned by the prior user. Weld; Whatever abandonment there was, was evidently to the public which would give no one the right to obtain a patent for the same device. — Clisby *v.* Reese, 88 Fed. 645; 32 C. C. A. 80.

Numerous witnesses establish that, before the application was filed, McCarty erected and operated a large model from which the drawings were made. It is true that it was susceptible of improvement, but that does not negative novelty. — Lamson *v.* Hillman, 123 Fed. 416; 59 C. C. A. 510.

Telephone Cases, 126 U. S. 1; Rogers *v.* Mergenthaler, 64 Fed. 799.

The . . . machine was produced at the hearing in the circuit court, and also at the hearing in this court, and the substantial identity of the two clutch mechanisms was established by concrete proof. The evidence also shows that the clutch was not used for purposes of experiment, or to gratify

curiosity, or to see whether it was successful, or whether anything more was to be done to perfect it; but that it was put to use in ordinary business as a thing which was completed, and that the reason why it was only used for a short time has no bearing upon its practical operativeness. It thus fulfills the tests with respect to anticipation. — United *v.* Greenman, 153 Fed. 283; 82 C. C. A. 581.

Brush *v.* Condit, 132 U. S. 39; Deering *v.* Winona, 155 U. S. 286; Brooks *v.* Sacks, 81 Fed. 403; Westinghouse *v.* Stanley, 133 Fed. 174.

The fact that the clutch in suit is practically operative raises a strong presumption that the clutch of the abandoned machine was practically operative, since the two clutches are substantially identical. — United *v.* Greenman, 153 Fed. 283; 82 C. C. A. 581.

§ 61. Abandoned Device or Experiment — Non-Anticipating.

The re-invention of a prior lost art or abandoned unproved device is not anticipated by such facts. — Gayler *v.* Wilder, 10 How. 477; 13 L. Ed. 504.

The case to this point admits, that, although Connor's (the anticipating) safe had been kept and used for years, yet no test had been applied to it, and its capacity for resisting heat was unknown, there was no evidence to show that any particular value was attached to it after it passed from his possession, or that it was ever afterwards used as a place of security for papers; and it appeared that he himself did not attempt to make another like the one he is supposed to have invented, but used a different one. — Gayler *v.* Wilder, 10 How. 477; 13 L. Ed. 504.

Embryonic or inchoate device does not defeat a completed, working invention. — Washburn *v.* Beat Em All, 143 U. S. 275; 36 L. Ed. 154; 12 S. Ct. 443.

Coffin *v.* Ogden, 85 U. S. 120; Cantrell *v.* Wallick, 117 U. S. 689: Hitchcock *v.* Tremain, 9 Blatchf. 550; Parkham *v.* American, 4 F. P. C. 468; Bell *v.* People's Tel. 22 F. R. 309.

Unsuccessful and abandoned experiments do not affect the validity of a subsequent patent. — Decring *v.* Winona, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

Brown *v.* Guild, 90 U. S. 181; Coffin *v.* Ogden, 85 U. S. 120.

It appears that Wood applied for a patent and was rejected. His application was accompanied by a model, which, it is claimed, embodied the invention in suit. The model itself was not produced and the account given of it is somewhat conflicting. The only use ever made of it by Wood was merely experimental. It was never used for any practical purpose. There is no pretense that the inventor of the patent in suit ever knew of its existence. The evidence is wholly insufficient for the court to conclude that the patent in suit was anticipated by the Wood device. — Gamewell *v.* Municipal, 61 Fed. 948; 10 C. C. A. 184.

It is not enough to defeat the patent that someone other than Gilmour had conceived the invention before he did, or had even perfected it, so long as it had not been in public use or described in some patent or publication. If Gilmour was an original inventor, though a subsequent one, it was his right to obtain a patent unless he "surreptitiously and unjustly obtained the patent for that which was invented by another who was using reasonable diligence in adapting and perfecting the same." — Lincoln *v.* McWhirter, 142 Fed. 967; 74 C. C. A. 229.

This machine after having been used a couple of years was thrown aside, competitors getting out a better looking and more salable product than could be produced by means of it; and it was sold soon afterwards to the defendants, in whose stockroom it has been stored away ever since, unnoted and unused, until resurrected for the purpose of this suit. Whatever virtue, therefore, it may have originally had, as it stands, it must be regarded as in the nature of an abandoned experiment, of which no notice need now be taken. — American *v.* Mills, 149 Fed. 743; 79 C. C. A. 449.

§ 62. Abandoned Device or Experiment — Application.

If, upon the whole of the evidence, it appears that the alleged prior invention or discovery was only an experiment and was never perfected or brought into actual use, but was abandoned and never revived by the alleged inventor, the mere fact of having unsuccessfully applied for a patent therefor cannot take the case out of the category of unsuccessful experiments. — Brown *v.* Guild, 90 U. S. 181; 23 L. Ed. 161.

§ 63. Analogousness — Art.

In a case where an insulated cable or wire was in question, the citation of a sub-marine cable coated somewhat similarly for the purpose of rendering it impervious and not intended at all as a high insulator held not good as a citation. — Ansonia *v.* Elec. Sup. 144 U. S. 11; 36 L. Ed. 327; 12 S. Ct. 601.

Time was wasted in attempting to show that machines relating to diverse and analogous arts, in which some sort of an envelope was wrapped round some sort of a core, prevented the exercise of invention in the formation of a previously unknown machine. — Bonsack *v.* Elliott, 69 Fed. 335; 16 C. C. A. 250.

It is true that the device belongs to another art. But the patent is interesting as exhibiting the application of the dove-tail method of connection under conditions that are mechanically similar to those of the device of the patent in suit. — Bullock *v.* General, 162 Fed. 28: 89 C. C. A. 68.

§ 64. Analogousness — Use.

Anticipation ought not to be found in prior devices in the art to which a patent belongs unless they are of such a character as to furnish clear, if not unmistakable suggestion, of the improvement in question; and if the anticipatory suggestion comes from another art, it should, of course, have less significance, proportioned inversely to the distance from which it is brought. — Williams *v.* American, 86 Fed. 641; 30 C. C. A. 318.

We do not think that the disintegration of apples or of cocoanut kernels is so analogous to the disintegration of wet clay that the ingenuity shown in the adoption of the device for disintegrating clay can be minimized by reference to these other arts. — Potts *v.* Creager, 97 Fed. 78; 38 C. C. A. 47.

§ 65. Anticipating an Anticipation — Burden of Proof.

Where a patent is introduced in suit showing with certainty the date of its publication and prior to the date of the patent in suit it is incumbent upon complainant to show, if not with equal certainty, yet to the satisfaction of the court, that the invention of the patent in suit preceded that date. — Clark *v.* Willimantic, 140 U. S. 481; 35 L. Ed. 521; 11 S. Ct. 846.

St. Paul *v.* Starling, 140 U. S. 184.

An anticipating design having been produced and established as antedating the patent in suit, it became necessary for the patentee to establish to the satisfaction of the court that his invention preceded the time when the design in evidence was shown to have been first made. — Untermeyer *v.* Freund, 58 Fed. 205; 7 C. C. A. 183.

Plow Works *v.* Starling, 140 U. S. 184; Clark *v.* Willimantic, 140 U. S. 481.

That the burden of proof to overcome an anticipation by carrying the date of the patent in suit back of the anticipation proved, is upon the complainant, see Rogers *v.* Fitch, 81 Fed. 959; 27 C. C. A. 23.

Clark *v.* Willimantic, 140 U. S. 492.

No attempt was made by the complainant to show the actual date of his invention, and in a case of this sort we will not presume that the invention was made prior to the time when the defendants constructed and began to use in their mills the shingle-edging machines which they are now using. If such be the fact, the complainant should have established it by competent evidence, or show that the defendants did not construct their machine at the time stated, nor until subsequent to the date of Wilson's alleged invention. — Wilson *v.* Townley, 125 Fed. 491; 60 C. C. A. 327.

A public knowledge and use prior to the date of the application being thus clearly shown, the burden was upon the complainant to show that the invention of the patent in suit was made at an earlier date. Complainant must furnish the court with convincing proof that the anticipation has been anticipated. — New England *v.* Sturtevant, 150 Fed. 131; 80 C. C. A. 85.

Westinghouse *v.* Saranac, 108 Fed. 221.

With the facts of complete anticipation in construction and use — known to the patentee several months prior to his application for a patent — settled by the evidence, we are of opinion that the presumption of invention by the patentee, which arises from the patent, application, and grant, is overcome, prima facie by such anticipation in Sherbondy's prima facie conception reduced to practice, so that the burden of proof is transferred to the patentee to establish priority in fact. — Consolidated *v.* Adams, 161 Fed. 343.

Westinghouse *v.* Catskill, 121 Fed. 831; Loom Co. *v.* Higgins, 15 Blatchf. 446; Thayer *v.* Hart, 20 Fed. 693; Westinghouse *v.* Saranac, 108 Fed. 221; Westinghouse *v.* Mutual Life, 129 Fed. 213; Walk. Pat. § 510; Clark *v.* Willimantic, 140 U. S. 481.

§ 66. Application.

A mere prior application is not a bar to a subsequent application except as affecting priority. — Brown *v.* Guild, 90 U. S. 181; 23 L. Ed. 161.

Statements in a prior application relied on to prove anticipation must be so clear and explicit that those skilled in the art will have no difficulty in ascertaining their meaning. When they are so vague, involved, intricate and contradictory that experts disagree radically as to their meaning and, following the instructions given, construct devices differing in fundamental features, it is safe to reject such a document as an anticipation. — Hillard *v.* Fisher, 159 Fed. 439; 86 C. C. A. 469.

§ 67. Combining Old Elements — Different Devices.

Where the thing patented is an entirety, consisting of a single device or combination of old elements, incapable of division or separate use, the respondent cannot escape the charge of infringement by alleging or proving

that a part of the entire thing is found in one prior patent or publication or machine, and another part in another exhibit, and still another part in a third one, and from the three or any greater number of such exhibits to draw the conclusion that the patentee is not the original and first inventor of the patented improvement. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

The defendant's theory is not that this invention was anticipated by any one pre-existing machine, taken by itself, but that its important features were separately found in two older machines and could have been combined without the exercise of inventive skill. It is true that anybody could have done this if he had ascertained the cause of the defect in the Siemens machine, and the kind of motion, and the proper means of applying it, which would obviate the defect. But the defendant's theory, like many theories of a similar character, assumes what is not apparent, that the cause of the pre-existing defect, and its remedy, were open to the discernment of the skilled mechanic. — Smith *v.* Macbeth, 67 Fed. 137; 14 C. C. A. 241.

It is also probably true that by selecting from the various known machines of that character, and indeed by selecting only from those devised with reference to lacing hooks, including especially the Palmer machine, all the elements of the patented machine in suit could be brought together. This, however, on well-settled rules, falls far short of demonstrating that appellee's device contains no patentable qualities, though it compels us to regard them as of a limited and restricted character. — Packard *v.* Lacing, 70 Fed. 66; 16 C. C. A. 639.

It may be true that an imaginable combination of the two prior patents would closely resemble the patent in suit but such a combination is not obvious and would require patentable invention. — Hart *v.* Anchor, 92 Fed. 657; 34 C. C. A. 606.

That attempted anticipation by combining the elements and combination of old devices, or showing possible capabilities of old devices, after the fact is not good evidence of anticipation, see, Hatch *v.* Electric, 100 Fed. 975; 41 C. C. A. 133.

The all-sufficient answer to an imaginary machine such as this being introduced in anticipation (a showing that a combination and arrangement of old presses would produce the same result) is the fact that no one either changed the Globe press, or suggested the possibility of such change. — Goss *v.* Scott, 108 Fed. 253; 47 C. C. A. 302.

The finding in the old devices, one portion here, one in another, and so on, should not defeat a patent for the combination, which is only truly anticipated by a prior device having identically the same elements, or their mechanical equivalents, co-operating to produce the same results. — Imperial *v.* Crown, 139 Fed. 312; 71 C. C. A. 442.

§ 68. Combining Old Elements — Different Patents.

It is probably very true that, by selecting the various prior machines in this particular art, all the elements in the device in suit, could be brought together. But to hold that this fact always defeats novelty would be to shut out every combination of old elements from the protection of the patent laws. — Heap *v.* Tremont, 82 Fed. 449; 27 C. C. A. 316.

Packard *v.* Lacing, 70 Fed. 66; Boston *v.* Bemis, 80 Fed. 287.

The elements appear severally in one or another of such prior patents, but are not all united in either. These patents furnish evidence of the prior state of the art, but do not deprive the new combination of patentable novelty. — Milwaukee *v.* Brunswick-Balke, 126 Fed. 171; 61 C. C. A. 175.

Parks *v.* Booth, 102 U. S. 96.

The line which separates invention from mechanical skill is at best a narrow one, and the difficulty of demarkation in this case is enhanced by the fact that of necessity we look upon the alleged anticipation with eyes instructed by the patent in suit and other subsequent patents, and must take care that we do not in such light reconstruct the alleged anticipation so as to see in it the possibilities which may seem very obvious now, but which may not have been disclosed by the patent itself. — Ideal *v.* Crown, 131 Fed. 244; 65 C. C. A. 436.

Some disclose one element and some another, but none of them, including those already specifically referred to, disclose all the elements or the combination of elements of the patent in suit. For that reason they cannot constitute anticipation. — St. Louis *v.* American, 156 Fed. 574; 84 C. C. A. 340.

Bates *v.* Coe, 98 U. S. 31; Emerson *v.* VanNort, 116 Fed. 974.

§ 69. Combining Old Elements — Mechanical Skill.

The mechanical skill which may be evoked to exclude the idea of invention must be mechanical skill applied in accordance with the direction of the alleged anticipating patent; not the skill which, taught by the invention in suit, seeks to reform and reorganize the former patent, so disguising it under a cloud of subtlety of argument and suggestion as to transform it. — Ideal *v.* Crown, 131 Fed. 244; 65 C. C. A. 436.

§ 70. Double Patenting.

While the effect of double patenting is to render the later patent void by reason of anticipation, only sufficient references are given here to indicate the rule. A full list of decisions on the subject will be found under *Double Patenting.*

If the feature referred to were old and already patented at the time of the patent in suit, it makes no difference that such other patent issued to the same patentee. This suit is brought solely upon the later patent, and the earlier one was outstanding against it when it was issued. — Doig *v.* Morgan, 122 Fed. 460; 59 C. C. A. 616.

Underwood *v.* Gerber, 149 U. S. 224.

In any case, it was invented before the issue of the patent in suit. That patent, therefore, is not in a prior art, properly so-called, and has priority only as a prior patent issued to the same inventor. — Hart *v.* Anchor, 92 Fed. 657; 34 C. C. A. 606.

§ 71. Evidence of — Burden of Proof.

The invention or discovery relied upon as a defense, must have been complete, and capable of producing the result sought to be accomplished; and this must be shown by the defendant. The burden of proof rests upon him, and every reasonable doubt must be resolved against him. If the thing were embryonic or inchoate; if it rested in speculation or experiment; if the process pursued for its development had failed to reach the point of

consummation, it cannot avail to defeat a patent founded upon a discovery or invention which was completed. The law requires, not conjectures but certainty. If the question relate to a machine, as thus exhibited, the conception must have been clothed in substantial forms which demonstrate at once its practical efficiency and utility. — Coffin *v.* Ogden, 85 U. S. 120; 21 L. Ed. 821.

Gayler *v.* Wilder, 10 How. 496; Reed *v.* Cutter, 1 Story, 590; Bedford *v.* Hunt, 1 Mas. 302.

The defendant must make out the allegation satisfactorily. The evidence must clearly show the anticipation. — Clough *v.* Gilbert, 106 U. S. 178; 27 L. Ed. 138; 1 S. Ct. 198.

The burden of proof is upon the defendants to establish this defense. For the grant of letters patent is prima facie evidence that the patentee is the first inventor of the device described in the letters patent and of its novelty. — Cantrell *v.* Wallick, 117 U. S. 689; 29 L. Ed. 1017; 6 S. Ct. 970.

Smith *v.* Goodyear, 93 U. S. 486; Lehnbeuter *v.* Holthaus, 105 U. S. 94.

Not only is the burden of proof to make good this defense upon the party setting it up, but it has been held that "every reasonable doubt should be resolved against him." — Cantrell *v.* Wallick, 117 U. S. 689; 29 L. Ed. 1017; 6 S. Ct. 970.

Coffin *v.* Ogden, 18 Wall. 120; Washburn *v.* Gould, 2 Story, 122, 142.

Anticipation is a question of fact, and the burden of establishing it is on the appellant. — Busch *v.* Jones, 184 U. S. 598; 46 L. Ed. 707; 22 S. Ct. 511.

It will be noticed that Dusenbury's application was first filed; so that it is settled law that the burden was thrown on the complainant below to prove priority in behalf of his patent to the satisfaction of the courts and by evidence which shall strongly outweigh that of the respondents below, if not beyond a reasonable doubt. — Brooks *v.* Sacks, 81 Fed. 403; 26 C. C. A. 456.

Mfg. Co. *v.* Sprague, 123 U. S. 249; Clark *v.* Willimantic, 140 U. S. 481; Walk. Pat. Sec. 70.

Inasmuch as defendants' contention is based on the claim that the Buller or other devices of the prior art were capable of practical successful operation when made of lava or steatite, the burden was upon the defendants to prove this fact as part of their prima facie case. — Kirchberger *v.* American, 128 Fed. 599; 64 C. C. A. 107. See 215 U. S. 161.

When the defense of anticipation is set up, it is unquestionable that the defendant is charged, not only with the burden of proof upon that issue, but priority of conception and reduction to practice must be clearly made out, by well-authenticated evidence, to defeat the patent. — Consolidated *v.* Adams, 161 Fed. 343; 88 C. C. A. 355.

§ 72. Evidence of — Device or Exhibit.

These seven original sketches are undoubtedly rude and imperfect, and do not show, or attempt to show, an organized working machine. But we do not regard this as a vital defect. The claims put in interference do not involve anything more than certain improvements upon machines well known in the art, and contemplate a combination of certain novel features with the loading tools and other devices of the old Peters machine. The question as to whether these sketches so clearly show the novel features as that

one familiar with the construction and operation of the Peters machine could from these construct a machine embodying the endless belt feature is one addressed to persons possessing a mass of information about the old art. If such persons, from these sketches, could construct a machine containing the improvements conceived by Ligowsky, without the further exercise of the inventive faculty, then it is very clear that Ligowsky must be held to have had a sufficient conception in 1887 to entitle him, on a question of priority, to carry the date of his invention back to the date of these drawings. That they are incomprehensible to one unacquainted with such machinery, or to a mechanic unaware of what they purported to be is no answer. That they do not in all respects show the relation of the novel features to the old loading tools, nor describe precisely the mode of attachment, nor, with scientific exactness, show other details of the combination, is not fatal, if the absent features are such as would be readily supplied by a mechanic familiar with the subject, and without requiring further invention. The well-known statement of the doctrine touching the sufficiency of description in the specifications and drawing of an application for a patentable novelty by Justice Bradley, in Loom Co. *v.* Higgins, 105 U. S. 586, applies with even greater force to the adequacy of such sketch drawings, when the question is one of carrying back the date of an invention to the time of first conception. — Standard *v.* Peters, 77 Fed. 630; 23 C. C. A. 367.

The following extended quotation from the opinion of Judge Coxe (Lacombe and Townsend concurring) appears to sum up and conclude the question of the evidential value of models in proving anticipation.

It is urged by the complainant that novelty of the combination of the ninth claim cannot be negatived by the Yost model, and in support of this proposition we are referred to Walker on Patents, Sec. 61, and cases there cited.

Cahoon *v.* Ring, 1 Cliff. 592, was a trial of certain feigned issues of fact by a jury to determine whether complainants' patent for an improved seeding machine was valid and infringed. At page 611 Judge Clifford charged the jury:

"You are accordingly instructed to inquire and determine, from the evidence, whether Luce made his alleged invention of the vertical machine public, and if he did not, but had used it for no purpose, except simply for his own private experiments, and if it had been broken up prior to the 14th of May, 1857 (the date of Cahoon's application) and its materials used for other purposes, and its essential parts lost, and the invention forgotten or abandoned, that such an invention and use would be no obstacle to the taking out of a patent by Cahoon, or those claiming under him, and that the model, or machine, now in evidence, on that state of facts, would not invalidate the Cahoon patent, if he was an original inventor of his improvements, without any knowledge of said machine, and did not derive any of them from Luce."

In Stainthorp *v.* Humiston, 4 Fish. P. C. 107, the court says:

"The machine of Whitfield never went into practical use. Although a working model was made in or about the year 1849, and was soon after used for two or three hours in making candles, by way of experiment, the machinery may well be considered as but an abandoned experiment."

In Johnson *v.* McCullough, 4 Fish. P. C. 170, the court said:

"I have also examined all the testimony relating to the Shaw model, and find it does not show more than the making of a model, and not of any practical working machine, which is necessary to overthrow a patent."

In Stilwell *v.* Cincinnati, 1 Ban & A. 610, the court said of a model made prior to the invention in question:

"That (the making of a mere model) does not constitute invention, and

it can only be used as an item of testimony, reflecting upon the making and using of the wooden heater in 1845 or 1846. Taking it in connection with the testimony on that point, and weighing all the testimony together, I cannot say, that it is of that clear and satisfactory character, as requires me to find that James Armstrong invented the device, as claimed, in 1845 or 1846."

In Bowers *v.* Von Schmidt, 63 Fed. 572, the court, at page 577, says:

"That models or drawings will not constitute invention, so as to amount to anticipation, may be true, but models or drawings may constitute invention to avoid anticipation."

Non constat models and drawings may be used to establish an invention prior to that of the patentee.

These are all the authorities cited by Mr. Walker, and we are convinced that they do not sustain the broad contention of the complainant. The law, section 4886 of the Revised Statutes, provides that any person may obtain a patent, inter alia, for a machine invented by him "not known or used by others in this country before his invention or discovery thereof." It is clear, as pointed out by Mr. Walker, that knowledge of a model of a machine is not knowledge of the machine itself any more than knowledge of a model of Brooklyn Bridge is knowledge of that structure. But we think the rule should be restricted to a model pure and simple as the word is understood in common parlance, viz., a pattern, a copy, a representation usually upon a reduced scale. The word "model" should not be construed to mean the identical device which is covered by the patent. If this were otherwise a defendant who produces the exact structure of the claims and proves that it was known prior to the date of the alleged invention is completely answered if the complainant can show that the anticipating structure was filed as a model. In other words, the question is not one of nomenclature but of fact. In the case of a complicated machine a small model incapable of actual use may be filed for the purpose of explaining and illustrating the drawing; that such a model alone would not anticipate is, of course, perfectly clear. On the other hand, it frequently happens that the applicant files as his model not a pattern or reproduction of the thing invented by him but the thing itself. Take, for illustration, an application for a patent for a horse-shoe nail when one of the nails made by the inventor is filed as a model, can it be that a subsequent applicant can hold a patent for that nail or any feature thereof after proof of its prior existence and the knowledge thereof by the public? During the pendency of an application a model filed in the Patent Office is supposed to be inaccessible to the public and therefore proof of its filing date is not alone proof of public knowledge at that time, but, on the other hand, such knowledge having been shown by extrinsic evidence, the model is not open to the suspicion that it has been altered and, until proof to the contrary is adduced, must be presumed to be in the condition it was at the date of filing. As before stated, we think the Yost model was something more than a mere model, for the reason that it is a full operative embodiment of the tabulating mechanism, and for the further reason that its existence and purpose is established by evidence independent of its connection with the Patent Office. — American *v.* Wagner, 151 Fed. 576; 81 C. C. A. 120.

Note: Compare this clear statement with the opinion in Buser *v.* Novelty, 151 Fed. 478.

With reference to this model, it is sufficient to say that it was proven on the trial of the case that it was not an original model of the press which it purported to represent, but was made by the defendant Livengood about six months after the institution of the suit at bar for the purpose of being used as evidence to invalidate the claims of the Power patent. It was so

made merely from the witness' recollection of the structure of the press that it purported to represent, which he had not seen for eight or ten years, and the fact that it was not an original model was not disclosed when it was offered in evidence, but was intentionally concealed until the fact was developed on cross-examination. Under the circumstances, we cannot accept the model in question as sufficient evidence to invalidate the claims.— Kansas City *v.* Devol, 81 Fed. 726; 26 C. C. A. 578. Reversed, 84 Fed. 463.

That when counsel is called upon by the court to differentiate the device of the patent in suit, his failure to do so will not be looked upon with favor, see Greene *v.* Buckley, 135 Fed. 520; 68 C. C. A. 70.

No writing supports the defendant's contention, and human memory is not to be relied upon as to minute details of transactions occurring twenty-five years before. — United *v.* Beattie, 149 Fed. 736; 79 C. C. A. 442.

Keasby *v.* Carey, 139 Fed. 571.

§ 73. Evidence of — Expert.

It is perhaps possible for an expert, having the patent in suit before him, to build up the structure covered by these claims, by selecting and deftly adapting appliances theretofore known, "yet it would still be true that neither the same combination in its entirety nor the same operation" had previously been described or in any manner exemplified. — McMichael *v.* Ruth, 123 Fed. 706; 63 C. C. A. 304.

Parks *v.* Booth, 102 U. S. 96; Bates *v.* Coe, 98 U. S. 31; Mast *v.* Stover, 177 U. S. 497.

§ 74. Evidence of — Parol.

Evidence of anticipation consisting wholly of the recollection of witnesses, especially when contradicted and when at variance and when not substantiated, but impaired by the production of one of the alleged anticipating articles is not sufficient to negative novelty. — Untermeyer *v.* Freund, 58 Fed. 205; 7 C. C. A. 183.

The personal recollection of a number of unimpeached and disinterested witnesses of an anticipating device, fully described and identical, though the device itself has passed out of existence, is sufficient to establish prior invention. — American *v.* Weston, 59 Fed. 147; 8 C. C. A. 56.

Washburn *v.* Beat Em. All. 143 U. S. 275; Fruit Jar Co. *v.* Wright, 94 U. S. 92; Egbert *v.* Lippmann, 104 U. S. 333; Andrews *v.* Hovey, 124 U. S. 694; Jones *v.* Barker, 11 Fed. 597.

The inherent dangers of oral proofs in this class of cases are explained in the Barbed Wire Patent, 143 U. S. 275, and in Deering *v.* Harvester Works, 155 U. S. 286. — Brooks *v.* Sacks, 81 Fed. 403; 26 C. C. A. 456.

The unsupported oral testimony which will warrant a finding of prior use, should be clear and satisfactory. It is also open to suspicion. It ought to be sufficient to establish such a use beyond a reasonable doubt. — Mast *v.* Dempster, 82 Fed. 327; 27 C. C. A. 191.

Barbed Wire Pat. 143 U. S. 275; Deering *v.* Harvester, 155 U. S. 286.

The brief and fragmentary testimony of the two witnesses is unpersuasive, especially in view of the circumstance that no one whose business made him familiar with the chest, rather than its contents, was called. The evi-

dence of Meade indicated where the best witnesses on this subject were to be sought for, and their non-production would seem to require greater caution in accepting the statements of others. — Acme *v.* Cary, 101 Fed. 269; 41 C. C. A. 338.

Unsupported oral testimony of a prior use is always open to suspicion, and it cannot prevail over the legal presumption of validity which accompanies the patent, unless it is sufficient to establish such a use beyond a reasonable doubt. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Mast *v.* Dempster, 82 Fed. 327; In re Barbed-Wire Patent, 143 U. S. 275; Deering *v.* Harvester, 155 U. S. 286; Miller *v.* Handley (C. C.) 61 Fed. 100.

This (alleged prior public use) was more than 20 years after the event. Under the circumstances of the case, this not only throws the practical burden on the complainant, but it also requires that the proofs offered by him should be "full, unequivocal, and convincing." The strictness with which this rule is applied, and the unwillingness of the courts to regard unsupported oral testimony, given after a lapse of many years, as constituting "full, unequivocal and convincing" proof, are practically illustrated by the Supreme Court in (cases cited). — Swain *v.* Holyoke, 111 Fed. 408; 49 C. C. A. 419.

Clark *v.* Willimantic, 140 U. S. 481; Barbed Wire Patent, 143 U. S. 275; Morgan *v.* Daniels, 153 U. S. 120; Deering *v.* Harvester, 155 U. S. 286; Brooks *v.* Sacks, 81 Fed. 403.

He failed to so describe the said apparatus that this court can determine whether they did in fact embody in structure and practical operation the specific form of apparatus used by the defendant. Such evidence, under the familiar rule, called either for corroboration or for some explanation why corroboration was impossible. — Westinghouse *v.* Catskill, 121 Fed. 831; 58 C. C. A. 167.

Testimony that something occurred "about a month" preceding a day unestablished, except by the unsupported recollection of an interested witness twelve years after, is too indefinite and uncertain to be accepted as establishing a five days' anticipation of a patent. — Bettendorf *v.* Little, 123 Fed. 433; 59 C. C. A. 473.

Clark *v.* Willimantic, 140 U. S. 481; Brooks *v.* Sacks, 81 Fed. 403; Westinghouse *v.* Saranac, 108 Fed. 221.

Courts have frequently taken the ground that where a long time has elapsed since the alleged use, and the fact depends upon the fading recollection of a single witness, that an exhibit of the device or thing actually used must accompany the affidavit. There is, however, no hard and fast rule as to this. In this, as in other cases, the weight and effect of testimony must be passed upon and a conclusion as to the existence of an alleged prior use will be reached if the evidence thereof is clear and satisfactory to the judicial mind. — Sipp *v.* Atwood-Morrison, 142 Fed. 149; 73 C. C. A. 367.

In order to invalidate a patent by oral testimony of prior invention, it must be such as to convince one beyond a reasonable doubt of that fact. — Buser *v.* Novelty, 151 Fed. 478; 81 C. C. A. 16.

Barbed Wire Case, 143 U. S. 275; American *v.* Weston, 59 Fed. 147; Columbus *v.* Standard, 148 Fed. 622.

The anticipation relied upon was the oral testimony of one witness whose testimony was collaterally but not directly supported. In holding such testimony sufficient to anticipate, the court said: we are clearly of the opinion that such a rejection (i. e. of his testimony) would be unjustifiable for the following reasons: (1) the witness occupies an important position in which mendacity would not be countenanced, and there is no stain upon his character. (2) He is in the prime of life, of sound mind and memory, and therefore likely to remember the important details in a business in which he has been engaged for over 20 years. (3) He was a disinterested witness, and when he imparted his knowledge of the prior use, he did not know of the pendency of this action. (4) In view of the undisputed prior use of the illusion for a very analogous use, the use he describes seems the natural thing to have done. (5) This is not the case, which so frequently occurs, where a witness, having no knowledge of the art in question, testifies as to the minute details of a complicated machine or a complex chemical process which he saw years before. We are now dealing with a witness concededly familiar with the art, who narrates acts of his own, so simple in character that he can hardly be mistaken regarding them. (6) He is corroborated by a number of witnesses whose testimony though relating to different instances, is substantially to the same effect. (7) His inability to remember the relative fineness of the illusion as compared with the weave of the exhibit in suit, does not militate against his truthfulness. — National *v.* Stolts, 157 Fed. 392; 85 C. C. A. 300.

§ 75. Evidence of — Prior Patent.

Every invention disclosed in a patent, and not claimed, is dedicated to the public, and no one may thereafter appropriate it. It becomes thenceforth as much a part of the art as does the invention disclosed in the same patent and also claimed therein. The question whether an individual is or is not, an original and first inventor and discoverer, can only be determined by comparing what he did or discovered with that body of information upon the subject with which he and all the world are chargeable, and which is called the "state of the art." — Saunders *v.* Allen, 60 Fed. 610; 9 C. C. A. 157.

§ 76. Evidence of — Rebuttal.

As against the defense of anticipation, it is well settled a patentee may show, if he can, the fact of invention by drawings, sketches, models, or any other competent proof. — Von Schmidt *v.* Bowers, 80 Fed. 121; 25 C. C. A. 323.

Walk. Pat. Sec. 70; Loom Co. *v.* Higgins, 105 U. S. 594; Bates *v.* Coe, 98 U. S. 34; Smith *v.* Vulcanite, 92 U. S. 486; Apparatus Co. *v.* Woerle, 29 Fed. 451.

To avoid the defense which this design patent establishes, it is necessary for complainant to show that his invention antedates the date of his application by several months. The burden of proving this is upon complainant. — Lein *v.* Myers, 105 Fed. 962; 45 C. C. A. 148.

That the proof to anticipate an anticipation must be clear and convincing, see Westinghouse *v.* Catskill, 121 Fed. 831; 58 C. C. A. 167.

For a general discussion of the character of proofs necessary to overcome substantial evidence of anticipation, see with authorities Westinghouse *v.* Stanley, 133 Fed. 167; 68 C. C. A. 523.

§ 77. Evidence of — Miscellaneous Holdings.

Proof of such foreign manufacture and use, if known to the applicant for a patent, may be evidence tending to show that he is not the inventor of the alleged improvement; but it is not sufficient to supersede the patent if he did not borrow his supposed invention from that source, unless the foreign inventor obtained a patent for his improvement, or the same was described in some printed publication. — Roemer *v.* Simon, 95 U. S. 214; 24 L. Ed. 384.

It is, therefore, impossible to say that the sulphuric acid process was a known equivalent at the time. It is easy now, after the event, for scientific men to say, with the knowledge of today, that the thing was obvious. But the crucial facts contradict the assumption. — Cochrane *v.* Badische, 111 U. S. 293; 28 L. Ed. 433; 4 S. Ct. 455.

Anticipation is a question of fact, and the burden of establishing it is on the appellant. The patent bears a presumption of novelty and invention, and the lower courts, having passed on the evidence, found against appellant's construction. Such united judgment this court accepts unless there is a clear showing to the contrary. — Busch *v.* Jones, 184 U. S. 598; 46 L. Ed. 707; 22 S. Ct. 511.

Brainard *v.* Buck, 184 U. S. 99.

During a quarter of a century, the scientific world was struggling with the problem and could not solve it; and yet, if the claim asserted be well founded, it had already been solved, and the discoverer had made public demonstration of it in the commercial metropolis of the Union; the scientific world, however, and the public generally remaining in total ignorance of it. How he could thus hide his light under a bushel passes comprehension. The mind cannot readily yield assent to the assertion of a claim under such circumstances, and when it is supported solely by ex parte evidence. — Electric *v.* Edison, 61 Fed. 834; 10 C. C. A. 106.

There was no attempt to secure the protection of the law for an invention that, had it been known would have startled the world and made him a millionaire. That he should have been so careful to secure his rights with respect to trifling matters, and evidence such utter disregard of his interests in a matter of great moment challenges belief. This renders the more improbable the story of his invention. — Electric *v.* Edison, 61 Fed. 834; 10 C. C. A. 106.

Telephone Cases, 126 U. S. 556; Barbed Wire Patent, 143 U. S. 275.

The positive testimony of several witnesses produced on the trial is corroborated by the actual presence of the machine in court, and yet the testimony was apparently rejected on the ground that if Brown, who was manufacturing corn-planters, and who was in the business of obtaining patents on similar machinery, had constructed this machine, he would have applied for a patent and continued to manufacture the machine. Such a reason might be sufficient if the testimony were doubtful or conflicting. If the evidence on the question of anticipation were conflicting or doubtful then, no doubt, the circumstance that Brown had never applied for a patent or continued the manufacture of the machine, might be allowed to turn the scale. — Parlin *v.* Moline, 89 Fed. 329; 32 C. C. A. 221.

From the similarity of the two patents, it seemed wellnigh manifest that the French patent had been read by the patentee, who was urged

by the first patentee of the patent in suit to invent an economical method of repairing asphalt pavements. — U. S. *v.* Standard, 95 Fed. 137; 37 C. C. A. 28.

Note: This is an excellent illustration of the way in which a court may be mistaken as to conclusions inferentially drawn from the record. As a matter of fact, (the writer having prepared the defense in this case), the French patent was not only unknown to the patentee, but was absolutely unknown to the American art. The French patent to Crochet had been misclassified in the patent office and was discovered only after three searches had been made and then almost accidentally, among the classes relating to stuccoes and similar objects made from plaster and cements. The point to be observed is that an inference of this character is generally unsafe; and when allowed to turn the weight of evidence, when a question is in doubt, renders the decision of no more value than the inference itself.

It will therefore be observed that, while the Cleveland Company is now denying the priority of the Hebbard use, it formerly asserted such priority solemnly and repeatedly, by declarations of record, by offering evidence in support thereof, and by the earnest arguments of its counsel, in a suit involving substantially the same question as is now presented. It may be admitted that no estoppel is made out by the foregoing facts, but we cannot agree that they should have no influence upon the burden or degree of proof required of the defendant in the present case. At the least, they called upon the Cleveland Company for a satisfactory explanation why witnesses whom it formerly relied upon as truthful and accurate were now challenged as untrustworthy and not to be believed. In the absence of such explanation, we think that the court should not have treated the facts referred to as if they involved merely some unimportant inconsistency between the position taken then and the position taken now by the Cleveland Company. It does not agree with our sense of fair dealing that in one jurisdiction a party should succeed by upholding the truthfulness and reliability of witnesses, and should thereafter attack the same witnesses in another jurisdiction as persons not credible, merely because the exigencies of his case require a change of attitude. We do not deny that such change is permissible where the element of estoppel or other sufficient objection does not exist, but to treat the change, when no satisfactory explanation has been offered, as without influence upon the burden or the degree of proof, seems to us to be going too far. — Empire *v.* Cleveland, 102 Fed. 354; 42 C. C. A. 393.

The courts uniformly require strict and convincing proof of a prior use not thus set up for the purpose of defeating a patent, and especially when the invention has been a long time in general use, and has several times been through the ordeal of litigation. — Loew *v.* German-American, 107 Fed. 949; 47 C. C. A. 94.

§ 73. Experiment.

It is freely admitted that the patent of an originator of a complete and successful invention cannot be avoided by proof of any number of incomplete and imperfect experiments made by others at an earlier date. This is true, though the experimentors may have had the idea of the invention and may have made partially successful efforts to embody it in a practical form. And though this doctrine has been more frequently asserted when patents for machines have been under consideration, we see no reason why it should not be applied in cases arising under patents for chemical products. — American *v.* Fiber, 90 U. S. 566; 23 L. Ed. 31.

We are satisfied Smith's invention did not anticipate Reynolds'. He and Reynolds had conferences on the subject of their work, and Smith sketched something, but whatever it was no one can tell; the sketches were evidently considered unimportant, for they were not even preserved. He had ideas on this subject, but he certainly had not perfected such invention. Reynolds' conduct was not an admission that he had. It may be that the latter feared litigation and delay in the patent office, because of something Smith said, and for that reason wanted Smith to delay his application. If he induced such delay it did not invalidate his patent. He was the original inventor and was lawfully entitled to the patent. His conduct was not fraudulent, either as respects Smith or the public. — National *v.* Belcher, 71 Fed. 876; 18 C. C. A. 375.

Nothing is shown but occasional, tentative experiments by the Farnhams, made years ago to meet their personal and temporary wants. Precisely what they accomplished is uncertain; no sample of their device is exhibited. Whatever it may have been it was never applied to nor intended for the public use; it was a mere makeshift for a temporary purpose, which disappeared with the occasion that called for it, never known to anybody but the Farnhams, and now is almost forgotten by them. — Schenck *v.* Diamond, 77 Fed. 208; 23 C. C. A. 122.

Thus the respondent's patent points out, on mathematical principles, exactly what was required to make a last operative. The result is that, so far as claim 2 is concerned, the patent in suit accomplished only a crude experiment, without practical success. As the latter was reached in the respondent's last, the complainant is not entitled to stand in its way. — Miller *v.* Mawhinney, 105 Fed. 523; 44 C. C. A. 581.

For nearly 20 years it remained nothing but an ambiguous description of incomprehensible drawings. It emerged from oblivion solely to meet the exigencies of this litigation. The inquiry is pertinent, why was it that this machine was permitted to remain unused? Since the success of the device of the patent in suit every effort has been made by infringers to evade it by introducing specious changes of form, and yet, if we are to accept the contention of appellant, there is an operative machine in existence doing the work as well as the machine of the patent in suit and free to anyone who desires to use it. Is not the presumption almost conclusive that it was not used because it was not usable? — Cimiotti *v.* American, 115 Fed. 498; 53 C. C. A. 230.

Considering this patent as an alleged limiting or anticipating document, what would a person skilled in the art of barrel making produce from inspecting the drawings of the patent and following it? Nothing but a tight, unventilated barrel, with a cylindrical center and cones at the ends. For nearly 30 years it had been on the public record without producing any effect on the art or trade of barrel making. It cannot be said that a patent for a device which fails to accomplish the desired end is an anticipation of one which successfully accomplishes it. — Farmers' *v.* Spruks, 127 Fed. 691; 62 C. C. A. 447.

Note: This and other similar holdings are in absolute contradiction of the rule that a mere paper patent, if it discloses the principle, anticipates. It is, to my mind, an approximation to the proper rule.

§ 79. Foreign Invention.

That testimony of a witness that he had seen the device used abroad, and that the same had been imported along with chests of tea ever since

he had known of China teas, is not sufficient to defeat a patent through public use by importation, see Acme *v.* Cary, 101 Fed. 269; 41 C. C. A. 338.

Much time and space have been devoted to an effort to establish "prior use" in Germany. Since such prior use if established, would be no defense, under sec. 4923, it is difficult to understand why the record is thus encumbered. — Badische *v.* Kalle, 104 Fed. 802; 44 C. C. A. 201.

There is no proof which would warrant a conclusion that the patentee at the time of his application did not believe himself to be the original and first inventor and discoverer. Therefore, under sec. 4923, testimony tending to show knowledge or use in a foreign country need not be discussed. — Badische *v.* Kalle, 104 Fed. 802; 44 C. C. A. 201.

The French machine, of which the machine of the patent was a close copy, was imported a year and a half prior to the filing of the patent application. No proof was offered to carry the date of invention back of the date of filing. The patentee made machines, prior to his application, which were copies of the French machine. *Held:* Anticipation. — Stuart *v.* Auger, 149 Fed. 748; 79 C. C. A. 60.

§ 80. Foreign Patent or Publication — Burden of Proof.

One of the joint inventors had taken out foreign patents on the same invention. Held: Upon these patents being proved by the defendant, the burden of proof was cast upon the complainant to show that the joint inventors were the earlier inventors. — De Laval *v.* Vermont, 135 Fed. 772; 68 C. C. A. 474.

The burden was on appellant to establish that he invented his device prior to the date of issuance of the foreign patent, and that beyond a reasonable doubt. It is well settled that, if a defendant seeks to invalidate the patent in suit by showing, by oral testimony, prior invention, the proof must be clear, satisfactory, and beyond a reasonable doubt. Barbed Wire Case, 143 U. S. 275; American *v.* Weston, 59 Fed. 147. It is also the law that, if a plaintiff seeks to maintain the patent in suit by showing by oral testimony invention prior to a patent which anticipates it and would otherwise invalidate it, the proof must be of the same character. — Columbus *v.* Standard, 148 Fed. 622; 78 C. C. A. 394.

Thayer *v.* Hart, 20 Fed. 693.

§ 81. Foreign Patent or Publication — Date of.

But in order that the foreign patent may invalidate the patent in suit, it is not sufficient that it antedates that patent. If, notwithstanding such antedating, the patentee invented his device prior to the date of the foreign patent, then his patent is not invalidated thereby. — Columbus *v.* Standard, 148 Fed. 622; 78 C. C. A. 394.

Seymour *v.* Osborne, 11 Wall. 555.

§ 82. Foreign Patent or Publication — Invention.

The act of Congress provides that when the patentee believes himself to be the first inventor, a previous discovery in a foreign country shall not render his patent void, unless such discovery, or some substantial part of it, had been before patented or described in a printed publication. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

This is not the case of an interference in the patent office, or of a contest in the courts between two original inventors for priority of invention, in which it is the established rule under Sec. 4923, Rev. St. U. S., that an original inventor, who applies for letters patent of the United States, cannot be deprived of his right to a patent by the fact that an inventor had made in a foreign country, at a prior date, the same original invention, but which had not been described at a prior date in a patent or in a printed publication. This question then arises: Can an infringer defeat letters patent of the United States to an original inventor in a foreign country by proof that a few days before the date of a prior foreign patent to the same inventor, but not before the date of the application for such patent, and less than two years before the date of the application for a United States patent, the invention was used in this country by a person who did not invent it?

It is contended by the defendant that, under section 4886 of the Revised Statutes, the Rawson patent was void, on the ground that the improvement was known and used in this country before the invention thereof, because the actual inventor is not permitted to show that the date of his invention was prior to the date of his foreign patent.

The section gives to an inventor, foreign or domestic, the right to a patent unless certain conditions existed, neither of which in fact existed in this case. The Rawson invention had not been patented or described in any country before the patentees invented it, had not been in public use or on sale for more than two years prior to their application, had not been abandoned, and had not been known or used in this country by anyone before the date of the invention. If no other disabilities prevent, an inventor may obtain a patent of the United States for an invention made and previously patented in a foreign country, unless the same has been introduced into public use in the United States for more than two years prior to the application (section 4887), which is, in substance, the qualification which exists in section 4886, as applicable to any invention; and it is not necessary that the introduction shall have been made with the consent of the inventor. It is, however, said that the section requires that the invention must not have been known or used in this country before the date of the invention, and that the date of the publication of the foreign Rawson patent is the date de jure. The section applies to all inventions, irrespective of the place of their origin, and the term "date of invention" is used without discrimination between classes of inventions. The theory of the defendant is that, as to the domestic inventor, knowledge in this country must precede the actual date of the invention, but that, as to a foreign inventor, knowledge in this country need only precede the date of the publication of his foreign patent. We are of opinion that the language of the section refers to the actual, and not an artificial date, and that, where there is no contest between inventors, if knowledge in this country did not precede the actual date of the invention, unless it had been used in this country for two years before the application, the inventor was entitled to a patent. This question was before Judge Dallas in Hanifen *v.* Godshalk Co., 78 Fed. 811, and before Judge Townsend in Hanifen *v.* Price, 96 Fed. 435, whose opinions are in conformity with those herein expressed. Our conclusion is that, as against an infringer, the patentee in a United States patent for an invention previously made by him and patented in a foreign country may, to avoid alleged use in this country by an infringer before the date of the foreign patent, show the date of the application for the foreign patent, for the purpose of showing the actual date of his invention in a foreign country. — Welsbach *v.* American, 98 Fed. 613; 39 C. C. A. 185.

Ireson *v.* Pierce, 39 Fed. 797; Roemer *v.* Simon, 95 U. S. 214; Elizabeth *v.* Pavement, 97 U. S. 126; Lander *v.* Cowles, 16 O. G. 405; Andrews *v.* Hovey, 123 U. S. 267; id. 124 U. S. 694.

§ 83. Foreign Patent or Publication — Publication — Date.

A foreign patent, or other foreign printed publication describing an invention, is no defense to a suit upon a patent of the United States, unless published anterior to the making of the invention or discovery secured by the latter, provided that the American patentee, at the time of making application for his patent, believed himself to be the first inventor or discoverer of the thing patented. He is obliged to make oath to such belief when he applies for his patent; and it will be presumed that such was his belief until the contrary is proven. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

Act 1836, 55 S. at L. 117,7, 15; Act 1870, 16 S. at L. 198, 24, 25, 61; R. S. 4886, 4887, 4920. Curt Pat. Sec. 375, 375a.

§ 84. Foreign Patent or Publication — Same Inventor.

Under section 4887, an existing foreign patent is not a bar to a subsequent United States patent for the same invention to the same inventor, unless the invention has been in public use in this country for two years prior to the application. — Electric *v.* Brush, 52 Fed. 130; 2 C. C. A. 682.

§ 85. Foreign Patent or Publication — Sufficiency.

If a foreign invention had been printed or patented, it was already given to the world and open to the people of this country, as well as of others upon reasonable inquiry. They would therefore, derive no advantage from the (this) invention here. It would confer no benefit upon the community, and the inventor therefore, is not considered to be entitled to the reward. But if the foreign discovery is not patented, nor described in any printed publication, it might be known and used in remote places for ages, and the people of this country be unable to profit by it. The means of obtaining knowledge would not be within their reach, and so far as their interest is concerned, it would be the same thing as if the improvement had not been discovered. It is the inventor here that brings it to them and places it in their possession, and as he does this by the effort of his own genius, the law regards him as the first and original inventor, and protects his patent, although the improvement had in fact been invented before, and used by others. — Gayler *v.* Wilder, 10 How. 477; 13 L. Ed. 504.

The statutes authorize the granting of patents only for such inventions as have not been patented or described in any printed publication in this or any foreign country before the applicant's embodiment of his own conception. It may be a hardship to meritorious inventors, who, at the expenditure of much time and thought, have hit upon some ingenious combination of mechanical devices, which for aught they know, is entirely novel, to find that, in some remote time and place, someone else, of whom they never heard, had published to the world, in a patent or a printed publication, a full description of the very combination over which they have been puzzling; but in such cases the act, none the less, refuses them a patent. — New Departure *v.* Bevin, 73 Fed. 469; 19 C. C. A. 534.

It is a well settled and familiar doctrine that an invention patented here is not to be defeated by a prior foreign patent unless its descriptions or drawings contain or exhibit a substantial representation of the patented invention in such full, clear, and exact terms as to enable any person skilled in the art or science to which it appertains, without the necessity of making experiments, to practise the invention. — Hanifen *v.* Godshalk, 84 Fed. 649; 28 C. C. A. 507.

Seymour *v.* Osborne, 11 Wall. 516; Cahill *v.* Brown, Fed. Cas. 2,291; Rob. Pat. sec. 329.

Great stress is laid upon the English patent to Rose as embodying anticipatory features, but the Rose device did not do the thing that this device does. It did not undertake to do it, and, so far as appears, no one ever thought of its being applied to such a situation, and doing the work in the manner in which the device in question does it. Quite likely the Rose patent had some of the ideas involved in the patent in question, — as, for instance, the idea of radiating heat by means of coils of wire, — but it did not describe, or even suggest, the distribution of heat, either in detail or in substance, in the manner and by the means employed in the complainants' device. As was said by the circuit court, under the rules applying to foreign patents it cannot be viewed as anticipating the McElroy invention. — Consolidated *v.* West End, 85 Fed. 662; 29 C. C. A. 386.

That the patent was allowed by the patentee to expire in 1891 (when only four years old) through non-payment of a renewal fee, required by British law, is cogent evidence that the patent was found to be inoperative or valueless. — Streator *v.* Wire-Glass Co., 97 Fed. 950; 38 C. C. A. 573.

If the light thrown by Nicholl's provisional specifications on the art 30 years ago met the test laid down by the court in reference to a prior foreign patent, that it must be "sufficient to enable those skilled in the art to understand the nature and operation of the invention, and to carry it into practical use," and "that it must be an account of a complete and operative invention, capable of being put into practical operation" (Seymour *v.* Osborne, 11 Wall. 516) it is inconceivable that the device suggested would not have been seized upon in the 20 odd years ensuing before Firm's patent, and embodied in a practical press. The fact that it did not so instruct press builders proves the disclosures were not sufficient to so instruct. — Goss *v.* Scott, 110 Fed. 402; 49 C. C. A. 97.

The Galand device complies fully and clearly with all the requisites necessary to constitute a foreign anticipation. Not only is its essential principle described in his patent, but the details are also fully set out, and a pistol constructed substantially in accordance therewith has gone into extensive use in the French army. — Colt *v.* Wesson, 127 Fed. 333; 62 C. C. A. 167.

Being a foreign publication, it does not contain a substantial representation of the patent improvement in such clear and exact terms as to enable a person skilled in the art to construct and practise the invention. — Kirchberger *v.* American, 128 Fed. 599; 64 C. C. A. 107. See 215 U. S. 161.

Seymour *v.* Osborne, 11 Wall. 516; Eames *v.* Andrews, 122 U. S. 40; Chase *v.* Fillebrown, 58 Fed. 374.

§ 86. "Infringe-if-Later" Test.

That which infringes if later would anticipate if earlier. — Knapp *v.* Morss, 150 U. S. 221; 37 L. Ed. 1059; 14 S. Ct. 81.

Peters *v.* Active, 129 U. S. 530; Thatcher *v.* Burtis, 121 U. S. 286; Grant *v.* Walter, 148 U. S. 547; Gordon *v.* Warder, 150 U. S. 47.

That which infringes if later anticipates if earlier. — Miller *v.* Eagle Mfg. Co. 151 U. S. 186; 38 L. Ed. 121; 14 S. Ct. 310.

If one invention infringes another if later, it anticipates it if earlier. — Wells *v.* Curtis, 66 Fed. 318; 13 C. C. A. 494.

Peters *v.* Active, 129 U. S. 530; Knapp *v.* Morss, 150 U. S. 221; Miller *v.* Mfg. Co. 151 U. S. 186.

If it would infringe, it would anticipate if earlier. — Eames *v.* Worcester, 123 Fed. 67; 60 C. C. A. 37.

Miller *v.* Eagle, 151 U. S. 186.

A person making, using, or selling the patented device would infringe, and he would not be permitted to escape on the plea that it was not intended for use on an underwaist or a belt (the patent being for a hose supporter). It follows, as a necessary corollary, that such a structure in the prior art will anticipate irrespective of its connection, use or lack of use. — Parramore *v.* Siegel-Cooper, 143 Fed. 516; 74 C. C. A. 386.

Rule followed in Standard *v.* Ramsay, 143 Fed. 972; 75 C. C. A. 158.

We are fully convinced that these motors if later in time would infringe the Eikemeyer patent; and, since they were in fact prior in the art, the patent must be held void for lack of invention. — General *v.* Corliss, 160 Fed. 672; 87 C. C. A. 560.

§ 87. Inoperative Device.

That this was a comparatively small machine and used only for applying moldings to combs is not material. — Peters *v.* Active, 129 U. S. 530; 32 L. Ed. 738; 9 S. Ct. 389.

Woodbury *v.* Keith, 101 U. S. 490.

That the fact that the devices of the prior art were not commercially successful until after the invention of the electric generator, does not bar the devices of the prior art from anticipating subsequent devices invented after the generator invention made such devices commercially successful, see Kelly *v.* Springfield, 92 Fed. 614; 34 C. C. A. 570.

That a device which is essentially a toy, without practical use, and not known and suggesting the invention will not be held to anticipate, see Westinghouse *v.* New England, 110 Fed. 753; 49 C. C. A. 151.

We are not satisfied that the apparatus is inoperative, but incline to the opinion that the alleged defects are merely in details of construction, which would be readily obviated by the skilled mechanic. The presumption arising from the grant of the United States patent must prevail in the absence of proof to overthrow it. — Edison *v.* American, 114 Fed. 926; 52 C. C. A. 546.

§ 88 Knowledge.

The fact that the inventor obtained all the assistance and information possible from writings and from persons skilled in the art, obtained the best counsel obtainable and acted upon it, does not detract from his invention. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

The fact that the inventor had no prior knowledge of the anticipating patent may entitle him to claim the quality of invention, but as he is deemed in a legal point of view to have had this and all prior patents before him his invention rests upon a modification of these too trivial to be the subject of serious consideration. — Duer *v.* Corbin, 149 U. S. 216; 37 L. Ed. 707; 13 S. Ct. 850.

That a single instance incontrovertibly established a prior knowledge and use by a single person, is sufficient to defeat a patent, see Bannerman *v.* Sanford, 99 Fed. 294; 39 C. C. A. 534.

Coffin *v.* Ogden, 18 Wall. 124.

Giving to Deprez's theorem all the value to which it is entitled, its application by Tesla to the production of a new, original and most beneficial practical result by new and described means and the use of polyphase alternating currents, — in brief, by the polyphase system, — and the apparatus of Tesla was an invention of a very high order. The defense of non-patentability was elaborated in the record in the most painstaking manner, and with abundant reference to statements and theories of scientists who preceded Tesla, and who were trying to discover the laws of a mysterious force, the utilization of which is still far from complete development. Each was prospecting in a mine not thoroughly explored, and dimly lighted, and each produced something of value; but the attempt to minimize Tesla's invention of the method of successfully using electricity for very important purposes by means theretofore thought to be impracticable rested upon a very inadequate foundation. — Westinghouse *v.* New England, 110 Fed. 753; 49 C. C. A. 151.

There is no evidence in the record which indicates that Gilmour obtained the conception from Brown of fastening the two tables together. As the means for embodying this arrangement in the machine are the essence of the invention described in the patent, and all that was new in the existing state of the art, we are of opinion that the defense interposed was not proven. Brown did not communicate anything new or patentable to Gilmour. He only communicated that which was accessible to all who might have chosen to familiarize themselves with the prior art. — Lincoln *v.* McWhirter, 142 Fed. 967; 74 C. C. A. 229.

The Watts patent is a design patent. It illustrates and describes an interlocking tile of precisely the form of one of the figures in the patent in suit. The tiles manufactured under this patent were of pottery ware, and were used for wainscoting. Watts, the inventor, is the owner of one-third of the present patent. Furness (the inventor of the patent in suit) had seen this Watts pottery tile before he applied for his patent. It is apparent, therefore, that what Furness did — and all that he did — was to make the Harland yielding but not interlocking tile in the form of the Watts unyielding and interlocking tile. Was it invention to apply the old interlocking device to yielding tile? Was it invention to change the material of the old interlocking tile and make it yielding? From whichever point of view we examine the present case no patentable invention is to be found. There was no original conception in applying the old interlocking device to yielding tiles. Conversely, there was no invention in changing the material of the old interlocking tiles. — New York *v.* Sierer, 158 Fed. 819; 86 C. C. A. 79.

Aron *v.* Manhattan, 132 U. S. 90; Higgin *v.* Murdock, 132 Fed. 810; General *v.* Yost, 139 Fed. 568; Florsheim *v.* Schilling, 137 U. S. 64; Phillips *v.* Detroit, 111 U. S. 604; Brown *v.* D. C. 130 U S. 87; Potts *v.* Creager, 155 U. S. 605.

§ 39. Old Elements or Device — Different Uses.

The structure was not designed for the same purpose; no person looking at it or using it would understand that it was to be used in the way the device in suit is used, and it is not shown to have been really used and operated in that way. — Clough *v.* Gilbert, 106 U. S. 166; 27 L. Ed. 138; 1 S. Ct. 198.

With a strong disinclination to permit the remains of old experiments to destroy the pecuniary value of a patent for a useful and successful invention, and remembering that the defendants must assume a weighty burden of proof, I am of the opinion that the patentee's invention has been clearly proved to have been anticipated. — Brush *v.* Condit, 132 U. S. 39; 33 L. Ed. 251; 10 S. Ct. 1.

Coffin *v.* Ogden, 85 U. S. 120; Reed *v.* Cutter, 1 Story, 590; Pickering *v.* McCullough, 104 U. S. 310; Curtis on Patents, secs. 89–92; Hall *v.* Macneale, 107 U. S. 90.

A prior device which in some degree performs the function of the patent in suit, but the purpose and function of which was wholly different, and which in no way pointed out the function of the device in suit cannot be construed as an anticipation. — Edison *v.* Electric, 66 Fed. 309; 13 C. C. A. 487.

The patent in suit is for a dress stay. The alleged anticipation is a corset patent. The two subject matters seem to be essentially dissimilar. The respective inventors were dealing with plainly distinct problems. The difficulty which the one proposed to overcome was very different from that which the other desired to surmount. Their improvements were not both for use upon the same article or in the same way, and the means which they severally employed were not, in any admissible sense, identical. — Lublin *v.* Stewart, 77 Fed. 303; 23 C. C. A. 176.

Its (the Goldie nail) use and functions are different. It was adapted to an entirely different art from a spike. — Diamond *v.* Goldie, 84 Fed. 972; 28 C. C. A. 589.

Electric Co. *v.* LaRue, 139 U. S. 601; Potts *v.* Creager, 155 U. S. 606.

§ 90. Old Elements or Device — Function.

The court did not err in refusing the instruction that before the invention could be held invalid by reason of a prior patent it was not sufficient to find one element in one patent and another in another. If the patent had been for a combination of new and old elements producing a new result such instructions might have been correct, but as it was merely a new aggregation of old elements in which each element performed its old function and no new result was produced by their combination the instruction was properly refused. — Adams *v.* Bellaire, 141 U. S. 539; 35 L. Ed. 849; 12 S. Ct. 66.

To constitute anticipation of a later patent it is enough that such construction had been in well-established use, whether it originated in design or by accident. — National *v.* Quick, 74 Fed. 236; 20 C. C. A. 410.

The fact that the device of the prior patent was intended to, and will, accomplish more than the device of the patent in suit, does not prevent its being an anticipation of the latter. It is sufficient that in part it was intended to, and will, accomplish the same result, and that in the same way. — Columbus *v.* Standard, 142 Fed. 622; 78 C. C. A. 394.

§ 91. Old Elements or Device — Requiring Adaptation.

It is not sufficient to constitute an anticipation that the device relied upon might, by modification, be made to accomplish the function performed by the patent in question, if it were not designed by its maker nor adapted, nor actually used, for the performance of such functions. — Topliff *v.* Topliff, 145 U. S. 156; 36 L. Ed. 658; 12 S Ct. 825.

There is generic sameness, we concede, but there are differences, and the Patent Office and both lower courts found novelty and invention in those differences. — Busch *v.* Jones, 184 U. S. 598; 46 L. Ed. 707; 22 S. Ct. 511.

We are not satisfied from the rebuttal testimony of complainant's expert that it will not flow in this way. The most that he says is that the small packing will have to be so large that there would probably be a waste of oil. But that does not eliminate his patent from the prior art. — Nathan *v.* D. L. & W. 157 Fed. 685; 85 C. C. A. 453.

An alleged infringer is far from maintaining anticipation by showing what more or less approximates the patented article, but which, nevertheless, requires to be adjusted so as to accomplish a new purpose before it can come into the same field with it. — O'Brien *v.* Foster, 159 Fed. 710; 86 C. C. A. 464.

§ 92. Paper Patent — Insufficient.

The contention that these prior patents must be treated as failures — as mere paper patents of no especial value — is untenable. "The very fact" of the grant of a patent for the process described, "is some evidence of its operativeness, as well as of its utility," when introduced by way of anticipation. — National *v.* Swift, 104 Fed. 87; 43 C. C. A. 421.

On the one hand, in Packard *v.* Lacing Stud Co. 70 Fed. 66, we explained why, under some circumstances, a prior device cannot be rejected as an anticipation, although it has not been perfected into a practical and merchantable machine. On the other hand, the entire topic of inventive suggestions which have not been put into useful operation, including what is known as "paper patents," is a difficult one, so that in each case a practical rule of judicial determination can rarely be worked out, except by a thorough and keen analysis of all the surrounding circumstances. — Dececo *v.* Gilchrist, 125 Fed. 293; 60 C. C. A. 207.

Park's History of Medicine (2d Ed.) p. 312.

In determining the question of identity of the inventive idea, it is not a sufficient answer to say of any alleged anticipation that it was a mere paper patent, and that the same had not been operative or commercially successful; for prior existing conditions might not have stimulated full development. — Ideal *v.* Crown, 131 Fed. 244; 65 C. C. A. 436.

In these circumstances, the rule frequently invoked in the case of mere paper patents may with much greater force be applied to these machines, which, even though they may have worked imperfectly, were confessedly capable of a limited, successful, practical operation. Where such patents, or machines constructed under them, embody the principle covered by a later patent; the mere fact that they are not capable of successful practical working because of objections as to minor matters of detail in construction will not deprive them of their effect as defenses where they sufficiently disclose the invention claimed in the later patent. — Van Epps *v.* United, 143 Fed. 869; 75 C. C. A. 77.

Pickering *v.* McCullough, 104 U. S. 310.

§ 93. Paper Patent — Sufficient.

It may be assumed that these were paper patents, not capable of successful operation. But this does not defeat their relevancy as limitations upon the scope of the patent in suit, provided they sufficiently embody the ele-

ments and disclose the principle of operation of said patent. — Westinghouse *v.* Christensen, 128 Fed. 437; 63 C. C. A. 179.

Pickering *v.* Lomax, 104 U. S. 310; Packard *v.* Lacing-Stud, 70 Fed. 66; Dashiell *v.* Grosvenor, 162 U. S. 425.

Under ordinary circumstances, a patent which caused no advance in the art should have small effect upon a successful patent of 20 years later. — — Daylight *v.* American, 142 Fed. 454; 73 C. C. A. 570.

The Healy device was to some extent a paper patent, since it never came into general or extensive use. Although issued about 18 years prior to the patent in suit, it never seems to have suggested to anyone a construction like that of the Robins patent, which was designed to, and does substantially, obviate all of the disadvantages of the Healy patent. — Robins *v.* American, 145 Fed. 923; 76 C. C. A. 461.

If the new function existed in the machines made under the patent, it was accidental, unrecognized by the patentee and no disclosure thereof made to the public. — Hillard *v.* Fisher, 159 Fed. 439; 86 C. C. A. 469.

Tilghman *v.* Proctor, 102 U. S. 711.

§ 94. Prior Art — Insufficient.

The prophetical suggestions in English patents of what can be done, when no one has ever tested by actual and hard experience and under the stress of complication the truth of these suggestions, or the practical difficulties in the way of their accomplishment, or even whether the suggestions are feasible, do not carry conviction of the truth of these frequent and vague statements, and the result which was then reached is not shaken by merely a single sentence in the English patent. — Westinghouse *v.* Great Northern, 88 Fed. 258; 31 C. C. A. 525.

A machine or combination which is not designed by its maker, nor actually used nor apparently adapted to perform the function of a patented machine, or combination, but which is discovered in a remote art and was used under radically different conditions to perform another function, neither anticipates nor limits the scope of the patent. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Ansonia *v.* Electrical, 144 U. S. 11; Topliff *v.* Topliff, 145 U. S. 156; Potts *v.* Creager, 155 U. S. 597; Westinghouse *v.* Air-Brake Co. (C. C.) 59 Fed. 581; Walk. Pat. (2d Ed.) p. 54, sec. 68.

Where mechanical improvements have moved so fast as they have in the last half century, great caution is required in investigating alleged anticipations which date back nearly the whole of that period: and, so far as they did not go into use, so there was no practical exhibition of them, it is often difficult to determine whether they disclosed such full, clear, and exact terms as are necessary to anticipate. — Draper *v.* American, 161 Fed. 728; 88 C. C. A. 588.

§ 95. Prior Art — Sufficient.

Devices, though not claimed to fully anticipate the patent in suit, are important in their bearing upon the construction of this patent and upon the alleged infringement by the defendants. — Deering *v.* Winona, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

We must presume the patentee was fully informed of everything which preceded him, whether such were the actual fact or not. There is no doubt

that the patent laws sometimes fail to do justice to an individual who may, with the light he had before him, have exhibited inventive talent of a high order, and yet be denied a patent by reason of antecedent devices which actually existed, but not to his knowledge, and are only revealed after a careful search in the Patent Office. But the statute (4886) is inexorable. It denies the patent if the device were known or used by others in this country before his invention. Congress having created the monopoly, may put such limitations upon it as it pleases. — Mast Co. *v.* Stover Co. 177 U. S. 485; 44 L. Ed. 856; 20 S. Ct. 708.

In view of the prior art, of which his own prior patent must be deemed a part, the claims in question must be confined to combinations substantially embodying the specific elements claimed. — Davis *v.* Morris, 81 Fed. 407; 26 C. C. A. 460.

James *v.* Campbell, 104 U. S. 382; McCreary *v.* Canal Co. 141 U. S. 459.

That the court is not limited in its examination of the prior art to the specific class to which the invention belongs, see Kelly *v.* Clow, 89 Fed. 297; 32 C. C. A. 205.

We have no doubt that Hardy had no knowledge of any of these former patents, for they had not been much extended in use or public notice; but the consequence of their existence no less affects his claim for novelty than if he had known all about them, notwithstanding their obscurity. — Sanders *v.* Hancock, 128 Fed. 424; 63 C. C. A. 166.

Evans *v.* Eaton, 3 Wheat. 454; Stearns *v.* Russell, 85 Fed. 218; Sewall *v.* Jones, 91 U. S. 171; Crompton *v.* Knowles, 7 Fed. 199.

§ 96. Prior Patent — Date.

It is true Bishop's patent was not set up by way of defense in the answer; but there is no dispute as to the time it was issued, and that fact, together with Bishop's testimony, makes it clear that his invention which was exemplified in the Wiggins Ferry, was made as far back as 1858, anticipating Brady according to his own showing for at least seven or eight years. — Atlantic *v.* Brady, 107 U. S. 192; 27 L. Ed. 438; 2 S. Ct. 225.

Defendant may show that the invention claimed was patented or described in some printed publication (not before the American patent was granted — nor before the application was filed but) before the patentee's supposed invention or discovery thereof. — Clark *v.* Willimantic, 140 U. S. 481; 35 L. Ed. 521; 11 S. Ct. 846.

U. S. R. S. 4920.

It is indispensable to the maintenance of the defense that the combination had been patented prior to his invention or discovery thereof that the defensive patent should have been issued before the patentee under the patent in suit made his invention. As the patent was not issued until after complainant conceived and perfected his device, nor until after he had applied for a patent for it, it is neither competent nor material evidence upon the issues in this case. — Anderson *v.* Collins, 122 Fed. 451; 58 C. C. A. 669.

Bates *v.* Coe, 98 U. S. 31; DuBois *v.* Kirk, 158 U. S. 58; Walk. Pat. sec. 55.

§ 97. Prior Patent — Insufficient.

The fact that a former patent cited suggests the possibility or advantage of performing the function of the patent in suit is not sufficient to be construed as anticipation. — Gordon *v.* Warder, 150 U. S. 47; 37 L. Ed. 992; 14 S. Ct. 32.

The Dodson patent was an instance of the intermeshing of projections on the surface of an abutment with corresponding projections on the surface of a cylinder. It is not shown to have produced disintegrations of the clay, and is one of those wrecks and failures of inventive genius that are constantly found lining the path of the successful inventor, who takes the last step which wins. — Potts *v.* Creager, 97 Fed. 78; 38 C. C. A. 47.

Nor can we think that the existence in the Patent Office of something which might merely supply a hint, but was not specifically described or claimed as intended to be covered by a patent, ought to be held as an anticipation of an otherwise valid invention. Inventors are not precluded by the embryonic and shapeless ideas found in former patents, any more than they are by such undeveloped matter existing elsewhere. — Canda *v.* Michigan, 124 Fed. 486; 61 C. C. A. 194.

§ 98. Prior Patent — Sufficient.

The learned judge who decided this case in circuit apparently laid stress on the proposition that the respondent could not defend itself against a suit for infringement brought by Mann (the owner of the foreign patent set up in anticipation) provided Mann's patent were in vigor in this country. Even if this were true, and even if the complainant also, were in a similar position with reference to Mann, it would not necessarily be decisive of this case. This litigation is not with Mann, or with Mann's patent, but it is in favor of those who, in the most adverse view of them, have improved on Mann, so that, if the improvement amounts to invention, the respondent, if he has used the improvement, cannot shield itself behind Mann.— Deeeco *v.* Gilchrist, 125 Fed. 293; 60 C. C. A. 207.

The Buller patent does not anticipate the patent in suit because: (1) The defendants have failed to show that it is capable of successful practical operation, or that the objections thereto were such as could be obviated without the exercise of the faculty of invention. (2) Because, being a foreign publication, it does not contain a substantial representation of the patent improvement in such clear and exact terms as to enable a person skilled in the art to construct and practise the invention. (3) It appears that it does not operate upon the theory or in the manner covered by the invention in suit. — Kirchberger *v.* American, 128 Fed. 599; 64 C. C. A. 107. See 215 U. S. 161.

Sage *v.* Wyncoop, 104 U. S. 319; Seymour *v.* Osborne, 11 Wall. 516; Eames *v.* Andrews, 122 U. S. 40; Chase *v.* Fillebrown, 58 Fed. 374.

It may be true that the patented can was the first which was ever actually manufactured and put upon the market; but whether such as are described in the prior patents were ever actually made or not is an immaterial consideration. These patents show so plainly what they purport to show that he who runs can read; and their effect in negativing novelty of the claim cannot be impaired by any argument that they are impracticable structures. — Ironclad *v.* Dairyman's, 143 Fed. 512; 74 C. C. A. 372.

§ 99. Prior Patent — Reference on Application.

That a prior patent cited as a reference against the claim of the patent in suit, while the application was before the commissioner, followed by allowance of the claim, is evidence of novelty and patentable difference, see Warren *v.* Casey, 93 Fed. 963; 36 C. C. A. 29.

Lehnbeuter *v.* Holthaus, 105 U. S. 94.

§ 100. Process — Machine.

A process patent can only be anticipated by a similar process. It is not sufficient to show a piece of mechanism by which the process might have been performed. — Carnegie *v.* Cambria, 185 U. S. 405; 46 L. Ed. 968; 22 S. Ct. 698.

A process patent, such as that of Jones, is not anticipated by mechanism which might with slight alterations have been adapted to carry out the process, unless, at least, such use of it would have occurred to one whose duty it was to make particular use of the mechanism described. In other words, a process patent can be anticipated by a similar process. A mechanical patent is anticipated by a prior device of like construction and capable of performing the same function but it is otherwise with a process patent. The mere possession of an instrument or piece of mechanism contains no suggestion whatever of all the possible processes to which it may be adapted. (New Process *v.* Maus, 122 U. S. 413.) If the mere fact that a prior device might be made effective for carrying on a particular process were sufficient to anticipate such process, the assured result would follow that, if the process consisted merely of manipulation, it would be anticipated by the mere possession of a pair of hands. — Carnegie *v.* Cambria, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

That where complainant held a patent for a process and for a machine for carrying out that process, and the distinguishing novel feature of the process lay in the use of the patented machine, and not in the steps of the process, the steps of the process being all old and old in combination, the novelty of the result of the operation of the machine could not impart patentable novelty to the process, see United States *v.* Assyrian, 100 Fed. 965; 41 C. C. A. 123.

That a patent for a process is anticipated by a machine capable of performing the process and so used, see Johnson *v.* Chisholm, 115 Fed. 625; 53 C. C. A. 123.

§ 101. Process — Process Rule.

A process patent can only be anticipated by a similar process. — Johnson *v.* Foos, 141 Fed. 73; 72 C. C. A. 105.

Carnegie *v.* Cambria, 185 U. S. 403.

§ 102. Process — Miscellaneous.

The method of Burnham, whether workable or not, was not the process of Johnson, and his patent is not an anticipating patent for that reason as well as because it had not been issued at the date of the Johnson application. — Johnson *v.* Foos, 141 Fed. 73; 72 C. C. A. 105.

Bates *v.* Coe, 98 U. S. 31; Dubois *v.* Kirk, 158 U. S. 64; Anderson *v.* Collins, 122 Fed. 451.

There can, of course, be no anticipation of Johnson's method, which was purely mechanical, by one which involved chemical agencies alone. — Johnson *v.* Foos, 141 Fed. 73; 72 C. C. A. 105.

§ 103. Public Use — Sufficient.

The identical combinations having been previously used for the same purpose, there is no invention. — Dane *v.* Chicago, 131 U. S. cxxvi; 23 L. Ed. 82.

If the hoe made by the Tool Company infringes the patent of the applicant, it was an anticipation of the invention, and the patent is void, for the testimony leaves no doubt whatever in our minds that the Company made and sold its hoes long before the date of the invention patented. If it is not an anticipation, it is not an infringement. — Cook *v.* Sandusky, 28 L. Ed. 124.

When defendant assumed and proved that he had made and used the device shown and claimed by complainant for five years, four years of which time was prior to complainant's patent, the answer and defense were held good. — Anderson *v.* Miller, 129 U. S. 70; 32 L. Ed. 635; 9 S. Ct. 224.

Prior public use of a single device in a store, used by a number of employees for more than two years is anticipation. — American *v.* Weston, 59 Fed. 147; 8 C. C. A. 56.

There can be no doubt that, under the decisions of the supreme court, if these witnesses are to be believed, the making of the machine and its public use, more than two years before the complainant's patent was applied for, would constitute a complete anticipation. — Parlin *v.* Moline, 89 Fed. 329; 32 C. C. A. 221.

Aiken *v.* Dolan, Fed. Cas. 110; Coffin *v.* Ogden, 18 Wall. 120; Worley *v.* Tobacco Co. 104 U. S. 343; Manning *v.* Glue Co. 108 U. S. 465; Magin *v.* Karle, 150 U. S. 388; Brown *v.* Davis, 116 U. S. 237.

150 sample cans were sent to the French government in response to a request for cans of that character, before the date of invention of the patent in suit. But no commerce with the French government resulted. *Held:* Sec. 4886, R. S. voids a patent for a thing that has been known or used by others in this country prior to the alleged invention. No clearer case for the application of the statute can be found in the books. — American *v.* Morris, 142 Fed. 166; 73 C. C. A. 384.

Brush *v.* Condit, 132 U. S. 39.

§ 104. Public Use — Miscellaneous.

The action of the commissioner of patents in granting a patent is not conclusive either as to novelty, utility or prior use. — Reckendorfer *v.* Faber, 92 U. S. 347; 23 L. Ed. 719.

The fact that the anticipating device was concealed from view and could not have come to public notice does not constitute a secret device such as would take it outside the law of public use. — Brush *v.* Condit, 132 U. S. 39; 33 L. Ed. 251; 10 S. Ct. 1.

Conceding that there was sufficient evidence of use in England (of the patented article for more than two years) we think this does not vitiate the patent. Sec. 4886 declares, "Any person who has invented any new and useful art, machine, etc., and not in public use or on sale for more than two years prior to his application may obtain a patent therefor." While it is true there is no restriction as to place or country, sec. 4887 provides "unless the same has been introduced into public use in the United States for more than two years prior to the application." We think that the public use or sale contemplated by sec. 4886 must be limited to a use or sale in this country. Sec. 4923 providing that foreign use does not void a patent and sec. 4920 providing that defendant may plead use or sale in this country for more than two years establishes the intent of sec. 4886, that the right of

the patentee should not be denied by reason of the fact that he had made use of it or put it on sale abroad for more than two years, provided it were not so used or sold in this country. — Gandy *v.* Main, 143 U. S. 587; 36 L. Ed. 272; 12 S. Ct. 598.

§ 105. Publication — Insufficient.

A description in an encyclopedia before patent of an improvement claimed to be anticipatory, unsupported by any proof that it was operative, is not sufficient to defeat a patent. — Seymour *v.* McCormick, 60 U. S. 96; 15 L. Ed. 557.

It must be admitted that, unless the earlier printed and published description does exhibit the later patented invention in such a full and intelligible manner as to enable persons skilled in the art to which the invention is related to comprehend it without assistance from the patent, or to make it or repeat the process claimed, it is insufficient to invalidate the patent. — Cohn *v.* U. S. 93 U. S. 366; 23 L. Ed. 907.

Some of the expressions taken by themselves, seem to foreshadow the Jones idea; but there was nothing in any of these discoveries that filled the requirement of the law (Rev. Stat. sec. 4886) of a description in a publication sufficient to anticipate the patent. — Carnegie *v.* Cambria, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

It, therefore, serves no useful purpose to strive to show that the Brush patent was anticipated because some pre-existing scientist has described a battery which corresponds with the general phraseology of the claims, provided their language should be so construed as to include the class of batteries which has been mentioned, a construction which is forbidden by the history of the invention and by a disinterested examination of the patent. — Electric *v.* Brush, 52 Fed. 130; 2 C. C. A. 682.

The description must be such as to show that the article described in the patent can be certainly arrived at by following the description, without the assistance of local prior knowledge or local prior use in the foreign country where the description is published. — Badische *v.* Kalle, 104 Fed. 802; 44 C. C. A. 201.

Atlantic *v.* Parker, 16 Blatch. 295.

Of all these publications, so far as they contain suggestions which Mouras did not indicate, they are "mere vague and general representations not sufficient to enable those skilled in the art or science to understand the nature and operation of the invention and to carry it into practical use." — Cameron *v.* Saratoga, 159 Fed. 453; 86 C. C. A. 483.

Seymour *v.* Osborne, 11 Wall. 555.

§ 106. Publication — Sufficient.

A prior publication which describes a process or machine with sufficient exactness to enable one skilled in the art to employ it is a publication which will anticipate. — Downton *v.* Yaeger, 108 U. S. 466; 27 L. Ed. 789; 3 S. Ct. 10.

Seymour *v.* Osborne, 11 Wall. 516; Cohn *v.* Corset, 93 U. S. 366.

The "description in a printed publication" of the statute is to be found within the four corners of such printed publication. — Badische *v.* Kalle, 104 Fed. 802; 44 C. C. A. 201.

§ 107. Uncontemplated Use or Function.

The fact that incidentally the process of the patent in suit was performed by the accidental operation of certain substances, which was not understood, and which accidental phenomenon gave no hint to the discoverer of the process in suit will not be regarded. — Tilghman *v.* Proctor, 102 U. S. 707; 26 L. Ed. 279.

The case is one for the application of the doctrine, well settled in the law of patents, that novelty is not negatived by a prior accidental production of the same thing, when the operator does not recognize the means by which the accidental result is accomplished and no knowledge of them or of the method of its employment is derived from it by anyone. — Wickelman *v.* Dick, 88 Fed. 264; 31 C. C. A. 530.

Pittsburgh *v.* Cowles, 55 Fed. 301; Chase *v.* Fillebrown, 58 Fed. 377; Topliff *v.* Topliff, 145 U. S. 161; Tilghman *v.* Proctor, 102 U. S. 707.

The essence of the invention was the provision of new means to accomplish a new result in a new way by a radical departure from the prior art. In these circumstances, the fact that the old Gorge pocket of 1878 might be forced around to a position in which it might receive and hold the prominence of the abdomen instead of that of the hip bone is immaterial. — Young *v.* Wolfe, 130 Fed. 891; 65 C. C. A. 199.

We are brought to the argument that these prior constructions do not negative invention because they were not designed to be used for the purpose stated in the patent in suit. In the consideration of this question we are not unmindful of the rule as stated by this court in Wickelman *v.* Dick, 88 Fed. 264, 266. See also Boyd *v.* Cherry, 50 Fed. 279, 283; Clough *v.* Barker, 106 U. S. 166.

But in order to apply this doctrine to the case at bar, we must not only treat the device of the prior patent as an accidental construction, but we must ignore the evidence that it was used in the manner contemplated in the patent in suit. — American *v.* Carter-Crume, 150 Fed. 333; 80 C. C. A. 339.

To assert that Moran's invention (air-locks for caissons) is anticipated by freight elevators which pass through several stories of a building, the openings on each floor being closed by two-part doors, is tantamount to asserting that he who solves the problem of aerial navigation will be entitled to no credit because similar vehicles with the same motive power have traveled successfully over the land and through the water. — O'Rourke *v.* McMullen, 160 Fed. 933; 88 C. C. A. 115.

§ 108. Miscellaneous Rulings.

So far as the defense of anticipation is concerned, it must be established as of a date anterior to the patentee's invention or discovery; not merely prior to the application for, or the dating of his patent. — Von Schmidt *v.* Bowers, 80 Fed. 121; 25 C. C. A. 323.

R. S. 4886, 4920; Plow Works *v.* Starling, 140 U. S. 198; Clark *v.* Willimantic, 140 U. S. 492; Loom Co. *v.* Higgins, 105 U. S. 592; Kneeland *v.* Sheriff, 2 Fed. 901; Woodman *v.* Stimpson, Fed. Cas. 17,979; Merw. Pat. Inv. sec. 323.

His long delay in making application for the patent creates a strong countervailing presumption, but is reasonably and adequately explained by the surrounding facts and circumstances, and thus explained, ought not to prevail against the very convincing evidence that has been adduced by the complainants. — Frost *v.* Cohn, 119 Fed. 505; 56 C. C. A. 185.

Burdick was the first to make an air brush on the plan of concentric nozzles; and the primary character of his invention is not to be destroyed by references to patents for oil burners. Of course the oil burners cannot be used in painting pictures. And if the arts are analogous enough to charge Burdick with notice of the concentric nozzles in oil-burners, nevertheless it required invention to adapt them to co-operate with other elements, not present in the oil-burners, so as to produce Burdick's unquestionably new combination. — Wold *v.* Thayer, 148 Fed. 227; 78 C. C. A. 350.

APPEALS.

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§ 109. The Statutes — Appeals to the Supreme Court.

Prior to the Circuit Court of Appeals Act of Mar. 3, 1891, all appeals in patent causes were from the circuit courts directly to the Supreme Court by sec. 690, R. S. By the act of 19 Feb. 1897, the paragraph of said section providing for appeals to the Supreme Court in patent causes was repealed; but the section following (699, R. S.) was not so amended, and consequently, by the first paragraph of sec. 699, an appeal lies directly from the Court of Appeals, D. C., to the Supreme Court. Herein lies the reason why the decisions of the Court of Appeals, D. C., prior to January 1, 1912, were not included in this work as a part of the fixed law. But with the repeal of § 699 by the Judicial Code Act, in effect Jan. 1, 1912, this court becomes a court of last resort in patent causes, and its decisions are fixed law from that date. While it might be said that the repeal of § 699, by retroaction, made the previous decisions of the Court of Appeals, D. C. fixed law, it has not been deemed expedient to so regard them in the absence of any authority.

Appeals may, however, reach the Supreme Court in patent causes by either of the following provisions of the Judicial Code:

Sec. 239. In any case within its appellate jurisdiction, as defined in section 128, the circuit court of appeals at any time may certify to the Supreme Court of the United States any questions or propositions of law concerning which it desires the instruction of that court for its proper decision; and thereupon the Supreme Court may either give its instruction on the questions and propositions certified to it, which shall be binding upon the cir-

cuit court of appeals in such case, or it may require that the whole record and cause be sent up to it for its consideration, and thereupon shall decide the whole matter in controversy in the same manner as if it had been brought there for review by writ of error or appeal.

Sec. 240. In any case, civil or criminal, in which the judgment or decree of the circuit court of appeals is made final by the provisions of this Title, it shall be competent for the Supreme Court to require by certiorari or otherwise, upon the petition of any party thereto, any such case to be certified to the Supreme Court for its review and determination, with the same power and authority in the case as if it had been carried by appeal or writ of error to the Supreme Court.

§ 110. The Statutes — Appeals to Circuit Court of Appeals.

The Federal Judicial Code is not a repeal or general revision of the Circuit Court of Appeals Act and amendments thereto, but is a continuation of these previous acts except where the change is clearly manifest. The following are without substantial change from the former law.

Sec. 116. There shall be nine judicial circuits of the United States, constituted as follows:

* * * * * * * * * * * *

Sec. 117. There shall be in each circuit a circuit court of appeals, which shall consist of three judges, of whom two shall constitute a quorum, and which shall be a court of record, with appellate jurisdiction, as hereinafter limited and established.

Sec. 128. The circuit courts of appeals shall exercise appellate jurisdiction to review by appeal or writ of error final decisions in the district courts, including the United States district court of Hawaii, in all cases other than those in which appeals and writs of error may be taken direct to the Supreme Court, as provided in section two hundred and thirty-eight, unless otherw se provided by law; and except as provided in sections two hundred and thirty-nine and two hundred and forty, the judgments and decrees of the circuit courts of appeals shall be final in all cases in which the jurisdiction is dependent entirely upon the opposite parties to the suit or controversy being aliens and citizens of the United States, or citizens of different States; also in all cases arising under the patent laws, under the copyright laws, under the revenue laws, and under the criminal laws, and in admiralty cases.

When, however, the subject-matter of the appeal is a question of jurisdiction, appeal lies directly to the Supreme Court, even when the cause of action arises under the Patent Laws.

From a final decree of a Circuit or District Court on a question of jurisdiction, whether of the cause or of the person, the appeal lies directly to the Supreme Court, and this Court is without jurisdiction to entertain it. — Waterman *v.* Parker, 107 Fed. 141; 46 C. C. A. 203.

Shepard *v.* Adams, 168 U. S. 618.

Preliminary injunction appeals have been a most fruitful source of apellate decision since the passage of the C. C. A. Act. The law has been amended, and the entire subject-matter is so closely related to — and in fact of the very essence of — the right to a preliminary injunction, that such appeals are best considered in connection with *Injunctions*.

§ 111. Assignments of Error — Sufficiency.

A writ of error covers all questions which arose on the trial. — Hogg *v.* Emerson, 6 How. 437; 12 L. Ed. 505.

Note: It is thought that this rule has not always been followed.

Nothing can be assigned for error which contradicts the record; nor can any appellant be allowed to assign for error the ruling of the court in respect to any defense not set up in his plea or answer. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

The complainant has filed twenty assignments of error. It is hardly conceivable that the court below could have fallen into as many as twenty distinct different errors in passing upon the two questions at issue; and this court will not enter *seriatim* into an examination of these several assignments, but will treat the matter in a more compendious manner. — Ashton *v.* Coale, 52 Fed. 314; 3 C. C. A. 98.

Assignments of error ought to be strictly confined to the subject brought before the appellate court, whether on appeal or by writ of error. — Gamewell *v.* Municipal, 61 Fed. 208; 9 C. C. A. 450.

Error is assignable upon an order or ruling, but not upon the opinion of a court or the reasons given for a ruling. — Russell *v.* Kern, 69 Fed. 94; 16 C. C. A. 154.

Caverly *v.* Deere, 66 Fed. 305.

Where counsel for an appellant or plaintiff in error files a brief and makes an oral argument, and does not allude in either to any of his assignments of error, he must be taken to have waived it. — American *v.* Buckskin, 72 Fed. 508; 18 C. C. A. 662.

The assignments of error are three in number, and are set forth in the statement which precedes this opinion. The first assignment is not distributive or severable as between the five claims. The proposition to which appellants commit themselves is that their construction is not an infringement of any one of the five claims. This court cannot sustain the assignment in form and effect as made without declaring that no one of the claims is infringed. So, also, as to the second assignment. The proposition therein put forward by appellants is that neither of the patents is valid. The court cannot sustain this assignment without holding that both are invalid. But two of the claims were infringed, and one of the patents, namely, that numbered 456,122, is valid. Assuming that the two assignments of error meet the technical rules of this court, — a matter not here decided, since a court of error may, of its own motion, reverse for an error not assigned, — this court must necessarily overrule said assignments. The situation here is plain enough without elaboration. — Standard *v.* Crane, 76 Fed. 767; 22 C. C. A. 549.

The assignment is predicated, not as it ought to have been, upon the ruling of the court, but upon the reason given for the decision. That, we have more than once declared, is improper and unavailing. — Clark *v.* Deere, 80 Fed. 534; 25 C. C. A. 619.

Caverly *v.* Deere, 66 Fed. 305; Russell *v.* Kern, 69 Fed. 94.

An assignment of error which is predicated upon the opinion of the court, or upon a reason given by the court for its ruling or decree, is not available. It is something done by the court, — a ruling, judgment, order or decree, — and not a reason therefor, which may be assigned as error. A sufficient assignment in this case would have been simply that the court erred in dismissing the bill. — Evans *v.* Suess, 83 Fed. 706; 28 C. C. A. 24.

Caverly *v.* Deere, 66 Fed. 305; Russell *v.* Kern, 69 Fed. 94; Clark *v.* Deere, 80 Fed. 534.

§ 112. Assignments of Error — Miscellaneous Rules.

The appellate court reversed the trial court holding that the claims were too broad, and, properly construed, the patent was not infringed. This defense was not raised by the assignment of errors. *Held:* The first assignment is that "the court erred in not dismissing the bill of complaint," and it is said to be too general. But if this be so, we think the error is plain, and that we may, in the exercise of our discretion, and ought to, notice it. This defense was distinctly raised by the answer, the issue is vital to the merits of the controversy, and the case cannot be rightly decided without adverting to it. — Wessel *v.* United, 139 Fed. 11; 71 C. C. A. 423.

C. C. A. Rules, 90 Fed. cxlvii; Andrews *v.* National, 77 Fed. 774; National *v.* Spiro, 78 Fed. 774.

The assignment of errors is to be filed in the court below before the court loses jurisdiction. It follows that, when these later assignments were filed, the case was no longer pending in the court below, and the filing them there was a futile act. — Mast *v.* Superior, 154 Fed. 45; 83 C. C. A. 157.

§ 113. Certification.

The circuit court, on division certified the single question of fact of infringement. *Held:* That it could not be entertained. — Wilson *v.* Barnum, 8 How. 258; 12 L. Ed. 1070.

It is only a difference on a special point of law which can be distinctly stated that may be certified to this court under sec. 652 R. S. — California *v.* Molitor, 113 U. S. 609; 28 L. Ed. 1106; 5 S. Ct. 618.

Wayman *v.* Southard, 10 Wheat. 20; Denniston *v.* Stewart, 18 How. 565; Wilson *v.* Barnum, 8 How. 258; U. S. *v.* Briggs, 5 How. 208; U. S. *v.* Bailey, 9 Pet. 257; Adams *v.* Jones, 12 Pet. 207; Nesmith *v.* Sheldon, 6 How. 41; Webster *v.* Cooper, 10 How. 54; Daniels *v.* R. R. 3 Wall. 250.

It was long ago settled under the statutes authorizing questions upon which two judges of the circuit court were divided in opinion to be certified to this court, that each question so certified must be a distinct point or proposition of law clearly stated, so that it could be definitely answered. — Columbus *v.* Robbins, 148 U. S. 266; 37 L. Ed. 445; 13 S. Ct. 594.

Perkins *v.* Hart, 24 U. S. 237; Sadler *v.* Hoover, 48 U. S. 646; Jewell *v.* Knight, 123 U. S. 426; Fire Ins. Assn. *v.* Wickman, 128 U. S. 426.

Whether the supreme court will review a decision of the circuit court of appeals solely on the grounds that another circuit has held otherwise, without division and certificate, quaery. — Columbus *v.* Robbins, 148 U. S. 266; 37 L. Ed. 445; 13 S. Ct. 594.

§ 114. Commissioner of Patents — Actions of.

In matters of this description, in which the action of the Commissioner is quasi judicial, the fact that no appeal is expressly given to the Secretary of the Interior is conclusive that none is to be implied. — Butterworth *v.* Hoe, 112 U. S. 50; 28 L. Ed. 656; 5 S. Ct. 25.

9 O. G. 403; 12 O. G. 475; 13 O. G. 771; 16 O. G. 220.

§ 115. Cross-Appeals.

When a complainant has a decree in his favor, but not to the extent prayed for in his bill, and the respondent appeals: if the complainant desires a more favorable decree, he must enter a cross appeal, that when the

decree comes before the appellate court he may be heard. For when the decree is affirmed or reversed by the appellate court, it becomes the decree of that court, and cannot be the subject of another appeal. — Corning *v.* Troy, 15 How. 451; 14 L. Ed. 768.

That a decree holding certain claims sued on invalid, and certain other claims sued on valid and infringed and ordering an injunction, is not a final decree, and is not appealable by complainant by cross-appeal, see Ex parte National, 201 U. S. 156; 26 S. Ct. 404.

On an interlocutory decree declaring certain claims void and others valid, the complainant is not entitled to a cross appeal or to the decrees holding certain claims void. — Marden *v.* Campbell, 67 Fed. 809; 15 C. C. A. 26.

Gamewell *v.* Municipal, 61 Fed. 208.

That decree allowed an injunction, and for that reason the defendants had a right to review it by appeal, and this court had jurisdiction to consider and determine upon that appeal what kind of a decree ought to be rendered. The complainant had no right to maintain a cross-appeal, because no injunction was granted against it, and the decree was not final. — Minnesota *v.* Dowagiac, 126 Fed. 746; 61 C. C. A. 352.

Both parties appealed from interlocutory decree, holding one claim valid and another void. *Held:* Inasmuch as the decree of the circuit court is not final, the only appeal which can be considered is from so much of such decree as grants an injunction. — Kilmer *v.* Griswold, 67 Fed. 1017; 15 C. C. A. 161.

§ 116. Decrees — Final — What Constitute.

As it is admitted that the court below has not yet acted upon the mandate of this court, and entered a final decree in pursuance thereof, there is no final decree, from which only an appeal can be taken. — Corning *v.* Troy, 15 How. 451; 14 L. Ed. 768.

The Palmyra 10 Wheat 502; Chace *v.* Vasquez, 11 Wheat 429.

In the Federal courts no appeal can, as a general rule, be taken, except from a final decree. — Ex parte National, 201 U. S. 156; 26 S. Ct. 404.

Forgay *v.* Conrad, 6 How. 201; McLish *v.* Roff, 141 U. S. 661.

Complainant Brush Co., as co-complainant with licensee moved to be dismissed as a party. Motion denied. Brush Co., appeals. *Held:* That the decision below on the question was a final decision in the sense of giving the right of appeal under the act. — Brush *v.* Electric, 51 Fed. 557; 2 C. C. A. 373.

2 Dan. Ch. 1192; Williams *v.* Morgan, 111 U. S. 689; Forgay *v.* Conrad, 6 How. 203; Bronson *v.* Railroad, 2 Black. 530; Trust Co. *v.* Grant, 135 U. S. 209; Sharon *v.* Sharon, 67 Cal. 195; Terry *v.* Sharon, 131 U. S. 46.

Although there may be an interlocutory decree declaring certain claims void and others valid, yet there is only one final decree. It would be contrary to all well-conceived notions to imagine two final decrees in a patent cause of this character. — Marden *v.* Campbell, 67 Fed. 809; 15 C. C. A. 26.

Whatever was before this court by virtue of that appeal, and was disposed of, has been finally done, and must be regarded as settled. The cir-

cuit court is bound by such decree as the law of the case, and must carry it into execution according to the mandate. The decree of this court upon any matter within its jurisdiction can neither be modified, reversed, enlarged, nor suspended by circuit court; nor can any other or less or greater relief be accorded than that prescribed by its decree and mandate. Any matter undecided and left open by the mandate the court below may hear and decide, and its decree in relation to such new matters can be examined here only upon a new appeal. That the decree and mandate of this court have precisely the same finality as was attached to the decree and mandates of the supreme court, before the establishment of the circuit courts of appeals, is too obvious for elaboration. — Bissell *v.* Goshen, 72 Fed. 545; 19 C. C. A. 25.

The injunction decree appealed from was not a mere preliminary injunction granted in the exercise of the discretion of the circuit court. The case had been fully prepared by both parties. It came on regularly to be heard on the merits and was so heard. The court was obliged to decide, and did decide that the complainant's patent was valid and infringed. Upon this basis the court awarded, as it was bound to do, a perpetual injunction and an accounting. Under the rule of the supreme court as to an appealable final decree, this was not one, although the merits had been determined and nothing remained to be done except to ascertain the damages. — Bissell *v.* Goshen, 72 Fed. 545; 19 C. C. A. 25.

Forgay *v.* Conrad, 6 How. 204; Barnard *v.* Gibson, 7 How. 656; Humiston *v.* Stainthorp, 2 Wall. 106; Railroad *v.* Swasey, 23 Wall. 405; Bronson *v.* Railroad, 2 Black 528; Bostwick *v.* Brinkerhoff, 106 U. S. 3; Grant *v.* Ins. Co. 106 U. S. 429; Parsons *v.* Robinson, 122 U. S. 112; St. Louis *v.* Southern, 108 U. S. 24; Iron Co. *v.* Martin, 132 U. S. 91; McGourkey *v.* Railway, 146 U. S. 536; Elder *v.* McClaskey, 70 Fed. 557.

A decree on the merits sustaining infringement (without injunction) is not a final decree for the purpose of an appeal. — Lockwood *v.* Wickes, 75 Fed. 118; 21 C. C. A. 257.

Perkins *v.* Tourniquet, 6 How. 206; Barnard *v.* Gibson, 7 How. 650; Humiston *v.* Stainthorp, 2 Wall. 106; Crawford *v.* Points, 13 How. 11; Iron *v.* Martin, 132 U. S. 91.

One portion of a given decree may be final, and for that reason reviewable on appeal, while the remainder may be interlocutory, and for that reason not appealable. — Standard *v.* Crane, 76 Fed. 767; 22 C. C. A. 549.

Forgay *v.* Conrad, 6 How. 202; Iron Co. *v.* Meeker, 109 U. S. 180; McFarland *v.* Hall, 17 Tex. 691; Malone *v.* Marriott, 64 Ala. 486; Williamson *v.* Field, 2 Barb. Ch. 281; Dickerson *v.* Codwise, 11 Paige, 189.

A decree finding title, infringement and awarding an injunction and accounting is not an interlocutory decree and is not appealable under sec. 7 but is a final decree and is appealable under sec. 6. — Standard *v.* Crane, 76 Fed. 767; 22 C. C. A. 549.

Disapproving,

Bissell *v.* Goshen, 72 Fed. 545; Watch Co. *v.* Robbins. 52 Fed. 337; s. c. 64 Fed. 384; Richmond *v.* Atwood, 52 Fed. 10; Green *v.* Mills, 69 Fed. 852.

That after a case has been to the master and determined, and the final decree corrected and determined on appeal, the appellate court will not entertain a second appeal on evidence insufficient to materially change the status of the case, see Tuttle *v.* Clafflin, 82 Fed. 744; 27 C. C. A. 255.

It is further contended, that as the decree finally disposes of the first claim of the patent, an appeal would lie independently of the statute. But as that part of the decree did not finally dispose of the whole case, which was retained for the purpose of an accounting upon the claims held valid, the right to appeal from the dismissal of the bill as to the first claim, would be suspended until the final decree. — Western *v.* Williams-Abbott, 108 Fed. 952; 48 C. C. A. 159.

Marden *v.* Printing Press, 67 Fed. 809.

As the case below passed off on demurrer, no testimony having been heard, we are at liberty to consider only the allegations of the bill and the specification and claim of the patent. We are at liberty, however, to examine the patent in the light of that common knowledge of facts and principles which is possessed by all persons of average intelligence. — Mahler *v.* Animarium, 111 Fed. 530; 49 C. C. A. 431.

Brown *v.* Piper, 91 U. S. 37; *Richards v. Elevator*, 158 U. S. 299; *Engraving v.* Hoke, 30 Fed. 444.

§ 117. Decrees — Interlocutory — Defined.

A decree sustaining a patent, awarding an injunction and ordering an accounting, is an interlocutory decree and is appealable under the act of 1891. — Jones *v.* Munger, 50 Fed. 785; 1 C. C. A. 668.

Iron Co. *v.* Martin, 132 U. S. 91; Daniell Ch. Pr. 5 ed. 986–1019; Richmond *v.* Atwood, 48 Fed. 910.

The "interlocutory order or decree" made appealable by amended section 7 must be one wherein the court grants, continues, refuses, dissolves, or refuses to dissolve an injunction. The state of the record or progress of the cause must be such, when said appealable "interlocutory order or decree" is entered, that a "final decree" upon the matter with which said "interlocutory order or decree" has to do may yet be made. The contrast suggested by the words "interlocutory order or decree" and "final decree" as used in the first paragraph of amended section 7, is between a decree which is preliminary to a hearing on the merits, and hence discretionary in the court, and one which follows a hearing on the merits, and is hence final, conclusive, and as of right in the prevailing party; between a decree which is meant to preserve the subject-matter of the litigation, or prevent irreparable injury, till a hearing on the merits can be had, and a decree which follows the hearing on the merits, and ultimately determines the rights of the litigants. The "interlocutory order or decree" made appealable by amended section 7 must be one which leaves the cause pending on the issues in the court of original jurisdiction. — Standard *v.* Crane, 76 Fed. 767; 22 C. C. A. 549.

§ 118. Decrees — Interlocutory — What Determined on Appeal.

Appeals from orders are not to be confounded with appeals from final decrees, and the rule stated (as to the force and effect to be given a prior adjudication) will not prevent our review of the adjudication itself, whenever it and the record upon which it was made, shall be presented upon appeal. The tendency of any different rule would be to produce confusion, and convert the review of the interlocutory order into a review of the final adjudication upon which it was founded. — American *v.* National, 51 Fed. 229; 2 C. C. A. 165.

The record before us is complete. Everything is here for our consideration which was before the court below. We must go to the full merits, as shown by the record, in order to determine whether the interlocutory decree

for a perpetual injunction is founded in error, and, if we determine the property right adversely to the complainant the injunction should be dissolved; and no sufficient reason has been suggested why the accounting, — to which the complainant is not entitled, and, which would be an evasion of a right, and therefore, inequitable and improper, under our view of the case — should proceed. — Richmond *v.* Atwood, 52 Fed. 10; 2 C. C. A. 596.

While an appellate court interferes reluctantly with discretionary injunctions, on an appeal from an interlocutory decree for a perpetual injunction and an accounting, upon a complete record the court will decide the appeal upon its merits without waiting for an accounting. — Richmond *v.* Atwood, 52 Fed. 10; 2 C. C. A. 596.

As to what the court will consider on appeal from an interlocutory order, see note in Consolidated *v.* Pacific, 53 Fed. 385; 3 C. C. A. 570.

The case came here on appeal from an interlocutory decree granting an injunction but was heard as well on the merits. The court had jurisdiction to review the case on its merits. — Consolidated *v.* Pacific, 58 Fed. 226; 7 C. C. A. 195.

Iron Works *v.* Smith, (no opinion filed.)

It is a rule of equitable convenience that when the whole record touching the decree so far as it supports the injunction comes up before the court of appeals, or can come there, so that the court has before it everything in this respect which the circuit court had or which the court of appeals would have on an appeal from a final decree, the court will go fully into the merits of the appeal. — Marden *v.* Campbell, 67 Fed. 809; 15 C. C. A. 26.

Richmond *v.* Atwood, 52 Fed. 10.

Inasmuch as the hearing of the merits of the bill, answer, and proofs, and the whole record is before us, we are able to dispose finally of the case in accordance with what is now the settled rule of practice. — Crosby *v.* Ashton, 94 Fed. 516; 36 C. C. A. 335.

The appeal being from an interlocutory decree, it was attempted to dispose of the issue on the ground that no recovery could be had because complainant had failed to mark its articles patented. *Held:* the decree below not having as yet become final, the appeal brings before this court for review only so much of the decree as awarded an injunction. — Metallic *v.* Brown, 104 Fed. 345; 43 C. C. A. 568.

Several issues of fact are raised by the pleadings, a consideration of which at this time would tend to embarrass the trial court in the consideration of the case on the final hearing, and this court, should the case be again brought here by appeal. The cause is not in condition to be heard as to these matters now, and it must be understood that what is said is upon the record as now before this court, and not as to the merits as they may be hereafter presented. — American *v.* Phoenix, 113 Fed. 629; 51 C. C. A. 339.

Loew *v.* Filter Co. 107 Fed. 950.

In addition to a defense of the novelty of the claims of the patent, the appellees contend that, inasmuch as this is only an appeal from an order allowing an injunction pendente lite, this court may not consider any other question than whether the court below has abused its legal discretion in allowing the injunction, all other defenses being postponed until a final hearing. (After holding the contrary, citing Knoxville *v.* Africa, 77 Fed. 501; Mast *v.* Stover, 177 U. S. 485; Smith *v.* Vulcan, 165 U. S. 518; Bissell *v.* Goshen, 72 Fed. 545; Watch *v.* Robbins, 52 Fed. 337; Blount *v.* Societe, 53 Fed. 98; Duplex *v.* Campbell, 69 Fed. 250 the court added): But it must be conceded that upon

such an appeal the case against the patent must be a very plain one before the court would be justified in holding it void for want of novelty upon its face, or in reaching the same result upon a contested question of anticipation arising upon prior patents and their exemplification by ex parte affi avits of patent experts. — Co-operating *v.* Hallock, 128 Fed. 596; 64 C. C. A. 104.

Milner *v.* Yesbera, 111 Fed. 386; Higgins *v.* Scherer, 100 Fed. 459.

§ 119. Decrees — Interlocutory — When Appealable.

The decree appealed from is one dissolving pro tanto the perpetual injunction heretofore in force, and is an appealable interlocutory order or decree, within the act of Feb. 18, 1895, which amends sec. 7 of Mar. 3, 1891, so as to allow appeals from interlocutory orders or decrees dissolving injunctions. — Bissell *v.* Goshen, 72 Fed. 545; 19 C. C. A. 25.

Note: Not appealable under later amendment to the statute.

§ 120. Decrees — Interlocutory — Miscellaneous Rules.

It is equally clear that congress intended, by allowing an appeal from an interlocutory decree, to allow an appeal from a perpetual injunction ordered, and allowed upon a final hearing of the merits, where the same decree refers the cause to a master for an accounting. — Bissell *v.* Goshen, 72 Fed. 545; 19 C. C. A. 25.

Richmond *v.* Atwood, 52 Fed. 10; Dudley *v.* Munger, 50 Fed. 785; Marden *v.* Mfg. Co. 67 Fed. 809; Mfg. Co. *v.* Griswold, 67 Fed. 1017; American *v.* National, 51 Fed. 229; Curtis *v.* Wheel Co. 58 Fed. 784; Consolidated *v.* Accumulator, 55 Fed. 485; Blount *v.* Societe, 53 Fed. 98; Watch Co. *v.* Robbins, 52 Fed. 337; Industrial *v.* Electric, 58 Fed. 732; Consolidated *v.* Pacific, 58 Fed. 226; Andrews *v.* Pipe, 61 Fed. 782.

We conclude that the question whether a complainant should be permitted, in a given case, to waive his right to an injunction and thereby postpone the right of appeal until the decree becomes in all respects final, is one which may be safely remitted to the discretion of the trial court. — Lockwood *v.* Wicks, 75 Fed. 118; 21 C. C. A. 257.

Following,

Richmond *v.* Atwood, 52 Fed. 10; Jones *v.* Munger, 50 Fed. 785.

The interlocutory decree held one of the claims of the patent valid and infringed, and the other claims invalid or not infringed, and the complainant appealed from so much thereof as related to the claims which were adjudged invalid or not infringed. Thereupon the respondent below, now the appellee, filed a motion to dismiss on the ground that the appeal was premature. The respondent below took an appeal from so much of the interlocutory decree as adjudged one of the claims valid and infringed. The motion to dismiss this appeal must be allowed on the authority of our decision in Marden *v.* Campbell, 67 Fed. 809; and also Ex parte National Enameling, 201 U. S. 156. — Library *v.* Yawman, 147 Fed. 245; ' ' C. C. A. 387.

§ 121. Decrees — Stipulation.

A stipulation has been agreed upon between the parties that a decree might be entered in this case in conformity with and upon the filing of a decree in another suit between the same parties. *Held:* The court below having entered a decree conformable to that stipulation, the appellants cannot maintain an assignment of error. — McCafferty *v.* Celluloid, 104 Fed. 305; 43 C. C. A. 540.

Railroad *v.* Ketchum, 101 U. S. 289.

§ 122. Demurrer — Injunction.

Complainants, although they were prepared to go on with the motion they had made (for a preliminary injunction) were subjected on appeal to the same

consequences as if the preliminary hearing had been a final one. If complainants in every case must understand that a motion for preliminary injunction requires the same showing as on final hearing, very few motions of that sort would be made. We think the case comes within the exceptions pointed out in Mast *v.* Stover, 177 U. S. 485, and are impressed with the conviction that complainants have not had their day in court, and that it ought to be accorded them. — Brill *v.* Peckham, 189 U. S. 57; 47 L. Ed. 706; 23 S. Ct. 562.

§ 123. Dismissal — On Motion.

An appellant cannot as of right dismiss his own appeal. U. S. *v.* Minn. 18 How. 241; That ordinarily, on a dismissal on his own motion, the appellant is not entitled to an order expressed without prejudice, follows from what is said in the case cited at page 242, that usually the court will not allow such a dismissal if the appellant intends at some future time to bring another appeal. How very cautious the Supreme Court usually is to shut out presumptions of any qualification in connection with such orders appears from U. S. *v.* Griffith, 141 U. S. 212.

Where, after a hearing, a cause is disposed of by the court on appeal, for some reason not touching the merits, it is now well settled that the judgment should usually show that it is without prejudice. So, on his own motion to dismiss, an appellant may sometimes show inadvertence or mistake or some other special reason which may entitle him to equitable consideration and a special order. But we have no suggestion of any such exceptional matter here. We have no judicial knowledge of anything except what we have stated, and that there has been no hearing by us on the merits. Whether, under our expressions in Gamewell Fire-Alarm Telegraph Co. *v.* Municipal Signal Co. 61 Fed. 208 and in Marden *v.* Mfg. Co. 67 Fed. 809, the appellant is not, in any event, sure of all he desires to reserve, is for him to consider. As he moves to dismiss his appeal of his own volition, we have no occasion whatever to aid him, under the circumstances of the case, either by any special order, or by any expressions of opinion. — Donallan *v.* Tamage Patent, 79 Fed. 585; 24 C. C. A. 647.

§ 124. Dismissal — Without Prejudice.

The Supreme Court has shown a growing tendency to approve the practice of making it clear that a dismissal is without prejudice, or without a hearing on the merits, where there has been no such hearing. — Greene *v.* United, 124 Fed. 961; 60 C. C. A. 93.

Manifestly, whether the court below erred or did not err in entering a certain decree is a question to be presented upon review of such decree. It has nothing to do with a motion to dismiss appeal from such decree. The facts and circumstances which make the appeal effective or not all arise subsequent to the entry of the decree. — Bradley *v.* Eccles. 126 Fed. 945; 61 C. C. A. 669.

We are not able to see that the court below violated any rule of equity practice, or abused its legal discretion, in making the decree here complained of. No testimony had been taken in the case, and there had been no hearing or decree upon the merits. The hearing of the motion for a preliminary injunction upon opposing ex parte affidavits and the denial of the motion did not bar the dismissal of the bill by permission of the court in the exercise of its sound discretion. Nor was leave to dismiss precluded because the defendant was called on to answer the bill under oath, and did so. The appellant, we think, was deprived of no substantial right by the dismissal. We cannot agree that future litigation thus made possible amounted to legal prejudice. — Penn *v.* Columbia, 132 Fed. 808; 66 C. C. A. 127.

§ 125. Exceptions — Master's Report.

It is too late to raise exceptions here upon ruling of master on damages. — Kinsman *v.* Parkhurst, 59 U. S. 289; 15 L. Ed. 385.

Exceptions to a master's report raised for the first time in the Supreme Court will not be entertained. — Topliff *v.* Topliff, 145 U. S. 156; 36 L. Ed. 658; 12 S. Ct. 825.

McMicken *v.* Perin, 59 U. S. 507.

§ 126. Exceptions — Sufficiency.

An appeal lies only upon a bill of exceptions, certified, allowed and signed by the judge which constitutes a writ of error. — Phoenix *v.* Lanier, 95 U. S. 171; 24 L. Ed. 383.

Pomeroy *v.* Bk. 1 Wall. 592.

As no exception appears to have been taken thereto these findings must be accepted as conclusive. — Kirk *v.* U. S. 163 U. S. 49; 41 L. Ed. 66; 16 S. Ct. 911.

That exceptions under rule 11 must be definite, clear and specific, and not vague and general — see Mast *v.* Superior, 154 Fed. 45; 83 C. C. A. 157.

§ 127. Exceptions — Waiver.

When a party excepts to a ruling upon the trial but does not stand upon such exception, and elects to proceed, he thereby waives his exception. — Campbell *v.* Haverhill, 155 U. S. 610; 39 L. Ed. 280; 15 S. Ct. 217.

§ 128. Finality.

It seems to us that the opinions and decrees of this, as a court of appellate jurisdiction, are final and conclusive upon every point actually decided, and that it is the clear duty of the lower court to give effect to the decree here rendered. — Bissell *v.* Goshen, 72 Fed. 545; 19 C. C. A. 25.

Sibbald *v.* U. S. 12 Pet. 488; Stewart *v.* Solomon, 97 U. S. 361; Metcalf *v.* City, 68 Fed. 859; Sanford, Petitioner, 160 U. S. 247; 16 Sup. Ct. 291; Southard *v.* Russell, 16 How. 547; Durant *v.* Essex, 101 U. S. 555; Kingsbury *v.* Buckner, 134 U. S. 650; Smelting *v.* Billings, 150 U. S. 31; Gaines *v.* Rugg, 148 U. S. 228.

Whatever was before the court, and is disposed of, is considered as finally settled. The inferior court is bound by the decree as the law of the case. — In re Gamewell, 73 Fed. 908; 20 C. C. A. 111.

Sibbald *v.* U. S. 12 Pet. 488; Gaines *v.* Rugg, 148 U. S. 228; In re Sanford, 160 U. S. 247; Southard *v.* Russell, 16 How. 547.

§ 129. Findings.

The lower courts found that the invention was a broad one, and that the machine used by the Continental Company was an infringement. And these were questions of fact upon which, both of the courts concurring, their findings will not be disturbed unless clearly wrong. — Continental *v.* Eastern, 210 U. S. 405; 51 L. Ed. 922; 28 S. Ct. 748.

Deslions *v.* LaCompagnie, 210 U. S. 95.

An appeal in a case tried before a judge without a jury (under sec. 649 R. S.) taken upon the findings of fact, can present no other question on appeal. — Klein *v.* Seattle, 77 Fed. 200; 23 C. C. A. 114.

Trust Co. *v.* Wood, 60 Fed. 346; Blanchard *v.* Bank, 75 Fed. 249; Grayson *v.* Lynch, 163 U. S. 468.

Again, the court below has considered this question in the light of the state of the art, and of the conflicting testimony of the witnesses, and has decided that Seeley's combination was an invention. This conclusion is presumptively correct, and ought not to be reversed unless an obvious error has intervened in the application of the law, or some serious mistake has been made in the consideration of the facts by the circuit court. — Kinloch *v.* Western, 113 Fed. 659; 51 C. C. A. 369.

National *v.* Interchangeable, 106 Fed. 693; Mann *v.* Bank, 86 Fed. 51; Tilghman *v.* Proctor, 125 U. S. 136; Kimberly *v.* Arms, 129 U. S. 512; Furrer *v.* Ferris, 145 U. S. 132; Warren *v.* Burt, 58 Fed. 101; Plow *v.* Carson, 72 Fed. 387; Trust Co. *v.* McClure, 78 Fed. 209; Exploration *v.* Adams, 104 Fed. 404.

These findings of fact by the court below (that neither an express contract nor a presumption that such contract existed had been proved) must receive the respect and consideration to which such findings are always entitled in a reviewing court. They are prima facie conclusive, and nothing but a showing that the preponderance of evidence is clearly and unmistakably against them, would justify this court in reversing them. — Pressed Steel *v.* Hansen, 137 Fed. 403; 71 C. C. A. 207.

§ 130. Jurisdiction.

Neither can the allowance of the writ by the circuit court give jurisdiction, where the only question is the amount of costs to be taxed; and the amount allowed is less than $2000. The discretionary power in this respect vested in the circuit court by the Act of July 4, 1836, sec. 17, is evidently confined to cases which involve the construction of the patent laws, and the claims and rights of the patentees under them. But the amount of costs which either party shall be entitled to recover is not regulated by these laws. The costs claimed are allowed or refused in controversies arising under the Patent Acts upon the same principle and by the same laws which govern the court in the taxation of costs in any other case that may come before it. The same laws, therefore, must be applied to them in relation to the writ of error, and must limit the jurisdiction of this court as in other cases. — Sizer *v.* Many, 16 How. 98; 14 L. Ed. 861.

The sum taxed being less than $2000, no writ of error will lie under the Act of 1789. This Act gives no jurisdiction to this court over the judgment of a circuit court, when the judgment is for less than that sum. — Sizer *v.* Many, 16 How. 98; 14 L. Ed. 861.

A decree sustaining the validity of a patent, awarding injunction and an accounting is an interlocutory decree; and upon appeal from such decree the court will not pass upon the merits of the case as from a final decree. — Columbus *v.* Robbins, 52 Fed. 337; 3 C. C. A. 103.

(Overruled in Bissell *v.* Goshen, 72 Fed. 545.) See 148 U. S. 266.

Disapproving,

Richmond *v.* Atwood, 48 Fed. 910; Jones *v.* Munger, 50 Fed. 785; Barnard *v.* Gibson, 7 How. 650; Humiston *v.* Stainthorp, 2 Wall. 106; Iron Co. *v.* Martin, 132 U. S. 91; Tourniquet *v.* Perkins, 16 How. 84; Beebe *v.* Russell, 19 How. 283; Craighead *v.* Wilson, 18 How. 199; Farrelly *v.* Woodfolk, 19 How. 288; Green *v.* Fisk, 103 U. S. 518.

§ 131. Law Actions — What Considered on.

In a suit at law where evidence was taken and the question of infringement was determined, this court will not review the evidence as if it were a suit in equity. — St. Paul *v.* Starling, 140 U. S. 184; 35 L. Ed. 404; 11 S. Ct. 803.

Since the adoption of the seventh amendment to the Constitution, declaring that no fact tried by a jury shall be otherwise re-examined by any court of the United States than according to the rules of the common law, the Supreme Court has repeatedly affirmed the doctrine that upon writ of error the Federal courts are confined to the consideration of exceptions to the evidence and to the instructions given or refused to the jury, and that they have no concern with questions of fact, or the weight to be given to the evidence which was properly admitted. — Singer *v.* Brill, 54 Fed. 380; 4 C. C. A. 374.

Parsons *v.* Bedford, 3 Pet. 436; Barreda *v.* Silsbee, 21 How. 167; Railroad *v.* Fraloff, 100 U. S. 31; Ins. Co. *v.* Ward, 140 U. S. 91.

It is impossible for us to say that the jury disregarded the instructions. There is nothing in the bill of exceptions to show that they did. The presumption is, on the other hand, that they strictly observed it. — Harper *v.* Wilgus, 56 Fed. 587; 6 C. C. A. 45.

The only recognized exception to the statutory rule which in common law cases tried without a jury limits the review, on writ of error, to " rulings of the court in the progress of the trial " and to the question " of the sufficiency of the facts found to support the judgment," is that " a party may insist upon a finding in his favor on the ground that there is a total lack of evidence to support a contrary finding, or, if he have the burden of the issue, on the ground that the evidence in his favor is inadequate, unimpeached, and without conflict or uncertainty." But, to raise such a question as one of law, the exception or motion must be specific to that effect, distinguishing it from a question of the weight of evidence. — Keene *v.* Barratt, 100 Fed. 590; 40 C. C. A. 571.

Exposition *v.* Republic, 96 Fed. 687; Martinton *v.* Fairbanks, 112 U. S. 670.

Where the parties consent that the case be tried before a judge or referee, the only question presented by the writ of error is whether there is any error of law in the judgment upon the facts as found by the judge or referee. The court's findings upon questions of fact are not subject to review in the appellate court if there is any legal evidence upon which such findings could be made. — American *v.* Bullivant, 117 Fed. 255; 54 C. C. A. 287.

U. S. *v.* Dawson, 101 U. S. 569; Boogher *v.* Insurance Co. 103 U. S. 90; Miles *v.* U. S. 103 U. S. 304; Paine *v.* Railroad, 118 U. S. 152; Stanley *v.* Board, 121 U. S. 535; Hathaway *v.* Bank, 134 U. S. 494; Rogers *v.* U. S. 141 U. S. 548; 7 Enc. Pl. & Prac. 847-8; Myers *v.* Brown, 102 Fed. 250.

§ 132. Law Actions — Miscellaneous.

For a general statement as to requirements as to exceptions and as to briefs in the first circuit, see National *v.* Leland, 94 Fed. 502; 37 C. C. A. 372.

It is the rule that, if the bill of exceptions does not contain all of the evidence, the question whether a general verdict or finding of the lower court was supported by the evidence, will not be considered. — Leslie *v.* Standard, 98 Fed. 827; 39 C. C. A. 314.

It must always be presumed in such a case, that any defect in the evidence presented would be removed by a full statement, but, while every presumption must be indulged in favor of the judgment, it should be a reasonable presumption, not inconsistent with what is shown in the record; and when a finding has been directed in favor of the defendant in a case, and the bill of exceptions, though not purporting to contain all of the evidence, contains a statement of evidence in behalf of the plaintiff, sufficient

on every issue to have justified a verdict in his favor, the rule manifestly ought not to apply, especially if it be apparent that the action of the court was the result of a misapprehension of the bearing of the proof adduced. — Leslie *v.* Standard, 98 Fed. 827; 39 C. C. A. 314.

§ 133. Orders.

Orders relating to the conduct of a trial and to amendments adjusting the parties to a controversy are generally treated as orders made in the exercise of discretion, and not subject to exception and review. In an equity case, however, where the appeal brings up questions of law and of fact, the court of review may doubtless examine to see whether the case, as presented, is, either upon the law, the facts, or the pleadings, an inequitable case; and if, for any reason, it so appears, relief may and should be withheld. — Consolidated *v.* West End, 85 Fed. 662; 29 C. C. A. 386.

We cannot review the order of the court below refusing to stay the taxation of costs, or in fixing the amount of the bond to be given on appeal. The order is not reviewable, unless upon an appeal from the final decree. — Crown *v.* Baltimore, 136 Fed. 184; 69 C. C. A. 519.

Martin *v.* Hazard, 93 U. S. 302.

§ 134. Parties to.

The law gives the party aggrieved an appeal from a final decree of an inferior court. But it does not give the party who is not aggrieved an appeal from a decree in his favor, because the judge has given no reasons, or recited insufficient ones for a judgment admitted by the appellant to be correct. — Corning *v.* Troy, 15 How. 451; 14 L. Ed. 768.

All the parties against whom a joint judgment or decree is rendered, must unite in the writ of error or appeal, or it will be dismissed, unless there has been a summons and severance, or some like proceeding, or sufficient cause is shown for the non-joinder. — Hedges *v.* Seibert, 50 Fed. 643; 1 C. C. A. 594.

Masterson *v.* Herndon, 10 Wall. 416; Feibelman *v.* Packard, 108 U. S. 15; Estis *v.* Trabue, 128 U. S. 225.

As a patentee may be joined as a co-complainant against his consent originally, no good reason is perceived why he may not be so retained for the prosecution of the rights of his licensee, after judgment once rendered, and the cause remanded for further proceedings. The patentee may be content with a decree against him; but when his co-complainant is not, and has the right of appeal, the doctrine of summons and service may be invoked, and upon the refusal of the patentee to join in the appeal after being duly notified to do so, the appeal of his licensee may be allowed upon the entry of such refusal of record, the judgment remaining conclusive as to the party refusing. — Excelsior *v.* City of Seattle, 117 Fed. 140; 55 C. C. A. 156.

Masterson *v.* Herndon, 10 Wall. 416; Fost. Fed. Prac. sec. 505.

§ 135. Record — Encumbering.

The record contains embodied in the bill of exceptions, the whole of the testimony and evidence offered at the trial by each party in support of the issue. It is very voluminous, and as no exception was taken to its competency or sufficiency either generally or for a particular purpose, it is not properly before this court for consideration, and forms an expensive and unnecessary burden upon the record. This court has had occasion in many cases to express its regret on account of irregular proceedings of this nature. — Pennock *v.* Dialogue, 2 Pet. 1; 7 L. Ed. 327.

Where appellee needlessly encumbers record with some 50 immaterial patents, under Rule 10 half of the costs of printing will be assessed upon appellee. — B. & S. Fastener *v.* Kraetzer, 150 U. S. 111; 37 L. Ed. 1019; 14 S. Ct. 48.

We deem it proper to say that in view of the size which oftentimes in patent cases the zeal of counsel and the ingenuity of experts unduly swell the records and briefs, so called (in this case the record contained 2,200 pages and one of the briefs 484 pages), it is not to be expected that courts, and especially appellate ones, will follow the lead thus set and discuss every question raised. — Goss *v.* Scott, 110 Fed. 402; 49 C. C. A. 97.

§ 136. Record — Stipulated.

An appeal is good taken upon a judgment rendered upon an agreed statement of facts. — Stimpson *v.* Railroad, 10 How, 329; 13 L. Ed. 441.

3 Blackstone, 377; Stephens Plead. 92; U. S. *v.* Eliason, 16 Pet. 291.

As the parties to this suit have stipulated as to what the record is in this suit, and the clerk of the circuit court certifies the transcript, it must be accepted as sufficient for the purposes of this suit. — Lake Shore *v.* National, 110 U. S. 229; 28 L. Ed. 129; 4 S. Ct. 33.

The proper course of the clerk was for him to observe the agreement of counsel, and leave the parties to abide the consequences. The endeavor of counsel to eliminate matter which has been found to be superfluous and unnecessary to a review in the appellate court is one to be encouraged. — Lamb *v.* Lamb, 120 Fed. 267; 56 C. C. A. 247.

The jurisdiction of this court is appellate only. Its review in law or equity is limited to the record of matters which were before the trial court, and cannot be enlarged or affected by subsequent stipulations between the parties. — Austin *v.* American, 121 Fed. 76; 57 C. C. A. 330.

Maxwell Land-Grant Case, 122 U. S. 365; Randolph *v.* Allen, 73 Fed. 23; Case *v.* Hall, 94 Fed. 300.

§ 137. Record — Miscellaneous Rules.

The Peck patent, which is printed in the record, cannot be considered by the court, for the reason that it was not set up in the answer, and was first introduced as evidence in the court below in support of a motion for rehearing and to reopen the case, which was denied. — Andrews *v.* Thum, 67 Fed. 911; 15 C. C. A. 67.

Apart from any authority, it would seem that on principle the decision of this court upon a defective presentation of the case should not be conclusive of it in all respects. An amended bill is a continuation of the original bill, and forms a part of it. The original and amended bills constitute one pleading and one record. It is clear that at the time these parties were heard in this court upon the original bill the controversy between them was no longer presented by the original bill, but was contained in a record made up of the original bill and the amended and supplemental bills. So the dismissal of the original bill did not work a dismissal of the controversy. — Berliner *v.* Graanophone, 113 Fed. 750; 51 C. C. A. 440.

1 Dan. Ch. Pl. & Pr. 402, c. 6. sec. 7; French *v.* Hay, 22 Wall. 246; Phosphate Co. *v.* Brown, 74 Fed. 323; Miller *v.* McIntyre, 6 Pet. 62.

The court finds itself unable, upon the transcript from the court below, to determine with any degree of certainty the rights of the parties to this

litigation. Ordered that the decree of the court below be set aside, and the case remanded, with direction to remand the rules with leave to both parties to take such additional proofs as they may be advised. — Standard *v.* Computing, 145 Fed. 627; 76 C. C. A. 384.

§ 138. Rehearings.

The refusal of the circuit court to grant a rehearing is not open to consideration here. — Boesch *v.* Gräff, 133 U. S. 697; 33 L. Ed. 787; 10 S. Ct. 378.

Buffington *v.* Harvey, 95 U. S. 99; Steines *v.* Franklin, 81 U. S. 15; Pittsburgh *v.* Heck, 102 U. S. 20; Kennen *v.* Gilmer, 131 U. S. 22.

The petition was not filed within the 15 days limited by rule 16 of the circuit court, and therefore did not operate to extend the time within which the defendants below could appeal, under the circumstances found to exist by this court in Andrews *v.* Thum, 64 Fed. 149. — Marden *v.* Campbell, 67 Fed. 809; 15 C. C. A. 26.

On a motion for a rehearing the final decree is suspended and an appeal therefrom does not lie until such motion is decided. — Andrews *v.* Thum, 72 Fed. 290; 18 C. C. A. 566.

In the opinion announcing an allowance of a rehearing, the court describes the disclaimer as one by which the complainant "seeks to restrict the claims in controversy" so as to "avoid the effect of the anticipating devices referred to by the Court of Appeals." And then, after recognition of the rule that the Circuit Court has no power, upon the ground of newly discovered evidence, to reopen a question which has been finally decided by the Court of Appeals, without the permission of the appellate tribunal, the opinion proceeds thus: "But in the present case the complainant's patent, as it now stands, has never been before the Circuit Court of Appeals, and has therefore never been considered. It is in effect a new patent, and the subject of its validity or invalidity has never been decided by any tribunal." Do these considerations justify the action of the Circuit Court in granting a rehearing without leave of this court? The decisions of the Supreme Court require a negative answer. — American *v.* Sample, 136 Fed. 857; 70 C. C. A. 415.

Ex parte Sibbald, 12 Pet. 488; Ex parte Dubuque, 1 Wall. 69; Stewart *v.* Solomon, 97 U. S. 361; In re Potts, 166 U. S 263.

§ 139. Remanding.

While the appellate court is not bound so to do, it may, in its discretion, and should, when equity so requires, make full direction as to the manner in which the case shall be disposed of below. — Richmond *v.* Atwood, 52 Fed. 10; 2 C. C. A. 596.

This court, however, has no power to remand except for the purpose of giving effect to some judgment of its own. — Marden *v.* Campbell, 67 Fed. 809; 15 C. C. A. 26.

Roemer *v.* Simon, 91 U. S. 149; Smith *v.* Weeks, 53 Fed. 758.

§ 140. Second Appeal.

A second appeal lies only when the court below, in carrying out the mandate of this court, is alleged to have committed an error. But on an appeal from the mandate, it is well settled, that nothing is before the court but the proceedings subsequent to the mandate. Whatever was formally before the court, and was disposed of by its decree, is considered as finally disposed of. — Corning *v.* Troy, 15 How. 451; 14 L. Ed. 768.

Himley *v.* Rose, 5 Cranch, 313; Canter *v.* Ocean, 1 Pet. 511; The Santa Maria, 10 Wheat. 431; Rice *v.* Wheatley, 9 Dana, 272.

It has been settled by the decisions of this court, that after a case has been brought here and decided, and a mandate issued to the court below, if a second writ of error is sued out it brings up for revision nothing but the proceedings subsequent to the mandate. None of the questions which were before the court on the first writ of error can be reheard or reexamined upon the second; and there is nothing now before the court but the taxation of costs. — Sizer *v.* Many, 16 How. 98; 14 L. Ed. 861.

7 Wheat. 58; 12 Pet. 488.

§ 141. Subject-Matter.

A point not taken in the court below cannot be made here. — Klein *v.* Russell, 86 U. S. 433; 22 L. Ed. 116.

No appeal lies from a mere decree respecting costs and expenses. — Glendale *v.* Smith, 100 U. S. 110; 25 L. Ed. 547.

Canter *v.* Ins. Co. 3 Pet. 307.

It is, of course, well understood that a court of equity is to decide on the law and fact, and that an appeal in equity is an appeal upon the law and fact involved in the cause. — Richmond *v.* Atwood, 52 Fed. 10; 2 C. C. A. 596.

LeGuen *v.* Gouveneur, 1 Johns. Cas. 500; Adams Equity, 375; Briggs Petition, 29 N. H. 553; Blake *v.* Oxford, 64 N. H. 302.

This court cannot now upon this assignment of error, enter into the consideration of the question whether or not the patent in suit was anticipated by the Gauthier patent and, therefore, was itself void. That inquiry involved a question of fact for the jury, and it was properly submitted to the jury. No exception was taken in the trial, either to the submission of the case to the jury, or to the charge of the court. On the writ of error to this court we are confined to the consideration of questions of law, — the rulings of the trial court upon questions of evidence, and the instructions given or referred to the jury. We have no concern with the weight to be given to evidence which has been properly admitted. — Harper *v.* Wilgus, 56 Fed. 587; 6 C. C. A. 45.

The objections made by the appellants, touching the form of the bill, whether supplemental or original, and those as to the sufficiency of the allegations of the bill, were not raised in the court below, and cannot be taken for the first time in this court. — Herrick *v.* Giant Leveller, 60 Fed. 80; 8 C. C. A. 475.

The only question open is as to whether the court erred in holding that the plea was sustained by the evidence. If it was not supported, it should have been overruled, and the defendant ordered to answer. — Hartz *v.* Cleveland, 95 Fed. 681; 37 C. C. A. 227.

Dalzell *v.* Mfg. Co. 149 U. S. 315; Farley *v.* Kittson, 120 U. S. 303.

§ 142. Supersedeas.

The circuit court had a discretion to grant or refuse a supersedeas and its discretion cannot be controlled by a mandamus. — Re Haberman, 147 U. S. 525; 37 L. Ed. 266; 13 S. Ct. 527.

Ex parte Hawkins, 147 U. S. 486.

When an appeal was allowed from the decree granting the perpetual injunction the circuit court, as it was authorized to do under sec. 7 of the court of appeals act, granted an appeal with supersedeas, on a bond con-

ditioned that the defendant should prosecute the said appeal to effect and pay all costs and damages if it failed to make said appeal good, " as well as all damages and profits resulting from its manufacture and sale of the infringing sweepers after the date of the said decree." This only operated to stay or suspend the injunction pending the appeal. It had no effect or operation as a license to defendant. The status of the defendant was simply that of persons engaged in infringing and not restrained by operation of the injunction. — Bissell *v.* Goshen, 72 Fed. 545; 19 C. C. A. 25.

§ 143. Supreme Court.

In order to invoke the exercise of our jurisdiction in the instruction of the circuit court of appeals as to the proper decision of questions or propositions of law arising in the classes of cases mentioned, it is necessary that such questions or propositions should be clearly and distinctly certified, and that the certificate should show that the instruction of this court as to their proper decision is desired. — Columbus *v.* Robbins, 148 U. S. 266; 37 L. Ed. 445; 13 S. Ct. 594.

An appeal to the Supreme Court does not lie in an action to compel the Commissioner to issue a patent, because it neither involves a question affecting a patent right nor a sum of $5000. — Durham *v.* Seymour, 161 U. S. 235; 40 L. Ed. 682; 16 S. Ct. 452.

This court will not consider questions not presented to and passed upon by the lower court. — U. S. *v.* Am. Bell Tel. 167 U. S. 224; 42 L. Ed. 144; 17 S. Ct. 809.

Statement: The examiners-in-chief affirmed the decision of the primary examiner, " requiring a division of these claims for an art and for an independent machine used to perform the art; " and on appeal the Commissioner affirmed the examiners-in-chief in part only. Rehearing was denied and an appeal taken to the court of appeals D. C., which affirmed the decision of the Commissioner. An appeal and a writ of error were allowed, the court stating: " We are inclined to the view that this case is not appealable to the Supreme Court of the United States, but, as the question has never been directly decided, so far as we are advised, we shall grant the petition in order that the question of the right of appeal in such a case may be directly presented for the determination of the court of last resort." *Held:* The opinion or decision of the court, reviewing the Commissioner's decision, is not final, because it does not preclude any person interested from contesting the validity of the patent in court; and, if the decision of the Commissioner grants the patent, that is the end of the matter as between the government and the applicant; and if he refuses it, and the court of appeals sustains him, that is merely a qualified finality, for, as we have seen, the decision of that court may be challenged generally and a refusal of patent may be reviewed and contested by bill as provided. —Frasch *v.* Moore, 211 U. S. 1; L. Ed.; 29 S. Ct. 6.

Steinmetz *v.* Allen, 192 U. S. 543; Butterworth *v.* U. S. 112 U. S. 60; Rousseau *v.* Brown, 21 App. D. C. 73.

The rule of Frasch *v.* Moore, 211 U. S. 1, followed in Johnson *v.* Mueser, 212 U. S. 283; L. Ed.; 29 S. Ct. 390.

It is believed by this court that the practice of certification is intended to be availed of only when the certifying court is in doubt about the specific question or questions certified. — Sigafus *v.* Porter, 85 Fed. 689; 29 C. C. A. 391.

§ 144. Miscellaneous Rules.

Defenses mentioned in a brief but not raised upon the argument will not be considered here. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.

Where the record shows that complainant declared infringement for certain claim or claims and waived the others, only the claims declared upon will be considered on appeal. — Doze *v.* Smith, 69 Fed. 1002; 16 C. C. A. 581.

It appears that, where the validity of a patent is the main question in a co-pending suit, the court will, if possible so to do, leave such question to a full determination in such co-pending suit, see Hunt *v.* Milwaukee, 148 Fed. 220; 78 C. C. A. 116.

Upon this appeal the appellant only has appeared. Being, therefore, without the benefits accruing from a presentation of both sides of the case, we deem it advisable only to consider the particular grounds upon which the Circuit Court acted, and shall not consider ourselves precluded from examining anew other questions and reaching a different conclusion should another case be fully presented. — Hartford *v.* Hollander, 163 Fed. 948; C. C. A.

ARBITRATION.

Decision of Arbitrator — Force and Effect § 145

§ 145. Decision of Arbitrator — Force and Effect.

Nothing is exhibited in the record to show that the arbitrator erred in the construction of the patent, and if he did not and his finding as to the character of the machine manufactured by the respondent is correct, it is settled law that his decision is correct. — Reedy *v.* Scott, 90 U. S. 352; 23 L. Ed. 109.

Gill *v.* Wells, 89 U. S. 1; Gould *v.* Rees, 15 Wall. 194; Vance *v.* Campbell, 1 Black. 428; Prouty *v.* Ruggles, 16 Pet. 341; Carver *v.* Hyde, 16 Pet. 514; Brooks *v.* Fiske, 15 How. 212; Stimpson *v.* R. R. 10 How. 329.

ART.

Statutory Provision § 146
Definition § 147
Art and Process § 148
See — Process § 813

§ 146. Statutory Provision.

Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof * * *. — 4886, R. S.

§ 147. Definition.

No one has, and I think no one ever will, give a satisfactory definition of the word "art" as used in the Patent Statute. The Supreme Court has thus defined it by illustration:

In this art — or, what is the same thing under the patent law, this process, this way of transmitting speech — electricity, one of the forces of nature, is employed; but electricity, left to itself, will not do what is wanted. The art consists in so controlling the force as to make it accomplish the purpose. It had long been believed that if the vibrations of air caused by the voice in speaking could be reproduced at a distance by means of electricity, the speech itself would be reproduced and understood. How to do it was the question. Bell discovered that it could be done by gradually changing the intensity of a continuous electric current, so as to make it correspond exactly to the changes in the density of the air caused by the sound of the voice. This was his art. He then devised a way in which these changes of intensity could be made and speech actually transmitted. Thus his art was put in practical use. — Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

But the thing which Bell patented was a machine — a telephone. Is an "art," therefore, a "machine?" The process of making nitro-glycerine was a new and useful "art," and patentable; and the article itself, as a manufacture, was patentable. Aerial navigation is a new and useful art; but it is self-evident that no one will be granted a patent on the art of flying.

Many patents will be issued on machines used in the art. Nor does it help matters to say that it means the " mechanical arts," for so defined, in spite of the qualifications of novelty and utility imposed by the statute, it is still too broad; for it would include many things that are merely mechanical skill. We have all of us seen persons possessed of some remarkable mechanical art, such as turning an almost perfect sphere, or giving a tool a remarkably fine temper, or dyeing an article with remarkable exactness. These are mechanical arts — arts of individuals — but they are not, per se, patentable.

And yet, the use of the term in the statute has been a most desirable one, since its very vagueness has produced a resiliency in the otherwise hard-and-fast terms of the statute, and has enabled the Patent Office and the courts to reward those pioneers whose basic discoveries have often been too large, too simple, too generic to be limited to a specific machine or the specific steps of a process. It would not be far from the truth to say, that the term " art," as used in the statute, has opened the way for the courts to build up the doctrine of equivalents and establish that aristocracy among inventors known as " Pioneers."

§ 148. Art and Process.

We think that the method or art covered by the patent is patentable as a process, irrespective of the apparatus or instrumentality for carrying it out. — New Process *v.* Maus, 122 U. S. 413; 30 L. Ed. 1193; 7 S. Ct. 1304.

Corning *v.* Burden, 56 U. S. 252; Cochrane *v.* Deener, 94 U. S. 780; Tilghman *v.* Proctor, 102 U. S. 707.

The patent for the art does not necessarily involve a patent for the particular means employed for using it. Indeed, the mention of any means, in the specification or descriptive portion of the patent, is only necessary to show that the art can be used; for it is only useful arts — arts which may be used to advantage — that can be made the subject of a patent. The language of the statute is that " any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter " may obtain a patent therefor. Thus an art — a process — which is useful is as much the subject of a patent as a machine, manufacture or composition of matter. — Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

Corning *v.* Burden, 56 U. S. 252; Cochrane *v.* Deener, 94 U. S. 780; Tilghman *v.* Proctor, 102 U. S. 708; New Process *v.* Maus, 122 U. S. 413.

It is manifest that the subject-matter of the claims (a system for hotel and restaurant checks) is not a machine, manufacture or composition of matter. If within the language of the statute at all, it must be as a " new and useful art." One of the definitions given by Webster of the word " art " is as follows: " The employment of means to accomplish some desired end; the adaptation of things in the natural world to the uses of life; the application of knowledge or power to practical purposes." In the sense of the patent law, an art is not a mere abstraction. A system of transacting business disconnected from the means for carrying out the system is not, within the most liberal interpretation of the term, an art. Advice is not patentable. — Hotel *v.* Lorraine, 160 Fed. 467; 87 C. C. A. 451.

Fowler *v.* City of N. Y., 121 Fed. 747.

ASSIGNMENT.

Statutory Provisions § 149
Definition § 150
Action to Compel § 151 (*see* § 24)
Before Patent § 152
Conditions and Reservations § 153
Construction § 154
Copartnership § 155 (*see* § 270)
Corporation § 156 (*see* § 271)

Debtor and Creditor § 157
Evidence § 158 (*see* § 388)
Execution § 159
Future Inventions
  Legality § 160
  Recording § 161
  What are Not § 162
  Miscellaneous Rules § 163
Interests Assignable § 164
License § 165 (*see* § 749)
Notice
  Bona Fide Purchaser § 166
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Power of Attorney § 171
Recording § 172 (*see* § 388)
Reissue § 173 (*see* § 869)
Specific Performance § 174
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See — Attorneys § 179; *Bankruptcy* § 182; *Employer and Employe* §§ 365–6; *Evidence* § 394; *Infringement* §§ 449–51, 509–13; *License* § 749; *Licensor and Licensee* § 765; *Mortgage* § 778; *Royalties* § 897; *State Statutes* § 920; *Title* § 925

§ 149. Statutory Provisions.

Sections 4895, 4897, 4898, 4899, 4934 and 5046 provide for the assignment and recording assignments of inventions and of letters patent.

§ 150. Definition.

The monopoly thus granted is one entire thing and cannot be divided into parts except as authorized by law.

The patentee or his assigns may, by instrument in writing, assign, grant and convey, either (1) the whole patent comprising the exclusive right to make, use and vend the invention throughout the U. S.; or, (2) an undivided part or share of that exclusive right; or, (3) the exclusive right under the patent within and throughout a specified part of the United States. (Rev. Stat. sec. 4898.) A transfer of either of these three kinds of interests is an assignment properly speaking, and vests in the assignee a title in so much of the patent itself, with a right to sue infringers; in the second case jointly with the assignor, in the first and third cases in the name of the assignee alone. Any assignment or transfer short of one of these, is a mere license, giving the licensee no title in the patent; and no right to sue at law in his own name for infringement. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

R. S. sec. 4919; Gayler *v.* Wilder, 51 U. S. 477; Moore *v.* Marsh, 74 U. S. 515.

A grant, transfer, or conveyance of these exclusive rights throughout the United States, or a grant of an undivided part of these exclusive rights, or a grant of these exclusive rights throughout a specified part of the United States, is an assignment of an interest in the patent, by whatever name it may be called. A grant, transfer, or conveyance of any right or interest less than these is a license. — Paulus *v.* Buck, 129 Fed. 594; 64 C. C. A. 162.

Waterman *v.* Mackenzie, 138 U. S. 252; Union *v.* Johnson, 61 Fed. 940; Pickhardt *v.* Packard, 22 Fed. 530.

An assignment which is neither an undivided interest in the whole patent, nor of an exclusive right within a certain territory, is a mere license. — Pope *v.* Gormully, 144 U. S. 238; 36 L. Ed. 420; 12 S. Ct. 637.

Whether a transfer of a particular right or interest under a patent is an assignment or license does not depend upon the name by which it calls itself, but upon the legal effect of its provisions. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

Wilson *v.* Rousseau, 45 U. S. 646; Gayler *v.* Wilder, 51 U. S. 477; Mitchell *v.* Hawley, 83 U. S. 544; Hayward *v.* Andrews, 106 U. S. 672; Oliver *v.* Rumford, 109 U. S. 75.

§ 151. Action to Compel.

Unquestionably, a contract for the purchase of any portion of a patent right may be good as between the parties as a license, and enforced as such in the courts of justice. — Gayler *v.* Wilder, 10 How. 477; 13 L. Ed. 504.

Where the invention belonged to the employer and the employee obtained the patent by fraud in his own name, an action to compel a surrender will lie. — Appleton *v.* Bacon, 67 U. S. 699; 17 L. Ed. 338.

The clause of the decree below, appointing a trustee to execute an assignment, if the patentee should not himself execute one as directed by the decree, was clearly within the chancery powers of the court as defined by the statute of Maryland. — Ager *v.* Murray, 105 U. S. 126; 26 L. Ed. 942.

As the patent upon plaintiff's own showing conferred no title or right upon the defendant, a court of equity will not order him to assign it to the plaintiff — not only because that would be to decree a conveyance of property in which the defendant has, and can confer, no title; but also because its only possible value or use to the plaintiff would be to enable him to impose upon the public by asserting rights under a void patent. — Kennedy *v.* Hazelton, 128 U. S. 667; 32 L. Ed. 576; 9 S. Ct. 202.

Post *v.* Marsh, L. R. 16 Ch. Div. 395; Oldham *v.* James, 14 Irish Ch. 81.

If it appears by the bill or otherwise, that the want of title (even if caused by the defendant's own act, as by his conveyance to a bona fide purchaser) was known to the plaintiff at the time of beginning the suit, the bill will not be retained for assessment of damages, but must be dismissed and the plaintiff left to his remedy at law. — Kennedy *v.* Hazelton, 128 U. S. 667; 32 L. Ed. 576; 9 S. Ct. 202.

Columbine *v.* Chichester, 2 Phil. 27; Ferguson *v.* Wilson, L. R. 2 Ch. 77; Morse *v.* Ehnendorf, 11 Paige, 277; Milkman *v.* Ordway, 106 Mass. 232, 256.

The proceedings supplementary to execution, as authorized by the laws of New York, are a substitute for, and in all respects have the same force and effect as, an ordinary creditor's bill. The receiver, in such proceedings, becomes invested with the title to all the property — equitable as well as legal — belonging to the judgment debtor at the time of their institution; and the court has the power of a court of equity in such a suit to compel him to appropriate his property, including that out of the state (see Fenner *v.* Sanborn, 37 Barb. 610), and transfer it to the receiver towards the satisfaction of the judgment. In Ager *v.* Murray, 105 U. S. 126, it was decided that, notwithstanding a patent cannot be seized and sold on execution, it can be reached by a creditor's bill, and applied to satisfy a judgment against the owner, and a transfer by him be compelled for that purpose by the court. Although in the present case the court did not — as it might have done — compel Newton to make a written transfer to the receiver of his title to the patent, it is entirely clear that any equitable title which he may have had vested in the receiver, and passed by the sale to Vermilyea, and from Vermilyea to the defendant, by the assignment from Vermilyea. Newton never acquired anything but an equitable title to the patent, the right to compel a reformation of the agreement of March 6, 1889. He did not acquire the legal title, because, without an assignment such as the statute requires to effect the transfer of a patent interest, that title remained in the prior owner, the present defendant. Gayler *v.* Wilder, 10 How. 498. As that equitable title had, at the date of his assignment to Dooley, passed to the receiver, and the complainant's title is derived through that assign-

ment, she took nothing by the instrument. — Newton *v.* Buck, 77 Fed. 614; 23 C. C. A. 355.

Facts: Defendant was employed by complainant as engineer in charge of its plant to manufacture and to improve its product. He was paid from $4000 to $10,000 a year for his services. He made several improvements and assigned several patents thereon to complainant absolutely; in fact he made no claim to the title of any of his improvements until about the time he left the employ of the complainant, when he claimed as his own and refused to assign title to the six inventions in suit. There was no written agreement between the parties, and no parol agreement specifically agreeing to assign title was proved. *Held:* We do not think that the complainant here, in the absence of express contract to that effect, from the mere relation of employer and employee, in connection with the facts and circumstances disclosed in the record, is entitled, in equity and good conscience, to an assignment from the defendant of his whole right, title and property in the inventions in question. If entitled to anything, complainant is only entitled to a shop right or license that would enable it to use these inventions without paying a royalty therefor, a right which does not strip defendant of his entire property right in the product of his own inventive faculty. It is by distinguishing between claims for mere shop rights or license, and claims for the entire and exclusive property right in the inventions of the employee, that the cases cited are to be profitably read. This distinction has been observed in many cases, both federal and state. — Pressed Steel *v.* Hansen, 137 Fed. 403; 71 C. C. A. 207.

Opinion by Gray, C. J., Dallas, C. J. concurring; and Acheson, C. J. dissenting and holding that the facts bring the case within the rule in Solomons *v.* U. S., 137 U. S. 342; McAleer *v.* U. S., 150 U. S. 424; Gill *v.* U. S., 160 U. S. 426.

Citg. and reviewing fully main authorities,

McClurg *v.* Kingsland, 1 How. 202; Dalzell *v.* Dueber, 149 U. S. 315; Lane *v.* Locke, 150 U. S. 193; Bensley *v.* N. W. Horsenail Co. 26 Fed. 250; Hermann *v.* Hermann, 29 Fed. 92; Boston *v.* Allen, 91 Fed. 248; Joliet *v.* Dice, 105 Ill. 649; Fuller *v.* Bartlett, 68 Wis. 73.

Note: This decision is conclusive, it seems to me, upon this point: Regardless of the *character* of the services rendered by the employee, in the absence of a written agreement or a parol agreement unmistakably proven by which the employee agreed to pass the title of his inventions to his employer, such employer will secure only a shop right or license; and that a sharp distinction must be drawn between the ordinary conditions of private employment and the special conditions of government employment, such as disclosed in the Solomons, McAleer, and Gill cases above cited by Acheson, J. dissenting.

§ 152. Before Patent.

The thing to be assigned is not the mere parchment on which the grant is written. It is the monopoly which the grant confers; the right of property which it creates. And when the party has acquired an inchoate right to it, and the power to make that right perfect and absolute at his pleasure, the assignment of his whole interest, whether executed before or after the patent is issued is equally within the provisions of the act of Congress. — Gayler *v.* Wilder, 10 How. 477; 13 L. Ed. 504.

It is well settled that a recorded assignment of a perfected invention, made before a patent has been issued, carries with it the patent when it is issued. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

Gayler *v.* Wilder, 10 How. 477.

While it is, perhaps, not necessary to decide whether in any case a sale of an invention which is never patented carries with it anything of value, we are of opinion that the rights growing out of an invention may be sold, and that in the present case the sale, with the right to use it in connection with the existing patent and its reissue or renewals, protects defendants from liability. — Hammond *v.* Mason, 92 U. S. 724; 23 L. Ed. 767.

Such an instrument, though executed before the patent is granted, transfers the legal title to the assignee. — Hendrie *v.* Sayles, 98 U. S. 546; 25 L. Ed. 176.

Gayler *v.* Wilder, 10 How. 477; Rathbone *v.* Orr, 5 McLean, 131; Rich *v.* Lippincott, 2 Fish. 1; Herbert *v.* Adams, 4 Mas. 15; Dixon *v.* Moyer, 4 Wash. 72.

An assignment of a patent is good if made before the patent is actually obtained and should not be treated as a sale of personal property that was not in existence. — Brush *v.* California, 52 Fed. 945; 3 C. C. A. 368.

Gayler *v.* Wilder, 10 How. 477; Littlefield *v.* Perry, 21 Wall. 205.

§ 153. Conditions and Reservations.

It would seem that conditions and reservations stated in the recorded assignments are sufficient to charge purchasers with notice as to such matters. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

The concluding provision, that the net profits arising from sales, royalties, or settlements, or other sources, are to be divided between the parties to the assignment so as to give the patentee one fourth thereof, does not in any respect, modify or limit the absolute transfer of title. It is a provision by which the consideration for the transfer is to be paid to the grantor out of the net profits made; it reserves to him no control over the patents or their use or disposal, or any power to interfere with the management of the business growing out of their ownership. The clause appointing the assignees attorneys of the grantor, with authority to use his name whenever they deem proper in such management, does not restrict in any way the power of the assignee after the transfer of the property. — Rude *v.* Westcott, 130 U. S. 152; 32 L. Ed. 888; 9 S. Ct. 463.

Tilghman *v.* Proctor, 125 U. S. 136.

An adequate assignment is not defeated by a subsequent conditional agreement, conditioning the assignment with specified requirements, where such conditions have been fulfilled. — Boesch *v.* Gräff, 133 U. S. 697; 33 L. Ed. 787; 10 S. Ct. 378.

An assignment of the entire patent, or of an undivided part thereof, or of the exclusive right under the patent for a limited territory may be either absolute or by way of mortgage and liable to be defeated by non performance of a condition subsequent, as clearly appears in the provision of the Statute, that "an assignment grant or conveyance shall be void as against any subsequent purchaser or mortgagee for a valuable consideration without notice, unless it is recorded in the Patent Office within three months from the date thereof." R. S. sec. 4898. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

The title was conveyed to complainant subject only to certain conditions, and the assignor had no more right to it than a stranger so long as the conditions should remain unbroken. If the complainant should fail to keep his covenants, then the conditions would be broken, and the property would revert. Until this event happens the complainant has the right to protect

his interests by suing infringers of the patent. — Platt *v.* Fire Extinguisher, 59 Fed. 897; 8 C. C. A. 357.

Littlefield *v.* Perry, 21 Wall. 205.

§ 154. Construction.

When there is doubt as to the proper construction of an instrument, the intention of the parties is entitled to great consideration. But when its meaning is clear in the eye of the law, the error of the parties cannot control its effect. — Railroad *v.* Trimble, 77 U. S. 367; 19 L. Ed. 949.

The assignment transferred the patent together with alterations, improvements for the terms for which patents had theretofore been or might thereafter be granted. *Held:* to mean precisely what it said. — Railroad *v.* Trimble, 77 U. S. 367; 19 L. Ed. 949.

Gayler *v.* Wilder, 10 How. 477; distinguishing Wilson *v.* Rousseau, 4 How. 682.

An assignment of an interest in an invention secured by letters patent, is a contract, and, like all other contracts, is to be construed so as to carry out the intention of the parties to it. — Nicholson *v.* Jenkins, 81 U. S. 452; 20 L. Ed. 777.

Two contracts were made at the same time. The one, on its face assigning the patent but referring to the other agreement as part of the same contract, was recorded. The other was not. *Held:* for the purpose of ascertaining the intention of the parties in making their contract, the two instruments, executed as they were at the same time, and each referring to the other are to be construed together. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

The suggestion that "the test" of whether title passed by the assignment in question is "whether such paper could be recorded" under sec. 4898 has been attentively considered, but cannot be accepted. That section provides that "every patent * * * shall be assignable in law by an instrument in writing," and makes an assignment void for omission to record only "as against any subsequent purchaser or mortgagee," etc. In this instance we have a writing which, as was said by the learned judge below, is an assignment, in terms, "of all the property of the company executing it, * * * specifically including also 'the good will, patents, trademarks'" etc. Of course, the word "patents" included every patent which was assignable by the assignor (Herring-Hall-Marvin *v.* Hall, 208 U. S. 554); and with respect to the parties to this cause, it is immaterial whether the instrument was or was not eligible for record. — Delaware *v.* Shelby, 160 Fed. 928; 88 C. C. A. 110.

To preserve their joint property and prevent its practical destruction by co-owners, it is imperative that all should be permitted to simply vest the legal title in one without imposing any active duties on such holding trustee, and this shows that, while there are no express duties for the trustee to perform, it by no means follows the trust is a dry or inactive one. As holder of the legal title he can bring suit, enjoin infringers from destroying the patent, and the mere holding of the legal title in trust per se preserves the patent for the common good and prevents its destruction by each co-owner. We are of opinion that these views have actuated patent practitioners in thus vesting the legal titles to patents in trustees, and that a holding that such an instrument, contrary to its plain intent, executed itself and left the equitable owners as free to use and license as before would be most unfortunate in its unsettling effects. The intent and effect of this instrument we therefore hold was to vest and retain the legal title to this

patent in McDuffee, as trustee; but the equitable ownership thereof remained in his cestuis que trustent, and without their consent he could not convey such legal title, or any part thereof. — McDuffee *v.* Hestonville, 162 Fed. 36; 89 C. C. A. 76.

Duncan *v.* Jandow, 82 U. S. 165; Flitcraft *v.* Com. Title, 211 Pa. 119.

§ 155. Copartnership.

An assignment of a patent by one of two copartners to the other, for the use of the copartnership terminates with the copartnership. — Denning *v.* Bray, 61 Fed. 651; 10 C. C. A. 6.

We think the effect of the assignment was to transfer a one-half interest to the other partner, nothing appearing to show that the partners stood upon unequal terms. — Canada *v.* Michigan, 124 Fed. 486; 61 C. C. A. 194.

§ 156. Corporation.

Assignments of patents made by corporations need not be under seal. — Gottfried *v.* Miller, 104 U. S. 521; 26 L. Ed. 851.

Bank *v.* Patterson, 7 Cranch, 299; Fleckner *v.* Bank, 8 Wheat. 338; Turnpike *v.* Hay, 7 Mass. 102; Dunn *v.* Rector, 14 Johns, 118; Kennedy *v.* Ins. Co. 3 Har. & J. 367; Stanley *v.* Hotel, 13 Me. 51; Fanning *v.* Gregorie, 16 How. 524; Mott *v.* Hicks, 1 Cow. 513; Bowen *v.* Morris, 2 Taunt. 374; Shelton *v.* Darling, 2 Conn. 435; Brockway *v.* Allen, 17 Wend. 40.

The attachment of the stock of a stockholder in a corporation does not in any way prevent such corporation from executing an assignment of a patent. — Gottfried *v.* Miller, 104 U. S. 521; 26 L. Ed. 851.

It is alleged that the conveyance from the Firm Company to Firm was void by reason of the N. Y. statute which so declares to be certain transfers to its officers for the payment of any debts. We have been cited to no decision of the courts of that state holding that when the transfer has been made, and is unchallenged by the corporation, its receiver, its judgment creditors, or any stockholder, the transfer shall, at the instance of a stranger in interest and title, and against an innocent purchaser from the corporation's grantee, be adjudged absolutely void. In the absence of such construction, we are of the opinion that the title acquired by the complainant was, if, indeed, questionable, not void, but voidable, and, in the absence of any step to avoid it, must, for the purpose of this case, be deemed to vest the legal title to the patent in question in the complainant. — Goss *v.* Scott, 108 Fed. 253; 47 C. C. A. 302.

§ 157. Debtor and Creditor.

Under the copyright law, the sale on execution of a copper plate does not entitle the purchaser to produce and sell the copyrighted matter. But the copyright may be reached by a creditor's bill. — Stephens *v.* Cady, 14 How. 528; 14 L. Ed. 528.

See Stevens *v.* Gladding, 58 U. S. 447, to same effect.

It is within the general jurisdiction of a court of chancery to assist a judgment creditor to reach and apply to the payment of his debt any property of the judgment debtor, which by reason of its nature only, and not by reason of any positive rule exempting it from liability from debt, cannot be taken on execution at law; as in the case of trust property in which the judgment debtor has the entire beneficial interest, of shares of a corporation, or of choses in action. — Ager *v.* Murray, 105 U. S. 126; 26 L. Ed. 942.

McDermutt *v.* Strong, 4 Johns. Ch. 687; Spader *v.* Davis, 5 Johns. Ch. 280; Hadden *v.* Spader, 20 Johns. Ch. 554; Edmeston *v.* Lyde, 1 Paige, 637; Wiggin *v.* Heywood, 118 Mass. 514; Sparhawk *v.* Cloon, 125 Mass. 263; Daniels *v.* Eldredge, 125 Mass. 356; Dake *v.* Rice, 130 Mass. 410; Stephens *v.* Cady, 14 How. 528; Stevens *v.* Gladding, 17 How. 447.

A patent or copyright which vests the sole and exclusive right of making, using and vending the invention or of publishing and selling the book, in the person to whom it has been granted by the government, as against all persons not deriving title through him, is property, capable of being assigned by him at his pleasure, although his assignment, unless recorded in the proper office, is void against subsequent purchasers or mortgagees for a valuable consideration without notice. R. S. 4884, 4898, 4952, 4955. And the provisions of the patent and copyright Acts, securing a sole and exclusive right to the patentee, do not exonerate the right and property thereby acquired by him, of which he receives the profits, and has the absolute title and power of disposal, from liability to be subjected by suitable judicial proceedings to the payment of his debts. — Ager *v.* Murray, 105 U. S. 126; 26 L. Ed. 942.

There are decisions in the circuit courts that an assignee in insolvency, or a receiver, of all the property of a debtor, appointed under the laws of the state, does not, by virtue of the general assignment or apportionment merely, without any conveyance made by the debtor or specifically ordered by the court acquire a title in patent rights. But in Asheroft *v.* Walworth, 1 Holmes, 152, Judge Shepley clearly intimated that the courts of the state might have compelled the debtor to execute such a conveyance. And the highest courts of New York and California have affirmed the power, upon a creditor's bill, to order the assignment and sale of a patent right for the payment of the patentee's judgment debts. — Ager *v.* Murray, 105 U. S. 126; 26 L. Ed. 942.

Gordon *v.* Anthony, 16 Blatchf. 234; Gillett *v.* Bate, 86 N. Y. 87; Bank *v.* Robinson, 57 Cal. 520.

The present license contained no words which show that it was intended to be assigned, and was purely a personal license. Consequently the receiver could not acquire it. — Waterman *v.* Shipman, 55 Fed. 982; 5 C. C. A. 371.

§ 158. Evidence.

The appellee produced a license in its possession, absolute on its face and without any limitation or condition. The burden of proof is upon the appellants to show that it was delivered as an escrow. — Mellon *v.* D. L. & W., 154 U. S. 673; 26 L. Ed. 929; 14 S. Ct. 1194.

Certified copies of patent office records of instruments filed for record are not prima facie proof of either the execution or the genuineness of the original. The assignment of a patent is not a public document, but is merely a private writing. There is no statutory provision requiring it to be recorded in the patent office. Section 4898 R. S. permits this to be done for the protection of the assignee against a subsequent bona fide purchaser or mortgagee. The section does not make the recorded instrument evidence, does not require the assignment to be executed in the presence of any public officer, or to be acknowledged or authenticated in any way before recording, and does not provide or contemplate that it shall remain subsequently in the custody of the office. It devolves upon the patent office merely the clerical duty of recording any instrument which purports to be the assignment of a patent. We are aware of no principle which gives to such a record

the effect of primary evidence, or of prima facie proof of the execution or the genuineness of the original document. — Mayor *v.* American, 60 Fed. 1016; 9 C. C. A. 336.

Disapproving and reviewing in substance,

Brooks *v.* Jenkins, 3 McLean, 432; Parker *v.* Haworth, 4 McLean, 370; Lee *v.* Blandy, 1 Bond. 361; Dederick *v.* Agricultural, 26 Fed. 763; National *v.* American, 55 Fed. 488; Approving Paine *v.* Trask, 56 Fed. 233.

Section 4898 does not require that any instrument in the chain of title to a patent shall be recorded, but all such assignments may be recorded. The sense — the essential significance and intent — of this section is that the record or official copy of any assignment shall give to any person interested the prima facie assurance that an original assignment was made in terms as shown in the record, that such instrument was subscribed as shown, that it was delivered, that the signature thereto is the genuine signature of the assignor, and that such assignor had an assignable interest according to the purport of the instrument. The record of assignments in the patent office is a record "belonging to the patent office," within the literal terms of sec. 892. But, in the absence of that section, and on the general principles of evidence, a paper purporting to be a copy of a record in the patent office could be proven to be such copy by the sworn testimony of the person who made it, or of a person who had compared it with the original record in the patent office. The view here stated as to the prima facie probative force of a copy from the record of an assignment in the patent office has been substantially taken in many reported decisions. Brooks *v.* Jenkins, Fed. Cas. No. 1,953; Parker *v.* Haworth, Fed. Cas. No. 10,738; Lee *v.* Blandy, Fed. Cas. No. 8,182; Dederick *v.* Agricultural Co., 26 Fed. 763; National *v.* American, 55 Fed. 488. The only question presented by the record is the prima facie probative force of the patent office record of an assignment. In New *v.* American, 60 Fed. 1016, the federal court of appeals at N. Y., following an obiter dictum by the federal court of appeals at Boston in Paine *v.* Trask, 56 Fed. 233, decided that under the sections above quoted from the Revised Statutes a certified copy from the records in the patent office would not prima facie prove the assignment without a further showing as to the execution of the original instrument. It is argued that the statute does not require an assignment to be recorded, that the original is not left in the custody of the patent office, and that no certificate of acknowledgment or proof of execution is required by the statute to be made in connection with such instrument. But the line of reasoning upon which the courts have developed the rule already stated does not involve any one of the conditions named. The statute makes it the duty of the commissioner of patents to record assignments that are genuine. He has no authority to record a spurious instrument. A spurious assignment recorded in the patent office would not be in law a record of that office. The record of an assignment is, in law, tantamount to a finding or certificate by the commissioner that the original is genuine. It matters not that the commissioner may act on the mere assumption that whatever paper of this kind is presented for record is genuine. He is a public officer, charged by law with the duty of recording only such as are genuine. The argument that a spurious assignment may be mistakenly put upon the record might be urged against the policy of the statute, but not against the obvious sense of it. Such an argument might also be urged against the ordinary statutes for recording deeds. This court cannot accede to the view announced in N. Y. *v.* American, supra. The rule as understood and acted upon prior to that decision, is considered by this court to be law. For 52 years (Brooks *v.* Jenkins, supra, was decided in 1844) that rule has prevailed. As pointed out by Judge Coxe in National *v.* American, supra, a holding that the patent office record of an assignment shall have no force as prima facie proof of

the original writing would often entail great and useless expense, if not an entire defeat of the rights of the complainant in a patent case. A spurious or counterfeit assignment put on record in the patent office would be easily and certainly detected by any person interested in the inquiry, especially in the case of any patent of real value. The possible gain from such a rascality would not be worth the risk. The complainant in a patent suit is ordinarily making actual use of the patent. What may be called his possession of the patent property is usually open and notorious. It is no hardship upon an infringer who, claiming no right in himself, proposes to dispute the showing of the patent office on the matter of title, to require from him such proof as may at least raise a fair presumption that the original of some assignment shown of record in the chain of title is spurious. — Standard *v.* Crane, 76 Fed. 767; 22 C. C. A. 549.

Woods dissenting.

§ 159. Execution.

Need not be under seal. — Gottfried *v.* Miller, 104 U. S. 521; 26 L. Ed. 851.

It is always open to show that an instrument produced in evidence, whether in an action at law or a suit in equity in support of a claim or defense, was never executed by the person whose signature it bears. — Marsh *v.* Nichols, 128 U. S. 605; 32 L. Ed. 538; 9 S. Ct. 168.

Section 5 of the act of Mar. 3, 1897 is a statute which was intended to declare the evidential effect to be given to acknowledgments before a notary, after a given date, without special reference, however, to the time when the acknowledgment was taken; and in the absence of any specific provision that it should apply only to acknowledgments taken subsequently to Jan. 1, 1898, we perceive no sufficient reason why it should be limited in its operation to acknowledgments so taken. — Lanyon *v.* Brown, 115 Fed. 150; 53 C. C. A. 354.

DeLaval *v.* Vermont, 109 Fed. 813.

Section 4898 of the Revised Statutes, as amended by Act March 3, 1897, simply provides a new method of proof. The evident intent of the act was to substitute proof of execution by acknowledgment, instead of by the production of the subscribing witness, if there were one, or proof of the handwriting of the assignor, if there were no subscribing witness. In DeLaval *v.* Vermont, 109 Fed. 813 it was held that assignments which were acknowledged before the passage of that act were admissible in evidence thereunder, and that the act referred "to the time," to use the language of the court, "when the acknowledgment is produced in evidence, rather than to the time when it was taken." The rule thus laid down was approved by the Circuit Court of Appeals for the Eighth Circuit in Lanyon *v.* Brown, 115 Fed. 150. — Murray *v.* Continental, 149 Fed. 989; 79 C. C. A. 499.

§ 160. Future Inventions — Legality.

An assignment including "with all the improvement which he hath made or shall make in the same" is a covenant which bound the inventor to convey his improvement. Though the assignment was not made until several years after it was patented the assignees were equitably entitled to it before. — Troy *v.* Corning, 14 How. 193; 14 L. Ed. 383.

An assignment of an unperfected invention, with all improvements upon it the inventor may make, is equivalent in equity to an assignment of the perfected results. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

An assignment of an invention and of future improvements to be made passes title to the improvements. — Regan *v.* Pacific, 49 Fed. 68; 1 C. C. A. 169.

Littlefield *v.* Perry, 21 Wall. 226.

An agreement to assign future inventions is valid. — Regan *v.* Pacific, 49 Fed. 68; 1 C. C. A. 169.

Curtis Sec. 160; Robinson Sec. 771.

The defense is set up that such contracts for an indefinite period, covering inventions to be afterwards made, are against public policy. On the other hand, whether based on agreements for employment or other valuable considerations, such contracts have been extensively made, and have never been doubted until of late. They are essential to the business of the contracting parties, and are not unjust. A person may purchase an invention, and pay therefor a very large sum, and proceed to make use of it. The inventor, according to a practice not uncommon, may subsequently overlap that invention by improvements which, though small, may be enough, in these days of sharp competition, to build up a successful hostile business. — Reece *v.* Fenwick, 140 Fed. 287; 72 C. C. A. 39.

Thibodeau *v.* Hildreth, 124 Fed. 892.

Parties may lawfully assign inventions not yet patented, and even future inventions, so far as such future inventions are tributary to the inventions assigned. — American *v.* Pungs, 141 Fed. 923; 73 C. C. A. 157.

§ 161. Future Inventions — Recording.

An agreement to "license, grant and convey" future inventions is not an assignment, is not recordable and gives the grantee only an equitable right subject to defeat by an assignment to a bona fide purchaser for value. — Regan *v.* Pacific, 49 Fed. 68; 1 C. C. A. 169.

That an assignment of a patent, together with any future improvements thereon, is recordable and operative as notice to subsequent assignees of patents for improvements, may be conceded. — National *v.* New Columbus, 129 Fed. 114; 63 C. C. A. 616.

Littlefield *v.* Perry, 21 Wall. 205; Aspinwall *v.* Gill, 32 Fed. 697.

The patentee had previously assigned an interest in his patent, and the patent had issued to him and his assignees. Subsequent to issue the patentee executed an assignment of a part interest in all future inventions. Held: Near having by his prior recorded assignments, which did not include improvements, conveyed to Reynolds the one undivided third in all existing patents, and there being no application pending for any patent, there was nothing upon which this document could operate which entitled it to registration as an assignment, grant or conveyance under sec. 4898 R. S. What we decide is that an instrument which was not intended to convey any present interest in any existing patent is not an "assignment, grant, or conveyance," within the meaning of the statute, and that its registration did not operate as constructive notice to the complainant. — National *v.* New Columbus, 129 Fed. 114; 63 C. C. A. 616.

Rob. Pat. secs. 411, 769, 785; Wright *v.* Randel, 8 Fed. 591; Carpenter *v.* Dexter, 8 Wall. 513; Lynch *v.* Murphy, 161 U. S. 247.

In actual fact, an assignment, had been spread upon the registry of the Patent Office, by which he had assigned to Reynolds a one-third interest

in all of his improvements and inventions in cash registers which he had been working on, and for which he contemplated filing applications. (There was no pending application at the time it was filed.) This assignment did not operate as a constructive notice, because it was not such a grant or conveyance as was entitled to registration. Neither did it request the commissioner to issue any particular patent to an assignee, and the commissioner therefore properly ignored it when he came to issue the patent. — National *v.* New Columbus, 129 Fed. 114; 63 C. C. A. 616.

Lynch *v.* Murphy, 161 U. S. 247; Carpenter *v.* Dexter, 8 Wall. 513; Prentice *v.* Duluth, 58 Fed. 437; Rob. Pat. sec. 785; Wright *v.* Randel, 8 Fed. 591; R. S. sec. 4895; Rob. Pat. secs. 411, 769, 785.

§ 162. Future Inventions — What are Not.

Complainant agreed to supply defendant with certain tackle blocks, and to assign patents for improvements, defendant agreeing to pay all expenses of patenting, dies, patterns, etc., and to pay complainant for all articles as ordered. Defendant lived up to the contract for a time and complainant assigned the patent upon the invention made during that period. Subsequently, when complainant had made further improvements and expended some $8000 on dies and machinery, defendants refused to take the articles made. Later, defendants infringed the subsequent patented improvements of complainant and attempted to justify under implied license, growing out of said contract. *Held:* That the agreement was such as stated in the plea is highly improbable and the agreement made by the evidence still more so. The company was not bound to continue their agreement for a day, nor obliged to reimburse Hartz for cost of experiments or of plant essential in making his new devices. Such a contract is inconceivable and unconscionable. Even if clearly proven, it is not such a contract as a court of equity should specifically enforce. — Hartz *v.* Cleveland, 95 Fed. 681; 37 C. C. A. 227.

Dalzell *v.* Mfg. Co. 149 U. S. 315.

That when an employee agreed to assign inventions made while in the employ of defendant and to assign any future improvements on specific inventions already patented and assigned, such agreement covers improvement on said patents made after employment ceased, but not other improvements relating to defendant's business, see Frick *v.* Geiser, 100 Fed. 94; 40 C. C. A. 291.

That an assignment including along with pending applications, "inventions of like nature or similar thereto which I have already completed or which may hereafter be completed by me," cannot be construed to include inventions conceived after the assignment, see Davis *v.* Tagliabue, 159 Fed. 712; 86 C. C. A. 466.

§ 163. Future Inventions — Miscellaneous Rules.

The assignee of an agreement to assign future inventions takes it subject to all defenses against his assignor. — Regan *v.* Pacific, 49 Fed. 68; 1 C. C. A. 169.

An agreement existed by which the joint inventors agreed and did "bind themselves that in case they shall by invention or purchase become the owners of any invention or improvement upon carving machines they will transfer and assign a like exclusive right." Upon such title suit was brought. *Held:* While the terms of this agreement in reference to subsequent "invention in or improvement upon carving machines" are probably applicable

to the device shown in patent No. 447,796 (one of the patents in suit), and may be enforcible between the parties, as authorized in Littlefield *v.* Perry, 21 Wall. 205, it is plain that such agreement is executory only, and not an assignment, within the statute, so that no legal title is conferred. The subject-matter was not then in being, was incapable of sale and delivery, and, however binding the contract was upon the inventors to grant the right or title in their subsequent invention, it is not a legal assignment, and, at the utmost, confers upon the appellant a mere equity, with the legal title in the patentees. Suit by an assignee for infringement is authorized only when the assignment is complete within the statutory requirement. — Milwaukee *v.* Brunswick-Balke, 126 Fed. 171; 61 C. C. A. 175.

Rob. Pat. sec. 771; Curtis Pat. secs. 171–2; Regan *v.* Pacific, 49 Fed. 68; Waterman *v.* Mackenzie, 138 U. S. 252; Pope *v.* Gormully, 144 U. S. 248.

A contract for the assignment of future inventions existed. The bill asked for discovery of undisclosed inventions. The proofs gave no evidence whether such existed or what they were. *Held:* We are not justified in granting an order in the air for a discovery, involving parties in the hazards of ascertaining whether their proceedings may be in contempt or not. — Reece *v.* Fenwick, 140 Fed. 287; 72 C. C. A. 39.

Swift *v.* U. S. 196 U. S. 375.

Defendant having agreed to assign future inventions, was later discharged by complainant from its employ. Defendant then invented certain improvements and consulted officers of complainant with reference to getting them interested in complainant's proposed new business. Complainant's officers simply turned their backs on defendant without making any claim to the invention. *Held:* Inasmuch as defendant thereafterwards expended his time, efforts and money on the faith of the mutual understanding thus expressed by each party, equity cannot give the complainant relief with regard to any inventions on which defendant had expended his time, efforts and money with reference to developing and exploiting them, subsequently to the conversation referred to. — Reece *v.* Fenwick, 140 Fed. 287; 72 C. C. A. 39.

§ 164. Interests Assignable.

The monopoly granted to the patentee is for one entire thing; it is the exclusive right of making, using and vending to others to be used the improvement he has invented, and for which the patent is granted. The monopoly did not exist at common law, and the rights which may be exercised under it cannot be regulated by the rules of the common law. It is created by the act of Congress; and no rights can be acquired in it unless authorized by statute, and in the manner the statute provides. — Gayler *v.* Wilder, 10 How. 477; 13 L. Ed. 504.

Both assignees and grantees have an interest in the patent, but the terms are not synonymous, as used in the patent law. — Moore *v.* Marsh, 74 U. S. 515; 19 L. Ed. 37.

Potter *v.* Holland, 4 Blatchf. 157.

This power of assignment has been so construed by the courts as to confine it to the transfer of an entire patent, an undivided part thereof or the entire interest of the patentee or undivided part thereof within and throughout a certain specified portion of the United States. One holding such an assignment is an assignee within the meaning of the statute and may prosecute in the circuit court any action which may be necessary for the pro-

tection of his rights under the patent. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

That husband and wife may deal as strangers, see Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

By the law of the State of New York where all the instruments were made and all the parties to them resided, husband and wife are authorized to make conveyances and contracts of and concerning personal property to and with each other in the same manner and to the same effect as if they were strangers. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

Armitage *v.* Mace, 96 N. Y. 538; Adams *v.* Adams, 91 N. Y. 381.

This case really involves the question, which is one of considerable importance, whether a patentee can split up his patent into as many different parts as there are claims, and vest the legal title to those claims in as many different persons. This question has never before been squarely presented to this court, but in view of our prior adjudications, it presents no great difficulty. The leading case upon this subject is that of Gayler *v.* Wilder, 51 U. S. 477, and while that case involved a different question from the one in this case, the trend of the entire opinion is to the effect that the monopoly granted by law to the patentee is for one entire thing, and that in order to enable the assignee to sue, the assignment must convey to him the entire and unqualified monopoly which the patentee held, in the territory specified, and that any assignment short of that, is a mere license; for it was obviously not the intention of the legislature to permit several monopolies to be made out of one and divided among different persons within the same limits. — Pope *v.* Gormully, 144 U. S. 248; 36 L. Ed. 420; 12 S. Ct. 63.

The assignment ran to "J. B. Bartholomew, et al." It not appearing that any other interest had ever been asserted or claimed than that of Bartholomew, it was held that for the purpose of asserting title for the purpose of an infringement suit, the defendant having failed to show any adverse interest, that the expression "et al" was mere surplusage. — Bliss *v.* Reed, 106 Fed. 314; 45 C. C. A. 304.

It is urged that the use of the expression "may terminate this license" qualifies the language of the grant, and converts it into a mere license. We cannot concur in this view. It is a circumstance to be considered in the construction of the instrument as a whole, and in ascertaining whether there be provisions subsequent to the granting clause which are so repugnant to it that both cannot stand together. But the calling of an instrument which conveys the whole title of the grantor a license cannot qualify or limit the grant. — Sichler *v.* Deere, 113 Fed. 285; 51 C. C. A. 242.

Signal Co. *v.* Signal Co. 59 Fed. 20; Newton *v.* Buck, 72 Fed. 777.

§ 165. License.

A mere license to a party without having his assigns or equivalent words to them, showing that it is meant to be assignable, is only the grant of a personal power to the licensees, and is not transferrable to another. — Troy *v.* Corning, 14 How. 193; 14 L. Ed. 383.

Curt. Pat. 198; 2 Story. 525, 554.

An assignment of a right to use, make and sell for a limited time in a limited territory, in the absence of express words, is unassignable. — Oliver *v.* Rumford, 109 U. S. 75; 27 L. Ed. 862; 3 S. Ct. 61.

Iron *v.* Corning, 14 How. 193; Gayler *v.* Wilder, 10 How. 477.

The grant of an exclusive right under the patent within a certain district, which does not include the right to make, and the right to use, and the right to sell is not a grant of a title in the whole patent right within the district, and is therefore only a license. Such, for instance, is a grant of the " full and exclusive right to make and vend " within a certain district, reserving by the grantor the right to make within the district, to be sold outside of it. Gayler *v.* Wilder, 51 U. S. 477. So is a grant of " the exclusive right to make and use," but not to sell, patented machines within a certain district. Mitchell *v.* Hawley, 83 U. S. 544. So is an instrument granting " the sole right and privilege of manufacturing and selling " patented articles, and not expressly authorizing their use, because, though this might carry by implication the right to use the articles made under the patent by the licensee, it certainly would not authorize him to use such articles made by others. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

Hayward *v.* Andrews, 106 U. S. 672; Oliver *v.* Rumford, 109 U. S. 75.

In equity as at law, when the transfer amounts to a license only, the title remains in the owner of the patent; and suit must be brought in his name, and never in the name of the licensee alone, unless that is necessary to prevent an absolute failure of justice, as when the patentee is the infringer and cannot sue himself. Any rights of licensee must be enforced through, or in the name of the owner of the patent, and perhaps, if necessary to protect the rights of all parties, joining the licensee with him as a plaintiff. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

R. S. sec. 4921; Littlefield *v.* Perry, 88 U. S. 205; Paper Bag Cases, 105 U. S. 766, 771; Birdsell *v.* Shaliol, 112 U. S. 485; Renard *v.* Levinstein, 2 Hem. & M. 628.

An assignment or grant conveys (1) the whole patent, comprising the exclusive right to make, use and vend the invention throughout the United States; or (2) an undivided part or share of that exclusive right; or (3) the exclusive right under the patent within and throughout a specified part of the United States. " A transfer of either of these three kinds of interest is an assignment, properly speaking, and vests in the assignee, a title in so much of the patent itself, with a right to sue infringers; in the second case, jointly with the assignor; in the first and third cases, in the name of the assignee alone. Any assignment or transfer short of one of these is a mere license, giving the licensee no title in the patent, and no right to sue at law in his own name for infringement." Waterman *v.* McKenzie, 138 U. S. 252; Gayler *v.* Wilder, 10 How. 477; Pope *v.* Gormully, 144 U. S. 248. In the construction of this instrument, seeking to ascertain the intention of the parties to it, we must be governed by the familiar canons of interpretation. We must gather the intention from within the four corners of the instrument, giving the language employed its usual significance, and, if possible, reconcile discrepancies and avoid repugnancy, having regard also to the ancient rule that general words in one clause may be restricted by the particular words in a subsequent clause. — Sichler *v.* Deere, 113 Fed. 285; 51 C. C. A. 242.

Johnson *v.* Union, 59 Fed. 20; Newton *v.* Buck, 72 Fed. 777.

§ 166. Notice — Bona Fide Purchaser.

An assignee of a patent takes it subject to the legal consequences of the previous acts of the assignee. — McClurg *v.* Kingsland, 1 How. 202; 11 L. Ed. 102.

The owner of an equitable interest in a patent cannot set up such title against a bona fide purchaser of the legal title without notice of any prior outstanding equitable interest, and the title thus obtained is good as against

such equity in the hands of a subsequent purchaser even if they had notice.— Faulkner *v.* Empire, 67 Fed. 913; 15 C. C. A. 69.

A person taking title through an assignment indicating another interest takes at his risk, and is bound to make every inquiry to avoid the charge of notice. — Mills *v.* Whitehurst, 72 Fed. 496; 19 C. C. A. 130.

Chamberlain was Neer's attorney, and had charge of his application. He was asked to find out whether Neer would sell, and at what price. He bought the application from his client for himself, not disclosing to his client that he was buying for complainant, and then assigned the application to complainant at more than double the price he had paid. In the whole transaction he was acting in his own interest, and in such circumstances there is no presumption that he would disclose his information to his ostensible principal. — National *v.* New Columbus, 129 Fed. 114; 63 C. C. A. 616.

Thomson-Houston *v.* Capitol, 56 Fed. 849; Pine *v.* Bailey, 94 Fed. 258.

We are unable to hold, as against the defendant Tagliabue, a purchaser for value of the patents in question, that the verb "completed" should be given any other than its ordinary meaning. Assuming Tagliabue's actual knowledge of the assignment, he is not chargeable with notice that its language should receive an extraordinary interpretation. (The attempted interpretation being to make "completed or which may be hereafter completed by me" cover inventions made after the assignment was made). — Davis *v.* Tagliabue, 159 Fed. 712; 86 C. C. A. 466.

§ 167. Notice — Constructive.

Where the recorded agreement and assignment made reference to a second and unrecorded agreement and reservations and conditions therein contained, such record was sufficient to put bona fide purchasers on their inquiry as to the contents of the unrecorded agreement. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

It is well established that one who has reason to believe that another is offering property for sale, which he holds either as trustee or agent for a third person, cannot become a bona fide purchaser of the property for value by reliance on the statements of the suspected trustee or agent, either as to his authority, or as to his beneficial ownership of the thing sold. — Mills *v.* Whitehurst, 72 Fed. 496; 19 C. C. A. 130.

Trust Co. *v.* Boynton, 71 Fed. 797.

He is a voluntary purchaser, and having notice of a fact which casts doubt upon the validity of his title, the rights of innocent persons are not to be prejudiced through his negligence. — Mills *v.* Whitehurst, 72 Fed. 496; 19 C. C. A. 130.

Brush *v.* Ware, 15 Pet. 93, 112, 114; Oliver *v.* Piatt, 3 How. 333; Cordova *v.* Hood, 17 Wall. 1.

The defendants Weaver and Emminger were purchasers of the interest of Mrs. West for a valuable consideration after the alleged assignment to the partnership, and the oral unrecorded grant to the firm was void as against them and their licensee, the Buck Manufacturing Co., unless they had notice of its existence before they purchased from Mrs. West. — Paulus *v.* Buck, 129 Fed. 594; 64 C. C. A. 162.

Gates *v.* Fraser, 153 U. S. 332.

That where an assignee knew that other parties had been in some way interested in the development of a prior invention with the inventor and in the invention in question, or might have known such facts from the Patent Office records, such assignee is put upon his guard, see National *v.* New Columbus, 129 Fed. 114; 63 C. C. A. 616.

Cordova *v.* Hood, 17 Wall. 8; Jonathan *v.* Whitehurst, 72 Fed. 496.

§ 168. Parol.

An oral agreement for the sale and assignment of the right to obtain a patent for an invention is not within the statute of frauds, nor within section 4898 R. S. requiring assignments of patents to be in writing; and may be specifically enforced in equity upon sufficient proof thereof. — Dalzell *v.* Dueber, 149 U. S. 315; 37 L. Ed. 749; 13 S. Ct. 886.

Somerby *v.* Buntin, 118 Mass. 279; Gould *v.* Banks, 8 Wend. 562; Burr *v.* De La Vergne, 102 N. Y. 415; Blakeney *v.* Goode, 30 Ohio St. 350.

Complainant who had a series of patents and inventions, assigned to defendant those appertaining to his established business. The invention of the patent in suit was at that time unpatented but was in esse. Complainant claims that he reserved this invention (apparently mentally). *Held:* It would be difficult to conceive that intelligent men would omit from the calculation an element so essential to the success of the enterprise. To hold otherwise would be to credit the cunning of appellant a success, and to the committee that dealt with him a stupidity, that the care shown in all the other branches of the negotiation clearly discredit. — Cook *v.* Sterling, 150 Fed. 766; 80 C. C. A. 502.

An arrangement entered into, in contemplation of incorporation, and followed by incorporation, is binding upon the parties, when all the terms of the contract except the one in dispute have been fully and in good faith executed, and the disputed term fails of execution through the fraud, mistake, or inadvertence of the parties. To hold, in this respect, as we are asked to hold, would be to make all agreements preliminary to incorporation of no avail, notwithstanding the completion of the transaction by incorporation — a doctrine that in the present development of the law has no standing whatever. — Cook *v.* Sterling, 150 Fed. 766; 80 C. C. A. 502.

As a general rule, a parol contract reduced to writing, is to be held as fully expressed in the writing. But this does not exclude a court of equity from the inquiry whether, by fraud, mistake, or inadvertence, the writing fails to express the agreement; or (such fraud, mistake, or inadvertence appearing) from giving force to the oral agreement. — Cook *v.* Sterling, 150 Fed. 766; 80 C. C. A. 502.

§ 169. Part Interest.

If the owner assigns a part of his invention it must be an undivided portion of his entire interest under the patent, placing the assignee upon an equal footing with himself for the part assigned. Upon such an assignment, the patentee and his assignees become joint owners of the whole interest secured by the patent, according to the respective proportions which the assignment creates. — Gayler *v.* Wilder, 10 How. 477; 13 L. Ed. 504.

The assignment of a part interest of a patent pending suit does not defeat the action. — Moore *v.* Marsh, 74 U. S. 515; 19 L. Ed. 37.

Kilborn *v.* Rewes, 8 Gray, 415; Eades *v.* Harris, 1 Younge & C. 230.

How a patent monopoly may not be divided. — Pope *v.* Gormully, 144 U. S. 238; 36 L. Ed. 420; 12 S. Ct. 637.

§ 170. Pendente Lite.

The fact of the assignment of the Hofman patent pendente lite, and of all rights thereunder to any claims for, profits or damages, was not known to the circuit court. The defendant definitely learned of this assignment on Nov. 28, 1894, and thereafter, and before the argument upon the appeal, moved this court to remand the case to the circuit court with directions to dismiss the bill, but without prejudice to the rights of the assignee to apply for leave to file an original bill in the nature of a supplemental bill. This motion was properly denied. A peremptory dismissal of the bill, as will be seen hereafter, was not permissible; and furthermore, while Appleton and others were complainants, Ecaubert was seeking affirmative relief against them by his cross bill, and his right to relief, if any he had, could not be injuriously affected by the complainant's assignment. If the court should decree adversely to the validity of the Hofman patent, its assignees would be bound by the decree, because, irrespective of the question whether they had become the actual parties, they, being assignees were charged with notice of the suit, and bound by its results. Thus, where a plaintiff — who as owner of a patent, had brought suit for infringement and had assigned his interest in the patent pendente lite — asked the court to dismiss his bill, after an answer praying for affirmative relief, it was held that a possible right in the defendant to have a decree in his favor could not be defeated by such an assignment and by permission to dismiss the bill. — Ecaubert *v.* Appleton, 67 Fed. 917; 15 C. C. A. 73.

Electrical *v.* Brush, 44 Fed. 602.

If a sole plaintiff, suing in his own right, assigns the whole interest to another, he is no longer able to prosecute the suit because he is without interest in the litigation.

Nor would the fact that the assignment included collateral considerations, such as increase of consideration to be paid in the event of success of the litigation, or agreement to prosecute the action by the assignor, alter the condition of title. — Automatic *v.* Cutler-Hammer, 147 Fed. 250; 77 C. C. A. 176.

Ecaubert *v.* Appleton, 67 Fed. 917.

§ 171. Power of Attorney.

He undertook to give them an exclusive license, embracing the entire territory covered by the patent, and running for the full period of its life. We agree with the circuit court that this was a virtual, if not actual sale, and was therefore in excess of his authority (of working and developing the business of the said patent). What constitutes a sale of a patent, as an abstract question need not be discussed. It is sufficiently considered in Nellis *v.* Mfg. Co., 13 Fed. 451; Pickhardt *v.* Packard, 22 Fed. 532; Waterman *v.* MacKenzie, 138 U. S. 252; 2 Rob. Pat. Sec. 763; Curt. Pat. pp. 241–243. — Union *v.* Johnson, 61 Fed. 940; 10 C. C. A. 176.

There can be no question that, under the power of attorney, the agent had full authority to assign the patent. But it is equally clear that his authority could be exercised only upon terms that should be first communicated to and accepted by his principal. The purported assignment, therefore, was clearly insufficient to transfer a title to the patent, not only because it was the act and deed of the agent, and not of the principal (Machesney *v.* Brown, 29 Fed. 145, and cases there cited) but for the further

reason that the agent exercised a power not conferred upon him, in that he made a transfer of the patent without communicating the terms of the sale to his principal, or obtaining his approval thereof. — Chauche *v.* Pare, 75 Fed. 283; 21 C. C. A. 329.

Johnson *v.* Union, 59 Fed. 20; Union *v.* Johnson, 61 Fed. 940.

§ 172. Recording.

The record is intended for the benefit of the public. Bona fide purchasers look to it for their protection. The record of the grant alone, therefore, furnishes the strongest evidence of the intention of the parties. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

An agreement to " license, grant and convey " future inventions, is not an assignment of a patent, and is not recordable. — Regan *v.* Pacific, 49 Fed. 68; 1 C. C. A. 169.

§ 173. Reissue.

The words " to the full end of the term for which the said letters patent are or may be granted " embraced in an assignment carries both reissues and extensions of the patent. — Nicholson *v.* Jenkins, 81 U. S. 452; 20 L. Ed. 777.

R. R. *v.* Trimble, 10 Wall. 367.

Reissues are not patents for new inventions, but amendments of old patents. If a reissue is obtained with the consent of an assignee, it inures at once to his benefit; if without he has his election to accept or reject it. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

§ 174. Specific Performance.

A court of equity will not enforce an assignment from employee to employer upon a proved oral agreement which is unconscionable. — Dalzell *v.* Dueber, 149 U. S. 315; 37 L. Ed. 749; 13 S. Ct. 886.

Cathcart *v.* Robinson, 30 U. S. 264; Mississippi *v.* Cromwell, 91 U. S. 643; Pope *v.* Gormully, 144 U. S. 224.

A court of chancery will not decree specific performance, unless the agreement is " certain, fair, and just in all its parts." — Dalzell *v.* Dueber, 149 U. S. 315; 37 L. Ed. 749; 13 S. Ct. 886.

Buxton *v.* Lister, 3 Atk. 383; Underwood *v.* Hitchcox, 1 Ves. sec. 279; Franks *v.* Martin, 1 Eden, 309.

Uncertainty as to the meaning of a contract is fatal to a claim for its specific performance. — Davis *v.* Tagliabue, 159 Fed. 712; 86 C. C. A. 466.

§ 175. Territorial.

The holder of a territorial right, if exclusive although limited as to number of machines, holds such an interest as will enable him to sue for infringement in his own territory. — Wilson *v.* Ronsseau, 4 How. 646; 11 L. Ed. 1141.

The assignment of an exclusive right to make and use, and to vend to others machines within a given territory only, authorizes the assignee to vend elsewhere out of the said territory, the product of said machines. — Simpson *v.* Wilson, 4 How. 709; 11 L. Ed. 1169.

The patentee may assign his exclusive right within and throughout a specified part of the United States, and upon such an assignment, the

assignee may sue in his own name for an infringement of his rights. But in order to enable him to sue, the assignment must undoubtedly convey to him the entire and unqualified monopoly which the patentee held in the territory specified — excluding the patentee himself as well as others. And any assignment short of this is a mere license. — Gayler *v.* Wilder, 10 How. 477; 13 L. Ed. 504.

§ 176. Miscellaneous Rulings.

An assignment made and recorded, based upon a definite consideration never paid, and which is treated as a nullity by the parties, is void. — Railroad *v.* Trimble, 77 U. S. 367; 19 L. Ed. 949.

See Emerson *v.* Slater, 22 How. 41.

An assignment made subsequent to a mortgage assignment duly recorded within the three months is subject to the mortgage, though not in terms so expressed. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

When a patentee contracts for the use or sale of the patented article upon the payment of certain royalties, he cannot, as against such licensee, maintain a suit for infringement simply upon the ground that the licensee has failed to pay the agreed sum. — Atkins *v.* Parke, 61 Fed. 593; 10 C. C. A. 189.

Hartell *v.* Tilghman, 99 U. S. 547.

That where the evidence shows that the inventor agreed to assign his invention, and afterward refused so to do, he cannot recover for infringement, see Schmitt *v.* Nelson, 125 Fed. 754; 60 C. C. A. 522.

Acheson, J. dissenting (and I think most properly).

The assignment by the patentee who resided in England was made for the express purpose of enabling the assignee-trustee and his associates to exploit the invention, the assignee-trustee and his associates to license the use of the device, but not to sell or assign any part of the patent, and to pay the assignor one-third of all license fees. The successor of the assignee-trustee subsequently manufactured and sold the devices and did not account for all of the same, but did account in part, and the assignee accepted payments thereunder. *Held:*

We incline to agree with the court below that the correspondence between complainant and the patents company shows a sufficient acquiescence on the part of the complainant, in this mode of conducting business under the agreement, to estop him from now objecting thereto.

Sufficient evidence has been adduced, as to suppression of facts in regard to the amount of license fees collected and not accounted for, and undercharges in license fees due for devices made by defendants, accompanied by a refusal to make full disclosure of the books and accounts of said company, to clothe the complainant with a right to pursue defendants for redress in some form of action.

Equity and good conscience clearly require that these defendants, as trustees of these license fees, should be charged with the highest rate ever collected from outsiders for similar articles. — Duff *v.* Gilliland, 139 Fed. 16; 71 C. C. A. 428.

We are of the opinion that the short description in the title head is required for the purposes of Patent Office classification, that a conveyance by reference to the title head alone would be uncertain because applicable to any of the class, and that the name of the patentee and the serial number

afford a clear and definite description. There can be but one Maginn patent numbered 415,212. — Maginn *v.* Standard, 150 Fed. 139; 80 C. C. A. 15.

Note: This is good law very poorly stated. The "title head" includes name, number and short title. "Short title" is what the court meant. The use of the word "serial" is error; that word applies to the number of the application. What was meant was the patent number.

The assignment of the patent carried no such right. (The right to use the inventor's name and a certain mark in connection with it.) The name was not an essential part of the trademark, and, if the conveyance gave any right to use the name, it was only in connection with the particular representation of a shoe upon a cushion. — Reed *v.* Frew, 162 Fed. 887; 89 C. C. A. 577.

ATTORNEYS

Statutory Provision § 177
Actions Binding § 178 (*see* § 52)
Assignment by — Notice § 179 (*see* § 149)
Statements on Argument —Not Evidence § 180
Miscellaneous § 181
See — Amendment § 52

§ 177. Statutory Provision.

The only statutory provision as to attorneys or solicitors in the Patent Statute is sec. 487, which gives the Commissioner power to refuse recognition for gross misconduct. Under the powers given the Commissioner to establish regulations (sec. 483) some slight qualifications for practice before the Office have been provided; but, as elsewhere noted, these provisions are wholly inadequate.

§ 178. Acts Binding.

The court could not distinguish between the patentee and his counsel as to what occurred during the pendency of the application for the patent, and, as to the acceptance by the latter, the patentee must be regarded as bound by the acts of his counsel. — Dobson *v.* Lees, 137 U. S. 258; 34 L. Ed. 652; 11 S. Ct. 71.

That the negligence of an attorney in prosecuting an application is no excuse for defects which may exist in the patent, see Lay *v.* Indianapolis, 120 Fed. 831; 57 C. C. A. 313.

It will hardly be contended that the mistaken advice of a patent solicitor can override a statute of the United States. — Eastman *v.* Mayor, 134 Fed. 844; 69 C. C. A. 628.

§ 179. Assignment by — Notice.

Chamberlain was Neer's attorney, and had charge of his application. He was asked to find whether Neer would sell, and at what price. He bought the application from his client for himself, not disclosing to his client that he was buying for complainant, and then assigned the application to complainant at more than double the price he had paid. In the whole transaction he was acting in his own interest, and in such circumstances there is no presumption that he would disclose his information to his ostensible principal. — National *v.* New Columbus, 129 Fed. 114; 63 C. C. A. 616.

Thomson-Houston *v.* Capitol, 56 Fed. 849; Pine *v.* Bailey, 94 Fed. 258.

§ 180. Statements on Argument — Not Evidence.

That the mere argument of a solicitor found in the file-wrapper, in the absence of any amendment to conform thereto, cannot be held to limit or extend the claim, see Boyer *v.* Keller, 127 Fed. 130; 62 C. C. A. 244.

Acme *v.* Carey, 96 Fed. 344; Society *v.* Rehfuss, 75 Fed. 657; Daylight *v.* Marcus, 110 Fed. 980.

§ 181. Miscellaneous.

The commissioner of patents has no right to make the former misconduct of an attorney or solicitor a ground for refusing him his rights upon proper demand. He cannot enforce an apology by withholding rights. Ill manners or bad manners do not work a forfeiture of men's civil rights. — Boyden *v.* Burke, 14 How. 575; 14 L. Ed. 548.

Right to amend. — Eagleton *v.* West, 111 U. S. 490; 28 L. Ed. 493; 4 S. Ct. 593.

Distinguished, De La Vergne *v.* Featherstone, 147 U. S. 209.

BANKRUPTCY.

Statutory Provision § 182 | Title to Patent § 183

§ 182. Statutory Provision.

Sec. 5046, R. S. provided for the vesting of the title to letters patent in the assignee in bankruptcy under the old act. The Act of July 1, 1898 (30 Stat. 565) in sec. 70, provides for the vesting of the title in the trustee of the bankrupt under the present act. It will be noted that the following rules were made with reference to conditions arising under the old act.

§ 183. Title to Patent.

If the existence of a patent had been concealed by the bankrupt, or the assignee had discovered it subsequently — after his discharge — and desired to take possession of it for the benefit of the estate, it is possible the bankruptcy court might reopen the case and vacate the discharge for that purpose. — Sessions *v.* Romadka, 145 U. S. 29; 36 L. Ed. 609; 12 S. Ct. 799.

Clark *v.* Clark, 58 U. S. 315.

While, under the provisions of the bankrupt law, the title to this patent passed undoubtedly to the assignee in bankruptcy, it passed subject to an election on his part not to accept it, if, in his opinion, it was worthless, or would have proved to be burdensome and unprofitable. And he was entitled to a reasonable time to elect whether he would accept it or not. — Sessions *v.* Romadka, 145 U. S. 29; 36 L. Ed. 609; 12 S. Ct. 799.

American *v.* Garrett, 110 U. S. 288; Sparhawk *v.* Yerkes, 142 U. S. 1; Amory *v.* Lawrence, 3 Cliff. 523.

CLAIMS (*see* § 249)

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See — Divisional Patenting § 348; *Double Patenting* § 356; *Equivalents* § 373; *Improvement* § 432; *Invention* §§ 603–12; *Process* §§ 814, 820; *Words and Phrases* § 936

§ 184. Statutory Provisions.

Before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the Commissioner of Patents, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery. The specification and claim shall be signed by the inventor and attested by two witnesses. R. S. 4888.

§ 185. Purpose of the Claim.

Probably no better definition of the object and purpose of the claim is to be found than that given almost at the inception of patent decisions, in Evans *v.* Eaton, 7 Wheat. 356.

The specification has two objects: one is to make known the manner of construction so as to enable the artisans to make and use it, and thus to give the public the full benefit of the discovery after the expiration of the patent. The other is to put the public in possession of what the party claims as his invention, so as to ascertain if he claim anything that is in common use, or

is already known, and to guard against prejudice or injury from the use of an invention, which the party may otherwise innocently suppose not to be patented. It is therefore, for the purpose of warning an innocent purchaser, or other persons using a machine, of his infringement of the patent; and at the same time taking from the inventor the means for practicing upon the credulity, or the fears of other persons by pretending that his invention is for more than what it really is, or different from its ostensible objects.

§ 186. Ambiguity.

Without deciding that a repetition of substantially the same claim in different words will vitiate a patent, we hold that where a specification by ambiguity and needless multiplication of nebulous claims is calculated to deceive and mislead the public the patent is void. — Carlton *v.* Bokee, 84 U. S. 463; 21 L. Ed. 517.

There is here no sufficient foundation upon which to rest a claim which, if construed as broadly as the complainant insists it should be, practically makes all pay tribute who stir the mixture in question by machinery and by hand also, provided substantially the same movement can be produced. — Marchand *v.* Emken, 132 U. S. 195; 33 L. Ed. 332; 10 S. Ct. 65.

§ 187. Combination.

In case of a claim for a combination, where all the elements of the invention are old, and where the invention consists merely in the new combination of old elements or devices whereby a new and useful result is attained, such combination is sufficiently described if the elements or devices of which it is composed are all named and their mode of operation given, and the new and useful result to be accomplished pointed out, so that those skilled in the art and the public may know the extent and nature of the claims, and what the parts are which cooperate to produce the described new and useful result. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

Curt. Pat. sec. 489; Seymour *v.* Osborne, 11 Wall. 542.

The claims of the patents sued on in this case are claims for combinations. In such claims, if the patentee specifies any element as entering into the combination either directly by the language of the claim or by such a reference to the descriptive part of the specification as carries such element into the claim, he makes such element material to the combination and the court cannot declare it to be immaterial. It is his province to make his own claim and his privilege to restrict it. If it be a claim to a combination, and be restricted to specified elements, all must be regarded as material, leaving open only the question, whether an omitted part is supplied by an equivalent device or instrumentality. — Fay *v.* Cordesman, 109 U. S. 408; 27 L. Ed. 979; 3 S. Ct. 236.

Water *v.* Desper, 101 U. S. 332; Gage *v.* Herring, 107 U. S. 640.

An attempt to incorporate into a claim for a combination a feature which had not been claimed in connection with the combination before, and thereby make a new combination will not be heard. — Albany *v.* Worthington, 79 Fed. 966; 25 C. C. A. 258.

§ 188. Construction — Beneficial Uses.

A patentee who is first to make an invention is entitled to his claim for all the uses and advantages which belong to it. — Stow *v.* Chicago, 104 U. S. 547; 26 L. Ed. 816.

Woodman *v.* Stimpson, 3 Fish. P. C. 98; Tucker *v.* Spalding, 80 U. S. 453; Graham *v.* Mason, 5 Fish. P. C. 1.

An inventor is entitled to a beneficial function of his invention, whether he knew all its beneficial uses or not. — Goshen *v.* Bissell, 72 Fed. 67; 19 C. C. A. 13.

McCormick *v.* Aultman, 69 Fed. 371; Roberts *v.* Ryer, 91 U. S. 150; Brown *v.* D. C. 130 U. S. 87–103; Eames *v.* Andrews, 122 U. S. 40; Miller *v.* Mfg. Co. 151 U. S. 201; Stow *v.* Chicago, 104 U. S. 550; Tucker *v.* Spalding, 13 Wall. 453; Appleton *v.* Star, 60 Fed. 411; Western *v.* Sperry, 58 Fed. 186; Galt *v.* Parlin, 60 Fed. 422; Dixon *v.* Pfeifer, 55 Fed. 390; Thompson *v.* National, 65 Fed. 427.

§ 189. Construction — Broad and Narrow.

It is possible, and perhaps probable, that the second claim might be construed as covering not only non-conducting material placed between the spiral layers, but such other means as might occur to the skilled mechanic as useful for that purpose, but it does not, it seems to us, necessarily follow that the inventor is bound to rely upon such scope as would probably result from construction. He may, for the purpose of describing the extent of his claims, not only state the general principles and requisite features of the invention in one claim, but the general principles and requisite features in another claim, supplementing this with a more particular description of the details involved in the contemplated structure. We do not consider the claims identical, and therefore, one or the other superfluous, but view the first claim as broader than the second in the respect which we have stated and not inconsistent therewith. — Consolidated *v.* West End, 85 Fed. 622; 29 C. C. A. 386.

Where there are several claims, if some of the claims are limited to details, those which remain are prima facie not to be fettered by insisting that they contain as necessary elements, the particulars which are specifically covered elsewhere. — Bresnahan *v.* Tripp, 102 Fed. 899; 43 C. C. A. 48.

§ 190. Construction — Comparison.

In our opinion, the special office of the second and third claims was to secure combinations containing the pivoted pitman and the pitman rod described in the specification and omitted from the first claim, and the fact these claims were added is a very persuasive argument that the additional elements they protect were not secured by the first claim. Any construction which would read into the first claim these additional elements, renders it useless and unmeaning, because it gives it the same effect as the claims which follow it, and in this way shows that neither the patentee nor the patent office contemplated such an interpretation. — Mast *v.* Dempster, 82 Fed. 327; 27 C. C. A. 191. But see 177 U. S. 485.

It is necessary where the complainant limited its suit, to one claim out of the many in the patent, to make sure that the claim in issue does not receive improper color or breadth from those not in issue. — Eppler *v.* Campbell, 86 Fed. 141; 29 C. C. A. 616.

The very fact that the other elements mentioned in the specification, while expressly embraced in the other claims, were not mentioned in the sixth claim, demonstrates an intention to cover by that claim any and all forms of disintegrators in the construction of which that cylinder should be used. — Anderson *v.* Potts, 108 Fed. 379; 47 C. C. A. 409.

Separate claims are not to be construed as identical unless fairly unavoidable. — Lamson *v.* Hillman, 123 Fed. 416; 59 C. C. A. 510.

United *v.* California, 25 Fed. 475; Cohansey *v.* Wharton, 28 Fed. 189; Tondeur *v.* Stewart, 28 Fed. 561; Smead *v.* Union, 44 Fed. 614; National *v.* American, 53 Fed. 367; Felix *v.* Ledos, 54 Fed. 163.

That a construction which would render two claims substantially identical should be avoided where possible, see O'Rourke *v.* McMullen, 160 Fed. 933.

Bresnahan *v.* Tripp, 102 Fed. 899; Thomson-Houston *v.* Nassau, 110 Fed. 647.

§ 191. Construction — Dissecting.

It is manifestly just to a patient and meritorious inventor that the court should be careful not to regard with too much importance the mere mechanical resemblance in the parts of the combination, or the combination as a whole, to the neglect of the result, and the success and efficiency with which the object aimed at is accomplished. — Kalamazoo *v.* Duff, 113 Fed. 264; 51 C. C. A. 221.

§ 192. Construction — Drawings.

When a drawing merely shows one special construction not pointed out and defined as to its value, and the device is broadly claimed, the drawing alone will not serve to limit the claim so as to save it from being void for broadness. — Consolidated *v.* Metropolitan, 60 Fed. 93; 8 C. C. A. 485.

DeLamater *v.* Heath, 58 Fed. 414.

We know of no principle of patent construction which, in such a case (the improvement being novel) would require the court to read into the claim the particular concrete form of improvement shown in the drawings and in the descriptions of such drawings. — Consolidated *v.* Littaner, 84 Fed. 164; 28 C. C. A. 133.

§ 193. Construction — Duplication.

While, according to strict rules of law, two distinct claims for the same substantial matter, differing only in nonessentials, cannot both be sustained, yet out of regard to the frailty of human methods of expression, and the variety of views among different legal judicial tribunals as to the construction of instruments of the character of letters patent, and conceding also, the difficulty of always correctly defining what one's invention really is, the practice has become settled to allow the same substantial invention to be stated in different ways, very much as the same cause of action, or the same offense intended to be covered by indictment, are permitted to be propounded in different counts, with a general verdict on all of them. — Dececo *v.* Gilchrist, 125 Fed. 293; 60 C. C. A. 207.

§ 194. Construction — Equivalents.

Though a claim is not entitled to the broad construction it would appear to imply, it still may be held to be infringed by a construction which comes within a limited construction of such claim. — Lawther *v.* Hamilton, 124 U. S. 1; 31 L. Ed. 325; 8 S. Ct. 342.

Among cases which run to the other extreme, where the range of equivalents is held to be very narrow are Masten *v.* Hunt, 51 Fed. 216; 55 Fed. 78; Ball *v.* Ball, 58 Fed. 818; Ball *v.* Edgarton, 96 Fed. 489; Millard *v.* Chase, 108 Fed. 399. In some of this class the nature of the invention prohibited anything except the narrowest range of equivalents, it being a practical rule

that the range is proportionate to the extent of the invention; but some are within the expressions of Reece *v.* Globe, 61 Fed. 958, to the effect that words and phrases which might have been omitted may be so introduced as to leave the courts no option except to regard them as limitations. — U. S. Peg-Wood *v.* Sturtevant, 125 Fed. 382; 60 C. C. A. 248.

Where two patents like those in question relate to improved mechanical arrangement, and where the structural and mechanical adaptations are so entirely different, and the modes of operation so entirely unlike, the situation does not admit of the doctrine of equivalents as a foundation for finding and holding infringement. Each should stand upon its merits, unaided by a liberal rule of judicial construction extending the claims beyond the mechanical arrangement described. — Yawman *v.* Library, 147 Fed. 246; 77 C. C. A. 388.

§195. Construction — Expanding.

It is well known that the terms of the claim in letters patent are carefully scrutinized in the Patent Office. Over this part of the specification the chief contest generally arises. It defines what the office, after a full examination of previous inventions and the state of the art, determines the applicant is entitled to. The courts therefore should be careful not to enlarge by construction the claim which the Patent Office has admitted, and which the patentee has acquiesced in, beyond the fair interpretation of its terms. — Burns *v.* Meyer, 100 U. S. 671; 25 L. Ed. 738.

Court will not import elements that would operate to so enlarge its scope as to cover an invention not indicated upon its face. — Wollensak *v.* Sargent, 151 U. S. 221; 38 L. Ed. 137; 14 S. Ct. 291.

Day *v.* Fairhaven, 132 U. S. 98.

While this may be done (reading an old element into a claim) with a view of showing the connection in which a device is used, and proving that it is an operative device, we know of no principle of law which would authorize us to read into a claim an element which is not present, for the purpose of making out a case of novelty or infringement. The difficulty is that, if we once begin to include elements not mentioned in the claim, in order to limit such claim, and avoid a defense of anticipation, we should never know when to stop. — McCarty *v.* Lehigh, 160 U. S. 110; 40 L. Ed. 358; 16 S. Ct. 240.

The patent was for an improvement in burglar-proof safes. There was no claim made upon the lock, but any suitable locking device was specified. Defendant applied the lock shown in the patent in suit to a jail cage. *Held:* In this case there was no claim for a lock or locking device, but for an improvement in safes; and it would unquestionably be extending the terms of the patent to afford protection against infringement in the use of a lock omitting the principal element mentioned in the specifications and claim. — Gerard *v.* Diebold, 54 Fed. 889; 4 C. C. A. 644.

Keystone *v.* Phœnix, 95 U. S. 274; McClain *v.* Ortmayer, 141 U. S. 419.

The enlargement of a claim to cover infringement beyond the scope of the application would render the patent void. — Erie *v.* American, 70 Fed. 58; 16 C. C. A. 632.

De La Vergne *v.* Valentine, 66 Fed. 771.

We do not entertain any doubt that there must be incorporated into these claims, by implication, means for maintaining the contact device and the conductor in their normal working relations. — Thomson-Houston *v.* Union, 86 Fed. 636; 30 C. C. A. 313.

The statute provides for a correction of defective patents by means of reissue, and we are of the opinion that a court of equity has no power, in a suit for infringement, to give existence on the theory of correcting a mistake, to a patent never issued in the mode provided by law, and adjudge damages for its infringement. — Chase *v.* Ide, 89 Fed. 491; 32 C. C. A. 260.

That elements not clearly indicated as part of a combination cannot be read into the claims, see Wilson *v.* McCormick, 92 Fed. 167; 34 C. C. A. 280.

While the patent is notice of the claims which it contains and allows, it constitutes an estoppel of the patentee from claiming under that or any subsequent patent any combination or improvement there shown which he has not clearly pointed out and distinctly claimed as his discovery or invention when he received his patent. It is a complete and a legal notice to every one — notice on which every one has a right to rely — that he may freely use such improvements and combinations without claim or molestation from the patentee. It would constitute rank injustice to permit an inventor, after a combination or device that he did not distinctly claim in his patent had gone into general use, and years after his patent had been granted, to read that combination or device into one of the claims of his patent, and to recover for its infringement of every one who had used it upon the faith of his solemn declaration that he did not claim it. This would be the effect of a reversal of the decree below.— M'Bride *v.* Kingman, 97 Fed. 217; 38 C. C. A. 123.

Building *v.* Eustis, 65 Fed. 804; Stirrat *v.* Mfg. Co. 61 Fed. 980; Adams *v.* Lindell, 77 Fed. 432.

It is not within the rightful power of the courts to enlarge or restrict the scope of patents which by mistake, were issued in terms too narrow or too broad to cover the invention, however manifest the fact and extent of the mistake may have shown to have been. — United States Repair *v.* Assyrian, 100 Fed. 965; 41 C. C. A. 123.

The object of the claim in a patent is to publish to the world the precise nature of the invention which the patentee seeks to protect. He cannot demand that there shall be imported into it an element which is not there distinctly stated or necessarily implied. — Santa Clara *v.* Prescott, 102 Fed. 501; 42 C. C. A. 477.

In view of the fact that the invention was the hanging of the motor below the car, one end being centered upon the axle, and the other end being flexibly attached by springs to the truck frame, it cannot be subdivided, and claim four must be construed to include the flexible support of the off end of the motor from an independent structure which is the truck frame, or from the independently mounted body of the vehicle. — Sprague *v.* Nassau, 102 Fed. 761; 42 C. C. A. 612.

That reference to a subsequent patent to the same inventor may not be made for the purpose of expanding the claims of the patent in suit, see Union *v.* Battle Creek, 104 Fed. 337; 43 C. C. A. 560.

The courts will not, in the absence of an inclusive claim, go into the history of the art, to ascertain what was really discovered, and what might have been patented, had the patentee chosen. The patentee will be taken at his word, and protected only according to the terms in which he has himself demanded protection. — Consolidated *v.* Seybold, 105 Fed. 978; 45 C. C. A. 152.

The court is not at liberty by construction to expand a claim beyond the fair meaning of its terms. This claim is for a combination. Its terms are explicit and clear. It needs no interpretation. It speaks for itself. The court must take the claim as it finds it. — Pittsburg *v.* Pittsburg, 109 Fed. 644; 48 C. C. A. 580.

The claim does not contain any apt language which would suggest to a casual reader that the patentee intended to incorporate as one of the elements thereof the invention consisting of the supplemental chamber and a slotted partition wall, which are covered completely by the first claim; and in the absence of words which do clearly indicate such a purpose, we are not disposed to import into a claim a feature of construction already protected by another claim, merely for the purpose of sustaining the claim, and subjecting another to the charge of infringement. — Metallic *v.* Brown, 110 Fed. 665; 49 C. C. A. 147.

McCarty *v.* Railroad, 160 U. S. 110; Stearns *v.* Russell, 85 Fed. 218; Wilson *v.* Machine Co. 92 Fed. 167.

The most liberal rule of construction known to the patent law will not sanction such an interpretation of the specification and claims of a patent, or such an expansion of the invention (viz., disregarding the specific feature repeatedly mentioned as the essence of the invention). Such a construction and enlargement of the claim are manifestly a contradiction of its specific terms, and an attempt to read into the patent a structure never contemplated by the patentee, and entirely outside of his invention. — General *v.* Webster, 113 Fed. 756; 51 C. C. A. 446.

If this tipping capacity had been pointed out, and even this indefinite direction given by the patentee as to the mode of securing the operation, the patent might possibly be saved. But neither the advantage of such a function, nor any hint that it is in any wise dependent upon the normal tension of the retaining wires, is to be found in the patent. How, then, is it possible for the public to obtain a knowledge of this new function? — Goodyear *v.* Rubber, 116 Fed. 363; 53 C. C. A. 583.

If, when thus examined, the specification answers the calls of the claim, there is no difficulty. But one may not read into a claim an element not contained in it when its meaning is once settled by construction. — Canda *v.* Michigan, 124 Fed. 486; 61 C. C. A. 194.

Stillwell-Bierce *v.* Eufaula, 117 Fed. 410; Deering *v.* Winona, 155 U. S. 286; Goshen *v.* Bissell, 72 Fed. 67; Roberts *v.* Nail, 53 Fed. 920; Campbell *v.* Duplex, 86 Fed. 315.

Neither can a feature of construction or an element covered by one claim be read into another in which it is not mentioned. — Penfield *v.* Potts, 126 Fed. 475; 61 C. C. A. 371.

Wilson *v.* McCormick, 92 Fed. 167; Canda *v.* Michigan, 124 Fed. 486.

We know of no authority for reading into a claim features which have been omitted, although shown in the specifications, and none which would justify us in suffering such enlargement of this claim for the purpose of increasing the damages justly recoverable for the infringement of the patented portions of the infringing machine. We may, beyond doubt, look to the specifications and drawings for the purpose of understanding the claims, or that we may see that the device is useful or operative, and sometimes for the purpose of limiting a claim to the particular device described, but we may not enlarge

a claim by including therein elements which are not claimed as such. — Penfield *v.* Potts, 126 Fed. 475; 61 C. C. A. 371.

McCarty *v.* Lehigh, 160 U. S. 110; Stearns *v.* Russell, 85 Fed. 218.

This is not a question of the construction of a patent or of the application of the doctrine of equivalents. It is a question whether the court will reconstruct the Whitley patent in order to cover a device in which the essence of the invention covered by the patent has been eliminated. — Whitley *v.* Winsor, 127 Fed. 338; 62 C. C. A. 220.

Under a well-settled rule, mere utility cannot serve to enlarge the scope of an invention which is limited to the structure disclosed in the patent — Wilson *v.* Calculagraph, 144 Fed. 91; 75 C. C. A. 249.

The rule is fundamental, in the construction of patents, that the claim in the patent is the measure of the invention. The specification may be referred to to explain any ambiguity in the claim, but it cannot be referred to for the purpose of expanding or changing the claim. — National *v.* New England, 151 Fed. 19; 80 C. C. A. 485.

Keystone *v.* Phœnix, 95 U. S. 274; McClain *v.* Ortmayer, 141 U. S. 419.

If we import the specifications into the claims it would seem that this characteristic of the vapor holder should go with it, as showing what vapor holder the patentee means by his claim. — American *v.* Cleveland, 158 Fed. 978; 86 C. C. A. 182.

§ 196. Construction — Functional.

We think it must be conceded that the movement of a machine irrespective of the mechanism which causes it cannot be patented. The claim must be restricted to the mechanism which causes the movement, subject, of course, to the rule of equivalents, which operates liberally in favor of the grantee where the patent is primary in nature, making a distinct advance in the progress of the art; and this patent, in our opinion, is of that character. When we examine the mechanism we find in the appellant's machine described in the patent a rocking or tilting device, and in the appellee's a lifting and dropping device. The appliances are essentially different. They do different things in distinct ways. The one rocks or tilts the mold plates, the other alternately lifts and drops them. Are we justified in holding that these two essentially distinct devices are equivalents, simply because the ultimate result is the same? We think not, for that would be construing the claim so as to cover the movement alone and not the mechanism producing it. It would be virtually giving a patent for the result, regardless of how reached. — American *v.* Sexton, 139 Fed. 564; 71 C. C. A. 548.

Burr *v.* Duryea, 1 Wall. 320; Merrill *v.* Yeomans, 94 U. S. 568; Wessell *v.* United, 139 Fed. 11.

§ 197. Construction — Generic.

If the patent be for a whole machine the party can maintain a title to it only by establishing that it is substantially new in its structure and mode of operation. — Evans *v.* Eaton, 7 Wheat. 356; 5 L. Ed. 472.

See s. c. 3 Wheat. 454.

Being satisfied that he was, in fact, the inventor of the general process described and bodied forth in the specification, how can we, by any fair rule of construction, circumscribe this claim in such a manner as that it shall only cover the process applied in the precise degree and the precise means or

machinery pointed out? Had the process been known and used before and not been Tilghman's invention, he could not then have claimed anything more than the particular apparatus described in his patent; but being the inventor of the process, as we are satisfied was the fact, he was entitled to claim it as he did. — Tilghman *v.* Proctor, 102 U. S. 707; 26 L. Ed. 279.

A patentee who is the first to make an invention is entitled to his claim for all the uses and advantages which belong to it. — Stow *v.* Chicago, 104 U. S. 547; 26 L. Ed. 816.

Woodman *v.* Stimson, 3 Fish. P. C. 98; Tucker *v.* Spalding, 80 U. S. 453; Graham *v.* Mason, 5 Fish. P. C. 1.

Unless the description is sufficiently clear and full to enable one skilled in the art to use the invention, the invention, though it be a pioneer cannot have a broad construction applied to its claims. — Béné *v.* Jeantet, 129 U. S. 683; 32 L. Ed. 803; 9 S. Ct. 428.

In view of the fact that the inventor was a pioneer in his art, and invented a principle which had gone into almost universal use in this country, we think he is entitled to a liberal construction of his claim, and that the infringing device, containing as it does all the elements of his combination should be held as an infringement, though there are superficial dissimilarities in their construction. — Sessions *v.* Romadka, 145 U. S. 29; 36 L. Ed. 609; 12 S. Ct. 799.

The Circuit Court of Appeals concurred with the Circuit Court that unless the patents sued on embodied a pioneer invention, the defendant's machine was so differentiated from either of the others that the charge of infringement could not be maintained. The Circuit Court held all complainant's patents to be only improvements on the prior art. The Circuit Court of Appeals held that the patent was entitled to be treated as embodying primary invention. We think that none of complainant's patents embodied primary invention, and we concur with both the courts below that, this being so, there was no infringement. — Kokomo *v.* Kitselman, 189 U. S. 8; 47 L. Ed. 689; 23 S. Ct. 521.

The patentee was a pioneer, in that he designed a new way to accomplish a desired result, but upon the same general idea which he had unsuccessfully tried to work out in his earlier patent. His later patent was the bridge and not a mere step, which carried from failure to success. It is not important now to determine the grade of its pioneership, and whether it may be classed in the list of those inventions which are of the highest rank; but it was an invention created to achieve great necessities and overcome great hindrances, and was one of wide breadth. A court would not be justified in adopting "a narrow or astute construction," which should minimize the character of the invention, leave its real scope open to trespassers and thus "be fatal to the grant." The claims of the patent do not contract the grant to narrower limits than those, which the invention as made by the patentee, literally covered; and the claims, therefore, are not limited to the precise mechanical means described in the specification. The rule which permits, and indeed compels, courts to give a wide range to the equivalents which a broad or pioneer patent can include, is thus expressed in Miller *v.* Mfg. Co. 151 U. S. 186. "If the invention is broad or primary in its character, the range of equivalents will be correspondingly broad, under the liberal construction which the courts give to such inventions." — Westinghouse *v.* New York, 63 Fed. 962; 11 C. C. A. 528.

On the whole case, we are satisfied that the Gorham binder was a primary or pioneer patent of the highest merit, that it attained a result wholly new in a new way, and that in the consideration of alleged infringements of it, the patentee is entitled to all the liberality of treatment accorded to that comparatively rare class of patents. — McCormick *v.* Aultman, 69 Fed. 371; 16 C. C. A. 259.

It is conspicuously one of those pioneer inventions which entitle the proprietor to a liberal protection from the courts in construing the claim. But there is a limit to the judicial liability in this direction. If an inventor is ambiguous or obscure, or halt or limp in his language of description, the courts will help him out, and so construe the claim as to give distinct identity to his device. If there be a doubt in the mind of the court or the jury on the issue of mechanical equivalency, the court will give and instruct the jury to give, the benefit of the doubt to the pioneer inventor. But where the inventor falls so far short in his description as to claim only the result which his machine accomplishes, and omits an explicit definition of the means by which he does it, as in the case at bar, the courts have another duty to perform, one which they owe to the public and to the worthy fraternity of inventors, and must decline to give him general rights where he is entitled only to special rights. — Boyden *v.* Westinghouse, 70 Fed. 816; 17 C. C. A. 430.

Limitations upon the claims by which the defendant seeks to avoid infringement proceed upon the initial fallacy, that in a generic process patent every phenomenon observed during operation and every minute detail described must be read into the claims and that the least departure from the claims as so construed avoids infringement. The position is not tenable. In a patent like Bradley's the claims should be as broad as the invention and, even if unnecessary and unreasonable limitations are incorporated in the claims, the court should interpret them liberally and not permit a defendant to escape who reaches the same result by analogous means, although he may employ additional elements and improve mechanical appliances. — Electric *v.* Pittsburg, 125 Fed. 926; 60 C. C. A. 636.

Ventilating Co. *v.* Fuller, 57 Fed. 626; Tilghman *v.* Proctor, 102 U. S. 707.

To use the language of counsel, the court ought "to refer back to the specifications, and read into the claims those elements which are therein specified as being the means by which such functions are performed." The claims of a patent should be construed, where they reasonably may be, to cover the entire invention of the patentee; and where a patent contains several claims, some of which are limited to details, the others are, prima facie, not to be restricted by insisting that they contain, as necessary elements, the particulars which are specifically covered elsewhere. — Los Angeles *v.* Æolian, 143 Fed. 880; 75 C. C. A. 88.

Risdon *v.* Trent, 92 Fed. 375; Mast *v.* Dempster, 82 Fed. 327; Bresnahan *v.* Tripp, 102 Fed. 899.

§ 198. Construction — Improvement.

Some inventions embrace only a part of a machine, and in such case the part or parts claimed must be specified and pointed out so that constructors, other inventors and the public may know how to make the invention, and what is withdrawn from general use. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Bailey was not the first to conceive the idea of the device in suit. The same thing had been done by other means. The claim must be confined to

the specific device described and claimed. — Blake *v.* San Francisco, 113 U. S. 679; 28 L. Ed. 1070; 5 S. Ct. 692.

Prouty *v.* Ruggles, 16 Pet. 336; Rowell *v.* Lindsay, 113 U. S. 97.

If his device contains a patentable invention, it is but one in a series of improvements all having the same general object and purpose; and that in construing the claims of his patent, they must be restricted to the precise form and arrangement of parts described in his specification, and to the purpose indicated therein. — Bragg *v.* Fitch, 121 U. S. 478; 30 L. Ed. 1008; 7 S. Ct. 978.

If the complainant's device constituted a patentable invention, it is clearly " one in a series of improvements, all having the same general object and purpose; and that, in construing the claims of his patent, they must be restricted to the precise form and arrangement of parts described in his specifications, and to the purpose indicated therein." — Fox *v.* Perkins, 52 Fed. 205; 3 C. C. A. 32.

Bragg *v.* Fitch, 121 U. S. 483; Caster *v.* Speigel, 133 U. S. 360.

That an element in a prior patent to the same inventor cannot be imported into a claim of a later patent to make that claim cover a desired combination, see Boston *v.* Woodward, 82 Fed. 97; 27 C. C. A. 69.

If the patent alleged to be infringed had been of a primary character, or one embodying a distinct and substantial advance in the art to which it relates, we should probably be able to find the equivalents of the elements. — Smith *v.* Ridgley, 103 Fed. 875; 43 C. C. A. 365.

McCormick *v.* Aultman, 69 Fed. 371; Bundy *v.* Detroit, 94 Fed. 524.

The invention claimed being only for improvements in well-known processes, and in no sense one of a pioneer character, the patentee must be held to a strict construction of his claims. — De Lamar *v.* De Lamar, 117 Fed. 240; 54 C. C. A. 272.

Wright *v.* Yuengling, 155 U. S. 47; Westinghouse *v.* Power-Brake, 170 U. S. 562.

Limited to specific combination — see Bibb *v.* Bowers, 142 Fed. 137; 73 C. C. A. 355.

Singer *v.* Cramer, 192 U. S. 265.

It must be remembered that the patent sued on is in no sense a pioneer one, but a mere improvement. In such cases the patentee is limited to the precise devices and combinations shown and claimed in his patent. — Cumming *v.* Baker, 144 Fed. 395; 75 C. C. A. 373.

Boyd *v.* Janesville, 158 U. S. 260; Brown *v.* Huntington, 134 Fed. 735; Rich *v.* Baldwin, 133 Fed. 920; King *v.* Bilhofer, 127 Fed. 127; Tabor *v.* Photograph, 87 Fed. 871; Ransome *v.* Hyatt, 69 Fed. 148; Ney *v.* Ney, 69 Fed. 405; Overweight *v.* Improved, 94 Fed. 155.

§ 199. Construction — Limitation — Broadening by Amendment.

Courts should regard with jealousy and disfavor any attempts to enlarge the scope of an application once filed, or of a patent once granted, the effect of which would be to enable the patentee to appropriate other inventions made prior to such alteration, or to appropriate that which has, in the meantime, gone into public use. — Chicago *v.* Sayles, 97 U. S. 554; 24 L. Ed. 1053.

§ 200. Construction — Limitation — Disclaimer.

We are aware of no principle which will permit a patent to be defeated for want of novelty in respect to the subject-matter which has been eliminated from it by disclaimer. It is also urged that the effect of the disclaimer was to limit the method of the patent to the exact elements mentioned. If these elements only, instead of elements such as these named, had been mentioned, there would be much force in the argument. — Schwarzwalder *v.* N. Y. 66 Fed. 152; 13 C. C. A. 380.

It is material to observe that the invention claimed is the combination of certain described elements. This amounts to a disclaimer of anything new in the elements themselves. — Wells *v.* Curtis, 66 Fed. 318; 13 C. C. A. 494. Corn Planter Pat. 23 Wall. 181; Miller *v.* Brass Co. 104 U. S. 350; Rowell *v.* Linsay, 113 U. S. 97.

If one particular branch of the art of working in wood — cabinet making, for example — had never used circular saws, because they were supposed to be impracticable or useless or not economical, although such saws were used in other branches of the art, it might be invention to introduce them in cabinet making; and the individual who showed that they were useful, practicable, and economical in that branch of the art might be entitled to a patent for a circular saw in combination with the other parts of an old machine. But his specification and claim would be expected to indicate just what it was he had invented and what he claimed. An individual who had invented some specific improvement in circular saws generally — something novel and useful and applicable to those tools in every branch of the wood-working art — might also obtain a patent, with a claim covering all circular saws, which would be good to restrain infringement of his particular improvement. But it would be a startling proposition that he could, 13 years afterwards, file a disclaimer of any combination containing circular saws so used (with his improvement or without) on the theory that no one had used them in that branch of the art before. We do not understand that the statutory provisions allowing a disclaimer to be filed can be thus availed of to change the invention claimed in a patent, and we are referred to no authorities which sustain complainant's contention. The object of a disclaimer is well expressed in Chem. Wks. *v.* Lauer, Fed. Cas. 12,135:

"It is designed to allow a patentee to recover on one claim of his patent, notwithstanding other claims in it are void for want of novelty. But it requires that the parts claimed without right, and the parts rightfully claimed, shall be definitely distinguishable, as a matter of fact, on the face of the claims; that is, to be definitely distinguished from each other in the claims." — Albany *v.* Worthington, 79 Fed. 966; 25 C. C. A. 258.

Whatever may have been the transactions between the applicant and the patent office, and whatever light may be thrown upon obscurities in the patent by the wrapper and contents, it is the patent as issued by which the patentee's right to a monopoly must be tested. When it expressly declares that there is some other process to which it does not apply, and in plain and unambiguous language gives the earmarks by which that other process is to be distinguished from the process of the patent, the public has the right to insist that the patentee shall abide by the disclaimer he has made and proclaimed. — Jackson *v.* Birmingham, 79 Fed. 801; 25 C. C. A. 196.

§ 201. Construction — Limitation — By Applicant.

Cases arise not unfrequently, where the actual invention described in the specification is larger than the claims of the patent; and in such cases it is undoubtedly true that the patentees in a suit for infringement must be

limited to what is specified in the claims annexed to the specification, but it is equally true that the claims of the patent, like other provisions in writing, must be reasonably construed, and in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims; nor is it incorrect to say that due reference may be had to the specification, drawings and claims of a patent, in order to ascertain its true legal construction. In construing patents it is the province of the court to determine what the subject-matter is upon the whole face of the specification and the accompanying drawings. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

Brooks *v.* Fisk, 15 How. 215; Curt. Pat. 4th Ed. sec. 222.

It is possible that the inventor was entitled to a broader claim than that to which he limited himself; but if he described and claimed only a part of his invention, he is presumed to have abandoned the residue to the public. — Deering *v.* Winona, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

McClain *v.* Ortmayer, 141 U. S. 419.

The patentee having described in his specification and declared to be an essential part of his invention an element thereof and having made it a subject of his claims, is not now at liberty to say it is immaterial, or that a device which dispenses with it is an infringement, though it accomplish the same purpose in, perhaps, an equally effective manner. — Wright *v.* Yuengling, 155 U. S. 47; 39 L. Ed. 64; 15 S. Ct. 1.

Vance *v.* Campbell, 66 U. S. 427; Union *v.* Desper, 101 U. S. 332; Gage *v.* Herring, 107 U. S. 640; Rees *v.* Gould, 82 U. S. 187; Brown *v.* Davis, 116 U. S. 237.

It is insisted that the claims of the patent should have a liberal construction, and that the special devices described in the specification "are not necessary constituents of the claims." Machine Co. *v.* Lancaster, 129 U. S. 263. This just principle is one that is well recognized, but another principle is, at the present stage of the patent law, of equal force, which is that the construction of patents must be in conformity with the self-imposed limitations which are contained in the claims. — Groth *v.* International, 61 Fed. 284; 9 C. C. A. 507.

Following
McClain *v.* Ortmayer, 141 U. S. 419.

When a patentee has practically disclaimed other devices by stating in his specifications that they existed before his own was contrived, such other devices may fairly be considered to be part of the prior art, when he brings suit upon the patent issued to him upon the representation made in such specifications. — Lyons *v.* Drucker, 106 Fed. 416; 45 C. C. A. 368.

Where the patentee specifies a particular form as a means by which the effect of the invention is produced, or otherwise confines himself to a particular form of what he describes, he is limited thereby in his claim for infringement. — Greene *v.* Buckley, 135 Fed. 520; 68 C. C. A. 70.

Walker on Pat. sec. 363.

The patentee, having originally covered his real invention by the last of the original 10 claims, and having unwarrantably attempted by said other claims to cover a broader invention, secured a patent for certain other claims, limited to the definite construction shown and described in his application. In so doing he has committed himself to a definite interpretation and limitation of his claims. — Greene *v.* Buckley, 135 Fed. 520; 68 C. C. A. 70.

Since the patentee has deliberately chosen to make this parallelism a feature of these two claims, it is not for the court to strike it out. — Whittemore *v.* Reinhardt, 159 Fed. 707; 86 C. C. A. 461.

Where one claim of a patent specifically names two elements, and another claim specifically names these two elements and in addition thereto a third element, it must be presumed that the patentee intended to limit the claims to the elements enumerated. — Marshall *v.* Pettingell-Andrews, 164 Fed. 862; C. C. A.

§ 202. Construction — Limitation — Elements of Claim.

A claim must be limited to the elements claimed, or their equivalents. — Gage *v.* Herring, 107 U. S. 640; 27 L. Ed. 601; 2 S. Ct. 819.

Meter *v.* Desper, 101 U. S. 332; Eames *v.* Godfrey, 1 Wall. 78; Murray *v.* Clayton, L. R. 10 Ch. 675 note; Clark *v.* Adie, L. R. 10 Ch. 667.

Where the claims covered specifically cylinders with chambers or depressions, they cannot be construed to cover plain cylinders. — Hendy *v.* Golden, 127 U. S. 370; 32 L. Ed. 207; 8 S. Ct. 1275.

Fay *v.* Cordesman, 109 U. S. 408; Sargent *v.* Hall, 114 U. S. 63; Shepard *v.* Carrigan, 116 U. S. 593; White *v.* Dunbar, 119 U. S. 47; Crawford *v.* Heysinger, 123 U. S. 589.

Must be restricted and confined to the specific combination described and each element pointed out as an essential part thereof. — Knapp *v.* Morss, 150 U. S. 221; 37 L. Ed. 1059; 14 S. Ct. 81.

Duff *v.* Sterling, 107 U. S. 639; Newton *v.* Furst, 119 U. S. 373; Bragg *v.* Fitch, 121 U. S. 478; Crawford *v.* Heysinger, 123 U. S. 589; Dreyfus *v.* Wiese, 124 U. S. 32; also Sargent *v.* Hall, 114 U. S. 63; Eddy *v.* Denis, 95 U. S. 560; McCormick *v.* Talcott, 61 U. S. 402.

The patentee having described in his specification and declared to be an essential part of his invention an element thereof and having made it a subject of his claims, is not now at liberty to say it is immaterial, or that a device which dispenses with it is an infringement, though it accomplish the same purpose in, perhaps, an equally effective manner. — Wright *v.* Yuengling, 155 U. S. 47; 39 L. Ed. 64; 15 S. Ct. 1.

Vance *v.* Campbell, 66 U. S. 427; Union *v.* Desper, 101 U. S. 332; Gage *v.* Herring, 107 U. S. 640; Rees *v.* Gould, 82 U. S. 187; Brown *v.* Davis, 116 U. S. 237.

In insisting now that the defendant has incorporated this vital feature in its safety-valve, the complainant seems to place itself precisely within the animadversion of the Supreme Court in the case of Western *v.* Ansonia, 114 U. S. 447, where it says, "It has been held by this court that the scope of letters patent should be limited to the invention covered by the claim; and, though the claim may be illustrated, it cannot be enlarged by the language of other parts of the specification." — Ashton *v.* Coale, 52 Fed. 314; 3 C. C. A. 98.

The patentee has disclosed only one particular construction operating in a defined way, and this construction he has claimed. It is idle to speculate whether or not he might have made a broader claim. The court is powerless to relieve him from the consequences of self-imposed limitations. — Lewis *v.* Pa. 59 Fed. 129; 8 C. C. A. 41.

Keystone *v.* Phœnix, 95 U. S. 274; Fay *v.* Cordesman, 109 U. S. 408; Rowell *v.* Lindsay, 113 U. S. 97; McClain *v.* Ortmayer, 141 U. S. 419.

A patent grants no exclusive right except to what is distinctly covered by the claims. — Thomasson *v.* Bumpass, 78 Fed. 491; 24 C. C. A. 180.

Grant *v.* Walter, 148 U. S. 547; Western *v.* Ansonia, 114 U. S. 447; Ashton *v.* Coale, 52 Fed. 318; McClain *v.* Ortmayer, 141 U. S. 419.

The patent was for a narrow improvement. *Held:* He must be held to the combination which is described and claimed so explicitly. — Hardison *v.* Brinkman, 156 Fed. 962; 87 C. C. A. 8.

Keystone *v.* Phœnix, 95 U. S. 274.

When a claim is explicit, the courts cannot alter or enlarge it. — Dey *v.* Syracuse, 161 Fed. 111.

Keystone *v.* Phœnix, 95 U. S. 274.

A patent for described means or mechanism to accomplish a desired end must be limited to the particular means described in the specification or their clear mechanical equivalents, and does not embrace or cover any other mechanical structure which is substantially different in its construction or operation. — Union *v.* Diamond, 162 Fed. 148; 89 C. C. A. 172.

Eames *v.* Godfrey, 1 Wall. 78; Boyd *v.* Janesville, 158 U. S. 260; Westinghouse *v.* Boyden, 170 U. S. 537; Bryce *v.* National, 116 Fed. 186; Jewell *v.* Jackson, 140 Fed. 340.

§ 203. Construction — Limitation — Failure to Claim.

What is described in the specification of a patent and not claimed is presumed to have been old. — Electric *v.* Boston, 139 U. S. 481; 35 L. Ed. 250; 11 S. Ct. 586.

It is a settled principle of law, enacted by statute and announced by the courts that a patentee and his assignees have no right to the exclusive use of anything patented which the inventor has not distinctly claimed in his application for the patent. — Ashton *v.* Coale, 52 Fed. 314; 3 C. C. A. 98.

A description in a specification of details which the claim does not make elements of the combination, and which are not essential to it, simply points out one method of using it, and does not restrict the claim to these details. — Brammer *v.* Schroeder, 106 Fed. 918; 46 C. C. A. 41.

It may be that Farwell's invention would have entitled him to make a broader claim, but his patent makes no such broad claim. It is in this respect like the patent under consideration in Keystone *v.* Phœnix, 95 U. S. 274. — Schreiber *v.* Adams, 117 Fed. 830; 54 C. C. A. 128.

McClain *v.* Ortmayer, 141 U. S. 419; Seabury *v.* Johnson, 76 Fed. 456.

If in truth Harder understood the now stated objections, and was the first to conceive and embody a way of overcoming them, he carefully refrained from saying so. Now a patent is to be sustained not for what an inventor may have done in fact, but only for what he "particularly points out and distinctly claims" in his open letter. — Harder *v.* United States, 160 Fed. 463; 87 C. C. A. 447.

Fastener *v.* Kraetzer, 150 U. S. 116; Indiana *v.* Crocker, 103 Fed. 496; Avery *v.* Case, 148 Fed. 214.

§ 204. Construction — Limitation — General Rules.

It is clear that a party cannot entitle himself to a patent for more than his own invention; and if his patent includes things before known, or before

in use, as his invention, he is not entitled to recover, for his patent is broader than his invention. — Evans *v.* Eaton, 7 Wheat. 356; 5 L. Ed. 472.

See s. c. 3 Wheat. 454.

It is obvious that the inventor claims as his improvement, not the whole of the engine, nor the whole of the wheel, but both merely in the superior form which he particularly sets out. He therefore does not claim too much, which might be bad. — Hogg *v.* Emerson, 6 How. 437; 12 L. Ed. 505.

Hill *v.* Thompson, 2 March. 435; 4 Wash. C. C. 68; Godson on Pat. 189; Kay *v.* Marshall, 1 Mylne, 373; 1 Story R. 273; 2 Mas. 112; 4 B. & A. 541; Boville *v.* Moon, 2 March. 211.

It is true that the patent cannot be extended beyond the claim. That bounds the patentee's right. — American *v.* Fiber Co. 90 U. S. 566; 23 L. Ed. 31.

In making his claim the inventor is at liberty to choose his own form of expression, and while the courts may construe the same, in view of the specifications and the state of the art, they may not add to or detract from the claim. And it is equally true that, as the inventor is required to enumerate the elements of his claim, no one is an infringer of a combination claim unless he uses all the elements therein. — Cimiotti *v.* American, 198 U. S. 399; 49 L. Ed. 1100; 25 S. Ct. 697.

Shepard *v.* Carrigan, 116 U. S. 593; Sutter *v.* Robinson, 119 U. S. 530; McClain *v.* Ortmayer, 141 U. S. 419; Wright *v.* Yuengling, 155 U. S. 47; Black Diamond *v.* Excelsior, 156 U. S. 611; Walk. Pat. sec. 349.

It is the chief office of a claim to particularize and limit the monopoly of use which is secured to the inventor by the letters patent. Within the limits which are by the claim marked out and definitely established as the scope of the invention, no one can venture to intrude without becoming a trespasser upon the exclusive rights secured to the inventor. The very purpose of a claim is to establish the line of demarcation between a permissive and lawful use and the forbidden and unlawful use. In its scope, its operative power, its comprehensive effect, the public have no less interest than the inventor. In drafting a claim, the applicant for the grant of a monopoly is directly dealing with the rights of the public, and, in such cases, strictness rather than elasticity of construction must obtain. The language by which the comprehensive boundaries of a claim are to be made distinctive and clear lies wholly within the selection of the inventor. He alone may choose the words to describe and particularize his invention. When chosen and used, such words must be held to be binding upon him. — Duff *v.* Forgie, 59 Fed. 772; 8 C. C. A. 261.

The statute requires the inventor to particularly point out, and distinctly claim, the improvement or combination which he claims as his discovery. Rev. St. sec. 4888. The purpose of a claim in a patent is to notify the public of the extent of the monopoly secured to the inventor, and, while it is notice of his exclusive privileges, it is no less a notice, and a legal notice, upon which everyone has a right to rely, that he disclaims, and dedicates to the public, any combination or improvement, apparent on the face of his specification, not a mere evasion of his own, which he has not there pointed out and distinctly claimed as his discovery or invention. Every one has the right to use every machine, combination, device and improvement not claimed by the patentee, without molestation from him. It would work great injustice to permit a patentee, after a combination or device which he did not claim has gone into general use, and years after his patent was granted, to read

that combination or device into one of the claims of his patent, and to recover for its infringement of everyone who has used it on the faith of his solemn declaration that he did not claim it. — Adams *v.* Lindell, 77 Fed. 432; 23 C. C. A. 223.

Keystone *v.* Phœnix, 95 U. S. 274; Miller *v.* Brass Co. 104 U. S. 350; Mahn *v.* Harwood, 112 U. S. 354; Wollensak *v.* Reiher, 115 U. S. 96; Parker *v.* Yale, 123 U. S. 87; Stirrat *v.* Mfg. Co. 61 Fed. 980; Building Co. *v.* Eustis, 65 Fed. 804.

§ 205. Construction — Limitation — Improvement.

The invention being, then, in no sense a pioneer in the art, no unexpressed meaning can be read with the claim, and the patent must be limited to the specific device described therein. — Evans *v.* Rood, 99 Fed. 990; 40 C. C. A. 209.

§ 206. Construction — Limitation — Narrow Improvement.

In a narrow claim elements cannot be held essential as infringing which could not be claimed. — Watson *v.* Cincinnati, 132 U. S. 161; 33 L. Ed. 295; 10 S. Ct. 45.

Gage *v.* Herring, 107 U. S. 640; Fay *v.* Cordesman, 109 U. S. 408.

If there were any thing more in this than mechanical skill or the aggregation of familiar devices, each operating in the old way to produce an aggregated result, it was invention of such a limited character as to require a narrow construction. — McCarty *v.* Lehigh, 160 U. S. 110; 40 L. Ed. 358; 16 S. Ct. 240.

Penna. *v.* Locomotive, 110 U. S. 490.

That a claim covering such an improvement (minor) is not entitled to a broad construction is too obvious to require the citation of authorities. — Dey *v.* Syracuse, 161 Fed. 111; 88 C. C. A. 275.

Cimiotti *v.* Fur, 198 U. S. 399; Kokomo *v.* Kitselman, 189 U. S. 8.

§ 207. Construction — Limitation — Patent Office Action Limiting.

As patents are procured ex parte, the public is not bound by them, but the patentees are. If the office refuses to allow him all he asks, he has an appeal. But the courts have no right to enlarge a patent beyond the scope of its claim as allowed by the Patent Office, or the appellate tribunal to which contested applications are referred. When the terms of a claim in a patent are clear and distinct, as they always should be, in a suit brought upon the patent, the patentee is bound by it. — Keystone *v.* Phœnix, 95 U. S. 274; 24 L. Ed. 344.

Merrill *v.* Yeomans, 94 U. S. 568.

In this case the description of appellee's invention is much broader than his claim. It seems quite clear, from the present form of appellee's specifications, and from the fact that his application for a patent was twice rejected, that he was compelled by the Patent Office to narrow his claim to its present limits before the commissioner would grant him a patent. In doing this he neglected to amend the descriptive part of his specifications. He cannot go beyond what he has claimed and insist that his patent covers something not claimed, merely because it is to be found in the descriptive part of the specifications. — Lehigh *v.* Mellon, 104 U. S. 112; 26 L. Ed. 639.

Burns *v.* Meyer, 100 U. S. 671; Keystone *v.* Phœnix, 95 U. S. 278.

In patents for combination of mechanism, limitations and provisos, imposed by the inventor, especially such as were introduced into an application after it had been persistently rejected, must be strictly construed against the inventor, and in favor of the public, and looked upon as in the nature of disclaimers. — Sargent *v.* Hall, 114 U. S. 63; 29 L. Ed. 67; 5 S. Ct. 1021.

Fay *v.* Cordesman, 109 U. S. 408; Water Meter *v.* Desper, 101 U. S. 332; Gage *v.* Herring, 107 U. S. 640.

If an applicant, in order to get his patent, accepts one with a narrower claim than that contained in his original application, he is bound by it. — Shepard *v.* Carrigan, 116 U. S. 593; 29 L. Ed. 723; 6 S. Ct. 493.

Where an applicant for a patent to cover a new combination is compelled by the rejection of his application by the Patent Office to narrow his claim by the introduction of a new element, he cannot after the issue of the patent broaden his claim by dropping the element which he was compelled to include in order to secure his patent. — Shepard *v.* Carrigan, 116 U. S. 593; 29 L. Ed. 723; 6 S. Ct. 493.

Leggett *v.* Avery, 101 U. S. 256; Goodyear *v.* Davis, 102 U. S. 222; Fay *v.* Cordesman, 109 U. S. 408; Mahn *v.* Harwood, 112 U. S. 354; Cartridge *v.* Cartridge, 112 U. S. 624; Sargent *v.* Hall, 114 U. S. 63.

Complainant is not at liberty now to insist upon a construction of his patent which will include what he was expressly required to abandon and disavow as a condition of the grant. — Sutter *v.* Robinson, 119 U. S. 530; 30 L. Ed. 492; 7 S. Ct. 376.

Shepard *v.* Carrigan, 116 U. S. 593, and cases there cited.

This court has often held that when a patentee, on the rejection of his application, inserts in his specification, in consequence, limitations and restrictions for the purpose of obtaining his patent, he cannot, after he has obtained it, claim that it shall be construed as it would have been construed if such limitations were not contained in it. — Roemer *v.* Peddie, 132 U. S. 313; 33 L. Ed. 382; 10 S. Ct. 98.

Leggett *v.* Avery, 101 U. S. 256; Goodyear *v.* Davis, 102 U. S. 222; Fay *v.* Cordesman, 109 U. S. 408; Mahn *v.* Harwood, 112 U. S. 354; Union *v.* U. S. 112 U. S. 624; Sargent *v.* Hall, 114 U. S. 63; Shepard *v.* Carrigan, 116 U. S. 593; White *v.* Dunbar, 119 U. S. 47; Sutter *v.* Robinson, 119 U. S. 530; Bragg *v.* Fitch, 121 U. S. 478; Snow *v.* Lake Shore, 121 U. S. 617; Crawford *v.* Heysinger, 123 U. S. 589.

As the claim must be held to define what the Patent Office had determined to be the patentee's invention, it ought not to be enlarged beyond the prior interpretation of its terms. — Day *v.* Fair Haven, 132 U. S. 98; 33 L. Ed. 265; 10 S. Ct. 11.

When applicant has limited his claim by including specific elements in his combination under rejection by the Patent Office he is limited thereby to his specific elements. — Phœnix *v.* Spiegel, 133 U. S. 360; 33 L. Ed. 663; 10 S. Ct. 409.

Roemer *v.* Peddie, 132 U. S. 313 and cases there cited.

A claim admitted by the Patent Office and acquiesced in by the patentee should not be enlarged by construction beyond the fair interpretation of its terms. — Haines *v.* McLaughlin, 135 U. S. 584; 22 L. Ed. 241; 10 S. Ct. 876.

Where applicant has put in a claim in the Patent Office to cover more broadly his process, and afterwards struck it out on rejection, it is well

settled, by numerous cases in this court, that under such circumstances a patentee cannot successfully contend that his patent shall be construed as if it still contained the claims which were so rejected and withdrawn. — Royer *v.* Coupe, 146 U. S. 524; 36 L. Ed. 1073; 13 S. Ct. 166.

Roemer *v.* Peddie, 132 U. S. 313; Phœnix *v.* Spiegel, 133 U. S. 360; Yale *v.* Berkshire, 135 U. S. 342; Dobson *v.* Lees, 137 U. S. 258.

Must be read and interpreted with reference to the rejected claims and to the prior state of the art, and cannot be construed to cover either. — Knapp *v.* Morss, 150 U. S. 221; 37 L. Ed. 1059; 14 S. Ct. 81.

Shepard *v.* Carrigan, 116 U. S. 593; Sutter *v.* Robinson, 119 U. S. 530.

Applicant having withdrawn rejected claims and substituted narrower claims cannot insist on construction of a reissue claim to cover original claim. — Corbin *v.* Eagle, 150 U. S. 38; 37 L. Ed. 989; 14 S. Ct. 28.

Shepard *v.* Carrigan, 116 U. S. 593; Roemer *v.* Peddie, 132 U. S. 313; Royer *v.* Coupe, 146 U. S. 524.

Where applicant has amended on rejection by patent office he is estopped to claim the scope of original claim. — Morgan *v.* Albany, 152 U. S. 425; 38 L. Ed. 500; 14 S. Ct. 627.

Acquiescence in the rejection of a claim and restriction by amendment limits the construction of the claim to the device shown. — Lehigh *v.* Kearney, 158 U. S. 461; 39 L. Ed. 1055; 15 S. Ct. 871.

Knapp *v.* Morss, 150 U. S. 221.

His acquiescence in the rulings of the patent office indicates very clearly that he should be limited to the combination claimed, and that the case is not one calling for a liberal construction. — McCarty *v.* Lehigh, 160 U. S. 110; 40 L. Ed. 358; 16 S. Ct. 240.

The patentee had acquiesced in the rejection of his claim and could not claim the benefit thereof, or of an equivalent construction of the claims allowed. — American *v.* Pennock, 164 U. S. 26; 41 L. Ed. 337; 17 S. Ct. 1.

The record shows correspondence between solicitor and examiner, in which the solicitor admitted and amended the specification to state that certain functions in question were old, but not admitting their force in application to the case in question.

Held: We agree with the defendant that this correspondence and the specification as so amended should be construed as reading the auxiliary valve into the claim, and repelling the idea that this claim should be construed as one for a method or process. — Westinghouse *v.* Boyden, 170 U. S. 537; 42 L. Ed. 1136; 18 S. Ct. 707.

Note: This case decided 5 to 4. See dissenting opinion of Shiras: "The courts should be slow to permit this construction of a patent, actually granted and delivered, to be affected or controlled by alleged interlocutions between the officers in the Patent Office and the claimant. When we consider that often the employees in the Patent Office are inexperienced persons, and the mass of business is so vast, it can be readily seen how dangerous it would be to modify or invalidate a patent, clear and definite in its terms, resorting to such uncertain sources of information."

Whether the examiners were right or wrong in so holding (narrowly limiting the claim) we are not to inquire, as the claimant did not appeal, but amended his claim and accepted a grant thereof, thereby putting himself

within the range of the authorities which hold that if the claim to a combination be restricted to specified elements, all must be regarded as material, and the limitations imposed by the inventor, especially such as were introduced into an application after it had been persistently rejected, must be strictly construed against the inventor and in favor of the public, and looked upon as in the nature of disclaimers. — Hubbell *v.* U. S. 179 U. S. 77; 45 L. Ed. 95; 21 S. Ct. 24.

Union *v.* Desper, 101 U. S. 332; Morgan *v.* Albany, 152 U. S. 425.

In order to get his patent, he was compelled to accept one with a narrower claim than that contained in his original application; and it is well settled that the claim as allowed must be read and interpreted with reference to the rejected claim and the prior state of the art, and cannot be so construed as to cover either what was rejected by the Patent Office or disclosed by prior devices. — Hubbell *v.* U. S. 179 U. S. 77; 45 L. Ed. 95; 21 S. Ct. 24.

Leggett *v.* Avery, 101 U. S. 256; Shepard *v.* Carrigan, 116 U. S. 593; Knapp *v.* Morss, 150 U. S. 227.

In view of what passed in the Patent Office, and the state of the art, we cannot regard the Kitselman patent as a pioneer patent, but think its claims must be limited in their scope to the actual combination of essential parts as shown and cannot be construed to cover other combinations of elements of different construction and arrangement. — Kokomo *v.* Kitselman, 189 U. S. 8; 47 L. Ed. 689; 23 S. Ct. 521.

We are of opinion that the Patent Office, after twice refusing to allow the patent because of prior patents referred to, was led to take favorable action owing to the peculiar form of the described bearing, and that it was the purpose to limit the patent to the peculiar device. And this view is supported by the claim in question. It contains words of limitation. It is recited therein that the combination is to be "substantially as specified," that is, as described in the specifications and shown in the drawings. — Singer *v.* Cramer, 192 U. S. 265; 48 L. Ed. 437; 24 S. Ct. 291.

Westinghouse *v.* Boyden, 170 U. S. 537.

Where an inventor seeking a broad claim, which is rejected, in which rejection he acquiesces, substitutes therefor, a narrower claim, he cannot be heard to insist that the construction of the claim allowed shall cover that which has been previously rejected. — Computing *v.* Automatic, 204 U. S. 609; 51 L. Ed. 645; 27 S. Ct. 307.

Corbin *v.* Eagle, 150 U. S. 38; Hubbell *v.* U. S. 179 U. S. 77; Leggett *v.* Avery, 101 U. S. 256; Shepard *v.* Carrigan 116 U. S. 593; Knapp *v.* Morss, 150 U. S. 221.

Thereupon Carr a nded and limited his claims by withdrawing those first filed, and substit he first claim that is now found in his patent; and, having adopted t rse, the claim in dispute must receive a strict and narrow construct ott *v.* Standard, 53 Fed. 819; 4 C. C. A. 28.

Roemer *v.* Pedd . S. 313; Sargent *v.* Safe & Lock Co. 114 U. S. 63.

The history of his second application shows that he presented and abandoned claims so worded as to have the same meaning which it has been sought to put by construction upon the claims finally presented and allowed. It is insisted that the claim granted is broader than those rejected, and therefore, cannot be limited by them; but that is a begging of the question. It can be made broader only by construction, and the effect of the decisions on the subject, as we understand them, is that a claim cannot by construction

be enlarged to include the matter of claims in the rejection of which the patentee has acquiesced. — Temple *v.* Goss, 58 Fed. 196; 7 C. C. A. 174.

A claim is limited by an amendment made and acquiesced in on application. — B. & S. Fastener *v.* B. G. Fastener, 58 Fed. 818; 7 C. C. A. 498.

Union *v.* U. S. 112 U. S. 624; Crawford *v.* Heysinger, 123 U. S. 589; Watson *v.* Railway, 132 U. S. 161.

After withdrawing a specific claim for an element, in favor of a contestant, the patentee cannot set that element up. His patent, if valid, is for the combination minus that element, a device whose novelty consists in dispensing with that element. — Shoemaker *v.* Merrow, 61 Fed. 945; 10 C. C. A. 181.

Within these lines with which the patentee has himself circumscribed his patent in the process of application for the same it must be construed, and, as thus construed there is no infringement in a compound employing that which he specifically excluded. — Dougherty *v.* Doyle, 63 Fed. 475; 11 C. C. A. 298.

Although the patentee might have made the language of his claim more broad, he is bound by the terms of limitation which he adopted. — Smith *v.* Macbeth, 67 Fed. 137; 14 C. C. A. 241.

The rule is well settled that the patentee cannot, after the issuance of his patent, broaden his claims by dropping any element which he was compelled to include in order to secure the patent. — Wheaton *v.* Norton, 70 Fed. 833; 17 C. C. A. 447.

Fay *v.* Cordesman, 109 U. S. 408; Sargent *v.* Lock Co. 114 U. S. 63; Shepard *v.* Carrigan, 116 U. S. 593; Leggett *v.* Avery, 101 U. S. 256; Vulcanite Co. *v.* Davis, 102 U. S. 222; Mahn *v.* Harwood, 112 U. S. 354; Howe *v.* National, 134 U. S. 394; White *v.* Dunbar, 119 U. S. 47.

The claim of the patent must be restricted within the limitations imposed by the patent office and accepted by the applicant. — Erie *v.* American, 70 Fed. 58; 16 C. C. A. 632.

Eagleton *v.* Mfg. Co. 111 U. S. 490; Macline *v.* Featherstone. 147 U. S. 209; Snow *v.* Railway, 121 U. S. 617; Crawford *v.* Heysinger, 123 U. S. 589; Consolidated *v.* McKeesport, 40 Fed. 21.

In view of the limitations placed upon the claims by the patent office and acquiesced in, and in view of the specific language, we are of opinion the claim cannot be construed to cover an element of a different character. — Troy *v.* Adams, 73 Fed. 301; 19 C. C. A. 505.

That claim, however, was rejected, not because functional, but because it was "altogether too broad, if not functional"; and the authorities are familiar which forbid a construction of claims allowed which will make them equivalent to broader claims rejected. — Brush *v.* Western, 76 Fed. 761; 22 C. C. A. 543.

The patentee having acquiesced in the rejection of the claim in its original form, cannot now insist that the present claim should be construed as it might have been construed if the original claim had not been rejected and withdrawn. — Olmsted *v.* Andrews 77 Fed. 835; 23 C. C. A. 488.

Roemer *v.* Peddie, 132 U. S. 313; Caster *v.* Spiegel, 133 U. S. 360; Yale *v.* Berkshire, 135 U. S. 379; Dobson *v.* Lees, 137 U. S. 258; Royer *v.* Coupe, 146 U. S. 524; Corbin *v.* Eagle, 150 U. S. 38.

It is well settled that where the patent office rejects a claim covering a certain device on its merits, and such rejection is acquiesced in, and the patent issues, the applicant cannot afterwards be allowed a construction of the claims allowed wide enough to embrace the claim which was rejected. In Morgan *v.* Albany, 152 U. S. 425, Mr. Justice Brown, speaking for the supreme court, in considering the contention that a claim should have a certain construction, said:

"But the patentee having once presented his claim in that form, and the patent office having rejected it, and he having acquiesced in such rejection, he is, under the repeated decisions of this court, now estopped to claim the benefit of his rejected claim, or such a construction of his present claim as would be equivalent thereto. Leggett *v.* Avery, 101 U. S. 256; Shepard *v.* Carrigan, 116 U. S. 593; Crawford *v.* Heysinger, 123 U. S. 589; Union *v.* U. S. 112 U. S. 624. It is true there were cases where the original claim was broader than the one allowed, but the principle is the same if the rejected claim be narrower." — Thomas *v.* Rocker, 77 Fed. 420; 23 C. C. A. 211.

That limitations which an inventor places upon an invention in a proceeding in the patent office, to gain his point and get his claim, must stand against him, even if he won his claim by other means, see Craig *v.* Michigan, 81 Fed. 870; 26 C. C. A. 659.

Whatever the invention, and whatever the patentee ought to have been allowed to incorporate into this claim it is clear that under the circumstances of this case, the patentee bound himself and the court by the addition of these amendatory words. — Eppler *v.* Campbell, 86 Fed. 141; 29 C. C. A. 616.

Reece *v.* Globe, 61 Fed. 958.

For a curious way of stating the familiar rule, see Truman *v.* Holmes, 87 Fed. 742; 31 C. C. A. 215.

Roemer *v.* Peddie, 132 U. S. 313; Morgan *v.* Albany, 152 U. S. 425.

He cannot claim such a construction of his patent as would include what he was expressly required to abandon as a condition of the grant, even if it takes away a material part of his real invention. — Kelly *v.* Clow, 89 Fed. 297; 32 C. C. A. 205.

Morgan *v.* Albany, 152 U. S. 425.

An application for a patent which has been rejected, and which is subsequently amended to conform with the objections of the patent office, is strictly construed. — Norton *v.* Jensen, 90 Fed. 415; 33 C. C. A. 141.

Sargent *v.* Lock, 114 U. S. 63; Meter Co. *v.* Desper, 101 U. S. 332; Gage *v.* Herring, 107 U. S. 640; Fay *v.* Cordesman, 109 U. S. 408.

It is immaterial, we think, whether the patent office was right or wrong in rejecting complainant's original claims on the ground that the invention therein described was anticipated by the prior art. By amending his specification and claims the complainant admitted, in effect, that some limitations were necessary; and it is now too late to assert that he was entitled to his original claims, or that the claims as finally allowed are as broad as the original claims. — Brill *v.* St. Louis, 90 Fed. 666; 33 C. C. A. 213.

Sutter *v.* Robinson, 119 U. S. 530; Shepard *v.* Carrigan, 116 U. S. 593; Erie *v.* American, 70 Fed. 58.

The proceedings in the patent office, and the language of the specification and claim, place certain limitations upon the patent. The claim was rejected

on references and finally submitted in the form in which it appears. — Lovell *v.* Johnson, 91 Fed. 160; 33 C. C. A. 426.

In view of the prior state of the art and the proceedings had in the patent office, the claim of complainant's patent should be strictly construed against him and be restricted to the particular device described. — Warren *v.* Casey, 93 Fed. 963; 36 C. C. A. 29.

Mahn *v.* Harwood, 112 U. S. 354; Sargent *v.* Lock, 114 U. S. 63.

On that subject it is to be observed that the doctrines of equitable estoppel, or estoppel in pais, invoked in behalf of the appellee, are not involved or applicable. The estoppel, which arises in such cases is of the nature of estoppel by contract, and its scope in a particular case, like the meaning of a contract, is a matter of the interpretation and construction of the terms used according to their fair meaning. — Magic *v.* Economy, 97 Fed. 87; 38 C. C. A. 56.

Reece *v.* Globe, 61 Fed. 967.

As the applicant thereupon submitted his amended claims without change in the specifications, and accepted the patent upon the substituted claims, his acquiescence in the ruling forecloses any claim of invention in the rejected feature, through the well established doctrine of estoppel which then applies. — Irwin *v.* Hasselman, 97 Fed. 964; 38 C. C. A. 587.

Morgan *v.* Albany, 152 U. S. 425; Richards *v.* Elevator, 159 U. S. 477.

Having voluntarily abandoned the claim for method limited to the use of "a blast of heat" the patentee or his assignee may not insist that a broad claim containing no suggestion of such invention, shall nevertheless be subjected by construction to the same restriction. — United States Repair *v.* Assyrian, 100 Fed. 965; 41 C. C. A. 123.

Upon this and some further limitation, the patent was allowed. The patentee cannot now expand his claims to cover the ground he yielded in order to obtain the patent. What he conceded was accepted as one of the terms of the grant. — Campbell *v.* Duplex, 101 Fed. 282; 41 C. C. A. 351.

Roemer *v.* Peddie, 132 U. S. 313; Royer *v.* Coupe, 146 U. S. 524; Thomas *v.* Rocker, 77 Fed. 420.

The grant of the patent having been thus procured, certainly the complainant below was in no position to insist upon a construction of the allowed claim which would make it practically the equivalent of the rejected claim. — Reinecke *v.* Dixon-Woods, 102 Fed. 349; 42 C. C. A. 388.

Morgan *v.* Albany, 152 U. S. 425.

In the proceedings on his original or forfeited application, he was required by the patent office to acknowledge the state of the art. This disposes of the contention that the device was a primary or pioneer invention. — Walker *v.* Collins, 102 Fed. 689; 42 C. C. A. 591.

The patentee himself acquiesced in a finding of the patent office that the existing state of the art negatived the patentability of the device of the patent in suit. The applicant struck out all of the before-quoted matter from his original specifications, and by so doing must be taken to have acquiescence in the action of the patent office. — Newark *v.* Ryan, 102 Fed. 693; 42 C. C. A. 594.

It is true that if a patentee acquiesces in the rejection of his claim on references cited in the patent office, and accepts a patent on an amended

claim, he is thereby estopped from maintaining that the amended claim covers the combinations shown in the references, and from claiming that it has the breadth of the claim that was rejected. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Roemer *v.* Peddie, 132 U. S. 313; Morgan *v.* Albany, 152 U. S. 425; Brill *v.* Car Co. 90 Fed. 666; Railroad Co. *v.* Kearney, 158 U. S. 461; Knapp *v.* Morss, 150 U. S. 221; Crawford *v.* Heysinger, 123 U. S. 589.

One who acquiesces in the rejection of his claim because it is said to be anticipated by other patents or references is not thereby estopped from claiming and securing by an amended claim every known and useful improvement which he has invented that is not disclosed by those references. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 644.

In this respect the case is altogether different from what it would have been if the invention had been of a fundamental character, and the inventor was sought to be deprived of substantial rights by reason of incidental action on the part of the examiners. — Millard *v.* Chase, 108 Fed. 399; 47 C. C. A. 429.

The patentee must be held to the results of the proceedings on his application, and be restricted thereby. — Millard *v.* Chase, 108 Fed. 399; 47 C. C. A. 429.

That a claim must be construed as limited by amendment and acquiescence in the Patent Office, see Peifer *v.* Brown, 112 Fed. 435; 50 C. C. A. 331.

Whatever doubt there might have been as to whether the claim was limited to the construction of its language by the specification, it was removed by the limitation which he put upon it by his explanation, the consequence of which was the allowance of his patent; and the claim must be read as limited in this respect in the same way as are the other claims. — Dowagiac *v.* Superior, 115 Fed. 886; 53 C. C. A. 36.

The correspondence between the attorneys for the patentee and the examiner's office, resulted in limitations of the first claim, which we are justified in calling enforced. The broader claims of the first application were abandoned, and the claims finally adopted cannot be construed as coextensive therewith. — Carnegie *v.* Brislin, 124 Fed. 213; 59 C. C. A. 651.

If he was in good faith, he desired the Patent Office to understand that his device was different from the reference. There is no doubt that the Patent Office so understood his representations. Under these circumstances, appellant will not be heard to assert that the Patent Office erred in rejecting his broad claims, or that we should give the claims allowed the meaning of those rejected. — Ajax *v.* Pettibone, 125 Fed. 748; 60 C. C. A. 516.

Roemer *v.* Peddie, 132 U. S. 313; Phœnix *v.* Spiegel, 133 U. S. 360.

In the light of what occurred in the Patent Office with reference to this patent, the inventor consented that his claim should have a literal, narrow construction. — U. S. Peg-Wood *v.* Sturtevant, 125 Fed. 382; 60 C. C. A. 248.

That conceded limitation of claims in the Patent Office is subsequently binding upon the patentee, see Morgan *v.* Pennsylvania, 126 Fed. 952; 62 C. C. A. 126.

The limitations thus imposed to secure the patent cannot now be disregarded. They constitute one of the terms of the grant. — Hale *v.* World, 127 Fed. 964; 62 C. C. A. 596.

Campbell *v.* Duplex, 101 Fed. 282; Roemer *v.* Peddie, 132 U. S. 313; Royer *v.* Coupe, 146 U. S. 524; Thomas *v.* Rocker, 77 Fed. 420.

Where a patentee acquiesces in a rejection of claims, and amends the same so as to be more specific, such claims must be read and interpreted with reference to the rejected claims and to the prior state of the art, and cannot be construed to cover either what was rejected by the Patent Office or disclosed by prior devices. — Greene *v.* Buckley, 135 Fed. 520; 68 C. C. A. 70.

Knapp *v.* Morss, 150 U. S. 221; Roemer *v.* Peddie, 132 U. S. 313; Phœnix *v.* Spiegel, 133 U. S. 360; Singer *v.* Cramer, 192 U. S. 265; Reece *v.* Globe, 61 Fed. 958; Wood *v.* Deering, 66 Fed. 547; Ball *v.* Ball, 58 Fed. 818.

It is quite unimportant that various claims in both applications were rejected, and the rejection acquiesced in by applicant, so long as the office finally granted the claim which is now in controversy. There is no question here of the construction of the claim, and no attempt to broaden it or to narrow it. — Kinnear *v.* Wilson, 142 Fed. 970; 74 C. C. A. 232.

It is questionable whether the applicant, instead of cancelling, might not have so amended the rejected claims as to differentiate them from the references cited, and still protect some of the broader elements of his invention. But however that may be, he acquiesced in the action of the Patent Office, and elected to substitute the present narrow claims in suit, and is now estopped to so expand them as to embrace the rejected subject matter. — Van Epps *v.* United, 143 Fed. 869; 75 C. C. A. 77.

The applicant acquiesced in the rejection, and amended his claim by adding the interlocking means. Thus it was conceded, and the complainant is precluded from asserting the contrary, that, except for the interlocking means, there was no novelty in the invention claimed. — Ironclad *v.* Dairyman's, 143 Fed. 512; 74 C. C. A. 372.

Examination discloses that he was compelled over and over again to amend and narrow his claims in order to avoid the prior art. The waiver and disclaimers of the file-wrapper were acquiesced in by the patentee in order to obtain his patent, and he is estopped from denying their force and effect. — Williams *v.* Kemmerer, 145 U. S. 928; 76 C. C. A. 466.

Hubbell *v.* U. S. 179 U. S. 77; Shepard *v.* Carrigan, 116 U. S. 593.

That where a claim is allowed only after strict limitation, such limitation cannot be disregarded in considering the question of infringement, see United *v.* Greenman, 146 Fed. 759; 77 C. C. A. 22.

That an applicant having added an element to his claim to make it allowable, as required by the Patent Office, and acquiescing in such limitation, is strictly limited to a construction containing such added element, see Schweichler *v.* Levinson, 147 Fed. 704; 78 C. C. A. 92.

After repeated amendments of the claims, to meet objections for conflict or want of invention, the claims in suit were allowed and the patent issued. The limitations thus imposed leave little, if any, scope for the claims beyond the several means which are specifically shown. — Schock *v.* Olsen, 147 Fed. 229; 77 C. C. A. 371.

The patentee repeatedly acquiesced in rejections of his application for a broad claim, and substituted therefor narrower claims, one after the other, upon each rejection, until his application was granted whereby water is delivered under pressure forwardly and laterly nearly parallel to the surface of the street. In such circumstances the owner of the patent will not be heard to insist that the narrower claim allowed shall cover the broader rejected claims. — St. Louis *v.* American, 156 Fed. 574; 84 C. C. A. 349.

Knapp *v.* Morss, 150 U. S. 221; Corbin *v.* Eagle, 150 U. S. 38; Hubbell *v.* U. S. 179 U. S. 77; Computing *v.* Automatic, 204 U. S. 609; Greene *v.* Buckley, 135 Fed. 520.

In the case of a meritorious invention a reasonable liberality in applying the doctrine of equivalents is not unusual, and patentees are not always held closely to the precise form stated in the claim when the same functions are found in a structure of a somewhat different form. But the history of this patent during its passage through the patent office precludes any construction of the claim which will eliminate the qualifying words " spirally wound." — National *v.* Roebling's, 158 Fed. 99; 85 C. C. A. 567.

Victor *v.* American, 151 Fed. 601.

The applicant had a long struggle in securing his patent, and was constrained to trim away, modify, and otherwise define his specifications and claims to meet the references made by the office, until they were brought within very narrow limits before his patent would be allowed. He must be deemed to have surrendered and disclaimed what he conceded, and to have imposed such definitions upon the language of the patent as he attributed to it in order to secure the grant. — American *v.* Cleveland, 158 Fed. 978; 86 C. C. A. 182.

Sargent *v.* Hall, 114 U. S. 63; Thomas *v.* Rocker, 77 Fed. 420; Dowagiac *v.* Superior, 115 Fed. 886; Hale *v.* World, 127 Fed. 964; Muller *v.* Lodge, 77 Fed. 621; Warren *v.* Casey, 93 Fed. 963; Streit *v.* Kaiper, 143 Fed. 981; New York *v.* Ambler, 103 Fed. 316.

§ 208. Construction — Limitation — Patent Office Action Not Limiting.

We do not mean to be understood as asserting that any correspondence between the applicant and the commissioner can be allowed to enlarge, diminish or vary the language of a patent afterwards issued. Undoubtedly a patent, like any other written instrument, is to be interpreted by its own terms. But when a patent bears on its face a particular construction, inasmuch as the specification and claim are in the words of the patentee, it is reasonable to hold that such a construction may be confirmed by what the patentee said when he was making his application. The understanding of a party to a contract has always been regarded as of some importance in its interpretation. — Goodyear *v.* Davis, 102 U. S. 222; 26 L. Ed. 149.

It is quite true, where the differences between the claim made and as allowed consist of mere changes of expression, having substantially the same meaning, such changes, made to meet the views of the examiner, ought not to be permitted to defeat a meritorious claimant. While not allowed to revive a rejected claim by a broad construction of the claim allowed, yet the patentee is entitled to a fair construction of the terms of his claim as actually granted. — Hubbell *v.* U. S. 179 U. S. 77; 45 L. Ed. 95; 21 S. Ct. 24.

The applicant amended his claim to comply with a requirement to put it in proper form. Such an amendment cannot be classed as a disclaimer. — Hunt Bros. *v.* Cassidy, 53 Fed. 257; 3 C. C. A. 525.

It may well be, in view of Royer *v.* Coupe, 146 U. S. 524; Knapp *v.* Morss, 150 U. S. 224; Corbin *v.* Eagle, 150 U. S. 40, and Morgan *v.* Albany, 152 U. S. 425, cited, that a patentee cannot be permitted to hold under his patent anything that he has clearly renounced and excluded from his inventions during the prosecution of his application. But surely it has never been held that mere changes in phraseology to suit the views of the examiner, and to distinguish the claims made from those contained in prior applications, to which reference has been made, can be held to defeat the patent, when granted. What is forbidden is the attempt, after a patent has been procured surrendering or disavowing substantial claims or devices, to recover such renounced and abandoned claims by demanding a broad construction of those allowed. — Hillborn *v.* Hale, 69 Fed. 958; 16 C. C. A. 569.

It is plain that, whatever were the views of the patent office, the matter stricken out was mere surplusage, and its omission was of no effect. — Heap *v.* Greene, 91 Fed. 792; 34 C. C. A. 86.

Winans *v.* Denmead, 15 How. 330; Reece *v.* Globe, 61 Fed. 958.

To be estopped by the action of the Patent Office, the patentee must be shown to have surrendered something which he now claims in order to obtain that which was allowed. — Bundy *v.* Detroit, 94 Fed. 524; 36 C. C. A. 375.

The effect of Reece *v.* Globe, as shown at the foot of page 969 of 61 Fed. and page 205 of 10 C. C. A., is to hold that such proceedings are of no effect when no direct issue of novelty or invention was involved, or when the amendments made by the applicant came in only incidentally, or in reference to an incidental matter. The case at bar, however, is clearly not excluded by the rule thus given. — Coburn *v.* Chandler, 97 Fed. 333; 38 C. C. A. 201.

So, the applicants never acquiesced in the examiner's action; the examiner did not require the amendment as a condition precedent to the allowance of claims narrower than originally made; and the appellate tribunal allowed the claims after examining the device in the spirit that giveth life. — Regent *v.* Penn. 121 Fed. 80; 57 C. C. A. 334.

That the subsequent allowance of a claim without the restriction imposed may remove such restriction, see Kelley *v.* Diamond, 123 Fed. 882; 59 C. C. A. 370.

That a claim formulated in the Patent Office for an interference will not be construed as limiting the invention, see Reed *v.* Smith, 123 Fed. 878; 59 C. C. A. 366.

It is a corollary to the general rule, that if the applicant successfully defends his position and secures the assent thereto of those in the office having charge of the application, and the patent issues notwithstanding the objection which had at one time been urged, the patent is not subject to diminution on that account. — American *v.* Cleveland, 158 Fed. 978; 86 C. C. A. 182.

That the file-wrapper contents of an abandoned application by the same person upon the same invention is not necessarily evidence of limitation of claims, see Delaware *v.* Shelby, 160 Fed. 928; 88 C. C. A. 110.

That rejection prior to amendment by the Patent Office does not argue for the invalidity of a claim subsequently amended and allowed as amended, see Dunn *v.* Standard, 163 Fed. 521; C. C. A.

§ 209. Construction — Limitation — Patent Office Action — Protest.

We now come to the novel question presented in this case. It is argued, and the circuit court held, that because the applicants after the rejection of

the claims, and after inserting the required limitations in the specifications, protested that the examiner was wrong in rejecting the claims, and advised him that they proposed to insist on a construction of claims as amended to cover the same ground as the rejected claims, the ruling of the patent office is not to be given the same effect as it would otherwise have. It seems to be contended that an applicant can qualify or minimize the effect of his acquiescence in the rejection of a claim by stating to the patent office that it is not an acquiescence, and that he expects to insist upon his right to cover the same ground as the rejected claim covered, under other and amended claims. We are clearly of opinion that he cannot thus destroy the effect of a patent office ruling. — Thomas *v.* Rocker, 77 Fed. 420; 23 C. C. A. 211.

§ 210. Construction — Limitation — Patent Office Action — Rule.

In order that the proceedings in the Patent Office should positively operate as a waiver or estoppel, they must relate to the pith and marrow of the alleged improvement, and be understandingly and deliberately assented to. — U. S. Peg-Wood *v.* Sturtevant, 125 Fed. 382; 60 C. C. A. 248.

Magic *v.* Economy, 97 Fed. 87; Paxton *v.* Brinton, 107 Fed. 137.

§ 211. Construction — Limitation — Specific Claims.

When a device designed merely for the improvement of a well-advanced art is described as having particular features of construction which are adapted to accomplish specific results or modes of operation, and the claim of the patent is for that device, the features so described are covered by the claim, and may not be rejected, or treated as of secondary importance, in order to extend the patent over other forms or features not described. — Temple *v.* Goss, 58 Fed. 196; 7 C. C. A. 174.

The claim of a specific combination or device in a patent is a renunciation of every claim to any other combinations or devices, for performing the same functions that are apparent from the face of the patent and are not colorable evasions of the combination or device claimed. — Stirratt *v.* Excelsior, 61 Fed. 980; 10 C. C. A. 216.

A combination for a specific invention is limited to the precise elements. — Muller *v.* Lodge, 77 Fed. 621; 23 C. C. A. 357.

Water Meter *v.* Desper, 101 U. S. 332; Sargent *v.* Lock Co. 114 U. S. 63; Fay *v.* Cordesman, 109 U. S. 408; Hendy *v.* Iron, 127 U. S. 371.

By force of the specification and drawings of the patent and the concluding terms of each of the claims, of which infringement is alleged, the invention is limited to certain peculiarities of construction and resulting functions described. — Johnson *v.* Powers, 85 Fed. 863; 29 C. C. A. 459.

But if the invention of this patent could be classified as a primary one, still the terms of claim 5 are so restricted that upon no sound principle of construction could it be held to cover the devices used by the defendants. — Stokes *v.* Heller, 101 Fed. 266; 41 C. C. A. 335.

Keystone *v.* Phœnix, 95 U. S. 274; Railroad *v.* Mellon, 104 U. S. 112; McClain *v.* Ortmayer, 141 U. S. 419; Wright *v.* Yuengling, 155 U. S. 47; Lewis *v.* Steel Co. 59 Fed. 129; Duff *v.* Pump Co. 107 U. S. 636; Bragg *v.* Fitch, 121 U. S. 478; Knapp *v.* Morss, 150 U. S. 221.

Having thus described his conveyor in his claim, he puts it forward as a constituent of his invention, and he could not now say that the kind of

frame he will employ is different. — Moore *v.* Eggers, 107 Fed. 491; 46 C. C. A. 425.

Keystone *v.* Phœnix, 95 U. S. 274; Fay *v.* Cordesman, 109 U. S. 408; Brown *v.* Mfg. Co., 57 Fed. 731; Mfg. Co. *v.* Randal, 104 Fed. 355.

While the patent to Myers was issued more than a year in advance of the patent in suit, the application for it was filed 11 days after, so that they were for a time co-pending in the Patent Office. No interference was declared. That the existence of the Myers patent was recognized and its drawings cited during the pendency of the application of the patent in suit is conceded. The fact of the allowance, with the grant to Myers in view, and under the circumstances stated, is presumptive of an understanding that claim 1 was limited to the structure substantially as described — not in conflict with Myers' device — and of purpose to confer monopoly within such scope. The presumption thus arising would not overcome the grant for an invention which was broadly specified and broad in fact. — Lowden *v.* Janesville, 148 Fed. 686; 78 C. C. A. 548.

§ 212. Construction — Limitation — Specification and Drawings.

Claims must be limited to the means described in the specification. — Hailes *v.* VanWormer, 87 U. S. 353; 22 L. Ed. 247.

The plain and explicit language of the specification requires a construction of the claim which will enable the defendant to escape liability. There is nothing in the context to indicate that the patentee contemplated any alternative arrangement. — Snow *v.* Railway, 121 U. S. 617; 30 L. Ed. 1004; 7 S. Ct. 1343.

The description does not necessarily limit the claims. — Continental *v.* Eastern, 210 U. S. 405; 51 L. Ed. 922; 28 S. Ct. 748.

A mere reference in a claim to a letter on the drawing does not of itself limit the claim to the precise geometrical shape shown in the drawing, even though the description of the drawing in the specification refers to the part thus lettered by an adjective appropriate to the form shown in the drawing, unless that particular form is pointed out in the specification, or was known by the state of the art to be the particular improvement the inventor claimed. — DeLamater *v.* Heath, 58 Fed. 414; 7 C. C. A. 279.

Reed *v.* Chase, 25 Fed. 100.

As we have shown, the specification and drawings clearly contemplate the use of a track consisting of two small wires placed side by side, and this limitation enters into the claims by necessary implication. — Lamson *v.* Godehard, 59 Fed. 776; 8 C. C. A. 265.

Roller Mill *v.* Walker, 138 U. S. 124; Caster Co. *v.* Spiegel, 133 U. S. 360; Bragg *v.* Fitch, 121 U. S. 478; Keystone *v.* Phœnix, 95 U. S. 274; Sharp *v.* Riessner, 119 U. S. 631.

The claim should be read and construed in the light of the description of the invention and drawings attached, and of the state of the art to which the invention belongs, not to enlarge the claim, but to ascertain its true meaning and the actual invention asserted, and which the inventor desired to secure by letters patent. — Card *v.* Colby, 64 Fed. 594; 12 C. C. A. 319.

It would seem that the usual preliminary statement of the class and nature of the improvement, in the absence of any declaration of broad invention,

would be construed as limiting the claim within the class and to the means specified. — Schuyler *v.* Electric, 66 Fed. 313; 13 C. C. A. 491.

Words and phrases which might have been omitted, on the presumption that they relate to nonessentials, may be introduced in such direct and positive manner as to leave the courts no option except to regard them as effecting the objects and limitations of the instrument in question. — Long *v.* Pope, 75 Fed. 835; 21 C. C. A. 533.

Reece *v.* Globe, 61 Fed. 958.

The scope of letters patent must always be limited to the invention predicated in the claim, and this claim can never be enlarged by any language employed in other parts of the specification. — Tiemann *v.* Kratz, 85 Fed. 437; 29 C. C. A. 257.

Railroad *v.* Mellon, 104 U. S. 112.

General language in a claim which points to an element or device which is more fully described in the specification, is limited to such an element or device as is there described. — Expanded *v.* Board, 111 Fed. 395; 49 C. C. A. 406.

Smith *v.* Vulcanite, 93 U. S. 486; Adams *v.* Lindell, 77 Fed. 432; Mitchell *v.* Tilghman, 19 Wall. 287.

Note: The citations do not bear out so broad a statement. Unqualified, the statement clearly is not the law. Such is the law with a narrow, specific improvement; but with a generic invention, it is not.

§ 213. Construction — Limitation — State of Art.

Having reference to the state of the art at the date of the alleged invention and the claims of the patent, the patentee must be limited to the combination shown. — Wollensak *v.* Reiher, 115 U. S. 87; 29 L. Ed. 355; 5 S. Ct. 1132.

It is undoubtedly true that if the prior state of the art exhibits the combination of all these essential elements, except the peculiarly constructed hinge the patentees show, accomplishing substantially the same purpose which their improved construction brings about, then the claims of this patent must be restricted to the peculiar construction of the hinge. — Griswold *v.* Harker, 62 Fed. 389; 10 C. C. A. 435.

Stirratt *v.* Mfg. Co. 61 Fed. 980.

Manifestly neither of the patents is for a primary invention. In each instance patentability may be conceded. Nevertheless, these inventions, by reason of the state of the prior art, belong to that class in which the patentee is to be restricted to the specific form of improvement shown and described. — Ryan *v.* Runyon, 93 Fed. 970; 36 C. C. A. 36.

Railway *v.* Sayles, 97 U. S. 554; Duff *v.* Pump Co. 107 U. S. 636.

In view of the limitations imposed upon the claims by the prior state of the art, they ought not to receive a construction which will enable them to cover a combination in which the several devices are not substantially those described in the patent. It will not do to say that, because the patentee was the first to introduce locking devices into a motor in which the regulator and reverser were operated by different levers, he is entitled to a monopoly of all locking devices in such a motor that will co-ordinate the movements of the two levers so that neither will move except when the other is at a

predetermined position. Precisely that function had been previously performed by the locking devices used to co-ordinate levers, and, if the patentee had done no more than to introduce them into the levers of a motor, he would merely have made a change of location. He is entitled to the merit of being the first to conceive of the utility of interlocking the two levers of a motor controller of the type in which separate levers are employed, but his right to a patent must rest on the novelty of the means he has contrived to carry his idea into practical application. — Thomson-Houston *v.* Lorain, 107 Fed. 711; 46 C. C. A. 593.

Aron *v.* Railroad, 132 U. S. 84.

Where none of the prior inventors exhibits or suggests any co-operation of the elements upon the principle adopted by the patent in suit, or upon any principle adapted to serve the same purpose, the use of the old elements may limit, but cannot defeat the patent. — Imperial *v.* Crown, 139 Fed. 312; 71 C. C. A. 442.

Note: Brawley, J., 4th Circ. writing the above. How such a prior device or the use of old elements " may limit " the patent does not appear. So much of this statement is distinctly untenable; for if it were the fact that prior use of the elements of an invention without ever producing the result attained by the patent could be postulated to limit the claim, such a thing as a generic invention or a primary improvement would be impossible.

In our judgment the reason of the case leads to the conclusion that between contracting parties, extraneous evidence is inadmissible if there is no ambiguity or uncertainty in the language of the description and claims, and that, if there is uncertainty, outside evidence is admissible only to make clear what the applicant meant to claim and the government to allow, and not for the purpose of showing, even in the slightest degree, that the applicant had no right to claim and that the government was improvident in allowing what was in fact claimed and allowed. — Siemens-Halske *v.* Duncan, 142 Fed. 157; 73 C. C. A. 375.

Trotman *v.* Wood, 16 C. B. (N. S.) 479; Clark *v.* Adie, L. R. 2 App. Cas. 423; Chambers *v.* Chrichley, 33 Beavan, 374; Crossley *v.* Dixon, 10 H. of L. Cas. 293; United States *v.* Harvey, 196 U. S. 310; Faulks *v.* Kamp, 3 Fed. 898; Consolidated *v.* Guilder, 9 Fed. 155; Underwood *v.* Warren, 21 Fed. 573; Parker *v.* McKee, 24 Fed. 808; Pope *v.* Owsley, 27 Fed. 100; American *v.* Laraway, 28 Fed. 141; Adee *v.* Thomas, 41 Fed. 342; Woodward *v.* Boston, 60 Fed. 283; Babcock *v.* Clarkson, 63 Fed. 607; National *v.* Connecticut, 73 Fed. 491; Alvin *v.* Scharling, 100 Fed. 87; Standard *v.* Leslie, 118 Fed. 557; Frank *v.* Barnard, 131 Fed. 269; *contra* Noonan *v.* Chester, 99 Fed. 90; Smith *v.* Ridgley, 103 Fed. 875.

§ 214. Construction — Limitation — Words of Limitation.

" Substantially as set forth " are words of limitation in a claim which limit the combination to the elements described. — Pope *v.* Gormully, 144 U. S. 248; 36 L. Ed. 423; 12 S. Ct. 641.

To prevent a broadening of the scope of the invention beyond its fair import in the light of the circumstances surrounding the issuance of the patent, the words of limitation contained in the claim must be given due effect, and, giving them such effect, the statement in the first claim of the elements entering into the combination must be construed to refer to elements in combination having substantially the form and constructed substantially as described in the specification and shown in the drawing. — Singer *v.* Cramer, 192 U. S. 265; 48 L. Ed. 437; 24 S. Ct. 291.

The words " substantially as described " are words of limitation and restriction in the claim of an improvement. — Fox *v.* Perkins, 52 Fed. 205; 3 C. C. A. 32.

Shepard *v.* Carrigan, 116 U. S. 598.

In view of the state of the art, the claim cannot be broadly construed, and it must be held to be fully limited by the words " substantially as described." — Reece *v.* Globe, 61 Fed. 958; 10 C. C. A. 194.

Railway *v.* National, 110 U. S. 229.

If therefore, the words " substantially as described," be omitted from the claim, and the preceding language be taken literally, nothing new would be embraced and the claim would consequently be invalid. — Campbell *v.* Richardson, 76 Fed. 976; 22 C. C. A. 669.

The words " substantially as set forth," with which this claim concludes, referred to the specification and make the description of the housings therein contained an essential part of the claim. " General language in a claim which points to an element or device more fully described in the specification, is limited to such an element or device as is there described." — Brill *v.* St. Louis, 90 Fed. 666; 33 C. C. A. 213.

Adams *v.* Lindell, 77 Fed. 432; Mitchell *v.* Tilghman, 19 Wall. 287; Stirrat *v.* Mfg. Co. 61 Fed. 980.

The second claim is narrow and is limited to the corrugations " substantually as set forth." The defendant's dies not having the same corrugations or the corrugations located in the same situation on the dies, do not infringe this claim. — Simonds *v.* Hathorn, 93 Fed. 958; 36 C. C. A. 24.

If the claim is to be read in connection with the specification, or any significance is to be attached to the words " substantially as described," it plainly must be limited to the coils of the patent. — Webster *v.* General, 115 Fed. 497; 53 C. C. A. 229.

Limited as above stated, appellant's structure does not infringe the specific organization covered by the first claim of the patent in suit. The words " substantially as set forth," with which the claim concludes, cannot here be ignored. — Carnegie *v.* Brislin, 124 Fed. 213; 59 C. C. A. 651.

He expressly declares that he does not intend to limit himself with regard to the different parts of his invention — a reservation sufficient, as it would seem to overcome the customary formula " substantially as described," at the end of the claim. — Boyer *v.* Keller, 127 Fed. 130; 62 C. C. A. 244.

That where the improvement is narrow the words " substantially as set forth " must be construed as words of limitation, see Rose *v.* Dowden, 157 Fed. 681; 85 C. C. A. 449.

Erie *v.* American, 70 Fed. 58.

§ 215. Construction — Limitation — Miscellaneous Rules.

Winans *v.* Denmead, 15 How. 330 construed with other cases and followed. — Recce *v.* Globe, 61 Fed. 958; 10 C. C. A. 194.

Miller *v.* Mfg. Co. 151 U. S. 186; Mfg. Co. *v.* Adams, 151 U. S. 139; Snow *v.* Railway, 121 U. S. 617; Sargent *v.* Lock Co. 114 U. S. 63; Water Meter *v.* Desper, 101 U. S. 332; Fay *v.* Cordesman, 109 U. S. 408; Corn Planter Pat. 23 Wall. 181; Hoyt *v.* Horne, 145 U. S. 302.

Doubtless a patentee is entitled to every use to which his invention is susceptible, whether such use be known or unknown to him (Potts *v.* Creager, 155 U. S. 597) and if the patent applying the means used in the former art were in force it would doubtless be entitled to control the use of the device in the later art. Under the doctrine which gives to the patentee all the uses to which his invention is susceptible, whether known or unknown, it is difficult to see why the public should not be entitled to all the uses to which the means involved in devices covered by lapsed patents are susceptible, or why a patentee who employs the old means with improvements adapting the use to a new or analogous industry should not be limited to a monopoly of the combination or improved machine. To say that one who discovers that old means will do a new work without any change may thereby monopolize the old means as applied to such new work, would be carrying the discovery doctrine altogether too far. — Wright *v.* Clinton, 67 Fed. 790; 14 C. C. A. 646.

Brook *v.* Ashton, 27 Law. J. Q. B. 145; Potts *v.* Creager, 155 U. S. 101; Penna. *v.* Locomotive, 110 U. S. 490; Brown *v.* Piper, 91 U. S. 37; Roberts *v.* Ryer, 91 U. S. 150; Atlantic *v.* Brady, 107 U. S. 192; Tucker *v.* Spalding, 13 Wall. 453; Rob.Pat. 259 n. 1; Knapp *v.* Morss, 150 U. S. 221; Duff *v.* Pump, 107 U. S. 636; Newton *v.* Furst, 119 U. S. 373; Bragg *v.* Fitch, 121 U. S. 478; Dryfoos *v.* Wiese, 124 U. S. 32.

Features described as preferable do not constitute a limitation of the claim. When the inventor says, "I recommend the following method," he does not thereby constitute such method a portion of his patent. His patent may be infringed, although the party does not follow his recommendation, but accomplishes the same end by another method. — Krajewski *v.* Pharr, 105 Fed. 514; 44 C. C. A. 572.

Sewall *v.* Jones, 91 U. S. 171.

In view of these circumstances (the narrowness of invention) and of the fact that the apparatus of the patent in suit is of doubtful utility, and does not appear ever to have been put upon the market, the claims can only be so interpreted as to cover details of construction. — Huber *v.* Mott, 125 Fed. 944; 60 C. C. A. 182.

§ 216. Construction — Limitation to Avoid Anticipation.

We ought to give a favorable construction so as to sustain the patent if it can be fairly done. — Brown *v.* Guild, 90 U. S. 181; 23 L. Ed. 161.

The patent in suit, in order that it may be held valid, must be construed in view of the disclaimer contained in that patent, and be limited to the particular devices shown in the specification. — Ashcroft *v.* Boston, 97 U. S. 189; 24 L. Ed. 982.

Where the complainant insists upon an extension of his claim he must submit also to the risk of anticipation. — Sutter *v.* Robinson, 119 U. S. 530; 30 L. Ed. 492; 7 S. Ct. 376.

A construction broad enough to cover infringement by equivalency may defeat the claim, because broadening the construction broadens the danger of anticipation. — Pope *v.* Gormully, 144 U. S. 238; 36 L. Ed. 420; 12 S. Ct. 637.

If complainant's claim should receive such construction as would cover defendant's machine, then it was clearly anticipated in the prior devices already referred to; that if valid under a narrow and restricted construction, which would limit the patent to the specific device described in the specifica-

tion, then it is not infringed by defendants. — Fox *v.* Perkins, 52 Fed. 205; 3 C. C. A. 32.

If the claims of the patent in suit were so constructed as to charge the defendant with infringement, the claims would be void for want of novelty; if construed so as to avoid anticipation, defendant does not infringe. — Gates *v.* Fraser, 55 Fed. 409; 5 C. C. A. 154.

To construe the claims of the patent so broadly as to cover appellant's device would render them worthless. — Holman *v.* Jones, 61 Fed. 105; 9 C. C. A. 385.

There is nothing new in the elements described. The only novelty is in the combination; and in this respect the device differs so little from others of an earlier date shown by the art, and intended for the same use, that the claims must be narrowly construed. We agree with the circuit court that the proofs do not exhibit anything sufficient to repel the ordinary presumption attending the grant of a patent. But this is only true, we think, when the claims are thus narrowly construed. — Holman *v.* Jones, 61 Fed. 105; 9 C. C. A. 385.

The invention being specific and limited, if the claims warranted a construction broad enough to cover the device of the appellee, we should have no hesitation in holding it void for want of novelty. — Stirrat *v.* Excelsior, 61 Fed. 980; 10 C. C. A. 216.

Atlantic *v.* Brady, 107 U. S. 192; Vinton *v.* Hamilton, 104 U. S. 485; Slawson *v.* Railroad, 107 U. S. 653; King *v.* Gallun. 109 U. S. 99; Double Pointed *v.* Two Rivers, 109 U. S. 117; Estey *v.* Burdett, 109 U. S. 633; Bussey *v.* Mfg. Co. 110 U. S. 131; Phillips *v.* Detroit, 111 U. S. 604; Morris *v.* McMillin, 112 U. S. 244; Hollister *v.* Mfg. Co. 113 U. S. 59; Ellbert *v.* Gaslight Co. 50 Fed. 205.

To imply as elements of a claim parts not named therein for the purpose of limiting its scope, so that it may be accorded novelty, is contrary to a well-settled rule of the patent law. — Stearns *v.* Russell, 85 Fed. 218; 29 C. C. A. 121.

McCarty *v.* Railroad, 160 U. S. 110.

These changes are of so slight a character, and the improvement by the new combination so debatable, that if any liberality in construction, or in the application of the doctrine of equivalents, be conceded for the purpose of including other improvers, along the same lines within the scope of this patent, it will have the necessary effect of rendering it void for anticipation. "That which infringes it, if later, anticipates it if earlier." — St. Louis *v.* National, 87 Fed. 885; 31 C. C. A. 265.

It is manifest that the inventions secured by the claims are of very narrow character, and that they cannot receive the broad construction which their language would authorize without affirming their invalidity for want of patentable novelty. — Brill *v.* Pekham, 108 Fed. 267; 47 C. C. A. 315.

Courts are reluctant to decree patents invalid when a decree can be based on infringement. — Wilcox *v.* Sherborne, 123 Fed. 875; 59 C. C. A. 363.

Note: This is lamentably true; and is one main respect in which the courts fail to do their duty by the public. If a patent is invalid and the court has jurisdiction thereof, it is the plain duty of the court as a servant of the Republic to destroy the illegal monopoly.

Even where a patent incidentally makes express reference to features other than the essential features, it has been held that the patent cannot be supported by such features alone, if the inventor does not rely upon them in describing the substance of his invention. Still less can a patent be supported

by features not referred to, claimed, or even suggested in the patent, and not a function of thing patented except when used in a special combination not claimed. — Greene *v.* United, 132 Fed. 973; 66 C. C. A. 43.

Waterman *v.* Lockwood, 125 Fed. 490.

§ 217. Construction — Narrow.

When the claim is confined to a particular article or fabric, it is tantamount to a declaration that nothing else was claimed. — White *v.* Dunbar, 119 U. S. 47; 30 L. Ed. 303; 7 S. Ct. 72.

The plaintiff's patent must be limited to the mechanism described and claimed by him, and cannot be extended so as to cover all mechanism for performing the function attained, nor to the process of operation described in his patent; and the defendant's mechanism, in each form of his machine cannot be regarded as merely an equivalent for the plaintiff's mechanism. — Dryfoos *v.* Wiese, 124 U. S. 32; 31 L. Ed. 362; 8 S. Ct. 354.

Yale *v.* Sargent, 117 U. S. 373.

Where, in a specific patent the claim is limited to the elements shown and claimed, the omission of an element thereof avoids infringement. — Forncrook *v.* Root, 127 U. S. 176; 32 L. Ed. 97; 8 S. Ct. 1247.

Fay *v.* Cordesman, 109 U. S. 408; Yale *v.* Sargent, 117 U. S. 373; Dryfoos *v.* Wiese, 124 U. S. 32.

Where the patent in suit is not a pioneer patent the claims must be strictly construed. — Clark *v.* Willimantic, 140 U. S. 481; 35 L. Ed. 521; 11 S. Ct. 846.

Where it appears that the patent in suit is not a pioneer in the art, the claims will be construed strictly and narrowly to the device described. — Gordon *v.* Warder, 150 U. S. 47; 37 L. Ed. 992; 14 S. Ct. 32.

It clearly appears that complainant was not a pioneer in this department of machinery. Many inventors had preceded him and many patents had been issued. We think the case is one where, in view of the state of the art the patentee is entitled, at the most, only to the precise devices mentioned in the claims. — Boyd *v.* Janesville, 158 U. S. 260; 39 L. Ed. 973; 15 S. Ct. 837.

The claim of the patent, in view of the state of the art, covers a very narrow invention, if construed to cover the device of defendant it is void for want of novelty. — Hammond *v.* Goodyear, 58 Fed. 411; 7 C. C. A. 276.

This patent is a subordinate one, and must receive a narrow construction. It is not permissible to give to the terms of a patent of that class so wide a sweep as to include the various devices which may actuate the mechanism, and the range of its monopoly is a limited one. — Westinghouse *v.* N. Y., 63 Fed. 962; 11 C. C. A. 528.

A claim for only the arrangement and combination of parts must be limited to a strict construction. — Roemer *v.* Peddie, 78 Fed. 117; 24 C. C. A. 39.

We find the first claim of the patent is for a specific combination of elementary parts. Upon well settled principles, this claim must be construed strictly, and the patentee held to the particular arrangement of parts described and specified. — DeBeaumont *v.* Williames, 80 Fed. 995; 26 C. C. A. 298.

Duff *v.* Pump Co. 107 U. S. 636; Bragg *v.* Fitch, 121 U. S. 478; Snow *v.* Railway, 121 U. S. 617; Wright *v.* Yuengling, 155 U. S. 47.

The facts that the claim is a narrow one, and that, after notice from patent office, Fay adhered to the special form of claim previously adopted; that the tool had not become generally commercial; and that the patentee unreasonably rested upon his supposed rights, — taken together, present a situation which forbids a liberal construction of the patentee's claims for the purpose of sustaining the contention of infringement. — Starrett *v.* Stevens, 100 Fed. 93; 40 C. C. A. 289.

It is true that Hamilton was the first inventor of a time-printing machine for directly measuring and recording intervals of time. It is also true that for this reason his patent should be liberally construed. But, at the same time, we know of no rule for construction which will permit the court to hold a machine to be an infringement of that patent which does not contain the original and vital elements of the invention, in a suit in which the claim of the patent relied upon expressly makes these elements a part of the combination covered by the claim. — Wilson *v.* Calculagraph, 144 Fed. 91; 75 C. C. A. 249.

§ 218. Construction — Omitting Element.

A patentee cannot claim the benefit of an element of his invention thus vaguely and indefinitely hinted at. It is clear that if the patentee intended to include the cooling of the wax or paraffine before compressing it upon the wire, he has failed to describe in his specification that element of his invention as required by the statute. Instead of describing the process he mentions a quality of the product, and asks the court to infer the process from the quality. Such a vague and inverted method of description is not a compliance with the statute. That part of the alleged invention is not even referred to in the most distant manner in the claim. It has been held by this court that, "the scope of letters patent should be limited to the invention covered by the claim; and, though the claim may be illustrated, it cannot be enlarged by the language in other parts of the description." — Western *v.* Ansonia, 114 U. S. 447; 29 L. Ed. 210; 5 S. Ct. 447.

R. R. *v.* Mellon, 104 U. S. 112.

The claim could hardly be construed to permit the omission of any of the described steps of the process, unless such omission had been recognized in the specification. — U. S. Repair *v.* Standard, 95 Fed. 137; 37 C. C. A. 28.

§ 219. Construction — Plain Intent and Meaning.

The courts of this country cannot always indulge the same latitude which is exercised by English judges in determining what parts of a machine are or are not material. Our law requires the patentee to specify particularly what he claims to be new, and if he claims a combination of certain elements or parts, we cannot declare that any one of these elements is immaterial. The patentee makes them all material by the restricted form of his claim. We can only decide whether any part omitted by an alleged infringer is supplied by some other device or instrumentality which is its equivalent. — Union *v.* Desper, 101 U. S. 332; 25 L. Ed. 1024.

The meaning of letters patent, like other grants or written instruments, must be ascertained by the language employed, as applied to the subject matter. — Krajewski *v.* Pharr, 105 Fed. 514; 44 C. C. A. 572.

Robinson *v.* Sutter, 8 Fed. 828; Adams *v.* Iron Co. 26 Fed. 324; Sayre *v.* Scott, 55 Fed. 971.

Some allowance may well be made for an unlearned man, when we remember that in the recent case of Westinghouse *v.* Boyden, 170 U. S. 537, the Supreme Court itself required three hearings before it could determine the meaning and scope of the patent claims, and the record in this case shows that such learned experts as Gen. Spear and Mr. Walker differ radically as to what the claims of the original patent cover. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

Such a restriction was not required by the prior act, in order to save the claim from being declared invalid, and, except for the purpose of saving a claim, its scope should not be restricted beyond the fair and ordinary meaning of the words. — Ryder *v.* Schlichter, 126 Fed. 487; 61 C. C. A. 469.

Winans *v.* Denmead, 56 U. S. 341; Consolidated *v.* Columbian, 79 Fed. 795; Gaisman *v.* Gallert, 105 Fed. 955.

These claims (the specific claims) are concerned with the particular structure described by the drawings and the specification, and to confine the fourth claim, which is drawn broadly, to such a structure, denies to the claim any effect whatever. This, we think, goes too far. It requires us to suppose that the inventor prepared a claim whose words do not mean what they say, and should be so modified as to make them a mere repetition of other claims, and that the Patent Office also knew that the words were to be read with limitations that are not stated, and nevertheless allowed the claim to stand. — Ryder *v.* Schlichter, 126 Fed. 487; 61 C. C. A. 469.

The meaning of the claim is plain. It does not require, and therefore is not open to, interpretation. It is so explicit that the courts cannot alter or enlarge it. — Jones *v.* Davis, 138 Fed. 62; 70 C. C. A. 558.

Keystone *v.* Phœnix, 95 U. S. 278.

The law requires the patentee to define in his claim precisely what his invention is. This Crosby has done, and the court has no power to disregard the plain terms of the claim and either change or enlarge it by a reference to the specification. — Cincinnati *v.* American, 143 Fed. 322; 74 C. C. A. 522.

Merrill *v.* Yeomans, 94 U. S. 568; Keystone *v.* Phœnix, 95 U. S. 274; White *v.* Dunbar, 119 U. S. 47; McCarty *v.* Lehigh, 160 U. S. 110; Penfield *v.* Potts, 126 Fed. 475.

Be this as it may, the Courts must take the claims of the patents as they find them, and are not permitted to reconstruct them by adding to or subtracting from their terminology. The Court is not concerned with the motives which induced the patent officials to require the patentee to accept the claim. It is enough that it is in the patent and that it is couched in language so plain and unambiguous as to leave no room for construction. The Courts must deal with the claims not as they might have been, but as they are. — Ryan *v.* Metropolitan, 144 Fed. 697; 75 C. C. A. 513.

We must construe the patent in the light of what it says, not what it might have said; we must hold the patentee to what he has put on paper, not what he may have had in his mind. It is enough that the patentee did not so word the claim and it is beyond the province of the court to rewrite it. — Universal *v.* Sonn, 154 Fed. 665; 83 C. C. A. 422.

Keystone *v.* Phœnix, 95 U. S. 274; National *v.* Williams, 44 Fed. 190.

The claims were limited by the word " detachable." Effort was made to show that this limitation should be disregarded. The court declined so to construe. — Brookfield *v.* Elmer, 154 Fed. 197; 83 C. C. A. 180.

§ 220. Construction — Reading in Elements.

It is true the elements of a combination not mentioned in a claim may sometimes be held included, in the light of other parts of the specification, which may be applicable, but here the claim is so broad that we are not justified in importing into it an element which would not operate to so enlarge its scope as to cover an invention in no manner indicated upon its face. — Day *v.* Fair Haven, 132 U. S. 98; 33 L. Ed. 265; 10 S. Ct. 11.

There is not an element in this combination which is not found in the windmill of the appellee, and it cannot be permitted to read other elements into this claim and then to defeat it, because it does not use the elements it interpolates. — Mast *v.* Dempster, 82 Fed. 327; 27 C. C. A. 191. But see 177 U. S. 485.

Clearly it is not allowable, by the importation of elements to give identity to claims which in terms are intelligibly different. — Anderson *v.* Potts, 108 Fed. 379; 47 C. C. A. 409.

McCarty *v.* Railroad, 160 U. S. 110.

The terms of the claim, read with the descriptive matter of the specification, would seem to require such a construction, but, inasmuch as the patent would be void for want of novelty if these constituents were omitted, this construction is imperative. — Brickill *v.* Mayor, 112 Fed. 65; 50 C. C. A. 1.

§ 221. Construction — Reference Characters.

Certainly neither of these cases establishes a hard and fast rule that where a patentee claims the combination of certain elements shown in his patent, describing them by reference letters shown in the drawings, he thereby deprives himself of the benefit of the liberal doctrine of equivalents applicable to pioneer patents, if otherwise he is entitled to its application. (Referring to Weir *v.* Morden, 125 U. S. 106; Hendy *v.* Iron, 127 U. S. 375.) — McCormick *v.* Aultman, 69 Fed. 371; 16 C. C. A. 259.

DeLamater *v.* Heath, 58 Fed. 414.

The use of letters in a claim to designate its elements does not prevent its liberal construction. — Bonnette *v.* Koehler, 82 Fed. 428; 27 C. C. A. 200.

McCormick *v.* Aultman, 69 Fed. 371; Muller *v.* Tool Co. 77 Fed. 621; DeLamater *v.* Heath, 58 Fed. 414.

The use of letters in describing a patented device has been the subject of consideration in a number of cases in the Supreme Court as well as in this court. Sometimes the letters have been held to limit the inventor to the very device thus designated; in other cases the mere use of letters has not been held to deprive the inventor of a liberal application of the doctrine of mechanical equivalents. An analysis of the cases will show that the conclusion reached depends upon the character of the improvement under consideration. If the invention is of a pioneer character, highly meritorious in conception and usefulness, the mere use of letters has been held not to limit the inventor to the exact form, of device shown, but he is entitled to a broader conception of his patent, in view of the advance which he has made in the art. However, if the field of invention is limited, and an improvement of a narrow character has been made, just sufficient to cross the line which divides mechanical improvement from patentable invention, the inventor will be allowed the specific description shown and no more. In other words, he will be held to have invented just what his claim shows to have been the specific subject matter of his improvement. Without stopping to analyze the cases,

we think the following citations establish the rules just stated. — Ross-Moyer *v.* Randall, 104 Fed. 355; 43 C. C. A. 578.

McCormick *v.* Aultman, 69 Fed. 371; Weir *v.* Morden, 125 U. S. 98; Hendy *v.* Iron Works, 127 U. S. 370; Muller *v.* Tool Co. 77 Fed. 621.

§ 222. Construction — Rules — General.

A patent should be generally construed in a favorable and beneficial sense for the best interests of the patentee. — Hogg *v.* Emerson, 6 How. 437; 12 L. Ed. 505.

Godson on Pat. 24; Kingsley & P. on Pat. 35; Grant *v.* Raymond, 6 Pet. 218; Ames *v.* Howard, 1 Summ. 482; Weyeth *v.* Stone, 1 Story, 273, 287; Blanchard *v.* Sprague, 2 Story, 164; King *v.* Wheeler, 2 Ban. & A. 345; Wilson *v.* Rousseau, 4 How. 708; Russell *v.* Cowley, 1 Compt. M. & B. 864, 876.

The term rule of construction in respect to patents and specifications, and the doings generally of inventors, is to apply to them plain and ordinary principles. — Hogg *v.* Emerson, 6 How. 437; 12 L. Ed. 505.

The reasonable presumption is that having a just right to cover and protect his whole invention, he intended to do so. — Winans *v.* Denmead, 15 How. 330; 14 L. Ed. 717.

Haworth *v.* Hardcastle, Web. P. C. 484.

A patent should be construed in a liberal spirit, to sustain the just claims of the inventor. This principle is not to be carried so far as to exclude what is in it, or to interpolate anything which it does not contain. But liberality rather than strictness, should prevail where the fate of the patent is involved, and the question to be decided is whether the inventor shall hold or lose the fruits of his genius and his labors. — Rubber Co. *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

Corning *v.* Burden, 15 How. 269; Battin *v.* Taggart, 17 How. 77.

It has always been held that a patent embraces nothing more than the improvement described and claimed as new, and that anyone who afterwards discovers a method of accomplishing the same object, substantially and essentially differing from the one described, has a right to use it and to vend it to others to be used. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

O'Reilly *v.* Morse, 15 How. 119.

A literal construction is not to be adopted where it would be repugnant to the manifest sense and reason of the instrument. — Brown *v.* Guild, 90 U. S. 181; 23 L. Ed. 161.

The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms. — Howe *v.* National, 134 U. S. 388; 33 L. Ed. 963; 10 S. Ct. 570.

White *v.* Dunbar, 119 U. S. 47.

If letters patent were to be treated by the courts in the critical and hostile spirit which a plea in abatement formerly encountered, the contention of the defendant would have technical importance; but courts do not construe letters patent for the purpose of their destruction. — Electric *v.* Brush, 52 Fed. 130; 2 C. C. A. 682.

The construction to be given to his patent must correspond with the extent of his invention. The actual invention, if in conformity with the language of the claims, should control in the construction of patents. A strict construction should not be resorted to if it becomes a limitation upon the actual invention, unless such construction is required by the claim, it being understood that the construction should not go beyond and enlarge the limitations of the claim. — Smead *v.* Fuller, 57 Fed. 626; 6 C. C. A. 481.

Merrill *v.* Yeomans, 94 U. S. 568; Railroad *v.* Mellon, 104 U. S. 117; Railway *v.* Sayles, 97 U. S. 554.

Unless a court is to recede from the rule of construction of claims which the modern decisions of the Supreme Court have endeavored to impress upon the patent law of this country, the claims are to be construed in accordance with what must be regarded as their obvious meaning. — Groth *v.* International, 61 Fed. 284; 9 C. C. A. 507.

The claim must be taken as defining precisely what the invention covered by the patent is, and, hence, the true question is, not what the patentee might have claimed, but what he has claimed. — Durand *v.* Schulze, 61 Fed. 819; 10 C. C. A. 97.

Theoretically, an inventor, in taking out a patent under the statutes of the United States, subtracts and adds nothing from or to his actual invention. The proceedings recognize his incipient ownership, and theoretically they constitute only a division of time, by which there is carved out of the entire estate a holding for a period of years for the inventor, and the fee is left for the public. Thus his patent is not at all akin to the King's grant, which must be expressed "ex speciali gratia, certa scientia, et mero motu regis," or be interpreted against the subject who receives it. Except for the provisions which, for public interests, require in a patent a description and claim, the same unrestricted rules of the common law would protect an inventor's statute right as are relied on to support a trademark or business good-will. Nevertheless, with reference to patents, the courts are necessarily subject to the restraints arising from the incorporation into them of the description and claim, which the statutes require. In interpreting these, however, the rule must be accepted that it is to be presumed the inventor did not intend to split up his invention. This is only an application of the ordinary rule of interpretation that transactions are to be construed in the light of all the circumstances and of the apparent purposes of the parties to them. Specifications and claims have not yet fallen into such settled forms as to enable the courts to construe them in any considerable part, with such certainty as they construe many words and phrases in formal instruments at the common law; but, on the whole the entire subject-matter must be taken together for effectuating the true purpose of the transaction, as contracts and wills, which are so frequently drawn formally, are usually construed. The ordinary rule that if by a literal construction an instrument would be rendered frivolous and ineffectual, and its apparent object frustrated, a different exposition will be applied if it can be supported by anything in it, requires that words which relate to what may be held nonessentials, however much multiplied, shall not be permitted unnecessarily to control the sense. For the most part such words are merely illustrative, or are used through inadvertence. On the other hand, it is true that words and phrases which might have been omitted on the presumption that they relate to nonessentials, may be introduced in such direct and positive manner as to leave the courts no option except to regard them as affecting the objects and limitations of the instrument in question. Especially may this be so when words which otherwise might be regarded as unimportant, are introduced by way of amendment. This is a

common rule, which perhaps has been illustrated more frequently with marine insurance policies than elsewhere. There is no doubt that if into an instrument which has been prepared and submitted additional words are subsequently introduced by mutual consent, greater effect may sometimes be attributed to such words than otherwise would be given them; for they then become the immediate language selected by the parties, and may be assumed to have been especially within their intention. The leading rule which we have given has been constantly restated by the text-writers and the courts as having full application to patents. They make use of such expressions as " ut res majis valeat quam pereat; " that " a patent should be construed in a liberal spirit, sustaining the just claims of the inventor;" that the titles by which patents are held " should not be overthrown upon doubts or objections capable of reasonable and just solution in favor of their validity; " that " in construing a patent the court will remember that the specification and claims are often unskillfully drawn; " and that " the claim shall be construed, if possible, to sustain the patentee's right to all that he has invented." It is true the general rules we have stated include the subordinate principle, which applies everywhere, that they are not to be carried " so far as to exclude what is in the patent, or to interpolate anything which it does not contain." It is impossible, however, to carry this to the extent of applying to patents as fully as it is applied to instruments in general, the maxim, " Enumeratio unius exclusio alterius." With the aid of the doctrine of equivalents, the courts are constantly engrafting on specifications and claims what they do not contain in the same sense in which the letter of ordinary instruments is required to contain matter on which the parties rely. To extend, in disregard of this fact, the rule against interpolations to any particular case, requires either that the patent relate to such mere matters of form or detail that interpretation by exclusion becomes just and reasonable, or that the specifications and claims be so phrased as in fact to contain a clearly intended exclusion, or the equivalent thereof. — Reece *v.* Globe, 61 Fed. 958; 10 C. C. A. 194.

These claims do not in themselves refer to the previous description of the parts of the machine mentioned in them, but they must be taken as in effect referring to the whole of the instrument in which they belong. — Bundy *v.* Columbian, 64 Fed. 851; 12 C. C. A. 442.

Westinghouse *v.* Air Brake Co. 2 Ban. & A. 55; Fed. Cas. 17,450; Bruce *v.* Marder, 10 Fed. 750.

The statute requires the inventor to particularly point out and distinctly claim the improvement or combination which he claims as his discovery. R. S. sec. 4888. When, under this statute, the inventor has made his claim, he has thereby disclaimed and dedicated to the public all other combinations and improvements apparent from his specifications and claims that are not mere evasions of the device, combinations or improvements he claims as his own. The purpose of a claim in a patent is to notify the public of the extent of the monopoly secured to the inventor, and, while it is notice of his exclusive privileges, it is no less an estoppel of the patentee to claim under that patent any combination or improvement he has not therein pointed out and distinctly claimed as his discovery or invention. The presumption is, and it is generally the fact, that any such unclaimed combination or improvement was not the invention or discovery of the patentee; that it was old and well-known; and that for that reason he did not intend to claim it. But whether he did intend to claim it or not is immaterial in an action for the infringement of a patent, where no claim for mistake or inadvertence in preparing the specifications or claims can be heard. The patent itself is a solemn declaration of the inventor that every improvement,

device and combination not claimed by him therein is not his invention or discovery, but is the property of the public. It is full and legal notice to every one; notice on which every one has the right to rely that he may freely use such improvements and combinations without claim or molestation from the patentee. The public generally does use them, and it would be rank injustice to permit a patentee, after a combination or device that he did not claim has gone into general use, and years after his patent was granted, to read that combination or device into one of the claims of his patent, and to recover for its infringement of every one who has used it on the faith of his solemn declaration that he did not claim it.—Buffington's *v.* Eustis, 65 Fed. 804; 13 C. C. A. 143.

Stirrat *v.* Mfg. Co. 61 Fed. 980; Keystone *v.* Phœnix, 95 U. S. 274; Miller *v.* Brass Co. 104 U. S. 350; Mahn *v.* Harwood, 112 U. S. 354; Wollensak *v.* Reiher, 115 U. S. 96; Parker *v.* Yale, 123 U. S. 87.

The invention secured by a patent is that which is secured to the patentee by the claim. The claim is a statutory requirement prescribed for the purpose of making a patentee define what his invention is so distinctly and exactly as to appraise other inventors, and the public, what is withdrawn from general use. The claim, however, is to be read in the light of the description contained in the specification, and its literal terms may be enlarged or narrowed accordingly, but not to an extent inconsistent with the meaning. Identity of language in the claims of two patents does not necessarily import that the invention patented by each is identical, nor does a difference in phraseology necessarily import that they are for different inventions. The test of identity is whether both, when properly construed in the light of the description define essentially the same thing. When the claims of both cover and control essentially the same subject-matter, both are for the same invention, and the later patent is void. — Thomson-Houston *v.* Elmira, 71 Fed. 396; 18 C. C. A. 145.

In the construction of a patent, it is not the personal intent or understanding of the patentee, but the actual facts regarding the invention, that was material. — Thomson-Houston *v.* Western, 72 Fed. 530; 19 C. C. A. 1.

It is the well known rule that patents, like other instruments, are to be construed by what appears on their face "in the light of all the circumstances and the apparent purposes of the parties to them." — Long *v.* Pope, 75 Fed. 835; 21 C. C. A. 533.

Reece *v.* Globe, 61 Fed. 958; Wier *v.* Morden, 125 U. S. 98.

That the claim is a statutory requirement and must be strictly construed, see Boynton *v.* Morris, 87 Fed. 225; 30 C. C. A. 617.

White *v.* Dunbar, 119 U. S. 47.

As the question of the construction of a patent concerns not only the parties in this case, but also the public, so that, as is well settled, we have a certain duty to take notice of matters bearing upon questions of the existence and extent of patentability, we would not be justified in ignoring what our own records show us on this point. — Cushman *v.* Goddard, 95 Fed. 664; 37 C. C. A. 221.

Among the primary rules for the construction of a contract are these: The court should put itself in the place of the parties at the time it is made, and should read its terms in the light of the facts and circumstances which then surrounded them. When the intention of the parties is manifest, it should control, regardless of inapt expressions and technical rules. In cases of

doubtful validity or of ambiguous terms, that construction should be adopted which sustains and vitalizes the agreement, rather than that which destroys or paralyzes it. Prior negotations are merged in the contract, and, while they may be considered to interpret its purpose, they must not be permitted to contradict or modify its express meaning. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

If the original conception for which his patents were granted was not his; if the principle of the alleged invention, with all its undeveloped possibilities, is found in previous patents or rested in public knowledge, and he has done no more than extend the original thought by change only in form, proportion and degree; if he has carried forward another's conception by a new and more extended application of it; and if the essence of his patents is in doing substantially the same thing in substantially the same way, only providing such improvements and modifications as a mechanic conversant with the art could effect by skill and ingenuity — it would follow that he would be entitled only to patents upon his improvements, and would not be entitled to shut out others from the enjoyment of those improvements which the same or greater skill may have achieved. But if the entire scheme is radically different from the prior art, and if, in construction, operation, purpose and result, the invention set forth in the prior patent is not responsive in terms or substance to his construction, and the same or nonequivalent elements are not used in substantially the same way to produce the same result, and no mechanical skill working upon the prior patent could ever produce the same result that he accomplished, then it would follow that the inventive idea was different, and any modification or improvements worked out upon his idea must be tributary to it. — Ideal *v.* Crown, 131 Fed. 244; 65 C. C. A. 436.

The rules for the construction of contracts apply with equal force to the interpretation of patents. The great desideratum, here as there, is to ascertain and give effect to the intention of the parties to the contract when they made it. This intention must be ascertained from the entire agreement, and not from isolated parts of it, because it was not expressed by a part, but by the whole of the contract. When the terms of a patent are plain and the intention of the parties is manifest, the latter must prevail, and there is no room for construction. When its expressions are ambiguous and the validity of the patent or any claim in it is doubtful, that construction which sustains and vitalizes the patent or claim, rather than that which paralyzes or destroys them, must be preferred. — Jewell *v.* Jackson, 140 Fed. 340; 72 C. C. A. 304.

The question of the validity of the patent is to be determined by ascertaining what it describes and claims which had not been described in previous patents, and construing the claim so far as its language will permit so as to secure to the patentee that which was really new and patentable in view of the prior art. — Ironclad *v.* Dairyman's, 143 Fed. 512; 74 C. C. A. 372.

The claim should be as broad as the invention. A safe and conservative rule for the construction of such claims (primary improvements) is clearly stated by Judge Shipman in Smead *v.* Fuller, 57 Fed. 626. — Wagner *v.* Wycoff, 151 Fed. 585; 81 C. C. A. 129.

Machine Co. *v.* Murphy, 97 U. S. 120; Tilghman *v.* Proctor, 102 U. S. 707; Eldred *v.* Kirkland, 130 Fed. 342; Reece *v.* Globe, 61 Fed. 959.

The court may resort to strict and, it may even be, to harsh construction when the patentee has done nothing more than make a trivial improvement upon a well-known structure which produces no new result; but it should be

correspondingly liberal when convinced that the patentee's improvement is so radical as to put the old methods out of action. The courts have frequently held that one who takes an old machine and by a few, even inconsequential, changes compels it to perform a new function and do important work which no one ever dreamed it capable of performing, is entitled to rank as an inventor. — O'Rourke *v.* McMullen, 160 Fed. 933; 88 C. C. A. 115.

Hobbs *v.* Beach, 180 U. S. 383; Magowan *v.* N. Y. 141 U. S. 332, Barbed Wire Case, 143 U. S. 275; Potts *v.* Creager, 155 U. S. 597; Loom Co. *v.* Higgins, 105 U. S. 580.

§ 223. Construction — Specification.

The claim is not to be taken alone, but in connection with the specification and drawings; the whole instrument is to be construed together. But we are to look at the others only for the purpose of enabling us correctly to interpret the claim. — Brooks *v.* Fisk, 15 How. 212; 14 L. Ed. 665.

The claim should be construed in connection with the specification. — Turrill *v.* Railroad, 68 U. S. 491; 17 L. Ed. 668.

Such a reference is proper if it does not introduce confusion and uncertainty, and is often necessary for restraining the too great generality, or enlarging the literal narrowness of the claim. — Brown *v.* Guild, 90 U. S. 181; 23 L. Ed. 161.

The claim may be construed in connection with the specification, and if the claim contains words referring back to the specification it cannot properly be construed in any other way. — Fuller *v.* Yentzer, 94 U. S. 288; 24 L. Ed. 103.

Seymour *v.* Osborne, 11 Wall. 516.

The scope of letters patent must be limited to the invention covered by the claim, and while the claim may be illustrated it can not be enlarged by language used in other parts of the specification. — Yale *v.* Greenleaf, 117 U. S. 554; 29 L. Ed. 952; 6 S. Ct. 846.

Keystone *v.* Phœnix, 95 U. S. 274; R. R. *v.* Mellon, 104 U. S. 112.

Some persons seem to suppose that a claim in a patent is like a nose of wax which may be turned and twisted in any direction, by merely referring to the specification so as to make it include something more than, or something different from, what its words express. The context may undoubtedly be resorted to, and often is resorted to, for the purpose of better understanding the meaning of the claim; but not for the purpose of changing it and making it different from what it is. The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public as well as an evasion of the law, to construe it in a manner different from the plain import of its terms. — White *v.* Dunbar, 119 U. S. 47; 30 L. Ed. 303; 7 S. Ct. 72.

Keystone *v.* Phœnix, 95 U. S. 274; James *v.* Campbell, 104 U. S. 356.

The plain and explicit language of the specification requires a construction of the claim which will enable the defendant to escape liability. There is nothing in the context to indicate that the patentee contemplated any alternative arrangement. — Snow *v.* Railway, 121 U. S. 617; 30 L. Ed. 1004; 7 S. Ct. 1343.

The invention, of course, must be described, and the mode of putting it to practical use, but the claims measure the invention. They may be explained

and illustrated by the description. They cannot be enlarged by it. — Continental *v.* Eastern, 210 U. S. 405; 51 L. Ed. 922; 28 S. Ct. 748.

Yale *v.* Greenleaf, 117 U. S. 554; Snow *v.* Lake Shore, 121 U. S. 617.

It is true that the claims must be construed according to the language of each, but specifications and designs may be referred to to limit or explain if not to enlarge. — Jones *v.* Munger, 49 Fed. 61; 1 C. C. A. 158.

Evans *v.* Kelly, 13 Fed. 903; Turrill *v.* Railroad, 1 Wall. 491; Tompkins *v.* Gage, 5 Blatchf. 268; Vance *v.* Campbell, 1 Black, 427.

It is always the duty of the courts to construe the patents by reference to the language of the claims and an examination of the specifications and drawings accompanying the same. — Norton *v.* Jensen, 49 Fed. 859; 1 C. C. A. 452.

Reference may be made to the specifications to supply in a claim what it is plain to every one skilled in the art is a necessary incident. — Reece *v.* Globe, 61 Fed. 958; 10 C. C. A. 194.

Seymour *v.* Osborne, 11 Wall. 516; Day *v.* Railway, 132 U. S. 98.

The claims of a patent limit the exclusive privileges of the patentee, and his specification may be referred to to explain and restrict, but never to expand them. General language in a claim which points to an element or device more fully described in the specification is limited to such an element or device as is there described. — Adams *v.* Lindell, 77 Fed. 432; 23 C. C. A. 223.

Mitchell *v.* Tilghman, 19 Wall. 287; Stirrat *v.* Mfg. Co. 61 Fed. 980.

The claims and the specifications are to be read together, not for the purpose of enlarging the invention stated in the claims, but " for the purpose of better understanding the meaning of the claims," the limit and extent of the invention, and the object of the inventor, and the construction, method, and process, as understood by him. — American *v.* Howland, 80 Fed. 395; 25 C. C. A. 500.

Howe *v.* National, 134 U. S. 383; Vance *v.* Campbell, Fed. Cas. 16,837; Wilson *v.* Coon, 6 Fed. 611; Gottfried *v.* Brewing Co. Fed. Cas. 5633; Brass Co. *v.* Miller, Fed. Cas. 17,254; Seymour *v.* Osborne, 11 Wall. 516; Rob. Pat. sec. 750; Curt. Pat. sec. 225, 227.

If, therefore, we apply the benignant rule of construction, — as we are required to do, — that the claims should be construed by the specifications, and that if, looking at both, the court is able to understand the meaning of the patentee in the language of his claims, and, as so understood, the combination is a practicable one, it will give effect to them according to the apparent purpose. Ryan *v.* Goodwin, Fed. Cas. 12,186; Blanchard *v.* Sprague, Fed. Cas. 1518; Turrill *v.* Railroad, 1 Wall. 491; Klein *v.* Russell, 19 Wall. 433; Haworth *v.* Hardcastle, Webst. Pat. Cas. 480; Blandy *v.* Griffith, Fed. Cas. 1529; Roller-Mill Co. *v.* Coombs, 39 Fed. 25.

These are a few of the great number of cases in which the foregoing rule has been approved and applied. Of course, if the language of a claim, in the light of the specifications, does not show that the patentee has described a practicable combination, there is an end of it, and the claim is nugatory. — Soehner *v.* Favorite Co. 84 Fed. 182; 28 C. C. A. 317.

If interpretation of the claim were requisite, the specification might, of course, be resorted to for the purpose of arriving at a better understanding of its meaning, but this may not be done " for the purpose of changing it

and making it different from what it is." — Boynton *v.* Morris, 87 Fed. 225; 30 C. C. A. 617.

White *v.* Dunbar, 119 U. S. 47.

The patent when construed by a reference to the whole specification, including the description and the claims, fully accomplishes these several ends. If a claim, uncertain when considered apart from the description, can by reference to the latter be rendered so clear as to satisfy the requirement of the statute, that the inventor " shall particularly point out and distinctly claim " his invention, by parity of reasoning a doubtful point in the description, when considered apart from the claims, can by reference to the latter, when in themselves unambiguous, be rendered so clear as to satisfy the other requirement of the statute that the inventor shall fully and clearly set forth his invention in the description. That under such circumstances a description uncertain or indefinite when considered alone, but not inconsistent with the claims, may be rendered certain and sufficient to meet the requirements of the statute by reading the whole specification together has frequently been recognized and is, we think, a sound rule of law. — Electric *v.* Carborundum, 102 Fed. 618; 42 C. C. A. 537.

Battin *v.* Taggert, 17 How. 74; Corn-Planter Pat. 23 Wall. 181; Carver *v.* Mfg. Co. 2 Story, 430; Howes *v.* Nutes, 4 Cliff. 173; Ryan *v.* Goodwin, 3 Sumn. 514; Myers *v.* Frame, 8 Blatchf. 446; Parker *v.* Stiles, 5 McLean, 44; Lowell *v.* Lewis, 1 Mason, 182.

It is true that neither they nor the specification can be read to expand the claim; but the specification and the drawings must be read together, and given their obvious force and meaning, for the purpose of determining what devices are pointed out and described therein.— Brammer *v.* Schroeder, 106 Fed. 918; 46 C. C. A. 41.

We may go to the description to amplify a claim, but we can not, out of the mere descriptive portion of the patent, wholly create a claim. — General *v.* Mallers, 110 Fed. 529; 49 C. C. A. 138.

While it is the purpose of the statute to require the inventor to set forth the nature and extent of his patent, and it is not the province of the courts to add to or take from a claim that which is not embraced within its language, nevertheless we may look to the specifications for the purpose of construing the language used in the claim. If this language includes an element only described in general terms, we may look to the specifications to ascertain its meaning. — Stillwell-Bierce *v.* Eufaula, 117 Fed. 410; 54 C. C. A. 584.

Soehner *v.* Range Co. 84 Fed. 182; Lake Shore *v.* National, 110 U. S. 229; Seymour *v.* Osborne, 11 Wall. 516; Corn Planter Pat. 23 Wall. 181; Fuller *v.* Yentzer, 94 U. S. 288; Hailes *v.* Van Wormer, 20 Wall. 353; Westinghouse *v.* Brake Co. 170 U. S. 537.

While this court may resort to the language of the specification for the purpose of interpreting the claim, it cannot read into such claim elements not specifically covered thereby, especially where to do so would be to contradict the clear and definite statement in the specification. When the terms of the claim are clear and distinct, the patentee cannot claim anything beyond for the purpose of establishing infringement. — Westinghouse *v.* N. Y. 119 Fed. 874; 56 C. C. A. 404.

Keystone *v.* Phœnix, 95 U. S. 274; Merrill *v.* Yeomans, 94 U. S. 568; McCarty *v.* Railroad, 160 U. S. 110; White *v.* Dunbar, 119 U. S. 47.

Within certain limits the courts are inclined to adopt the mode of construction, of construing the claims by reference to the specification, when it

is necessary, as in the present case, to save the patent from the objection that the claims are too broad. — Lamb *v.* Lamb, 120 Fed. 267; 56 C. C. A. 247.

Rubber *v.* Goodyear, 9 Wall. 788; McClain *v.* Ortmayer, 141 U. S. 419; Coupe *v.* Royer, 155 U. S. 565; Soehner *v.* Stove, 84 Fed. 182.

The claims must stand or fall as made (Keystone *v.* Phœnix, 95 U. S. 274); but it is equally well settled that the claims for a patent are to be construed by reference to the specifications (of which the drawings form a part) and that such reference may be had, not for the purpose of expanding the claim, but for the purpose of defining it and limiting it to the description of the invention. — Lamb *v.* Lamb, 120 Fed. 267; 56 C. C. A. 247.

McClain *v.* Ortmayer, 141 U. S. 419; Howe *v.* National, 134 U. S. 388; Coupe *v.* Royer, 155 U. S. 565; Tilghman *v.* Proctor, 102 U. S. 729.

To sustain the validity of claims 1 and 2, it is necessary "to refer back to the specification; not, it is true, for a slavish adoption of the identical instrumentalities therein described, but for the understanding of the essential and substantial features of the means therein illustrated." — Seiler *v.* Fuller, 121 Fed. 85; 57 C. C. A. 339.

Westinghouse *v.* Boyden, 170 U. S. 537.

The claims of a patent must be read in the light of the specification. The specification may always be referred to to restrict, though not to expand, the claims. — Anderson *v.* Collins, 122 Fed. 451; 58 C. C. A. 669.

The claims cannot be broadened or made to include things not therein included, but to know what is included we may resort to the specification for the purpose of interpreting the claim. — Canda *v.* Michigan, 124 Fed. 486; 61 C. C. A. 194.

McCarty *v.* Lehigh, 160 U. S. 110; White *v.* Dunbar, 119 U. S. 47.

It is well settled that for such purpose, and especially when the claim refers to the specification for further description, it is proper to resort to the specification, if explanation is necessary. — Canda *v.* Michigan, 124 Fed. 486; 61 C. C. A. 194.

Soehner *v.* Favorite, 84 Fed. 182; Stillwell-Bierce *v.* Eufaula, 117 Fed. 410; Klein *v.* Russell, 19 Wall. 433; Hailes *v.* Van Wormer, 20 Wall. 353; Lamb *v.* Lamb, 120 Fed. 267.

Features of construction which the specification of a patent recommends or describes as preferable do not thereby become essential parts of the patent, or limitations of the claims. — Smeeth *v.* Perkins, 125 Fed. 285; 60 C. C. A. 199.

Sewall *v.* Jones, 91 U. S. 171; Krajewski *v.* Pharr, 105 Fed. 514; Winans *v.* Denmead, 15 How. 330; Klein *v.* Russell, 19 Wall. 433.

Reference may be made to the specification to explain but not to extend or limit the claim. The words "to operate substantially as described" mean "substantially as described in regard to the combination which is the subject of the claim." — General *v.* International, 126 Fed. 755; 61 C. C. A. 329.

Lake Shore *v.* Car Brake, 110 U. S. 229.

It is evident that the express terms of the claim do not limit the patentee to a particular device, and therefore the construction adopted by the court below practically rewrote the claim, and in effect expunged it from the patent; for to limit it to one form of structure described in the specification and

shown in the drawings necessarily introduced into the claim such modifications of the language used by the inventor as turned it into a substantial, and therefore a superfluous, equivalent of the claims preceding. — Ryder *v.* Schlichter, 126 Fed. 487; 61 C. C. A. 469.

The claims of a patent are to be fairly construed so as to cover, if possible, the invention, and thus save it, especially if it be a meritorious one. In approaching a patent, we are to look primarily at the thing which the inventor conceived and described in his patent, and the claims are to be interpreted with this particular thing ever before our eyes. In confining our attention too closely to the claims, we are apt to look at them as separate and independent entities, and to lose sight of the important consideration that the real invention is to be found in the specification and drawings, and that the language of the claims is to be construed in the light of what is there shown and described. — Mossberg *v.* Nutter, 135 Fed. 95; 68 C. C. A. 257.

If any doubt existed as to the meaning of the claim, or if it were susceptible to two interpretations, it would be both right and proper that reference should be made to the drawings and specifications, not for the purpose of changing or altering the claim, but to ascertain the true and proper interpretation. — Robins *v.* American, 145 Fed. 923; 76 C. C. A. 461.

McClain *v.* Ortmayer, 141 U. S. 419; Klein *v.* Russell, 19 Wall. 433; McEwan *v.* McEwan, 91 Fed. 787; Stillwell-Bierce *v.* Eufaula, 117 Fed. 410; Electric *v.* Carborundum, 102 Fed. 618; Hogg *v.* Emerson, 11 How. 587.

We are satisfied, not only that the scope of the patentee's invention was narrow in fact, but that such limitation was advisedly recognized in his specifications, and is conclusive against the broad interpretation now sought. — Lowden *v.* Janesville, 148 Fed. 686; 78 C. C. A. 548.

§ 224. Construction — State of Art.

The case is one where, in view of the state of the art, the invention must be restricted to the form shown and described by the patentee. He was not a pioneer. He merely devised a new form to accomplish these results. — Duff *v.* Sterling, 107 U. S. 636; 27 L. Ed. 517; 2 S. Ct. 487.

R. R. *v.* Sayles, 97 U. S. 554.

Where the state of the art shows prior devices limiting the scope of the invention, the claims must be strictly construed. — Newton *v.* Furst, 119 U. S. 373; 30 L. Ed. 442; 7 S. Ct. 369.

Letters patent, though not set up in the answer, may be received in evidence to show the state of the art and to aid in the construction of the plaintiff's claim, though not to invalidate the claim on the ground of want of novelty when properly construed. — Grier *v.* Wilt, 120 U. S. 412; 30 L. Ed. 712; 7 S. Ct. 718.

Vance *v.* Campbell, 66 U. S. 427; Railroad *v.* Dubois, 79 U. S. 47; Brown *v.* Piper, 91 U. S. 37; Eachus *v.* Broomall, 115 U. S. 429.

The extent of novelty which can be read into a claim must be limited by the state of the art. — Consolidated *v.* Walker, 138 U. S. 124; 34 L. Ed. 920; 11 S. Ct. 292.

Phœnix *v.* Spiegel, 133 U. S. 360.

The inventor is legally presumed to have all prior patents before him when he makes his invention. — Duer *v.* Corbin, 149 U. S. 216; 37 L. Ed. 707; 13 S. Ct. 850.

Devices, though not claimed to fully anticipate the patent in suit, are important in their bearing upon the construction of this patent and upon the alleged infringement of the defendants. — Deering *v.* Winona, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

The line that the patentee drew in his patent between the old and new mechanism marks the extent of that portion of his invention now under consideration. — Lalance *v.* Haberman, 59 Fed. 143; 8 C. C. A. 53.

The claims must be construed in view of the state of the art, and unless it be a pioneer invention they are not entitled to the rule applicable to pioneer inventions. — Lamson *v.* Godehard, 59 Fed. 776; 8 C. C. A. 265.

Machine Co. *v.* Lancaster, 129 U. S. 263; McCormick *v.* Talcott, 20 How. 402; Railway *v.* Sayles, 97 U. S. 554.

The claims and specifications of every patent must be read and construed in the light of a full knowledge of the state of the art when the patent was issued. A patent to the original inventor of a machine which first performs a useful function protects him against all machines that perform the same function by equivalent mechanical devices, but a patent to one who has simply made a slight improvement on a device that performed the same function before as after the improvement, is protected only against those who use the very improvement he describes and claims, or mere colorable evasions of it. — Stirratt *v.* Excelsior, 61 Fed. 980; 10 C. C. A. 216.

McCormick *v.* Talcott, 20 How. 402.

The claims and specifications of every patent must be read and construed in the light of a knowledge of the state of the art when it was issued. — Murphy *v.* Excelsior, 76 Fed. 965; 22 C. C. A. 658.

A claim made necessarily complex and specific by reason of the prior art must be specifically construed. — Volkmann *v.* Dohnhoff, 77 Fed. 978; 23 C. C. A. 599.

If the specifications and claims of the patent were to be given effect without regard to the history of the art or the proceedings in the patent office, it might be conceded that the defendant's device would come within the scope of complainant's monopoly. We must, however, use both aids in construing the patent. — Thomas *v.* Rocker, 77 Fed. 420; 23 C. C. A. 211.

If the patented pull-off and take-up are merely improvements upon old devices for doing the same work, or if the patentee has imposed a limitation on his invention by express words in the specification and claims, it is manifest that the court would not be warranted in giving that breadth of construction to the patent which would be given in a case where the inventor was the first to devise a pull-off and take-up mechanism, or had not expressly restricted his invention by the terms of the specification and claims. — Goodyear *v.* Spaulding, 110 Fed. 393; 49 C. C. A. 88.

We must charge the inventor with knowledge of all that preceded him in the art, for " it is a presumption of law that all mechanics interested in upholding or defeating a patent were fully acquainted with the state of the art when they took out their patent, or when they built their machine. Each

party may then be assumed to have borrowed from the other whatever was actually first invented and used by the other." — Daylight *v.* American, 142 Fed. 454; 73 C. C. A. 570.

Crompton *v.* Knowles, 7 Fed. 199; Mast *v.* Stover, 177 U. S. 493.

§ 225. Construction — Unclaimed Elements.

If the patentee by his specification, including the summary claim at its close, points out and distinguishes what he claims as his own invention, it is all that is required; the rest he impliedly, if he does not expressly, disclaims as old. — Brown *v.* Guild, 90 U. S. 181; 23 L. Ed. 161.

In testing the validity of this patent for the "sheets" (blank forms) the methods and forms of contract described and not claimed in it are to be considered as outstanding. — U. S. Credit *v.* American, 59 Fed. 139; 8 C. C. A. 49.

Underwood *v.* Gerber, 149 U. S. 224.

Of course the discovery is unimportant if the patent does not secure it. The claim for a method of glass manufacture, as we have seen, was disallowed. If the advantages of the discovery are not, therefore, embodied in a new function, the discovery is not secured. — Benjamin *v.* Chambers, 59 Fed. 151; 8 C. C. A. 61.

An unclaimed peculiarity of construction is rarely read into a claim, the life of which consists in minor improvements upon an old article, and in which the patentee has undertaken to point out minutely the distinctive features which differentiate his combination from that of pre-existing devices. — Eagle *v.* Corbin, 64 Fed. 789; 12 C. C. A. 418.

As it was the combination which was claimed, the tension device was to be deemed incorporated into the claims, notwithstanding it was not in terms included. — Thomson-Houston *v.* Black River, 135 Fed. 759; 68 C. C. A. 461.

Hartshorn *v.* Saginaw, 119 U. S. 678; Consolidated *v.* Walker, 138 U. S. 124.

Where the patentee in his specifications has limited himself to do what he states to be his primary invention, and to "the several combinations hereinafter described and claimed," and where the combination upon which the contention of infringement is based is neither described, claimed nor illustrated, it should not be read into the patent. — Edison *v.* Crouse, 152 Fed. 437; 81 C. C. A. 579.

§ 226. Construction — Undue Limitation by Patentee.

When a claim is explicit, the courts cannot alter or enlarge it. If the patentees have not claimed the whole of their invention, and the omission has been the result of inadvertence, they should have sought to correct the error by a surrender of their patent and an application for a reissue. They cannot expect the courts to wade through the history of the art and spell out what they might have claimed, but have not claimed. — Keystone *v.* Phœnix, 95 U. S. 274; 24 L. Ed. 344.

Merrill *v.* Yeomans, 94 U. S. 568.

The principle of construction which we think applicable to the plaintiff's patent is that such construction must be in conformity with the self imposed limitations which are contained in the claims. Such claims are the measure

of their right to relief. — Coupe *v.* Royer, 155 U. S. 565; 39 L. Ed. 263; 15 S. Ct. 199.

Keystone *v.* Phœnix, 95 U. S. 274; Burns *v.* Meyer, 100 U. S. 672; McClain *v.* Ortmayer, 141 U. S. 425.

That where a claim includes a specific element in a specifically limited form, where such limitation is not required by the general terms of the patent, or by the state of the prior art, the court may construe the claim, nevertheless, with a scope commensurate with the invention, see Metallic *v.* Brown, 104 Fed. 345: 43 C. C. A. 568.

McCormick *v.* Aultman, 69 Fed. 371; Reece *v.* Globe, 61 Fed. 958; Electric *v.* LeRue, 139 U. S. 601; Devlin *v.* Paynter, 64 Fed. 398.

That where the inventor has industriously set forth as essential to his invention a certain construction and in his claims limits it to "substantially as described," such element or construction must be imported into the claim whether specifically stated or not, see Brill *v.* Peckham, 108 Fed. 267; 47 C. C. A. 315.

It is an elementary rule that a patentee may claim the whole or a part of what he has invented. He is entitled to limit his claims to any extent that may seem desirable, but, having done so, his right to protection is so limited, since the claim actually made by the patentee is the measure of his right to relief. — Lanyon *v.* Brown, 129 Fed. 912; 64 C. C. A. 344.

McClain *v.* Ortmayer, 141 U. S. 419; Keystone *v.* Phœnix, 95 U. S. 274; White *v.* Dunbar, 119 U. S. 47.

The court is not permitted to reconstruct the claims of a patent, and the patentee is bound by the claims as he has written them. — American *v.* Wagner, 151 Fed. 576; 81 C. C. A. 120.

In view of the failure of the patentee specifically to point out, illustrate, or broadly claim such location, we cannot so read it into the patent so as to embrace defendant's construction. In fact, it may be said that the defendant's construction is founded on a discovery not disclosed in the patent in suit, namely, that the change which the patentee supposed could only be obtained by a location of the main or working circuit, might be obtained by a location in the generator circuit. In these circumstances the rule must be applied that, while a patentee is entitled to all the beneficial uses of his invention when the property or function is inherent in the invention or is described or claimed by him, yet that, where such change or function is neither described nor claimed, and especially where other changes are described and insisted on as essential and specifically claimed, it is significant proof that the change which had not been disclosed by him to the public is not his invention. — Electric *v.* Gould, 158 Fed. 610; 85 C. C. A. 432.

Fastener Co. *v.* Kraetzer, 150 U. S. 111; Goodyear *v.* Rubber, 116 Fed. 375; Long *v.* Pope, 75 Fed. 835; Wells *v.* Curtis, 66 Fed. 318; Bates *v.* Force, 149 Fed. 220.

If a patentee by his specification and claims industriously makes an unnecessary device an essential mechanical element of the combination he claims, he is thereby estopped from maintaining that a combination which omits it infringes. — Brammer *v.* Witte, 159 Fed. 526; 86 C. C. A. 207.

Cimiotti *v.* American, 198 U. S. 399.

§ 227. Construction — Unduly Broad.

Having thus enlarged his claims, the court should not be astute to restrict them by reading in the real invention which he has failed to include within their terms. — Excelsior *v.* Morse-Keefer, 101 Fed. 448; 41 C. C. A. 448.

Courts lean towards reading into the claims of a patent such limitations as will save the real invention as disclosed by the specification and the prior state of the art. But when the claims are drawn in broad and nebulous terms with the apparent purpose of enabling the patentee to monopolize an important industry, the courts should be slow in attempting to sustain their validity by narrowing them beyond the boundaries which are clearly warranted in the specification. — National *v.* New England, 151 Fed. 19; 80 C. C. A. 485.

§ 228. Construction — Valeat quam Pereat Rule.

Patents for inventions are not to be treated as mere monopolies, and, therefore, odious in the eyes of the law; but they are to receive a liberal construction, and under the fair application of the rule, ut res magis valeat quam pereat, are, if practicable to be so interpreted as to uphold and not destroy the right of the inventor. — Turrill *v.* Railroad, 68 U. S. 491; 17 L. Ed. 668.

Ryan *v.* Goodwin, 3 Sumn. 520.

In case of doubt when a claim is susceptible of two constructions the one will be adopted which will preserve to the patentee his actual invention; but if the language of the specification and claims show clearly what he desired to secure as a monopoly nothing can be held to be an infringement which does not fall within the terms the patentee has himself chosen to express his invention. — McClain *v.* Ortmayer, 141 U. S. 419; 35 L. Ed. 800; 12 S. Ct. 76.

Vance *v.* Campbell, 66 U. S. 427.

That interpretation which sustains and vitalizes the grant should be preferred to that which strikes down and paralyzes it. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Reece *v.* Globe, 61 Fed. 958; Consolidated *v.* Columbian, 79 Fed. 795; American *v.* Newton, 82 Fed. 732; McSherry *v.* Dowagiac, 101 Fed. 716.

§ 229. Construction — Words and Phrases.

It is generally true, when a patentee describes a machine, and then claims it as described, that he is understood to intend to claim, and does by law actually cover, not only the precise forms he has described, but all other forms which embody his invention; it being a familiar rule, that to copy the principle or mode of operation described is an infringement, although the copy should be totally unlike the original in form or proportions. — Winans *v.* Denmead, 15 How. 330; 14 L. Ed. 717.

Words of such import, if not expressed in the claim, must be implied, else the patent in many cases would be invalid as covering a mere function, principle or result, which is obviously forbidden by the patent law, as it would close the door to all subsequent improvements. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

Seymour *v.* Osborne, 11 Wall. 538; Curt Pat. sec. 242.

Objection is taken to the patent because it claims " the design for a carpet substantially as shown." We see no good objection to the form of the claim. It refers to the description as well as the drawing, in using the word " shown." — Dobson *v.* Hartford, 114 U. S. 439; 29 L. Ed. 177; 5 S. Ct. 945.

These words have been uniformly held by us to import into the claim the particulars of the specification. — Westinghouse *v.* Boyden, 170 U. S. 537; 42 L. Ed. 1136; 18 S. Ct. 707.

The words "substantially as set forth" do not justify reading into the claim qualifications expressed in the specification. — Westinghouse *v.* Edison, 63 Fed. 588; 11 C. C. A. 342.

It is said that the claims of the reissued patent are void because too broad. Unless the claims are to be restricted by construction, this criticism is a just one. The only adaptation capable of appropriation by the inventor is that which is shown in the specifications and drawings of his patent, and this is the necessary limiting effect of the words "substantially and for the purpose specified." In this way the court may sustain the validity of the claims, as it is its duty to do when possible. — Columbus *v.* Robbins, 64 Fed. 384; 12 C. C. A. 174.

Corn Planter Pat. 23 Wall. 181.

The phrase, "substantially as set forth," is technical and is equivalent to saying, "by the means described in the text of the inventor's application for letters patent, as illustrated by the drawings, diagrams, and models which accompany the application." These words limit the general terms of the specification which set out the function performed by the invention, and confine the inventor's rights to his own special means of performing the function. — Boyden *v.* Westinghouse, 70 Fed. 816; 17 C. C. A. 430.

The words in the claims "as herein described" and "as described" must be construed closely in a patent of narrow scope. — Davis *v.* Parkman, 71 Fed. 961; 18 C. C. A. 398.

Duff *v.* Pump Co. 107 U. S. 636; Bragg *v.* Fitch, 121 U. S. 478; Knapp *v.* Morss, 150 U. S. 221.

It is rare that the words, "substantially as described" aid the courts in construing patents, if they ever do. In view of the fact that the statutes require an inventor seeking a patent to give in his application a "written description" of his invention, the words in question are usually implied when not expressed. They cannot enlarge a patent for a narrow invention, and they cannot narrow a claim justly broad. — Bresnahan *v.* Tripp, 72 Fed. 920; 19 C. C. A. 237.

Machine *v.* Lancaster, 129 U. S. 263; Rob. Pat. 750; Walker, (3d ed.) 182.

That claim is dangerously near being a claim for a mode of operation, and, if saved, it is saved by the words "substantially as set forth" which serve to limit the claim to the described mechanism. — Rousseau *v.* Peck, 78 Fed. 113; 24 C. C. A. 7.

Seymour *v.* Osborne, 11 Wall. 516; Curt Pat. 4 ed. 281.

The "whereby" clause does not add anything to the claim. — Frazer *v.* Gates, 85 Fed. 441; 29 C. C. A. 261.

Birmingham *v.* Gates, 78 Fed. 350.

The claim has the usual conclusion "substantially as described," without these qualifying words, however, the claim is to receive a reasonable construction, regard being had to the nature of the described structure and the object to be attained. — Thompson *v.* Second Avenue, 93 Fed. 824; 35 C. C. A. 620.

If the claim is to be read in connection with the specification, or any significance is to be given to the words "substantially as described," it plainly must be limited to the coils of the patent. The proceedings in the Patent Office show that Eickemeyer attempted to claim the method of double

winding and abandoned it. — General *v.* Webster, 113 Fed. 756; 51 C. C. A. 446.

That in a specific or improvement patent, such terms as "means employed," "means for," or "means whereby" will be limited to the substantial means disclosed in the specification, see Lowden *v.* Janesville, 148 Fed. 686; 78 C. C. A. 548.

That where the claim contains the words "substantially as set forth," and elements not directly included in the claim but fully disclosed in the description as a part of the combination will be read into the claim, even if the claim is thereby limited, see Boston *v.* Pennsylvania, 164 Fed. 557; C. C. A.

§ 230. Construction — Miscellaneous Rulings.

The defect here is both in the specification and in the claim. The former does not distinguish the new parts from the old, nor is there anything in the specification by which they can be distinguished; and the latter, instead of claiming the old parts, should have excluded them, and claimed the new by which the old were adapted to the new use, producing the new result. — Phillips *v.* Page, 65 U. S. 164; 16 L. Ed. 639.

Inventions secured by letters patent sometimes, though rarely, embrace an entire machine, and in such cases it is sufficient if it appear that the claim is co-extensive with the invention. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

The Whitney process described a system of re-heating car wheels which had been chilled upon the tread to a point a trifle below the fusing point. Its utility was attacked on the ground that reheating to such a point would destroy the chill. From the fact that the invention in practice had proved eminently useful, even by a wide modification of the degree of heat employed, the patent was held good upon the ground that the description was sufficiently exact to enable one skilled in the art to use the process. — Mowry *v.* Whitney, 81 U. S. 620; 20 L. Ed. 860.

Doubtful expressions may be subject to construction, but when the language employed is clear and unambiguous it must speak its own construction in the specification. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

This duty is now cast upon the Patent Office. There his claim is, or is supposed to be, examined, scrutinized, limited and made to conform to what he is entitled to. — Keystone *v.* Phoenix, 95 U. S. 274; 24 L. Ed. 344.

Mere technicality of terms employed in the claims or specification does not render the patent void for ambiguity or indefiniteness. — Loom Co. *v.* Higgins, 105 U. S. 580; 26 L. Ed. 1177.

The first claim of the reissue, if construed so as to cover the defendant's structure, is void for want of novelty, being anticipated by the old structures referred to. — Gosling *v.* Roberts, 106 U. S. 39; 27 L. Ed. 61; 1 S. Ct. 26.

There is no suggestion that the combination of the second claim was not new; and, there being nothing shown in the state of the art which requires any such construction of the second claim as that contended for by the defendant, and it being fairly susceptible of the opposite construction, and the latter being one which is commensurate with the real invention embraced in the second claim and one which prevents the real substance of that invention from being bodily appropriated by an infringer, it is proper to give the claim such construction. — Lake Shore *v.* National, 110 U. S. 229; 28 L. Ed. 129; 4 S. Ct. 33.

Where certain elements of the invention are shown and described with reference to their function and mode of operation, the claim covering such elements must be construed as covering such elements limited to such function and mode of operation. — Sharp *v.* Riessner, 119 U. S. 631; 30 L. Ed. 507; 7 S. Ct. 417.

The doctrine which is applicable to a machine patent is of a kindred character with that applied in this country and in England to a patent for a process. — Morley *v.* Lancaster, 129 U. S. 263; 32 L. Ed. 715; 9 S. Ct. 299.

McCormick *v.* Talcott, 61 U. S. 402; Chicago *v.* Sayles, 97 U. S. 554; Clough *v.* Barker, 106 U. S. 166; Duff *v.* Sterling, 107 U. S. 636; Consolidated *v.* Crosby, 113 U. S. 157; and comparing, Tilghman *v.* Proctor, 102 U. S. 707; Nelson *v.* Hartford, 1 Web. P. C. 295; O'Reilly *v.* Morse, 56 U. S. 62, 115; Curtis *v.* Platt (note) L. R. 3 Ch. Div. 134; Jupe *v.* Pratt, 1 Web. 146; Badische *v.* Leveinstein, L. R. 24 Ch. Div. 156, 171; Household *v.* Nelson, 1 Web. P. C. 685; Proctor *v.* Bennis, L. R. 36 Ch. Div. 740; Clark *v.* Adie, L. R. 2 App. Cas. 315, 320.

If the inventor had been the first to devise a contrivance of this description, it is possible that, under the cases of Ives *v.* Hamilton, 92 U. S. 426, and Hoyt *v.* Horne, 145 U. S. 302; a construction broad enough to include defendant's device might have been sustained. But in view, not only of the prior devices, but of the fact his invention was of doubtful utility and never went into practical use, the construction claimed would operate rather to the discouragement than the promotion of inventive talent. — Deering *v.* Winona, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

Admitting that additional elements are necessary to render the device operative, it does not necessarily follow that the omission of these elements invalidates the claim, or that the precise elements described in the patent as rendering it operative must be read into the claim. — Deering *v.* Winona, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

Should this device (a device covering specific means for the alignment and adjustment of the rolls of a roller mill) be adjudged an infringement, we shall not know where to draw the line, providing the alleged infringing device accomplished the four results. — Consolidated *v.* Barnard, 156 U. S. 261; 39 L. Ed. 417; 15 S. Ct. 333.

He used the plural (filaments) omitting the phrases "of high resistance" and "made as described," used in the first claim, in order to be sure that he should not, as to this second claim, be confined by construction to any one variety of filament. — Edison *v.* U. S. 52 Fed. 300; 3 C. C. A. 83.

It is difficult to see why the circumstance that the patentee had no solicitor should lead to any peculiarly liberal construction of this patent, in view of the fact that the description of his invention is singularly clear, complete, intelligent and unambiguous; an agreeable contrast to many which come before this court where the inventor has been represented by solicitor. — Gould *v.* Trojan, 74 Fed. 794; 21 C. C. A. 97.

The position as to the patent in suit was peculiar, arising from the fact that the patentee, who resided abroad, and was ignorant of our language, was instructing his solicitor in the United States with reference to a very complicated machine; but, within the rules laid down by us in Reece Buttonhole Mach. Co. *v.* Globe Buttonhole Machine Co., there is nothing which justifies us in holding that the inventor, either by implication of law or expressly, abandoned any part of his invention. We have therefore left only the question of infringement, to be determined in the light of the nature of

the invention, which, though limited in its scope in a certain sense, yet, on account of its importance is entitled to liberal protection. — Heap *v.* Tremont, 82 Fed. 449; 27 C. C. A. 316.

In construing this claim, we are permitted to omit the alternative words which we have stricken out, because, if they stood alone, they would narrow the claim within Brush's actual invention. — Hatch *v.* Electric, 100 Fed. 975; 41 C. C. A. 133.

A new rule will be established in patent law if claims for combinations of old elements are held not to cover those elements as they were known in the prior art because the patentee may have used inappropriate language in describing them. — Cimiotti *v.* American, 115 Fed. 498; 53 C. C. A. 230.

The object of the patent law is "to secure to inventors a monopoly of what they have actually invented or discovered," and it "ought not to be defeated by too strict construction" of the terms of the claims, which may be inartificially drawn. — Austin *v.* American, 121 Fed. 76; 57 C. C. A. 330.

Topliff *v.* Topliff, 145 U. S. 156; Sewall *v.* Jones, 91 U. S. 171.

§ 231. Designs.

A claim in a patent upon a machine for the means employed for producing a design, in connection with other claims upon the machine, is valid and is not a design claim within the meaning of the statute. — Clark *v.* Bonsfield, 77 U. S. 133; 19 L. Ed. 862.

In Dobson *v.* Biglow, 114 U. S. 439, the claim of the design patent was "the design of a carpet substantially as shown." Objection was taken to the form of the claim. But this court said it saw no good objection to the form, and that the claim referred to the description as well as the drawing, in using the word "shown." Undoubtedly the claim in this case covers the design as a whole and not any part of it as a part; and it is so to be tested as to the novelty and infringement. — Dobson *v.* Dornan, 118 U. S. 10; 30 L. Ed. 63; 6 S. Ct. 946.

§ 232. Elements — Essential.

A claim for a machine or for a combination of mechanical devices is not insufficient or invalid because it does not include mechanical devices for uniting and operating the elements of the machine or combination, which would readily suggest themselves to mechanics skilled in the art, or which are described in the specifications and drawings. — Brammer *v.* Schroeder, 106 Fed. 918; 46 C. C. A. 41.

Loom Co. *v.* Higgins, 105 U. S. 580; Deering *v.* Harvester Works, 155 U. S. 286.

The card's importance may be estimated by the fact that it is an element in nine out of the eleven claims. — American *v.* Cimiotti, 123 Fed. 869; 59 C. C. A. 357.

§ 233. Elements — Redundant.

This invention was for a method of lubrication. *Held:* If the crank shaft were left out the claims of this patent would not be so obnoxious to the criticism that they include in the combination specified any part of the engine which is not a part of the means employed to effect lubrication. The crank shaft is not essential because the necessary disc might be revolved by other means. — Chuse *v.* Ide, 89 Fed. 491; 32 C. C. A. 260.

Note: The entire spirit of this opinion by Judge Woods is to defeat the patent, and the conviction of the court that this should be done (and apparently it should) led to a hypercritical review of the claims. It is true, other means might have been used instead of the crank shaft, but without some means, the claims would have been open to criticism for want of operativeness, as is apparent where the court, on page 494, essays to draw a claim to suit it.

§ 234. Elements — Reference Characters.

The apron referred to in the claims and indicated by the letter "A," in the drawings accompanying the patent, is an essential part of each claim, as well as the vital part of the patent itself. — American *v.* Streat, 83 Fed. 700; 28 C. C. A. 18.

Parry *v.* Hitchcock, 58 Fed. 402; Weir *v.* Morden, 125 U. S. 98; Hendy *v.* Iron Works, 127 U. S. 370; Knapp *v.* Morss, 150 U. S. 221.

A reference in a claim to a letter or figure used in the drawing and in the specification to describe a device or an element of a combination does not limit the claim to the specific form of that element there shown, unless that particular form was essential to, or embodied the principle of, the improvement claimed. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Sprinkler *v.* Kochler, 82 Fed. 428; McCormick *v.* Aultman, 69 Fed. 371; Muller *v.* Tool Co., 77 Fed. 621; Delemater *v.* Heath, 58 Fed. 414; Reed *v.* Chase, 25 Fed. 94; Walk. Pat. (3d Ed.) sec. 117a.

§ 235. Elements — Terminology.

In our opinion it cannot be construed as a claim for three elements (a valve, a water chamber, and water in such chamber). The apparatus is the same apparatus whether water is used in it or not. The method of use does not change it, and an inventor who employs a new process of using it, does not thereby invent a new apparatus. — Consolidated *v.* Metropolitan, 60 Fed. 93; 8 C. C. A. 485.

That a mathematical formula which is of the essence of an invention may be made a positive and essential element of a claim, see Westinghouse *v.* Saranac, 113 Fed. 884; 51 C. C. A. 514.

§ 236. Excessive — Duplication.

It would be a waste of time to dwell upon the verbal differences in these claims. The changes in phraseology import nothing of substance into their respective combinations. They describe the same things in different language, and the draftsman seems to have expended great ingenuity in cataloguing a group of synonyms. — Thomson-Houston *v.* Hoosick, 82 Fed. 461; 27 C. C. A. 419.

The rule of construction which usually obtains, whereby the several claims of a patent are to be differentiated so that effect may be given each, cannot be reasonably invoked in behalf of this patent, where so many of the claims are duplicated. — Thomson-Houston *v.* Union, 86 Fed. 636; 30 C. C. A. 313.

§ 237. Excessive — Effect of.

It is true, by the 9th sec. Act Mar. 3, 1837, ch. 45, it is provided, that the suit shall not be defeated when the patentee claims more than he has invented;

it must be, however, in a case where the part invented can be clearly distinguishable from that claimed but not invented.

(See the modification of this act, in view of this construction, in the amendment of 1870, sec. 4922 R. S.) — Vance *v.* Campbell, 66 U. S. 427; 17 L. Ed. 168.

§ 238. Excessive — Foreclosing Improvement.

In other words, having himself experimented only with three or four bodies out of a group of hundreds, he proposes to set himself in the pathway of future experimenters with any or all of the other bodies, and, as the result of each new experiment is disclosed, will fire away at it, calculating to "hit it if it is a deer, and miss it if it is a cow." That this is precisely what is contended for is manifest from the statement, prominently set forth in appellee's brief. — Matheson *v.* Campbell, 78 Fed. 910; 24 C. C. A. 284.

§ 239. Expansion.

One who has invented device with three elements necessary cannot claim two elements to forestall another who employs the two elements for the same position. — National *v.* Hedden, 148 U. S. 482; 37 L. Ed. 529; 13 S. Ct. 680.

Court will not import elements that would operate to so enlarge its scope as to cover an invention not indicated upon its face. — Wollensak *v.* Sargent, 151 U. S. 221; 38 L. Ed. 137; 14 S. Ct. 291.

Day *v.* Fairhaven, 132 U. S. 98.

If the claim of the patent is not limited to the construction and description of the original application which alone was supported by the required oath, it would seem to be invalid. — De La Vergne *v.* Valentine, 66 Fed. 765; 14 C. C. A. 77.

Eagleton *v.* West, 111 U. S. 490; Machine *v.* Featheratone, 147 U. S. 209.

§ 240. Failure to Claim.

The failure to claim either one of the elements separately raises a presumption that no one of them is novel. — Richards *v.* Chase, 159 U. S. 477; 40 L. Ed. 225; 16 S. Ct. 53.

A patentee who has claimed either more or less than was necessary, cannot, in a suit for infringement, be relieved from the consequences. — Boynton *v.* Morris, 87 Fed. 225; 30 C. C. A. 617.

McClain *v.* Ortmayer, 141 U. S. 419; Durand *v.* Schulze, 61 Fed. 819.

The requirement of the patent law that a patentee shall claim in his patent the exact invention is not only to enable the public to use it after the term of the patent has expired, but also for the purpose of enabling any one to determine what the invention is, which is protected by the patent, and what processes which are not protected by the patent may be used in the same manufacture. A person who discovers a new and useful invention does not obtain a monopoly under the patent laws unless he claims his invention in his patent. Even if he describes his invention in the specifications, and then claims as his invention something he has not invented, his patent is good for nothing. — National *v.* New England, 151 Fed. 19; 80 C. C. A. 485.

§ 241. Generic.

He (the inventor) may, for the purpose of describing the extent of his claims, not only state the general principles and requisite features of the

invention in one claim, but the general principles and requisite features in another claim, supplementing this with a more particular description of the details involved in the contemplated structure. We do not consider the claims, identical, and, therefore, one or the other superfluous, but view the first claim as broader than the second in the respect which we have stated, and not inconsistent therewith. — Consolidated *v.* West End, 85 Fed. 662; 29 C. C. A. 386.

If the Moore patent had preceded all other devices for performing the work for which it was intended, it might very well be that he could bring under tribute all who should enter his domain, and build within the wide four corners of his invention; or, if he had made a large advance in a new direction in an art not new, he would have been protected to the extent of the limits of his large invention. — Moore *v.* Eggers, 107 Fed. 491; 46 C. C. A. 425.

Morley *v.* Lancaster, 129 U. S. 263; McCormick *v.* Aultman, 69 Fed. 371; Bundy *v.* Detroit, 94 Fed. 524.

Inasmuch as there is no prior art limiting Bellis as the first to produce a machine capable of providing loops on a ribbed fabric adapted to be fleeced, we think his invention is entitled to be regarded as of such primary character as to embrace defendant's machine, which performs the same functions of looping and engaging a thread in the fabric by a combination of means covered by the terms of the claims in suit, and operating on the same principle, with the same resulting fleecing capacity. — Scott *v.* Fisher, 145 Fed. 915; 76 C. C. A. 447.

§ 242. Novelty.

The novelty in each case he describes clearly, as he should; and it is not necessary he should go farther. — Hogg *v.* Emerson, 6 How. 437; 12 L. Ed. 505.

1 Story R. 286; Web. on Pat. 86-n; Macfarlane *v.* Price, 1 Starkie, 199; King *v.* Cutter, 1 Starkie 354; 3 Cam & Payne, 611; 2 Mason, 112; Kingsby & P. on Pat. 61; Godson on Pat. 154; Isaacs *v.* Cooper, 4 Wash. 259.

We are asked to pronounce this process patentable, not because we can see wherein the novelty resides, or that the advantageousness of the process is due to such novelty, but because the product is, in some respects, different from anything going before. — Cerealine *v.* Bates, 101 Fed. 272; 41 C. C. A. 341.

§ 243. Process.

The patentee claimed the use of strong sulphuric acid in reducing rubber scrap, and pointed out that weak sulphuric acid had proven insufficient. *Held:* that the patent must be limited to the use of strong sulphuric acid. — Chemical *v.* Raymond, 71 Fed. 179; 18 C. C. A. 31.

§ 244. Purpose of.

Nothing is better settled in the patent law than that the patentee may claim the whole or any part of his invention, and that if he only describes and claims a part he is presumed to have abandoned the residue to the public. The claim is the measure of his right to relief, and while the specification may be referred to to limit the claim it can never be made available to

expand it. — McClain *v.* Ortmayer, 141 U. S. 419; 35 L. Ed. 800; 12 S. Ct. 76.

Keystone *v.* Phœnix, 95 U. S. 274; Lehigh *v.* Mellon, 104 U. S. 112; Masury *v.* Anderson, 11 Blatchf. 162; Merrill *v.* Yeomans, 94 U. S. 568; Burns *v.* Meyer, 100 U. S. 671; Sutter *v.* Robinson, 119 U. S. 530.

What is new must be covered by the claim. — Grant *v.* Walter, 148 U. S. 547; 37 L. Ed. 557; 13 S. Ct. 699.

James *v.* Campbell, 104 U. S. 356.

Formal claims necessary to ascertain scope of invention. — Grant *v.* Walter, 148 U. S. 547; 37 L. Ed. 557; 13 S. Ct. 699.

Merrill *v.* Yeomans, 94 U. S. 568; Western Elec. Co. *v.* Ansonia, 114 U. S. 447.

It is well known that patentees generally make a much broader statement of the novelty of their invention in the body of the specification than they limit themselves to in the claim, which latter is held to be the distinctive feature of a patent. By the act of congress of 1836, the applicant for a patent was, for the first time, required to " particularly specify and point out the part, improvement or combination which he claims as his own invention or discovery." — Durand *v.* Schulge, 61 Fed. 819; 10 C. C. A. 97.

Merrill *v.* Yeomans, 94 U. S. 568; Keystone *v.* Phœnix, 95 U. S. 278; Mahn *v.* Harwood, 112 U. S. 360; Burns *v.* Meyer, 100 U. S. 671; White *v.* Dunbar, 119 U. S. 51.

The claim is a statutory requirement prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms. — Westinghouse *v.* Edison, 63 Fed. 588; 11 C. C. A. 342.

Quoting: White *v.* Dunbar, 119 U. S. 47.

Railroad *v.* Mellon, 104 U. S. 112; Mfg. Co. *v.* Greenleaf, 117 U. S. 554.

§ 245. Scope.

Whether the telegraph is regarded as an art or machine, the manner and process of making and using it must be set forth in exact terms. The patent embraces nothing more than the improvement described and claimed as new, and anyone who afterwards discovered a method of accomplishing the same object, substantially and essentially differing from the one described, has a right to use it. The specification of the patentee describes his invention or discovery, and the manner and process of constructing and using it; and his patent, like inventions in the other arts, covers nothing more. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

We cannot describe a machine which will perform a certain function, and then claim the function itself, and all other machines that may be invented to perform the same function. — Corning *v.* Burden, 15 How. 252; 14 L. Ed. 683.

Inventions sometimes embrace an entire machine, and in such cases it is sufficient if it appears that the claim is co-extensive with the patented improvement. Other inventions embrace one or more parts of a machine, and in such cases the part or parts claimed must be specified and pointed out, so that constructors, other inventors, and the public may know what the invention is and what is withdrawn from general use. — Parks *v.* Booth, 102 U. S. 96; 26 L. Ed. 54.

To hold that one who has discovered that a certain fibrous or textile material answered the required purpose, should obtain the right to exclude everybody from the whole domain of fibrous and textile materials, and thereby shut out any further efforts to discover a better specimen of that class than the patentee had employed, would be an unwarranted extension of his monopoly, and operate rather to discourage than to promote invention. — Incandescent Lamp Patent, 159 U. S. 465; 40 L. Ed. 221; 16 S. Ct. 75.

Undoubtedly, when an invention is meritorious, and of a primary character, as seems to be the case here, the patent should be liberally interpreted so as to secure to the patentee his real invention as he has disclosed it to the public by his specification; and, if it be for a process, he should be protected from the unauthorized practice of it by others, by whatsoever mode or forms of apparatus they may apply the process. The appellant's pretensions, however, far transcend the limits of these settled and just rules. Virtually the appellant claims all means, however differing in mode of action and principle from the process described in the patent. — Celluloid *v.* Arlington, 52 Fed. 740; 3 C. C. A. 269.

Tilghman *v.* Proctor, 102 U. S. 707; Machine Co. *v.* Lancaster, 129 U. S. 263; Béné *v.* Jeantet, 129 U. S. 683; McClain *v.* Ortmayer, 141 U. S. 419; Corn Planter Pat. 23 Wall. 218.

If a man describes in his specifications, a machine by which to get a certain result so that anyone skilled in the art can produce the machine and the result, he cannot be deprived of his exclusive right in the machine by a demonstration that his theory stated in the patent, of the causes producing the result is untrue. But a correct and certain knowledge of the principle by which the result is reached will often enable the patentee, or his solicitor, to cover, with general words, many different devices in which it may be applied. If he fails to use broad enough language to do so, then one of two things is true; either that he does not fully understand the true principle and the other devices are not part of his real invention, or else, knowing the principle, and its possible wider application, he has chosen to limit his claim for a monopoly to one particularly described device, and has abandoned the others to the public. Whichever horn of the dilemma he chooses, the court has no power to broaden the claims. — Brown *v.* Stilwell, 57 Fed. 731; 6 C. C. A. 528.

The scope of the claim must, on well-settled principles, be limited to the specific forms of construction shown and described by the patentee. — Wells *v.* Curtis, 66 Fed. 318; 13 C. C. A. 494.

Johnson *v.* Steel, 50 Fed. 90.

A patentee is not required to claim the entire machine in each claim. Each of the claims at issue is for a complete combination, and there was no necessity for expressing in terms the actuating devices. Any appropriate means for operating it will be understood. The omission of the actuating mechanism does not affect the validity of either one of the claims, which belong to that class where reference may be made to the specifications to supply in a claim what it is plain, to anyone skilled in the art, is a necessary incident. — Taylor *v.* Sawyer, 75 Fed. 301; 22 C. C. A. 203.

Reece *v.* Globe, 61 Fed. 970; Deering *v.* Winona, 155 U. S. 286.

If his invention is of a broad and meritorious character, such as to work a decided advance in the art, it will require something more than the use of reference letters in his claims to limit him to the exact form of device he has described. — Muller *v.* Lodge, 77 Fed. 621; 23 C. C. A. 357.

Pluralizing terms in the claim for the purpose of broadening it does not limit the claim so that a use in the singular is not an infringement of the plural. — International *v.* Bennett, 77 Fed. 313; 23 C. C. A. 179.

We are referred to no authority, and know of no principle, which will sustain the complainant's contention that he can thus, in the language of the circuit court, "speculate on the equivalents of his claimed invention, and thereby oblige the public to resort to experiments in order to determine the scope of the claims of his patent. — Matheson *v.* Campbell, 78 Fed. 910; 24 C. C. A. 284.

A patentee is bound by what his patent actually discloses and not by what he supposes his invention to be. — Jackson *v.* Birmingham, 79 Fed. 801; 25 C. C. A. 196.

The improvement was described in connection with a single thread machine; but the specification indicated its general adaptability. *Held:* The claims, therefore, in our opinion, cover the devices of the patent whether used in a double or in a single thread machine. — Willcox *v.* Merrow, 93 Fed. 206; 35 C. C. A. 269.

Deering *v.* Harvester, 155 U. S. 286.

A patentee is entitled to every function his device will perform, though he was ignorant of it when he procured his patent. But he secures no patent on the function, and a discovery of a new one in a patented device does not operate to broaden or enlarge the letter of his claim. — Dunlap *v.* Willbrandt, 151 Fed. 223; 80 C. C. A. 575.

§ 246. Specific.

The fact that the defendant was able, by a skillful contrivance, to dispense with one of the elements of plaintiff's claim, the plaintiff's patent not being generic, does not make the device an infringement. — Derby *v.* Thompson, 146 U. S. 476; 36 L. Ed. 1051; 13 S. Ct. 181.

If the first claim is valid, the second certainly is, because it is for the same combination, with limitations which include some additional minor improvements. — Schenck *v.* Singer, 77 Fed. 841; 23 C. C. A. 494.

A patentee may, however, describe all the devices in his machine or manufacture, and instead of claiming all or any particular portion of them in combination, may claim so much of the described mechanism as produces a particular described result. — Parsons *v.* Seelye, 100 Fed. 455; 40 C. C. A. 486.

Silsby *v.* Foote, 14 How. 218.

The terms of the claim are most specific, and it must be read with reference to the particular descriptions contained in the specifications and illustrated by the patent drawings. — Reineke *v.* Dixon-Woods, 102 Fed. 349; 42 C. C. A. 388.

Fay *v.* Cordesman, 109 U. S. 408; Knapp *v.* Morss, 150 U. S. 221.

§ 247. Sufficiency.

The public should not be deprived of rights supposed to belong to it, without being clearly told what it is that limits these rights. The genius of the inventor constantly making improvements in existing patents, a process which gives to the patent system its greatest value, should not be

restrained by vague and indefinite descriptions of claims in existing patents from the salutary and necessary right of improving on that which has already been invented. It seems to us that nothing can be more just and fair both to the patentee and to the public, than that the former should understand and correctly describe just what he has invented, and for what he claims a patent. — Merrill *v.* Yeomans, 94 U. S. 568; 24 L. Ed. 235.

But we are of opinion that the description and claim are sufficient. The purport of the description is, that what the photographic illustration represents as a whole is the invention. It is that which is claimed, when applied to carpeting. The design is a pattern to be worked into a carpet, and is within the statute. Claiming " the configuration of the design " is the same thing as claiming the design, or the figure or the pattern. It is better represented by the photographic illustration than it could be by any description, and a description would probably not be intelligible without the illustration. — Dobson *v.* Dornan, 118 U. S. 10; 30 L. Ed. 63; 6 S. Ct. 946.

See Dobson *v.* Bigelow, 114 U. S. 439.

In every patent the language of the claim, specification and grant, should be so clear, distinct and positive as to leave no question of what was asked and granted, nor should it require a careful, nice and labored investigation to ascertain whether one may not have trespassed upon the rights of the patentee. It is the duty of the inventor to use language sufficiently plain and explicit in his application to denote clearly what he asks for, and when he fails to do so, and the language of the grant follows that of the application, and is thereby misleading to the general public, he should gain no profit from such defective statement of that to which he considers he is entitled.— Gerard *v.* Diebold, 61 Fed. 209; 9 C. C. A. 451.

It is plainly unsound argument to say that, because the patentee does not expressly limit his patent to the device which he actually shows, therefore he is not entitled to the benefit of the invention involved in the use of one. — McCormick *v.* Aultman, 69 Fed. 371; 16 C. C. A. 259.

Where the invention is an improvement on a machine the claim need not include the main elements of the machine. — Goshen *v.* Bissell, 72 Fed. 67; 19 C. C. A. 13.

Here the result is obtained quite irrespective of the location of the upper ends of the brace-rods. The state of the art does not require the novelty of the claims to be predicated of a particular location. — Avery *v.* Case, 148 Fed. 214; 78 C. C. A. 110.

Cazier *v.* Mackie-Lovejoy, 138 Fed. 654; Machine Co. *v.* Murphy, 97 U. S. 120; Beach *v.* American, 63 Fed. 597; King *v.* Hubbard, 97 Fed. 795; Calculagraph *v.* Wilson, 132 Fed. 20; Benbow-Brammer *v.* Simpson, 132 Fed. 614.

§ 248. Void.

One void claim does not vitiate a patent if made by mistake or inadvertence and without any wilful default or intent to defraud or mislead the public. — Carlton *v.* Bokee, 84 U. S. 463; 21 L. Ed. 517.

COMBINATIONS.

General Statement § 249
See — Aggregation § 44; *Anticipation* §§ 67–69; *Claims* § 184; *Elements* § 232; *Improvement* § 433; *Infringement* §§ 464–73; *Invention* §§ 603–12.

§ 249. General Statement.

Combinations cannot be treated as constituting a single, unitary subject in the patent law. The Patent Statute does not use the term either as designating a patentable class of invention or as a condition of invention. But the term plays a large part in connection with *Infringement* §§ 466–473 and *Invention*, §§ 603–612 and also with the subjects of *Claims* § 187. It is sufficient to refer generally to those subjects, and to append what is regarded as one of the nearest approaches to a definition of patentable combination.

It must be considered that a new combination, if it produces new and useful results, is patentable, although all the constituents of the combination were well known and in common use before the combinations were made. But the result must be a product of the combination, and not a mere aggregate of several results, each the complete product of one of the combined elements. Combined results are not necessarily a novel result, nor are they an old result obtained in a new and useful manner. Merely bringing old devices into juxtaposition, and there allowing each to work out its own effect without the production of something novel, is not invention. No one by bringing together several old devices without producing a new and useful result, the joint product of the elements of the combination and something more than an aggregate of old results, can acquire a right to prevent others from using the same devices, either singly or in other combinations, or, even if a new and useful result is obtained, can prevent others from using some of the devices, omitting others, in combination. — Hailes *v.* VanWormer, 87 U. S. 353; 22 L. Ed. 247.

COMITY

General Statement and Definition § 250
Between Circuit Courts § 251
Between Circuit Court of Appeals and Circuit Court § 252
Between Circuit Courts of Appeal § 253
Prior Adjudication § 254
Supreme Court and Circuit Court of Appeals § 255
Weight of § 256
Miscellaneous § 257
See — Adjudication § 28; *Defenses* § 315; *Estoppel* § 381; *Injunction* § 535; *Interferences* § 580; *Res Judicata* § 893

§ 250. General Statement and Definition.

If both court and counsel had kept before them more clearly the very plain and reasonable rule of the Supreme Court that "comity is not a rule of law, but one of practice, convenience and expediency," there would have been less confusion than appears from the following quotations, and vastly less than appears when we read the opinions of the circuit courts. In the nature of things there can be no enforced comity. The only approach to such a rule is that in Kessler *v.* Eldred, 206 U. S. 285, (see § 31); but the rule of that case is one of res judicata rather than of comity.

The question of comity arises, or is attempted to be raised, perhaps more frequently in connection with applications for injunctions pendente lite than in any other, but it will be found that the distinct tendency of the courts in all questions involving the exercise of the extraordinary powers of injunctive relief is to rely upon the exercise of a sound discretion in view of the record presented, and not to rest the exercise of such authority upon the event of another cause or the opinion of another court.

Comity is not a rule of law, but one of practice, convenience and expediency. It is something more than mere courtesy, which implies only deference to the opinion of others, since it has a substantial value in securing uniformity of decision, and discouraging repeated litigation of the same question.

But its obligation is not imperative. If it were, the indiscreet action of one court might become a precedent, increasing in weight with each successive adjudication, until the whole country was tied down to an unsound principle. Comity persuades; but it does not command. It declares, not how a case shall be decided, but how it may with propriety be decided. It recognizes the fact that the primary duty of every court is to dispose of cases according to the law and the facts; in a word, to decide them right. In doing so, the judge is bound to determine them according to his own conviction. It demands of no one that he shall abdicate his individual judgement, but only that deference shall be paid to the judgements of other co-ordinate tribunals. —Mast *v.* Stover, 177 U. S. 485; 44 L. Ed. 856; 20 S. Ct. 708.

A direct utterance (referring to Stover *v.* Mast, 89 Fed. 333, affirmed 177 U. S. 485) could not have made it more clear that no court is to be reviewed or reversed, without an enquiry into the merits, merely because it failed or refused to follow the decision of another court to which it was not directly subordinate. Not less than of the Supreme Court, is it the duty of this court, within the sphere of its jurisdiction, to decide questions presented according to its own judgment. The purpose of Congress in creating the circuit courts of appeals and in conferring upon them the extraordinary jurisdiction given them in appeals from interlocutory orders of injunction, would be to a large extent thwarted if the doctrine of comity, always factitious and sometimes pernicious, should be allowed in these courts to take the place of independent and conscientious judgment. The safeguard against the evil of diverted and discordant decisions in the different circuits is in the power given to the Supreme Court to require the certification of cases to that Court for review; and evidently a prompt and healthy exercise of that power is more likely to follow inconsistency of decision in the courts of appeals than a harmony of rulings brought about by considerations of deference to comity. — Welsbach *v.* Cosmopolitan, 104 Fed. 83; 43 C. C. A. 418.

§ 251. Between Circuit Courts.

The rule of practice for one member of a court to regard the prior decision of another, in cases of this kind, as to be followed until otherwise authoritatively adjudicated, seems to be justified in the orderly conduct of proceedings. — Brill *v.* Peckham, 189 U. S. 57; 47 L. Ed. 706; 23 S. Ct. 562.

A circuit court will give respect to a decision of another circuit upon the same patent and the same proofs; and will consider only new matters of defense presented. — Wanamaker *v.* Enterprise, 53 Fed. 791; 3 C. C. A. 672.

National *v.* American, 53 Fed. 367.

§ 252. Between Circuit Court of Appeals and Circuit Court.

The court below followed the decision of the court in Massachusetts (National *v.* Boston, 45 Fed. 481). The course pursued in this regard was in conformity with the rule, well established in this circuit, to follow, unless under extraordinary circumstances, a prior judgment of any other of the circuit courts of the United States, wherever the patent, the question and the evidence are the same in both suits. We do not question the propriety of this practice as it has heretofore prevailed; but it cannot be extended to this court. The decisions of the several circuit courts, whenever pertinent, will be attentively considered by this tribunal; but because they are subject to appeal, and for other manifest reasons, it is not admissible for a court of review to accord them controlling effect. — National *v.* American, 53 Fed. 367; 3 C. C. A. 559.

The practice of comity existing between circuit courts is not applicable to this court. — Wanamaker *v.* Enterprise, 53 Fed. 791; 3 C. C. A. 672.
National *v.* American, 53 Fed. 367.

Upon a final hearing upon the merits it would be different, for then considerations of comity might properly have weight with the court below, which we should not hesitate, as an appellate court, to disregard in finally settling the rights of the parties. — Duplex *v.* Campbell, 69 Fed. 250; 16 C. C. A. 220.

Questions on appeals of this character are ordinarily to be treated in this court from the standpoint from which they were viewed by the circuit court, and the decision on merits by a circuit court of another circuit, sustaining the patent, is therefore usually of controlling weight here, as it should be in the court below. — Thomson-Houston *v.* Ohio, 80 Fed. 712; 26 C. C. A. 107.

This court as an appellate tribunal is not in the least concluded by the decision in the New York case, nor do considerations of comity toward a circuit court with respect to its rulings have the same potency with a circuit court of appeals as they may properly have with a circuit court when confronted with the alternative of following or departing from the ruling of another circuit court. — McNeely *v.* Williames, 96 Fed. 978; 37 C. C. A. 641.

§ 253. Between Circuit Courts of Appeals.

Whether and how far in a case like this, in which a patent has been held invalid by the circuit court of appeals in another circuit, this court should be controlled by such judgement — quaere. — Hammond *v.* Weld, 72 Fed. 171; 18 C. C. A. 502.

It is not claimed that the judgment of the Circuit Court of Appeals for the Second Circuit is controlling in the sense that the question is res adjudicata, but the high respect we have for the ability, learning and experience of the judges of that court is a very persuasive reason for following it, when by so doing we may assist in securing that uniformity which is very desirable, thus avoiding confusion and preventing repeated litigation of the same question; but the parties before us have the right to our individual judgment, and considerations of convenience and expediency must give way to demands of duty, from which we cannot be absolved by the doctrine of comity. — Imperial *v.* Crown, 139 Fed. 312; 71 C. C. A. 442.
Mast *v.* Stover, 177 U. S. 488.

In accordance with our usual custom of yielding to decisions of the circuit courts of appeals of other circuits, we perceive no reason why we should not follow this one. Therefore the only question left for our investigation is that of anticipation, and we open that only so far as it appears that the alleged anticipations are shown to us which were not shown to the Circuit Court of Appeals for the Second Circuit. — O'Brien *v.* Foster, 159 Fed. 710; 86 C. C. A. 464.

§ 254. Prior Adjudication.

We appreciate the great importance in patent litigation of uniformity of rulings by courts of concurrent jurisdiction, and ordinarily, it is a commendable practice upon a question of the allowance of a preliminary injunction, to accept and follow the decisions of a circuit court of appeals of

another circuit sustaining and construing a patent. Such practice has always prevailed in this circuit. In the present case, however, the circumstances are so unusual that we are constrained to make an independent investigation as to the validity and scope of the first claim of this reissue. — Horn *v.* Pelzer, 91 Fed. 665; 34 C. C. A. 45.

American *v.* McKeesport, 57 Fed. 661; Edison *v.* Phila. 60 Fed. 397; Crump *v.* Light Co. 65 Fed. 551.

Note: But the District Judge dissents; and on what possible ground the court could have refused, at this stage of the litigation, to follow the decision of the Second Circuit, is absolutely impossible to understand.

Although the defendants in this case are not the same, or in privity with the defendants in other cases, we think, as a general rule, and especially in patent cases, we should follow the decisions of the circuit court of appeals, of another circuit upon final hearing with respect to the issues determined, if based upon substantially the same state of facts, unless it should clearly appear that there was manifest error. — Beach *v.* Hobbs, 92 Fed. 146; 34 C. C. A. 248.

§ 255. Supreme Court and Circuit Courts of Appeals.

Of course we are bound to give to this question of anticipation an independent consideration. At the same time, we feel ourselves bound to defer somewhat to the unanimity of opinion upon the part of so many learned and distinguished judges, whose lives have been largely devoted to the examination of patent causes. — Hobbs *v.* Beach, 180 U. S. 383; 45 L. Ed. 586; 21 S. Ct. 409.

§ 256. Weight of.

The obligation to follow the decisions of other courts in patent cases of course increases in proportion to the number of courts which have passed upon the question, and the concordance of opinion may have been so general as to become a controlling authority. So, too, if a prior adjudication has followed a final hearing upon pleadings and proofs, especially after a protracted litigation, greater weight should be given to it than if it were made upon a motion for a preliminary injunction. — Mast Co. *v.* Stover Co. 177 U. S. 485; 44 L. Ed. 856; 20 S. Ct. 708.

Macbeth *v.* Gillinder, 54 Fed. 169; Electric *v.* Edison, 61 Fed. 834; Edison *v.* Beacon, 54 Fed. 678; Beach *v.* Hobbs, 82 Fed. 916; Newall *v.* Wilson, 2 DeG. M. & G. 282.

Those adjudications, except the first, it is fair to assume, were governed by the well-known rule of comity by which one federal court follows the ruling of another, especially in patent cases, and are therefore not entitled to the weight of so many independent judgements. — National *v.* Quick, 74 Fed. 236; 20 C. C. A. 410.

That great deference should be paid to the circuit court of appeals of the third circuit is true, and we have conformed to that duty, but have not been able to accord with the result which that court reached. — Hanifen *v.* Price, 102 Fed. 509; 42 C. C. A. 484.

§ 257. Miscellaneous.

Comity, however, has no application to questions not considered by the prior art, or, in patent cases, to alleged anticipating devices which were not

laid before the court. — Mast *v.* Stover, 177 U. S. 485; 44 L. Ed. 856; 20 S. Ct. 708.

Prima facie, a decision founded upon one patent not in suit here, and another decision founded upon three patents collectively, one only of which is in suit here, the two decisions declaring that an invention used by a defendant who is not the defendant here, against a machine of that defendant differing widely in its structure from the one complained of here, cannot be treated as binding in the decision which this court may feel bound to render in the suit at bar. — Boyden *v.* Westinghouse, 70 Fed. 816; 17 C. C. A. 430.

A decent respect for the stability of judicial decision, and a proper regard for the security of property in patents, requires that we shall not reverse our original holding in respect of the same patent, unless convinced of a very palpable error in law or in fact. — Penfield *v.* Potts, 126 Fed. 475; 61 C. C. A. 371.

We have especially shown the propriety of following decisions of the Circuit Courts of Appeals with regard to decisions touching letters patent for inventions in Beach *v.* Hobbs, 92 Fed. 146; Hatch *v.* Electric, 100 Fed. 975. The Supreme Court laid down a like practical rule in Hobbs *v.* Beach, 180 U. S. 383. In the present case, however, while the Circuit Court might well have felt constrained to follow the result of the Circuit Court of Appeals for the Second Circuit, the body of prior judicial decisions is of such an inharmonious character that we may well make an independent investigation, based on the evidence before us. — Westinghouse *v.* Stanley, 133 Fed. 167; 68 C. C. A. 523.

The discussion in the opinion in the last case cannot be said to particularly bind the court, because it was carried out for the most part by simply making long extracts from the opinion passed down in the Circuit Court. This is a mere quotation from the opinion of the Circuit Court, and not an expression devised by the Supreme Court; and it is not to be assumed that where an appellate tribunal, as in this case, quotes long extracts, it is held to be bound by all the expressions contained in them. — Westinghouse *v.* Stanley, 138 Fed. 823; 71 C. C. A. 189.

No two cases are identical upon the facts. Differences can always be pointed out, but the question for the court to determine is are the differences of such a character as to induce the court to believe that if the facts in the second case had been present in the first case the same result would have been reached; in other words, are the cases the same in principle? — Cortelyou *v.* Johnson, 145 Fed. 933; 76 C. C. A. 455.

See Cortelyou *v.* Carter, 118 Fed. 1022; Broderick *v.* Mayhew, 131 Fed. 92, affd. 137 Fed. 596.

The fact that the court is now differently constituted is, of course, quite immaterial. If entitled to be considered at all upon a question of general significance, like that under consideration, it should operate as an additional reason for adhering to existing conditions. It is the court, not the individuals composing it, that declares the law; and it would be unseemly, to say the least, to review propositions previously established, even though as an original proposition we might have been led to a different conclusion. — Cortelyou *v.* Johnson, 145 Fed. 933; 76 C. C. A. 455.

Cimiotti *v.* Nearseal, 123 Fed. 479.

COMMISSIONER OF PATENTS.

Statutory Provision § 258
General Statement § 259
Actions § 260
Decisions of § 261
Duties § 262
Powers of § 263
See — Appeals § 114; *Defenses* § 308; *Interferences* § 580; *Patent Office* § 783; *Reissue* § 880; *Res Judicata* § 895

§ 258. Statutory Provisions.

Sections 476, 479, 481, 483, 484, 4883, 4893, 4905, 4910, and 4913, R. S. relate especially to the Commissioner. Of these only the following need be quoted:

The Commissioner of Patents, under the direction of the Secretary of the Interior, shall superintend or perform all duties respecting the granting and issuing of patents directed by law; and he shall have charge of all books, records, papers, models, machines, and other things belonging to the Patent Office. — R. S. 481.

The Commissioner of Patents, subject to the approval of the Secretary of the Interior, may from time to time establish regulations, not inconsistent with law, for the conduct of proceedings in the Patent Office. — R. S. 483.

§ 259. General Statement.

The duties of the Commissioner are, therefore, both executive and judicial. The records of the executive duties performed are to be found in the Annual Reports of the Commissioner, and the records of the judicial acts are to be found in the Patent Office Gazette and in the Commissioner's Decisions.

§ 260. Actions of.

The issuance of a patent is prima facie evidence of the regularity of proceedings had. — Railroad *v.* Stimpson, 14 Pet. 448; 10 L. Ed. 535.

It is to be presumed, until the contrary is made to appear, that the commissioner did his duty correctly in granting the reissued patent. — Klein *v.* Russell, 86 U. S. 433; 22 L. Ed. 116.

The action of the Commissioner in any case, within the limits of his authority, is not open to collateral impeachment. But a reissue for a different invention is an excession of authority contrary to law. — Russell *v.* Dodge, 93 U. S. 460; 23 L. Ed. 973.

Seymour *v.* Osborne, 11 Wall. 544; Wicks *v.* Stevens, 2 Woods, 312.

Yet both these matters (abandonment and public use) as well as the originality of the invention, upon which the Commissioner must pass, must be contested in suits brought for infringement of the patent. Such defenses are allowed by the statute. — Woodbury *v.* Keith, 101 U. S. 479; 25 L. Ed. 939.

§ 261. Decisions of.

No other tribunal is empowered to controvert the sufficiency of the proofs before the commissioner incident to the performance of his duties. — Railroad *v.* Stimpson, 14 Pet. 448; 10 L. Ed. 535.

Application for a patent is required to be made to the commissioner appointed under authority of law, and inasmuch as that officer is empowered to decide upon the merits of the application, his decision in granting the

patent is presumed to be correct. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.

Pitts *v.* Hall, 2 Blatchf. 229; Union *v.* Matthieson, 2 Fish. 600.

Inasmuch as that officer is empowered to decide upon the merits of the application, his decision in granting the patent is presumed to be correct. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

Agawam *v.* Jordan, 7 Wall. 597.

The action of the commissioner of patents in granting a patent is not conclusive either as to novelty, utility or prior use. — Reckendorfer *v.* Faber, 92 U. S. 347; 23 L. Ed. 719.

Hotchkiss *v.* Greenwood, 11 How. 248; Stimpson *v.* Woodman, 10 Wall. 117; Hailes *v.* Van Wormer, 20 Wall. 353; Rubber *v.* Howard, 20 Wall. 498; Smith *v.* Nichols, 21 Wall. 115; Hicks *v.* Kelsey, 18 Wall. 670; Seymour *v.* Osborne, 11 Wall. 516.

In matters of this description, in which the action of the Commissioner is quasi judicial, the fact that no appeal is expressly given to the Secretary of the Interior is conclusive that none is to be implied. — Butterworth *v.* Hoe, 112 U. S. 50; 28 L. Ed. 656; 5 S. Ct. 25.

The decision of the Commissioner in favor of the applicant, upon the question whether the invention has been abandoned, is not conclusive, but may be contested and reviewed in a suit brought for the infringement of the patent. — U. S. *v.* Whitney, 118 U. S. 22; 30 L. Ed. 53; 6 S. Ct. 950.

Planing *v.* Keith, 101 U. S. 479.

§ 262. Duties.

Patents are public records of which all persons are bound to take notice. Upon proper application and the payment of fees the commissioner is obliged to furnish copies of such records. — Boyden *v.* Burke, 14 How. 575; 14 L. Ed. 548.

The relator had done all in his power to make his application effectual, and had a right to consider it properly before the commissioner. If the commissioner refused to take any action mandamus would lie; but having acted the remedy is by appeal. — Holloway *v.* Whiteley, 71 U. S. 522; 18 L. Ed. 335.

§ 263. Powers of.

Doubtless the several requirements of the statute may be regarded as conditions precedent to the right of the commissioner to grant the application, as they must appear on the face of the letters patent, and are always open to legal construction as to their sufficiency. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

When patents were issued by the Secretary of State, it was held that the power to correct a mistake resided in that officer, irrespective of the statute. Grant *v.* Raymond, 6 Pet. 243. By the laws creating the office of Commissioner of Patents and transferring to the Secretary of the Interior the power previously exercised by the Secretary of State, it has devolved upon the Commissioner to superintend, execute and perform all acts respecting the granting and issuing of patents, subject to revision by the Secretary of the Interior. Original power was conferred upon him to grant reissue by permissive language. By the act of July 8, 1870 (16 Stat. 205,

c. 230) the permissive words were substituted by the mandatory words of the statute as it now exists. It is the effect of this legislation to delegate to the commissioner, subject to the interposition of the Secretary of the Interior, all those acts with respect to the issuing of patents which originally devolved upon the Secretary of State. — Thomson-Houston *v.* Black River, 135 Fed. 759; 68 C. C. A. 461.

COMPOSITION OF MATTER.

Statutory Provision § 264
General Statement § 265
General Rules § 266

See — Manufacture § 772; *Process* §§ 820–1; *Product* § 823

§ 264. Statutory Provision.

Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter * * * — R. S. 4886.

When the invention or discovery is of a composition of matter, the applicant, if required by the Commissioner, shall furnish specimens of ingredients and of composition, sufficient in quantity for the purpose of experiment. — R. S. 4890.

§ 265. General Statement.

The line of separation between a composition of matter and an article of Manufacture is not always distinct. It will be noted that a composition of matter may also be an article of manufacture, which may be patentable; but that, on the other hand, an article of manufacture, in order to be patentable, need not be composed of a novel combination of ingredients which would render it patentable as a composition of matter.

The subjects of composition of matter and *Manufacture* and *Process* are more or less closely related.

§ 266. General Rules.

In most compositions of matter, some small difference in the proportions must occasionally be required, since the ingredients proposed to be compounded must be in some degree superior or inferior to those most commonly used. — Wood *v.* Underhill, 5 How. 1; 12 L. Ed. 23.

When the specification of a mere composition of matter gives only the names of the substances which are to be mixed together, without stating any relative proportion, undoubtedly, it would be the duty of the court to declare the patent void. And the same rule would prevail when it was apparent that the proportions were stated ambiguously and vaguely. For in such cases it would be apparent on the face of the specification that no one could use the invention without first ascertaining by experiment the exact proportions. — Wood *v.* Underhill, 5 How. 1; 12 L. Ed. 23.

The character and purpose of the specification as compared with the English system. — Hogg *v.* Emerson, 6 How. 437; 12 L. Ed. 505.

Where a patent upon an article of manufacture does not claim the composition of matter, though it describes it, such omission is public dedication of the said composition. — Underwood *v.* Gerber, 149 U. S. 224; 37 L. Ed. 710; 13 S. Ct. 854.

Had the description and claims proceeded upon some designated treatment or process, we might have found a way to sustain their validity. But the

patent is ambitious beyond this. It seeks to exclude the use, by others, of pulverized silica in any proportion. It surveys a field that includes any silicate "having a frictional property and capable of being pulverized and compacted." To sustain this would be to hold that the use of pulverized silica in a billiard chalk, independently of the proportions employed, was a discovery properly embodied in appellant's patent. This the state of the art will not justify. — Hoskins *v.* Matthes, 108 Fed. 404; 47 C. C. A. 434.

CONGRESS.

Constitutional Powers § 267 | Plenary Powers § 268

§ 267. Constitutional Powers.

The Congress shall have power:

* * * * * * * * * * * *

8. To promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.

9. To constitute tribunals inferior to the Supreme Court. — Const. Art. I, Sec. VIII.

It will thus be seen that the power to create the patent monopoly resides in paragraph 8, while the power to maintain and protect that monopoly emanates from paragraph 9. In the exercise of its power Congress creates nothing that did not exist before. Continental *v.* Eastern, 210 U. S. 405. It would not have been enough to empower Congress to create a monopoly in derogation of the common-law; the power to punish for trespass and to restrain from infringement are vital necessities.

§ 268. Plenary Powers.

The powers of Congress are plenary. A patent may be granted by it wholly independently of the Patent Office and the statutes relating to the regular granting of patents. Such power has been exercised; but it would be only in the event of a most extraordinary state of facts that such power would be again asserted. It has not been asserted for years, and stern refusal has met every attempt to invoke these powers.

The power of Congress to legislate upon the subjects of patents is plenary by the terms of the Constitution, and as there are no restraints on its exercise, there can be no limitation of their rights to modify them at their pleasure, so they do not take away the rights of property in existing patents. — McClurg *v.* Kingsland, 1 How. 202; 11 L. Ed. 102.

CONTEMPT.

General Statement § 269 | *See — Injunction* §§ 536–8, 577

§ 269. General Statement.

Punishment for violation of a court order or decree occurs, in patent causes, well-nigh invariably in connection with injunctions, and most commonly with preliminary injunctions. In order that the entire appellate law on the subject may be studied together, all rulings relating to contempt are assembled under *Injunction — Appeals*, § 536, and *Injunction — Violation of*, § 577.

COPARTNERSHIP.

Miscellaneous Rulings § 270
See — Assignment § 155; *Joint Inventions* § 704; *License* § 749; *Title* § 925

§ 270. Miscellaneous Ruiings.

It is competent for two persons, joint owners of letters patent, whether valid or invalid, to enter into a copartnership for the manufacture and sale of the patented machines and to enter into an agreement not to manufacture independently thereunder, and such agreement is not in restraint of trade. — Kinsman *v.* Parkhurst, 59 U. S. 289; 15 L. Ed. 385.

A copartner holding no interest in the patent could not sue on the patent for such damages or any part of them. — Yale *v.* Sargent, 117 U. S. 536; 29 L. Ed. 954; 6 S. Ct. 934.

The plaintiff, as the owner of the patent, is entitled to recover the damages in this case. He may be accountable to his copartner for a part of them, but the copartner could not sue on the patent, for such damages or any part of them. — Yale *v.* Sargent, 117 U. S. 536; 29 L. Ed. 954; 6 S. Ct. 934.

Where partnership constructed a machine with knowledge and consent of inventor before application, an implied license arises in favor of the machine so constructed. — Wade *v.* Metcalf, 129 U. S. 202; 32 L. Ed. 661; 9 S. Ct. 271.

A license from one member to the firm for the use of the firm expires with the firm. — Haffeke *v.* Clark, 50 Fed. 531; 1 C. C. A. 570.

Oliver *v.* Chemical Co., 109 U. S. 75; Nail Factory *v.* Corning, 14 How. 193; Gayler *v.* Wilder, 10 How. 477.

The object of the agreement is expressly stated to be the creation and building up of a good business, which business was to be owned and shared equally and mutually by both. The learned judge who tried the case at circuit, construed this agreement as providing that whatever rights either might, by its terms, acquire in future inventions of the other, should be "qualified down to the requirements of the business" they were undertaking to build up, and that when the business ceased, each patent for an improvement should remain the property of the individual inventor, unqualified by any further interest of the other therein. — Denning *v.* Bray, 61 Fed. 651; 10 C. C. A. 6.

CORPORATIONS.

Miscellaneous Rulings § 271
See — Abatement § 23; *Assignment* § 156; *Infringement* §§ 479–82; *Injunction* § 547

§ 271. Miscellaneous Rulings.

One corporation cooperating with another in the infliction of a wrong is directly responsible for the resulting damage. — Railroad *v.* Winans, 58 U. S. 31; 15 L. Ed. 27.

An implied license arising out of the employment and invention of an employee confers upon a corporation an unassignable right only and does not pass to a new corporation. — Hapgood *v.* Hewitt, 119 U. S. 226; 30 L. Ed. 369; 7 S. Ct. 193.

Troy *v.* Corning, 55 U. S. 193; Oliver *v.* Rumford, 109 U. S. 75.

The acquiescence of the former owners of the patent has in equity the same effect upon complainant's rights as its own subsequent neglect. — Woodmansee *v.* Williams, 68 Fed. 489; 15 C. C. A. 520.

Rob. Pat. 1194; Spring *v.* Sewing, Fed. Cas. 13,258; McClurg *v.* Kingsland, 1 How. 205.

A mere stockholder is not bound by the acts of a corporate body for which he labors as an employee. — American *v.* Phœnix, 113 Fed. 629; 51 C. C. A. 339.

Machine Co. *v.* Woodward, 82 Fed. 97.

COSTS.

Statutory Provisions § 272
Appeals § 273 (*see* § 109)
Disclaimer § 274 (*see* § 339)
Record § 275
Taxation § 276
Miscellaneous § 277

§ 272. Statutory Provisions.

Costs may be recovered by a plaintiff or complainant who succeeds in an action for infringement, under 4919 R. S. In like manner, a defendant succeeding in such an action is entitled to his costs under 4920 R. S.

When judgment or decree is rendered for the plaintiff or complainant, in any suit at law or in equity, for the infringement of a part of a patent, in which it appears that the patentee, in his specification, claimed to be the original and first inventor or discoverer of any material or substantial part of the thing patented, of which he was not the original and first inventor, no costs shall be recovered, unless the proper disclaimer, as provided by the patent laws (4917 R. S.), has been entered at the Patent Office before the suit was brought. 973 R. S.

* * * But in every such case in which a judgment or decree shall be rendered for the plaintiff, no costs shall be recovered unless the proper disclaimer has been entered at the Patent Office before the commencement of the suit. * * * — 4922 R. S.

§ 273. Appeals.

An appeal involving costs will not be entertained here. — Paper Bag Cases, 105 U. S. 766; 26 L. Ed. 959.

When the plaintiffs fail in this court on both appeals, (one in which they had been successful below) they are to pay the costs of this court on both appeals. — Yale *v.* Berkshire, 135 U. S. 342; 34 L. Ed. 168; 10 S. Ct. 884.

This court has held in several cases that an appeal does not lie from a decree for costs; and if an appeal be taken from a decree upon the merits, and such decree be affirmed with respect to the merits, it will not be reversed upon the question of costs. — DuBois *v.* Kirk, 158 U. S. 58; 39 L. Ed. 895; 15 S. Ct. 729.

Glendale *v.* Smith, 100 U. S. 110; Wood *v.* Weimer, 104 U. S. 786; Russell *v.* Farley, 105 U. S. 433.

The apportionment of costs is generally for the master and the circuit court, and appeals, except in extraordinary cases will not be entertained. — Davis *v.* Parkman, 71 Fed. 961; 18 C. C. A. 398.

The patent having expired pendente lite and nominal damages having been awarded, an appeal cannot lie, as the only question is one of costs. — Gamewell *v.* Municipal, 77 Fed. 490; 23 C. C. A. 250.

That when a claim sued on proves invalid on appeal costs will be barred, see Metallic *v.* Brown, 110 Fed. 665; 49 C. C. A. 147.

Albany *v.* Felthousen, 20 Fed. 633; Mann's *v.* Monarch, 34 Fed. 130.

That if, on appeal, part of the claims sued on are sustained and part are not, the costs will be divided, see Ide *v.* Trorlicht, 115 Fed. 137; 53 C. C. A. 341.

Willcox *v.* Merrow, 93 Fed. 206; Thomson-Houston *v.* Elmira, 71 Fed. 396; Albany *v.* Felthousen, 20 Fed. 633.

Undoubtedly the statutory provision (as to disclaimer) applies to costs in the court below, but no case has been brought to our attention in which it was directly held that the statutory provision applies to costs on appeal. Our decree rectifies the error of the court in dismissing the bill, and remands the case with instructions to enter a decree in favor of the complainants, which should have been rendered. We think, then, that the appellants are rightfully entitled to costs in this court upon appeal, but not to costs below. — Kahn *v.* Starrels, 136 Fed. 597; 69 C. C. A. 371.

If the mandate of this court requires the trial court to enter a decree sustaining some parts of the patent and finding infringement, the statute will then have application and the patentee will not be allowed his costs because he had not entered his disclaimer before starting his suit and had put the defendant and the public to the disadvantage incident to his having asserted certain parts of his patent without right. We are not satisfied that either section (R. S. 973 and 4922) applies to a decree of this court where the decree of the court below is found erroneous, and that court is directed to enter a decree sustaining some of the claims of the patent in suit. If that court had rendered the proper decree, the patentee would not have been compelled to come here to obtain the measure of relief to which it is found he was entitled. It would be a harsh rule that would not allow him to recover the costs of his appeal from an erroneous decree so far as relief was denied upon the claim of his patents which were good because success had not attended the whole of his contention. — Johnson *v.* Foos, 141 Fed. 73; 72 C. C. A. 105.

§ 274. Disclaimer.

Failure to make necessary disclaimer before suit bars costs. — Silsby *v.* Foote, 61 U. S. 378; 15 L. Ed. 953.

The general issue of infringement was raised by the pleadings, and the answer, in general, set up necessity of disclaimer. The proofs were made on a single claim. Under such circumstances the complainant was not debarred costs under 973 and 4922 U. S. R. S. — Gamewell *v.* Municipal, 77 Fed. 490; 23 C. C. A. 250.

Fabries Co. *v.* Smith, 100 U. S. 110; Paper Bag Cases, 105 U. S. 766; Mills *v.* Green, 159 U. S. 651.

This claim being rejected as invalid, and no disclaimer having been filed before the suit was brought, under sec. 973 R. S. the complainant is not entitled to recover costs. — Fairbanks *v.* Stickney, 123 Fed. 79; 57 C. C. A. 209.

Metallic *v.* Brown, 110 Fed. 665.

§ 275. Record.

Where appellee has encumbered record with some 50 immaterial patents, under Rule 10 half of the costs of the printing will be assessed upon appellee. — B. & S. Fastener *v.* Kraetzer, 150 U. S. 111; 37 L. Ed. 1019; 14 S. Ct. 48.

There was so much irrelevant matter introduced into the case as to make it inequitable that the defendant should pay costs in this court, and he should not be compelled to pay the costs in the circuit court which were caused by this class of evidence. — Ecaubert *v.* Appleton, 67 Fed. 917; 15 C. C. A. 73.

That $20.90 paid by appellant to the commissioner of patents for copies of patents for insertion in the printed record may be taxed as costs on appeal. This is allowed. It is part of the cost of printing the record, and therefore taxable here. — Lee *v.* Penberthy, 109 Fed. 964; 48 C. C. A. 760.

§ 276. Taxation.

The costs are, perhaps, never in fact, taxed, until after the judgement is rendered; and in many cases cannot be taxed until afterward and where this is the case the amount ascertained is usually, under the direction of the court, entered nunc pro tunc as a part of the original judgement. And this mode of proceeding is necessary for the purposes of justice, in order to afford the necessary time to examine and decide upon the several items of costs, to which the successful party is lawfully entitled. — Sizer *v.* Many, 16 How. 98; 14 L. Ed. 861.

Costs were properly allowed, but the court is of the opinion that the complainant was not entitled to an allowance for any expenses beyond the taxable costs. — Parks *v.* Booth, 102 U. S. 96; 26 L. Ed. 54.

§ 277. Miscellaneous.

In this case we sustain the action of the court below both as to the interlocutory and final decree, and, as costs in equity and admiralty cases are within the sound discretion of the court, we do not feel inclined to disturb this decree in awarding full costs to the plaintiff. — DuBois *v.* Kirk, 158 U. S. 58; 39 L. Ed. 895; 15 S. Ct. 729.

Canter *v.* American, 28 U. S. 307; Harmony *v.* U. S. 43 U. S. 110, 237; Sapphire *v.* Napoleon, 85 U. S. 51; Kittridge *v.* Race, 92 U. S. 116.
Distinguishing, Dobson *v.* Hartford, 114 U. S. 442; Dobson *v.* Dornan, 118 U. S. 10.

The co-complainant licensor would undoubtedly have the right to be protected from any costs that might be adjudged against it, or incurred in the management of the suit. The court, upon proper motion, would without doubt compel this protection. The usual practice is in such cases, to require a sufficient bond of indemnity. Under such conditions there would be an implied contract on the part of the licensor to permit the use of its name by the complainant. — Brush *v.* California, 52 Fed. 945; 3 C. C. A. 368.

It would seem that the death of one or two copartner defendants after the closing of the record and before decree, does not effect the costs as they are chargeable against the surviving partners. — Hillborn *v.* Hale, 69 Fed. 958; 16 C. C. A. 569.

The statute refers to depositions taken out of court under such notice or consent as will entitle them to be filed and read as evidence upon the hearing

of the case, and does not include evidence taken either in court or before a master upon a reference. — Kissinger-Ison *v.* Bradford, 123 Fed. 91; 59 C. C. A. 221.

Troy *v.* Corning, 7 Blatchf. 16; In re Strauss *v.* Meyer, 22 Fed. 467; Spill *v.* Celluloid, 28 Fed. 870; Missouri *v.* Texas, 48 Fed. 775; Ferguson *v.* Dent, 46 Fed. 88.

No costs will be recovered by either party in this court or in the court below; each party having succeeded only in part. — Cleveland *v.* Detroit, 131 Fed. 853; 68 C. C. A. 233.

Appellant urges upon our consideration an alleged error of the court in overruling his motion to tax against appellees the costs occasioned by their propounding alleged improper cross-examining questions to appellant's witnesses. The motion is based on the proposition that a cross-examiner in an equity suit may not go beyond the scope of the direct examination. Even on that basis the ruling was right, because the cross-examining questions were germane to the matters in issue, which had been opened up on direct examination. — Parsons *v.* New Home, 134 Fed. 394; 67 C. C. A. 392.

Inasmuch as complainant in the court below claimed infringement of all the claims except one, and on the taking of proofs expressly declined to state on which ones it relied, and now abandons all but four of said claims, no costs will be allowed in favor of complainant on this appeal. — Cayuta *v.* Kennedy, 135 Fed. 537; 68 C. C. A. 563.

That where officers of a corporation, acting merely as such officers, are joined as defendants and the bill as against them is dismissed by the appellate court, costs of both courts will go to them, see Western *v.* North, 135 Fed. 79; 67 C. C. A. 553.

The process patent was contested and the machine patents were held to be wanting in invention. The process patent being sustained, *Held:* In such circumstances we do not feel that the statute requires this court to deny the appellant his costs in this court. This is the view taken by the Third and Seventh Circuits. — Johnson *v.* Foos, 141 Fed. 73; 72 C. C. A. 105.

Kahn *v.* Starrels, 136 Fed. 597; Ide *v.* Trorlicht, 115 Fed. 137.

In equity cases this court directs the imposition of costs according to the circumstances, and apportions them or denies cost altogether by no iron-clad rule. Indeed, such a rule could not be well prepared, and would more often than otherwise lead to injustice. — Johnson *v.* Foos, 141 Fed. 73; 72 C. C. A. 105.

Northern *v.* Snyder, 77 Fed. 818.

Inasmuch as the defendant has been defeated on the issues contested, and escapes upon a defense not pleaded, the case will be reversed, with costs to the complainant in the court below and no costs to either party in this court. Clancy *v.* Troy, 157 Fed. 554; 85 C. C. A. 314.

DAMAGES.

(*See* § 825)
Statutory Provisions § 278
General Statement § 279
Actual § 280
Designs § 281 (*see* § 328)
In Equity § 282
Increasing § 283
Interest § 284
Law Actions § 285 (*see* § 733)
Master's Report § 286

Measure
Absence of License or Royalty Measure § 287
Complainant's Loss § 288
Deductions and Mitigations § 289
Defendant's Gains § 290
Full Damages § 291
License Fee § 292
Nominal § 293
Royalty § 294 (*see* § 897)
Speculative § 295
Miscellaneous § 296
Proof of § 297
Segregation § 298
Miscellaneous Rulings § 299
See — Designs § 336; *Injunction* §§ 556, 565; *Marking "Patented"* § 776; *Profits* § 825; *Statute of Limitations* § 291

§ 278. Statutory Provisions.

Damages for the infringement of any patent may be recovered by action on the case, in the name of the party interested either as patentee, assignee, or grantee. And whenever in any such action a verdict is rendered for the plaintiff, the court may enter judgment thereon for any sum above the amount found by the verdict as the actual damages sustained, according to the circumstances of the case, not exceeding three times the amount of such verdict, together with costs. — R. S. 4919.

The several courts vested with jurisdiction of causes arising under the patent laws shall have power to grant injunctions according to the course and principles of courts of equity, to prevent the violation of any right secured by patent, on such terms as the court may deem reasonable; and upon a decree being entered in any such case for an infringement, the complainant shall be entitled to recover, in addition to the profits to be accounted for by the defendant, the damages the complainant has sustained thereby; and the court shall assess the same or cause the same to be assessed under its direction. And the court shall have the same power to increase such damages, in its discretion, as is given to increase the damages found by verdicts in actions in the nature of actions of trespass upon the case. — R. S. 4921.

* * * And in any suit for infringement, by the party failing so to mark, no damages shall be recovered by the plaintiff, except on proof that the defendant was duly notified of the infringement, and continued, after such notice, to make, use, or vend the article so patented. — R. S. 4900.

The Act Feb. 4, 1887, makes this special provision for damages for the infringement of design patents:

* * * Any person violating the provisions, or either of them, of this section, shall be liable in the amount of two hundred and fifty dollars; and in case the total profit made by him from the manufacture or sale, as aforesaid, of the article or articles to which the design, or colorable imitation thereof, has been applied, exceeds the sum of two hundred and fifty dollars, he shall be further liable for the excess of such profit over and above the sum of two hundred and fifty dollars; and the full amount of such liability may be recovered by the owner of the letters patent, to his own use, in any circuit court of the United States having jurisdiction of the parties, either by action at law or upon a bill in equity for an injunction to restrain such infringement.

That nothing in this act contained shall prevent, lessen, impeach, or avoid any remedy at law or in equity which any owner of letters patent for a design, aggrieved by the infringement of the same, might have had if this act had not been passed; but such owner shall not twice recover the profits made from the infringement.

The word "circuit," above, to be read *district*. Jud. Code, Sec. 291.

§ 279. General Statement.

The terms " damages " and " profits " are used with little discrimination in many instances, and the line of demarkation is often so indistinct that separation of the two is attended with difficulty. No attempt at an extended general statement upon the subject of damages, or that of profits will be attempted. This title, therefore, should be read in connection with " Profits," §§ 825-847.

The segregation rule established in the Mop Case (111 U. S. 120) and the long line of decisions growing out of it, which rendered recovery of substantial damages or profits practically impossible in most cases, has been brought to a pause, if not changed in its course, by the decision of Westinghouse *v.* Wagner, 225 U. S. 604 (§ 845). The Mop Case rule was, and is, sound as a rule of evidence which, like any minor rule of evidence, must conform and be subject to the basic principles of evidence. The error was in regarding it as a principle rather than a rule. The Supreme Court — not abrogating it as a useful rule — declared it subject to the broad principles of onus probandi; and thus it becomes possible to recover substantial damages and profits in that class of cases where segregation must be made.

§ 280. Actual.

Actual damages must be actually proved, and cannot be assumed as a legal inference from any facts which amount not to actual proof of the fact. — Seymour *v.* McCormick, 16 How. 480; 14 L. Ed. 1024.

When a plaintiff is allowed to recover only " actual damages," he is bound to furnish evidence by which the jury may assess them. If he rest his case, after merely proving an infringement of his patent, he may be entitled to nominal damages, but no more. He can not call a jury to guess out his case without evidence. Actual damages must be calculated, not imagined, and an arithmetical calculation cannot be made without certain data on which to make it. — Mayor *v.* Ransom, 64 U. S. 487; 16 L. Ed. 515.

Actual damages should be actually proved, and cannot be assumed as a legal inference from facts, which afford no data by which they can be calculated. — Mayor *v.* Ransom, 64 U. S. 487; 16 L. Ed. 515.

Seymour *v.* McCormick, 16 How. 485.

The measure of damages to be recovered, prescribed by the act of 1870, 16 Stat. at L. 207 is " the actual damages sustained by the plaintiff." — Philip *v.* Nock, 84 U. S. 460; 21 L. Ed. 679.

If the test of a royalty cannot be applied, he will be entitled to an amount which will compensate him for the injury to which he has been subjected by the piracy. — Philip *v.* Nock, 84 U. S. 460; 21 L. Ed. 679.

§ 281. Designs.

In absence of marking notice is necessary. — Dunlap *v.* Schofield, 152 U. S. 244; 38 L. Ed. 426; 14 S. Ct. 576.

The statute of 1887 was passed in consequence of the decision of the Supreme Court in Dobson *v.* Carpet Co. 114 U. S. 439. The manifest purpose of Congress was to enlarge the remedy against infringers of design patents, and to declare that the measure of profits recoverable on account of the infringement should be considered to be the total net profits upon the whole article. A construction which should limit a recovery above $250.00 to the

amount which the complainant could clearly establish to be the value which the design had contributed to the infringing carpets would be at variance, not only with the apparent legislative intent but with the language of the statute. The rule which Congress declared for the computation of profits was the total profit from the manufacture or sale of the article to which the design was applied, as distinguished from the pre-existing rule of the profit which could be proved to be attributable to the design. — Untermeyer *v.* Freund, 58 Fed. 205; 7 C. C. A. 183.

The liability imposed by the act of Feb. 4, 1887, is a statutory penalty in the nature of damages, and not, as has been contended, a "profit liquidated." — Monroe *v.* Anderson, 58 Fed. 398; 7 C. C. A. 272.

§ 282. In Equity.

If the appellees had sustained an injury to their legal rights the courts of law were open to them for redress, and in those courts they might have claimed not compensation merely but vengeance for such injury as they could show they had sustained. — Livingstone *v.* Woodworth, 15 How. 546; 14 L. Ed. 809.

The rule in suits in equity of ascertaining by a reference to a master the profits which the defendant has made by the use of the plaintiff's invention, stands on a different principle. It is that of converting the infringer into a trustee for the patentee as regards the profits there made; and the adjudgment of these profits is subject to all the equitable considerations which are necessary to do complete justice between the parties, many of which would be appropriate in a trial by jury. With these corrective powers in the hands of a chancellor, the rule of assuming profits as the groundwork for estimating the compensation due from the infringer to the patentee has produced results calculated to suggest distrust to its universal application even in courts of equity. — Packet Co. *v.* Sickles, 86 U. S. 611; 22 L. Ed. 203.

Damages of a compensatory character may also be allowed in equity, in certain cases where the gains and profits made by the respondent are clearly not sufficient to compensate the complainant for the injury sustained. Gains and profits are still the proper measure of damage in equity. — Birdsall *v.* Coolidge, 93 U. S. 64; 23 L. Ed. 802.

Damages of a compensatory character may be allowed to a complainant in an equity suit, when it appears that the business of the infringer was so improvidently conducted that it did not yield any substantial profits. — Marsh *v.* Seymour, 97 U. S. 348; 24 L. Ed. 963.

R. S. Sec. 4921; Birdsall *v.* Coolidge, 93 U. S. 64.

By a uniform current of decisions of this court, beginning 30 years ago, the profits allowed in equity, for the injury that a patentee has sustained by the infringement of his patent, have been considered as a measure of unliquidated damages which, as a general rule, and in the absence of special circumstances, do not bear interest until after their amount has been judicially ascertained; and the provision introduced in the Patent Act of 1870, regulating the subject of profits and damages made no mention of interest, and has not been understood to affect the rule as previously announced. — Tilghman *v.* Proctor, 125 U. S. 136; 31 L. Ed. 664; 8 S. Ct. 894.

Silsby *v.* Foote, 61 U. S. 378; Mowry *v.* Whitney, 81 U. S. 620; Littlefield *v.* Perry, 88 U. S. 205; R. S. 4921; Parks *v.* Booth, 102 U. S. 96; Root *v.* Railway, 105 U. S. 189; R. R. *v.* Turrill, 110 U. S. 301.

We have been in doubt as to the proper disposition of the case, — whether it should be sent to a master for rehearing, or whether this court should ascertain from the record the proper amount. Mfg. Co. *v.* Cowling, 105 U. S. 253. This case has now been in the courts for eighteen years. It survived two masters, and was before a master for more than nine years. The lapse of time undoubtedly arose from a variety of circumstances, and we are not aware that it is attributable to the counsel in the case; but the delays which are incident to an accounting are well known, and we hesitate exceedingly to compel an additional expenditure of time. The manufacture of plaits in any large amount has now ceased, and it is very likely that further testimony would result only in estimates not the result of experience. We have therefore concluded to ascertain from the record a more satisfactory amount of profits, and conclude that a reasonable allowance will be the sum of $40,000. — Tuttle *v.* Claflin, 76 Fed. 227; 22 C. C. A. 138.

§ 283. Increasing.

Damages of a compensatory character may be allowed to a complainant in equity when it appears that the business of the infringer was so improvidently conducted that it did not yield any substantial profits, as in the case before the court. — Root *v.* Ry., 105 U. S. 189; 26 L. Ed. 975.

Marsh *v.* Seymour, 97 U. S. 348.

Conduct of an infringer which will warrant. — Topliff *v.* Topliff, 145 U. S. 156; 36 L. Ed. 658; 12 S. Ct. 825.

Is a matter of discretion by court and will not be disturbed on appeal unless evidence clearly demands it. — Topliff *v.* Topliff, 145 U. S. 156; 36 L. Ed. 658; 12 S. Ct. 825.

They were perfectly indifferent to the claimed rights of anyone else, and purchased infringing goods from the Dayton Company a month after the issuance of a preliminary injunction against them, and nearly one and one-half months after the date of Judge Lacombe's opinion. While the master cautiously does not find a removal of their books and papers to evade the accounting, it appears that they did not exert themselves to produce them. They were passive instruments in the hands of the real defendants, and permitted all the difficulties which the master has detailed to be interposed. The doubling of the small amount of damages which the master was able to find, was a proper exercise of the power of the circuit court. — National *v.* Elsas, 86 Fed. 917; 30 C. C. A. 487.

This case is particularly free from unusual circumstances showing a wilful purpose to violate the rights of complainants, and we are not disposed to overrule the court below in refusing to exercise this punitory power. — Kissinger-Ison *v.* Bradford, 123 Fed. 91; 59 C. C. A. 221.

A suggestion was made with respect to our ascertaining from the master's report the amounts that should be adjudged on account of these additional infringements. We think the assessment should be made by the Circuit Court. — Murray *v.* Orr, 153 Fed. 369; 82 C. C. A. 445.

That damages recoverable in equity may not be increased (notwithstanding the plain statement of the statute) see McSherry *v.* Dowagiac, 160 Fed. 948; 89 C. C. A. 26.

In increasing the damages the court below was influenced by the fact that the defendant had reason to believe that it was infringing, "as it was called upon to indemnify at least one party with whom it was dealing and from whom it secured business by a reduction of price, thus knowingly taking business from a licensee of the complainants." It also appeared that the defendant destroyed all file proofs of the use by it of the infringing process prior to the commencement of the accounting, although this was not done maliciously or for the purpose of concealment. The account presented to the master was not a frank and full statement, and defendant's infringement was continued after the commencement of suit. If the question had been presented to this court in the first instance, it is not improbable that we should have decided to treble the damages. It was, however, in the discretion of the Circuit Court to do so and we hesitate to say that the discretion has been abused. — Fox *v.* Knickerbocker, 165 Fed. 442; C. C. A.

Topliff *v.* Topliff, 145 U. S. 156; Day *v.* Woodworth, 13 How. 363; Weston *v.* Empire, 155 Fed. 301; Folding Box *v.* Elsas, 81 Fed. 197, affd. 86 Fed. 917; Lyon *v.* Donaldson, 34 Fed. 789.

Since the statute permits only an increase of the damages found, and not of profits, it follows that the complainant's motion in that regard falls to the ground. — Yesbera *v.* Hardesty, 166 Fed. 120; C. C. A.

Note: This is clearly the rule in the Sixth Circuit. I have never been able to see the logic of this rule. The statute giving courts of equity jurisdiction provides: "And the court shall have the same power to increase such damages, in its discretion, as is given to increase the damages found by verdicts in actions in the nature of actions of trespass upon the case." (R. S. 4921). In the first place, "such damages" in an action at law may be measured by the jury in sundry ways — in terms of losses by defendant, gains of plaintiff, royalties, etc. In the second place, the distinction between "profits" and "damages" in equity is, as one observes from reading the cases, shadowy at least. Whether the award is in terms of profits or damages, it comes to dollars and cents — a penalty on the one hand, and a recoupment on the other. The rules and distinctions in damages and profits are means to a common end, rules for reaching justice; and the plain intent of congress in providing the means for increasing the award to a plaintiff or complainant was to enable the court, *in any case where the actual finding is palpably insufficient*, to do justice, not merely to inflict a penalty; and the recoupment feature is an equitable provision which a court of equity should be most willing to enforce.

§ 284. Interest.

Interest upon profits should not be allowed as part of the damages. — Silsby *v.* Foote, 61 U. S. 378; 15 L. Ed. 953.

In our opinion the defendant should not have been charged with interest before final decree. The profits which are recoverable against an infringer of a patent are in fact in compensation for the injury the patentee has sustained from the invasion of his right. They are the measure of his damages. Though called profits they are really damages, and unliquidated until the decree is made. — Mowry *v.* Whitney, 81 U. S. 620; 20 L. Ed. 860.

The circuit court, however, in rendering its final decree, added interest to the amount found by the master to be due upon the account for profits.

In Mowry *v.* Whitney, 14 Wall. 620 it was held that interest was not allowable in such cases except under peculiar circumstances. This case does not, in our opinion, justify such an allowance. It will be for the court to determine, upon the coming in of the new report, accompanied by other evidence, whether the conduct of the defendants has been such as to subject them to liability in this particular. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

The court in its former decision (94 U. S. 695) affirmed the decrees "with costs and interest until paid at the same rate per annum that similar decrees bear in the courts of the state of Illinois." By "similar" we did not mean decrees in patent suits, for of such suits state courts have no jurisdiction. It was right for the circuit court, when our mandate went down, to order the decree affirmed to be executed by the collection of the money found to be due, and interest, which, under the established rule in the state, will be six per cent. — Railroad *v.* Turrill, 101 U. S. 836; 25 L. Ed. 1009.

Interest on the profits decreed to the complainant should not have been allowed, as was decided by this court many years ago, the better opinion being that profits in such a case can be regarded in the light of unliquidated damages, which usually do not draw interest without a special order of the court. — Parks *v.* Booth, 102 U. S. 96; 26 L. Ed. 54.

Silsby *v.* Foote, 20 How. 378.

In a case arising in New York State the court awarded damages with interest until paid at the same rate per annum that decrees bear in the state of New York. — Yale *v.* Sargent, 117 U. S. 536; 29 L. Ed. 954; 6 S. Ct. 934.

Delay caused by the court, or not attributable to the plaintiff, in coming to a conclusion on the master's report, where the amount found by that report is confirmed, ought not to deprive the plaintiff of interest on the amount found by the master. Under such circumstances, the account ought to be considered as liquidated on the day when the master's report is filed. — Consolidated *v.* Crosby, 141 U. S. 441; 35 L. Ed. 809; 12 S. Ct. 49.

§ 285. Law Actions.

At law the jury can award only actual damages. — Hogg *v.* Emerson, 11 How. 587; 13 L. Ed. 824.

Lowell *v.* Lewis, 1 Mas. 182.

Profits are not the primary or true criterion of damages for infringement in an action at law. That rule applies eminently and mainly to cases in equity, and is based upon the idea that the infringer shall be converted into a trustee, as to those profits, for the owner of the patent which he infringes; a principle which it is very difficult to apply in a trial before a jury but quite appropriate on a reference to a master, who can examine defendant's books and papers, and examine him upon oath, as well as all his clerks and employees.

No doubt, in the absence of satisfactory evidence of either class in the form to which it is most appropriate, the other may be resorted to as one of the elements on which the damages or the compensation may be ascertained; but it cannot be admitted, as the prayer which was refused implies, that in an action at law the profits which the other party might have made is the primary

or controlling measure of damages. — Burdell *v.* Denig, 92 U. S. 716; 23 L. Ed. 764.

Packet *v.* Sickles, 19 Wall. 617.

We have repeatedly held that sales of licenses of machines, or of a royalty established, constitute the primary and true criterion of damages in the action at law. — Burdell *v.* Denig, 92 U. S. 716; 23 L. Ed. 764.

Where the suit is at law, the measure of damages remains unchanged, the rule still being that the verdict of the jury must be for the actual damages sustained, subject to the right of the court to enter judgement for any sum above the verdict not exceeding three times that amount, with costs. — Birdsall *v.* Coolidge, 93 U. S. 64; 23 L. Ed. 802.

There is a difference between the measure of recovery in equity and that applicable in an action at law. In equity the complainant is entitled to recover such gains and profits as have been made by the infringer from the unlawful use of the invention, and, since the act of July 8, 1870, in cases where the injury sustained by the infringement is plainly greater than the aggregate of what was made by the defendant, the complainant is entitled to recover the damages he has sustained, in addition to the profits received. At law the plaintiff is entitled to recover, as damages, compensation for the pecuniary loss he has suffered from the infringement, without regard to the question whether the defendant has gained or lost by his unlawful acts — the measure of recovery in such cases being not what the defendant has gained, but what plaintiff has lost. As the case in hand is one at law, it is not necessary to pursue the subject of the extent of the equitable remedy; but reference may be had to Tilghman *v.* Proctor, 125 U. S. 137, where the cases were elaborately considered and the rule above stated was declared to be established. — Coupe *v.* Royer, 155 U. S. 565; 39 L. Ed. 263; 15 S. Ct. 199.

That in the absence of any measure of damages at law, recovery cannot be measured in terms of the defendant's profits, see Brown *v.* Lanyon, 148 Fed. 838; 78 C. C. A. 528.

Reviewing history of the statute and citing:

Seymour *v.* McCormick, 16 How. 480; Suffolk *v.* Hayden, 70 U. S. 315; Mowry *v.* Whitney, 81 U. S. 620; Philip *v.* Nock, 84 U. S. 460; Packet Co. *v.* Sickles, 86 U. S. 611; Burdell *v.* Denig, 92 U. S. 716; Tilghman *v.* Proctor, 125 U. S. 136; Coupe *v.* Royer, 155 U. S. 565; Belknap *v.* Schild, 161 U. S. 10; Houston *v.* Stern, 74 Fed. 636; Seattle *v.* McNamara, 81 Fed. 863; Boston *v.* Allen, 91 Fed. 248; Boyle *v.* Zacharie, 6 Pet. 647; Scott *v.* Neeley, 140 U S. 106; Root *v.* Railway, 105 U. S. 189.

The plaintiff offered to prove the utility and advantages of his patented device, that it had been appropriated and used by a number of other railroads, and that this use, being without his consent, prevented the establishment of a market value therefor. This offer the court rejected. It will thus be seen that Suffolk Co. *v.* Hayden, has been approvingly cited and considered as authority for the principle, therein enunciated, that, in the absence of license fee or royalty, other proof can in an action at law be resorted to, to show the damage done to the owner of the patent. The law thus announced in conclusion of the case before us, unless Suffolk *v.* Hayden was over-

ruled in Coupe *v.* Royer, 155 U. S. 567. Holding, then as we do, that Suffolk *v.* Hayden is unreversed and unqualified by Coupe *v.* Royer, it follows the court below erred. — McCune *v.* Baltimore, 154 Fed. 63; 83 C. C. A. 175.

Suffolk *v.* Hayden, 70 U. S. 318, Birdsall *v.* Coolidge, 93 U. S. 69; Root *v.* Railway, 105 U. S. 198; Tilghman *v.* Proctor, 125 U. S. 143; Coupe *v.* Royer, 155 U. S. 567.

The complaint (at law) concluded with a prayer or petition for judgment against the defendant in the sum of $50,000. During the trial plaintiff sought to raise an issue respecting royalties, which was cut off by the court. Damages were assessed at $1. Plaintiff then petitioned for an accounting of profits. *Held:* Relief can be administered in lawsuits only in accordance with the facts set out in the pleading, regardless of the prayer. As the profits are based upon the existence of established royalties, involving matters of accounting cognizable in equity, the bill should be framed accordingly, containing the essential averments authorizing an inquiry for the ascertainment of profits. There are no facts alleged in the petition as a basis for the ascertainment of profits. — Portland *v.* Hermann, 160 Fed. 91.

Brown *v.* Lanyon, 148 Fed. 838.

Note: It would seem as if this decision might fitly conclude the practice that has so curiously prevailed in the Ninth Circuit of bringing actions for infringement on the wrong side of the court.

§ 286. Master's Report.

The master acted in view of this evidence, and the court below concurred in his finding, except in some unimportant particulars. As no obvious error or mistake has been pointed out to us, their conclusions must be permitted to stand. — Warren *v.* Keep, 155 U. S. 265; 39 L. Ed. 144; 15 S. Ct. 83.

Tilghman *v.* Proctor, 125 U. S. 136.

The testimony on the reference was directed to both lines for recovery, namely profits on the one and damages on the other; and that the master followed this scheme, not for the purpose of duplicating the damages but because the complainant might be able to succeed on one line, even if he should fail on the other. The master's report shows that, though he was impressed that the proof was sufficient to make out a case for damages, he thought it expedient to report his conclusions upon the proof offered in support of the claim for profits, to the end that the court should have the data for a decree upon the adoption of either basis as the court should deem *proper. We think the course pursued by the master was well advised, and* conducive to a proper result. — Mast *v.* Superior, 154 Fed. 45; 83 C. C. A. 157.

The court abruptly departed from the orderly course of procedure. (The master found $29,000 damages and the circuit judge arbitrarily reduced the amount to $18,000.) The decree did not rest upon any finding of the master, notwithstanding the court overruled all exceptions to it. Nor is it supported by any evidence found in the record. It was for an arbitrary sum quite distinct from either of the results which the evidence had any tendency to prove, and the court was not at liberty to pronounce a decree at discretion. — Mast *v.* Superior, 154 Fed. 45; 83 C. C. A. 157.

N. Y. *v.* Ransom, 23 How. 487; Philip *v.* Nock, 17 Wall. 460.

§ 287. Measure — Absence of License or Royalty Measure.

This question of damage, under the rule given in the statute, is always attended with difficulty and embarrassment, both to the court and jury. There being no established patent or license fee in the case, in order to get at a fair measure of damages, or even an approximation to it, general evidence must necessarily be resorted to. And what evidence could be more appropriate and pertinent than that of the utility and advantage of the invention over the old modes or devices that had been used for working out similar results? With a knowledge of these benefits to the persons who have used the invention and the extent of the use by the infringer, a jury will be in possession of material and controlling facts that may enable them in the exercise of a sound judgement, to ascertain the damages, or, in other words, the loss to the patentee or owner, by the piracy instead of the purchase of the use of the invention. — Suffolk *v.* Hayden, 70 U. S. 315; 18 L. Ed. 76.

In cases where there is no established license fee in the case, or even an approximation to it, general evidence must necessarily be resorted to. — Packet Co. *v.* Sickles, 86 U. S. 611; 22 L. Ed. 203.

Suffolk *v.* Hayden, 3 Wall. 315.

In this case when the patentee granted no licenses and had no established license fee, but supplied the demand himself and was able to supply the demand, the master was unable to determine from the proofs what profits the defendant had made. He confined his award to the enforced reduction of price caused by the infringement. That this is a proper item of damages, if proved, is clear. — Yale *v.* Sargent, 117 U. S. 536; 29 L. Ed. 954; 6 S. Ct. 934.

McComb *v.* Brodie, 1 Woods, 153; Philip *v.* Nock, 17 Wall. 460.

This is an action at law for the damages sustained by the plaintiffs for the alleged infringement, and in such actions where there has been proved an established royalty or license fee, which has been customarily paid to the owner of the patent by those who desired to use it, such regular price for a license is its primary and true criterion of the plaintiff's damage; but in this case, there is no evidence of any license fee ever having been demanded or paid by anyone; and so, if you find in favor of the plaintiffs, you should consider the utility and advantage to the defendant of the use of the patented device, as compared to any other means of obtaining similar results which were open to the defendant to use; and you may consider the cost of using one as compared with the cost and savings to the defendant of using the other; and from these data, if proven to you, you should ascertain, in the exercise of a sound judgment, what would be a fair compensation to the plaintiffs for the damage which they have sustained by reason of the defendant having infringed, instead of having purchased the right to use, the invention. — Brickill *v.* Mayor, 60 Fed. 98; 8 C. C. A. 500.

Suffolk *v.* Hayden, 3 Wall. 320; Sessions *v.* Romadka, 145 U. S. 29.

If there had been an established royalty, the jury could have taken that sum as the measure of damages. In the absence of such royalty, and in the absence of proof of lost sales or injury by competition, the only measure of damages was such sum as, under all the circumstances, would have been a reasonable royalty for the defendant to have paid. This amount it was the province of the jury to determine. In so doing, they did not make a contract for the parties, but found a measure of damages. — Hunt *v.* Cassidy, 64 Fed. 585; 12 C. C. A. 316.

McKeever *v.* U. S. 14 Ct. Cl. 414; Ross *v.* Railway, 45 Fed. 371; Royer *v.* Coupe, 29 Fed. 371; Cary *v.* Mfg. Co. 37 Fed. 654.

That where there is no royalty basis, where the plaintiff can show no actual damage, and no market price can be established, the plaintiff, under Coupe *v.* Royer, 155 U. S. 565, can recover nominal damages only, see Seattle *v.* McNamara, 81 Fed. 863; 26 C. C. A. 652.

§ 288. Measure — Complainant's Loss.

Reduction of prices and consequent loss of profits, enforced by infringing competition, is a proper ground for award of damages. The only question is as to the character and sufficiency of the evidence in the particular case. — Yale *v.* Sargent, 117 U. S. 536; 29 L. Ed. 954; 6 S. Ct. 934.

Where the patentee grants no licenses, and has no established license fee, but supplied the demand himself, and was able to do so, an enforced reduction of price is a proper item of damages, if proven by satisfactory evidence. — Boesch *v.* Gräff, 133 U. S. 697; 33 L. Ed. 787; 10 S. Ct. 378.

Yale *v.* Sargent, 117 U. S. 536.

While the loss due to an infringing device reducing the market price of complainant's manufacture is a proper element of damages, the evidence must show that the reduction in price was due to the sale of the infringing devices and not to other causes. — Boesch *v.* Gräff, 133 U. S. 697; 33 L. Ed. 787; 10 S Ct. 378.

Cornley *v.* Marckwold, 131 U. S. 159; N. Y. *v.* Ransom, 64 U. S. 487; Rude *v.* Westcott, 130 U. S. 152.

It is reasonable to conclude that, if the appellees had not deliberately and wantonly become infringers, and wrongfully trespassed on appellant's patent rights, they would have purchased from appellant the rods they used. Moreover, the law is that in cases of wanton infringement, every doubt is to be resolved against the infringer. These facts unite to afford substantial, not mere conjectural, grounds on which to base the conclusion, that the appellant, by appellees' wrongful act, lost the sale of these particular rods, and to that extent assuredly was damaged. The facts we have stated being in evidence, the master was fully justified in finding, as we do, and especially so in the absence of all counterproof by the appellees, that the appellant, by the appellees' wrongful impairment of his sales, was damaged to the extent of the difference between the cost price and the selling price established as between these parties, and interest from the date of the filing of the master's report. — Rose *v.* Hirsch, 94 Fed. 177; 36 C. C. A. 132.

Rubber Co. *v.* Goodyear, 9 Wall. 803; Creamer *v.* Bowers, 35 Fed. 209; Covert *v.* Sargent, 38 Fed. 237; Tilghman *v.* Proctor, 125 U. S. 161.

It is undoubted that the wrongdoer compelled the complainant to reduce its prices, but the complainant even then probably made a profit and it sold more machines on account of the reduced price. What, on the whole, it lost does not appear. It was within the power of the complainant to illustrate to what extent its whole profit fell off by reason of the competition. It did not do so, and the court is unable to know to what extent it was finally injured by the competition. Therefore, no damages growing out of this unlawful competition can be allowed. (Opinion of court below quoted and approved.) — Force *v.* Sawyer-Boss, 143 Fed. 894; 75 C. C. A. 102.

§ 289. Measure — Deductions and Mitigations.

The intent not to injure never exonerates from all damages, though it may mitigate them. — Hogg *v.* Emerson, 11 How. 587; 13 L. Ed. 824.

Whittemore *v.* Cutter, 1 Gall. 429; Jones *v.* Pearce, Web. P. C. 125; Bryce *v.* Dorr, 3 McLean, 583; Lowell *v.* Lewis, 1 Mas. 182.

Such general expenses as store rent, clerk hire, fuel, gas, porterage, etc. are to be deducted proportionally upon the profits of the attachment. — Tremain *v.* Hitchcock, 90 U. S. 518; 23 L. Ed. 97.

A receipt given after suit was commenced may be given in evidence to reduce damages without setting it up in the pleadings by amendment. — Burdell *v.* Denig, 92 U. S. 716; 23 L. Ed. 764.

The judge of the circuit court was of opinion that the facts in this case took it out of the general rule that the pecuniary advantage which the infringers derived from the unauthorized use of the patent is to be estimated upon the entire production of the infringers, because, in his opinion, the evidence showed that the defendants never would have resorted to the hand method, because it was so expensive as to be prohibitory, and because it was impossible to make marketable plaits by hand. There may be and probably will be, cases in which an inadvertent infringer of an old and unknown patent for the method of manufacturing an article which is made and sold by the million at a cheap rate, and which is expensively made by hand, like the article of paper bags, suggested by Judge Coxe, will have a persuasive equity against a decree for his entire profits, upon the ground that the owner of the patent suffered no damage, and that the paper-bag business was created by automatic machinery, and never would have existed if the bags must be made by hand. — Tuttle *v.* Claflin, 76 Fed. 227; 22 C. C. A. 138.

Before final hearing the courts referred the case back to "take proof as to the entire or partial abandonment by complainant of the disk furrow opener covered by the patent, and the substitution therefor of another and different type of device for the same purpose." The master reported that he was unable to discover how the later improvement should affect the consequences of the infringement from 1898 to 1902 and adhered to his former report. It is manifest that his conclusion upon the matter referred back to him was correct. — Mast *v.* Superior, 154 Fed. 45; 83 C. C. A. 157.

§ 290. Measure — Defendant's Gains.

It must be apparent to the most superficial observer of the immense variety of patents issued every day, that there cannot, in the nature of things, be any one rule of damages which will equally apply to all cases. The mode of ascertaining actual damages must necessarily depend upon the peculiar nature of the monopoly granted. A man who invents or discovers a new composition of matter such as vulcanized India rubber, or a valuable medicine, may find his profit to consist in a close monopoly, forbidding anyone to compete with him in the market, the patentee being himself able to supply the whole demand at his own price. If he should grant licenses to all who might desire to manufacture his composition, mutual competition might destroy the value of such license. This may be the case also where the patentee is the inventor of an entire new machine. If any person could use the invention or discovery by paying what a jury might suppose to be a fair value of a license, it is plain that competition would destroy the whole value of the monopoly. In such cases the profit of the infringer may be the only criterion of the actual damages of the patentee. — Seymour *v.* McCormick, 16 How. 480; 14 L. Ed. 1024.

It is only where, from the peculiar circumstances of the case, no other rule can be found, that the defendant's profits become the criterion of the plaintiff's loss. — Seymour *v.* McCormick, 16 How. 480; 14 L. Ed. 1024.

The master reported as damages the entire profits of defendant on car-wheels made under plaintiff's process. As it appeared that car-wheels could be made and sold at a profit without employing plaintiff's process it was held that the damages were the savings or gains due to said process over what the profits of defendant otherwise would have been. — Mowry *v.* Whitney, 81 U. S. 620; 20 L. Ed. 860.

The same principle, therefore, which gives to the complainants the aggregate profits of the entire manufacture would give the same profits to a patentee of the process of chilling, if there were one, and as there are many processes in the manufacture, for each of which it is conceivable there might be a patent and as every one of the processes is necessary to make a marketable wheel, an infringer might be mulcted in several times the profits he had made from the whole manufacture. We cannot assent to such a rule. The question to be determined in this case is: what advantage did the defendant derive from using the complainant's invention over what he had in using the processes then open to the public and adequate to enable him to obtain an equally beneficial result? The fruits of that advantage are his profits. — Mowry *v.* Whitney, 81 U. S. 620; 20 L. Ed. 860.

In arriving at their conclusion, the profit made by the defendant and that lost by the plaintiff, are among the elements which the jury may consider. — Philip *v.* Nock, 84 U. S. 460; 21 L. Ed. 679.

The decree (covering all gains and profits from selling articles containing the patented improvement) is as we think too broad. In Mowry *v.* Whitney, 14 Wall. 620, it was held "What advantage did the defendant derive from using the complainant's invention over what he had in using other processes then open to the public, and adequate to enable him to obtain an equally beneficial result? The fruits of that advantage are his profits." For such profits he is compelled to account as damages. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

Profits actually realized are usually, in a case like this, the measure of unliquidated damage. Circumstances may, however, arise which would justify the addition of interest in order to give complete indemnity for losses sustained by wilful infringements. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

Manifestly the complainants are not entitled to the savings or profits resulting from the defendant's own invention. — Mason *v.* Graham, 90 U. S. 261; 23 L. Ed. 86.

In cases where profits are the proper measure, it is the profits which the infringer makes, or ought to make, which govern, and not the profits which plaintiff can show that he might have made. — Burdell *v.* Denig, 92 U. S. 716; 23 L. Ed. 764.

Assuming that the use of the machine was not true economy. They had the choice of repairing them on the common anvil or on the complainant's machine. By selecting the latter, they saved a large part of what they must have expended in the use of the former. They gained, therefore, to the extent that they saved themselves from loss. — Railroad *v.* Turrill, 94 U. S. 695; 24 L. Ed. 238.

We think the weight of evidence leads to the conclusion that the number of feet mended on the infringing machines, the gain in mending compared with

the cost of mending on the common anvil, considering the saving of labor and fuel were such as justified the decrees that were made. — Railroad *v.* Turrill, 94 U. S. 695; 24 L. Ed. 238.

A limited locality required a particular kind of a pump to be used only in that locality for a special purpose. The market was not only limited to a particular locality but it was unusually limited in demand. A single manufacturer, possessing the facilities the appellant had could easily and with reasonable promptness fill every order that was made. There was no other pump that could successfully compete with that controlled by the patent. Under these circumstances it is easy to see that what had been the appellee's gain in this business must necessarily have been the appellant's loss and, consequently, the appellant's damages are to be measured by the appellee's profits derived from their business in that special and limited market. — Goulds *v.* Cowing, 105 U. S. 253; 26 L. Ed. 987.

The question to be determined is, what advantage did the defendant derive from using the complainant's invention over what he had in using other processes then open to the public and adequate to enable him to obtain an equally beneficial result. The fruits of that advantage are his profits. Quoting Mowry *v.* Whitney, 14 Wall. 620. — Goulds *v.* Cowing, 105 U. S. 253; 26 L. Ed. 987.

There was no market for pumps adapted to this particular use, except in the oil producing regions of Pennsylvania and Canada. The demand was limited as well as local. Less than a thousand pumps actually supplied all who wanted them. But for that particular use no other pump could at the time be sold. If the appellant kept the control of its monopoly under the patent, it alone had the advantage of the market. Unless the appellees got the improved pump, they could not become competitors in the field, and just to the extent they got into the field they drove the appellant out. Through their infringement they got the advantage of selling the pumps that had upon them the patented improvement. Without it no such sales would have been effected. The fruits of the advantage they gained by their infringement were, therefore, necessarily the profits they made on the entire sale. — Goulds *v.* Cowing, 105 U. S. 253; 26 L. Ed. 987.

It may be added that where no profits are shown to have accrued a court of equity cannot give a decree for profits by way of damages or as punishment for the infringement. — Root *v.* Ry., 105 U. S. 189; 26 L. Ed. 975.

Livingston *v.* Woodworth, 15 How. 559.

No profits having been made by the defendant. in the absence of any evidence as to the value imparted by the patented design it was error to allow as damages upon the number of yards of goods made by the defendant the sum per yard which was the profit of the plaintiff in making and selling goods with the patented design. —Dobson *v.* Dornan, 118 U. S. 10; 30 L. Ed. 63; 6 S. Ct. 946.

Dobson *v.* Hartford, 114 U. S. 439.

Exception is taken to the form of the interlocutory decree, in that, while it awards a recovery for the profits and damages from the infringement of the design, it orders an account to be taken of the profits of the defendants from infringing upon the exclusive rights of the plaintiffs " by the manufacture, use and sale of carpeting bearing said patented design," and of the additional damages suffered by the plaintiffs " by reason of said infringements." We do not think the decree is open to the objection made. It is not like the

decree in Littlefield *v.* Perry, 88 U. S. 228. It directs an account of the profits from the infringement. The infringement could be committed only by making, using, and selling carpets containing the patented design; but the profits and damages to be accounted for are described as only those from the infringement. — Dobson *v.* Dornan, 118 U. S. 10; 30 L. Ed. 63; 6 S. Ct. 946.

Where defendant's entire profits were derived from the infringement his profits are plaintiff's damages. — Hurlbut *v.* Schillinger, 130 U. S. 456; 32 L. Ed. 1011; 9 S. Ct. 584.

Elizabeth *v.* Nicholson, 97 U. S. 126; Root *v.* Railway, 105 U. S. 189; Callaghan *v.* Myers, 128 U. S. 617; Garretson *v.* Clark, 111 U. S. 120.

This court has repeatedly held that in estimating damages in the absence of a royalty, it is proper to consider the savings of the defendant in the use of the patented device over what was known and in general use for the same purpose anterior to the date of the patent. — Sessions *v.* Romadka, 145 U. S. 29; 36 L. Ed. 609; 12 S. Ct. 799.

Mowry *v.* Whitney, 81 U. S. 620; Cawood Pat. 94 U. S. 695; Tilghman *v.* Proctor, 125 U. S. 136; Williams *v.* Rome, 18 Blatchf. 181.

If the infringing machine or device derived the entire commercial value from the patented feature or improvement, complainant would be entitled to defendant's entire profits. — Mosher *v.* Joyce, 51 Fed. 441; 2 C. C. A. 322.

Mfg. Co. *v.* Cowing, 105 U. S. 253; Root *v.* Railway, 105 U. S. 189; Hurlbut *v.* Schillinger, 130 U. S. 456; Crosby *v.* Consolidated, 141 U. S. 454.

Upon the foregoing facts, the question of the rule of law in regard to the method of ascertaining the profits was not a debatable one. If the defendants had made no addition to the Crosby and Kellogg invention, it being one of an original and primary character, they took it as it was, although they furnished their machine with mechanical equivalents which might produce better work than the corresponding devices for which they were substituted, and the complainants would be entitled to the pecuniary advantage which the infringers derived from their unauthorized use of the patent, the profit being in this case the difference between the expense of plaiting by the use of the patented device and the expense of doing the same thing by hand. — Tuttle *v.* Claflin, 76 Fed. 227; 22 C. C. A. 138.

Mowry *v.* Whitney, 14 Wall. 620; Cawood Pat. 94 U. S. 695; Thomson *v.* Wooster, 114 U. S. 104; Sessions *v.* Romadka, 145 U. S. 29.

When the infringer uses in his infringing machine the essential part of the patented machine, without which his infringing machine is worthless, it is not an adequate answer to the demand for the payment of his entire profits that his substituted equivalents improved the work of the corresponding elements of the infringed machine. — Tuttle *v.* Claflin, 76 Fed. 227; 22 C. C. A. 138.

§ 291. Measure — Full Damages.

It is the making and selling to be used, and not the selling or buying or making alone for which full damages are usually given. — Hogg *v.* Emerson, 11 How. 587; 13 L. Ed. 824.

10 Wheat. 350; Curt. Pat. 256 n. 3; 3 McLean. 427.

When the entire profit of a business or undertaking results from the use of the invention, the patentee will be entitled to recover the entire profits, if

he elects that remedy. And in such a case, the defendant will not be allowed to diminish the show of profits by putting in unconscionable claims for personal services or other inequitable deductions. — Root *v.* Ry., 105 U. S. 189; 26 L. Ed. 975.

Rubber Co. *v.* Goodyear, 76 U. S. 788.

§ 292. Measure — License Fee.

When an inventor finds it profitable to exercise his monopoly by selling licenses to make or use his improvement, he has himself fixed the average of his actual damage, when his invention has been used without his license. If he claims anything above that amount he is bound to substantiate his claim by clear and distinct evidence. When he has himself established the market value of his improvement as separate and distinct from the other machinery with which it is connected, he can have no claim in justice or equity to make the profits of the whole machine the measure of his demand. — Seymour *v.* McCormick, 16 How. 480; 14 L. Ed. 1024.

The defendants in various forms praved the court to instruct the jury that the measure of damages was the established rate for the license to use their invention, as ascertained by the sales made by plaintiffs of such license to others. If this was the true rule of estimating the damages, the bill of exceptions shows that a sufficient number of such licenses, and the prices at which they were granted, was in evidence to enable the jury to apply the principle to the case before them.

As we are of opinion that this was the sound rule, and that in refusing the prayers for instruction based on it, as well as in admitting evidence of the saving of fuel and its value as affecting the amount of the verdict, the court below was in error.

On that subject in the case of Seymour *v.* McCormick, 16 How. 480, this court on full consideration, and without dissent, laid down the proposition that in suits at law for infringement of patents, where the sale of licenses by the patentee had been sufficient to establish a price for such licenses, that price should be taken as his measure of damages against the infringer. The rule thus declared has remained the established criterion of damages in cases to which it was applicable ever since. Sickles *v.* Borden, 4 Blatchf. 14; Suffolk *v.* Hayden, 3 Wall. 315; Livingstone *v.* Jones, 3 Wall. Jr. 330.

Certainly any unnecessary relaxation of the rule we have laid down in cases at law, where the patentee has been in the habit of selling his invention or license to use it, so that a fair deduction can be made as to the value which he and those using it have established for it, does not commend itself to our judgement, nor is it encouraged by our experience.

If such be the proper rule in case of the infringer who uses the invention without license and against the consent of the owner, it should not be harsher against the party who uses it with consent of the owner, express or implied, but without any agreement as to the rate of compensation. In such case nothing can be more reasonable than that the price fixed by the patentee for the use of his invention, in his dealings with others, and submitted to by them before using it, should govern. — Packet Co. *v.* Sickles, 86 U. S. 611; 22 L. Ed. 203.

It is obvious that there cannot be any one rule of damages prescribed which will apply in all cases, even where it is conceded that the finding must be limited to actual damages. Frequent cases arise where proof of an established royalty furnishes a pretty safe guide both for the instructions of the court and the finding of the jury. Reported cases of undoubted authority may be referred to which support that proposition; and yet it is believed to

be good law that the rule cannot be applied without qualification, where the patented improvement has been used only to a limited extent and for a short time, that in such a case the jury should find less than the amount of the license fee; and it is admitted in several cases that the circumstances may be such that the finding should be larger than the royalty. — Birdsall *v.* Coolidge, 93 U. S. 64: 23 L. Ed. 802.

Seymour *v.* McCormick, 16 How. 490; Livingston *v.* Woodworth, 15 How. 560; Dean *v.* Mason, 20 How. 203; Curtis Pat. 459.

The inventor may indeed prohibit the use, or exact a license fee for it, and if such license fee has been generally paid, its amount may be taken as a criterion of damages to him when his rights are infringed. In the absence of such criterion, the damages must necessarily be nominal. — Black *v.* Thorne, 111 U. S. 122; 28 L. Ed. 372; 4 S. Ct. 326.

Established license fees are the best measure of damages that can be used. There may be damages beyond this, such as the expense and trouble the plaintiff has been put to by the defendant, and any special inconvenience he has suffered from the wrongful acts of the defendant; but these are more properly the subject of allowance by the court under the authority given to it to increase the damages. — Clark *v.* Wooster, 119 U. S. 322; 30 L. Ed. 392; 7 S. Ct. 217.

In an action at law for the infringement of a patent, the plaintiff can recover a verdict for only the actual damages which he has sustained; and the amount of such royalties or license fees as he has been accustomed to receive from third persons for the use of the invention, with interest thereon from the time when they should have been paid by the defendants, is generally, though not always, taken as the measure of his damages; but the court may, whenever the circumstances of the case appear to require it, inflict vindictive or punitive damages by rendering judgement for not more than thrice the amount of the verdict. — Tilghman *v.* Proctor, 125 U. S. 136; 31 L. Ed. 664; 8 S. Ct. 894.

Seymour *v.* McCormick, 57 U. S. 480; N. Y. *v.* Ransom, 64 U. S. 487; Suffolk *v.* Hayden, 70 U. S. 315; Philip *v.* Nock, 84 U. S. 460; Packet Co. *v.* Sickles, 86 U. S. 611; Burdell *v.* Denig, 92 U. S. 716.

It is clear that the payment of any sum in settlement of a claim for an alleged infringement cannot be taken as a standard to measure the value of the improvements patented, in determining the damages sustained by the owners of the patent in other cases of infringement. Many considerations other than the value of the improvements may induce the payment in such cases. The avoidance of the risk and expense of litigation will always be a potential motive for settlement. It is undoubtedly true that when there has been such a number of sales by a patentee of licenses to make, use and sell his patents, as to establish a regular price for a license that price may be taken as a measure of damages against infringers. That rule was established in Seymour *v.* McCormick, 57 U. S. 480; N. Y. *v.* Ransom, 64 U. S. 487; Packet *v.* Sickles, 86 U. S. 611; Birdsall *v.* Coolidge, 93 U. S. 64; Root *v.* Railway, 105 U. S. 189. Sales of licenses made at periods years apart, will not establish any rule on the subject and determine the value of the patent. Like sales of ordinary goods, they must be common, that is, of frequent occurrence, to establish such a market price for the article that it may be assumed to express, with reference to all similar articles, their salable value at the place designated. In order that a royalty may be accepted as a measure of damages against an infringer, who is a stranger to the license establishing it, it must be paid or secured before the infringement complained of; it must

be paid by such a number of persons as to indicate a general acquiescence in its reasonableness by those who have occasion to use the invention; and it must be uniform at the places where the licenses are issued. — Rude *v.* Westcott, 130 U. S. 152; 32 L. Ed. 888; 9 S. Ct. 463.

A license fee, when established and agreed to by the public, is only a measure of estimating the market value of a patented machine or device of which the patentee has been deprived by infringement. — Hunt *v.* Cassidy, 53 Fed. 257; 3 C. C. A. 525.

Seymour *v.* McCormick, 16 How. 480; Packet Co. *v.* Sickles, 19 Wall. 617; Rude *v.* Westcott, 130 U. S. 152.

The proof of a license fee for two improvements is not competent to show the damages sustained by an infringement of one of these improvements. And suit having been brought on only one patent and no proof having been offered to apportion or segregate the profits due to each, nominal damages only can be recovered. — Hunt *v.* Cassidy, 53 Fed. 257; 3 C. C. A. 525.

Philip *v.* Nock, 17 Wall. 460; Seymour *v.* McCormick, 16 How. 480.

It appears from the evidence that at the time of infringement, there was an established license fee for the use of the apparatus such as that employed by the defendant, and that it amounted on the proper basis of computation, to $687.50. This sum with interest is the measure of damages which the complainants are entitled to recover. — McNeely *v.* Williames, 96 Fed. 978; 37 C. C. A. 641.

The proof of damages consisted of licenses granted to a large proportion of the leading manufacturers on which royalties substantially uniform were agreed to be paid, and it was upon the basis of such royalties that the master reckoned the damages. These licenses were made after this suit was begun and while it was pending contemporaneously with the running of these licenses and the pending of this suit, the defendant was continuing the infringement. The licenses recited the pending of the litigation over the patent, and stipulated that, if it should be adjudged invalid, the royalties should cease or be remitted. The licensees were all substantial parties. In the present case, so far as we can see there is no room for suspecting collusion. Nor can we perceive any reason why the evidence in such a case should be hedged about with suspicions and artificial limitations not felt or imposed in dealing with business transactions generally. — Mast *v.* Superior, 154 Fed. 45; 83 C. C. A. 157.

§ 293. Measure — Nominal.

It does not always follow that because a party may have made an improvement in a machine and obtained a patent for it, another using the improvement and infringing upon the patentee's rights will be muleted in more than nominal damages for the infringement. If other methods in common use produce the same results, with equal facility and cost, the use of the patented invention cannot add to the gains of the infringer, or impair the just rewards of the inventor. — Black *v.* Thorne, 111 U. S. 122; 28 L. Ed. 372; 4 S. Ct. 326.

Where plaintiff claims profits of defendant where infringement does not cover entire machine only nominal damages can be had in absence of segregation. — Keystone *v.* Adams, 151 U. S. 139; 38 L. Ed. 103; 14 S. Ct. 295.

The court below charged the jury as follows: "Your verdict in this case can be only for the damages which he (the plaintiff) has sustained by the

alleged use of his patent by the defendant during the six years prior to the date of his writ. There being no evidence that the patent was of any value to him during this time or that the use of it by the defendant during the 6 years was any injury to him, or that he paid anything for the patent, you can find only nominal damages, if any, in this case." Under these circumstances, the court should have expressly directed the jury that it should not return a verdict for more than nominal damages. — Boston *v.* Allen, 91 Fed. 248; 33 C. C. A. 485.

Suffolk *v.* Hayden, 3 Wall. 315; Coupe *v.* Royer, 155 U. S. 565 (overruling Suffolk *v.* Hayden); Black *v.* Thorn, 111 U. S. 122; Seattle *v.* McNamara, 81 Fed. 863.

§ 294. Measure — Royalty.

Where the plaintiff has sought his profit in the form of a royalty paid by his licensees, and there are no peculiar circumstances in the case, the amount to be recovered will be regulated by that standard. — Philip *v.* Nock, 84 U. S. 460; 21 L. Ed. 679.

Evidence of an established royalty will undoubtedly furnish the true measure of damages in an action at law when the wilful acts consist in making and selling the patented improvement, or in the extensive and protracted use of the same, without palliation or excuse; but when the use is a limited one and for a brief period it is error to apply the rule arbitrarily and without any qualification. — Birdsall *v.* Coolidge, 93 U. S. 64; 23 L. Ed. 802.

Packet *v.* Sickles, 19 Wall. 617; Burdell *v.* Denig, 92 U. S. 716; Suffolk *v.* Hayden, 3 Wall. 320.

Where damages cannot be assessed upon the basis of a royalty, nor on that of lost sales, nor on that of hurtful competition, the proper method of assessing them is to ascertain what would have been a reasonable royalty. — Hunt *v.* Cassidy, 64 Fed. 585; 3 C. C. A. 525.

Quoting Rob. Pat. Sec. 563.

(The application of the rule in this case seems to me wholly beyond the rule. The only direct testimony of the royalty value was the opinion of the plaintiff. If this is not allowing a plaintiff to assess his own damages under cover of another name, then it would be hard to tell what would be.)

In the instant case, although three sales were sworn to, the price in only two is given, and one of these was a sale made before the reissue of the patent. All were more than ten years before the infringement alleged in this case, and, during these ten years, although the appliance was on the market not a single sale or license fee is shown. It cannot be seriously contended that the sales referred to establish the market value of the patent. From this state of the case, it is clear that the court erred in refusing to charge the jury to find nominal damages only. — Houston *v.* Stern, 74 Fed. 636; 20 C. C. A. 636.

Coupe *v.* Royer, 155 U. S. 565; Rude *v.* Westcott, 130 U. S. 152.

§ 295. Measure — Speculative.

In the present case, the master found that the plaintiffs' profit on their carpets was a certain percentage, and assumed or presumed that the defendants' carpets, which were far inferior in quality as well as in market value, displaced those of plaintiffs to the extent of the sales by the defendants, and held that the entire profit which the plaintiffs would have received, at such percentage, from the sale of an equal quantity of their own carpets of the same pattern, was the proper measure of their damages. The defendants' carpets were so inferior in quality that they sold them at a much less price

than the plaintiffs got for their carpets, and even at those prices the defendants made no profits. Under these circumstances there can be no presumption that the plaintiffs would have sold their better quality of carpets in place of the defendants' poorer quality, if the latter had not existed, or that the pattern would have induced the purchasers from the defendants to give to the plaintiffs the higher price. On the contrary, the presumption is at least equal that the cheaper price, and not the pattern, sold the defendants' carpets. There was no satisfactory testimony that those who bought the cheap carpets from the defendants would have bought the higher priced goods from the plaintiffs, or that the design added anything to the defendants' price or promoted their sale of the particular carpets; and none to show what part of the defendants' price was to be attributed to the design. — Dobson *v.* Dornan, 118 U. S. 10; 30 L. Ed. 63; 6 S. Ct. 946.

Opinions not founded on knowledge are of no value. Conclusions from such opinions are at best mere guesses. By the decision rendered a settled rule of law was violated, that actual, not speculative damages must be shown, and by clear and definite proof, to warrant a recovery for the infringement of a patent. As was said long ago by this court; actual damages must be calculated, not imagined; and an arithmetical calculation cannot be made without certain data on which to make it. — Rude *v.* Westcott, 130 U. S. 152; 32 L. Ed. 888; 9 S. Ct. 463.

N. Y. *v.* Ransom, 64 U. S. 487.

In view of this record, it might be possible to make some vague guess, as many of the witnesses have, as to how much faster some one appliance would work than another, under favorable circumstances; but there seems to be absolutely no proof which would warrant the court in finding that by the use of the infringing nets, defendant saved any specific number of hours out of the time it would have taken to do the work with one or other of the cargo-hoisting appliances available to defendant. The testimony falls far short of the reliable and tangible proof which is required to establish profits. — Hohorst *v.* Hamburg-American, 91 Fed. 655; 34 C. C. A. 39.

The parties agreed upon a guess as to the number of machines made and sold and on this guess the amount of damages was estimated. If the Supreme Court had not found plenty of reasons for reversing this decision upon other grounds (192 U. S. 265) there is little question but that it would have been reversed on the question of damages. — Singer *v.* Cramer, 109 Fed. 652; 48 C. C. A. 588. Reversed, 192 U. S. 265.

Counsel for the defendant says, "the law requires that the two things to be compared must be adequate to produce an equally beneficial result." This proposition seems to have been borrowed from cases where the circumstances were such as to make such a comparison possible. It has no application to a case like this. There was no such thing to compare with and the rule above stated, to be applicable to such a case as this, must be modified to suit the different circumstances. — Mast *v.* Superior, 154 Fed. 45; 83 C. C. A. 157.

Suffolk *v.* Hayden, 3 Wall. 315; Cawood Pat. 94 U. S. 695; Sessions *v.* Romadka, 145 U. S. 29.

§ 296. Measure — Miscellaneous.

These sales (of the attachment alone) furnish a much better measure of profits than a ratable proportion on the entire machine. It may fairly be presumed from them that the profits on the sale of the machine, with the improvement attached, were increased by the infringing device quite as much as was the profit on the improvement sold separately. It does not

appear at what profit, if any, the machines could have been sold without the improvement. — Mason *v.* Graham, 90 U. S. 261; 23 L. Ed. 86.

As the infringement of a combination is in the use of the combination and not its elements, so profits or damages for such infringement depend upon the combination and not the elements. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

For history of doctrine of damages, see Root *v.* Ry., 105 U. S. 189; 26 L. Ed. 975.

If made by such infringement they can hardly be set up against the complainant to reduce the amount of profits made by the defendants. At all events, since the defendants chose to make their own folded strips in their own factory, instead of going outside to purchase them, or have them made by others, they cannot justly complain of their being accountable for the profits realized in using the complainant's machine for that purpose. — Thompson *v.* Wooster, 114 U. S. 104; 29 L. Ed. 105; 5 S. Ct. 788.

§ 297. Proof of.

The plaintiffs have furnished no data to estimate actual damage, and therefore, in no aspect of the case can they recover more than nominal damages. — Mayor *v.* Ransom, 64 U. S. 487; 16 L. Ed. 515.

The plaintiff must show his damages by evidence. They must not be left to conjecture by the jury. They must be proved, and not guessed at. — Philip *v.* Nock, 84 U. S. 460; 21 L. Ed. 679.

No license fee charged by complainant is shown. The burden of proof rests upon him. Damages must be proved; they are not to be presumed. — Robertson *v.* Blake, 94 U. S. 728; 24 L. Ed. 245.

Having failed to prove by reliable and tangible evidence that the entire value of the infringing device as a marketable article, was properly and legally attributable to his patented feature, the court cannot indulge in conjecture or speculation in order to give him the entire profits made by the defendants. — Mosher *v.* Joyce, 51 Fed. 441; 2 C. C. A. 322.

The burden of proof of damages is upon the plaintiff. — Hunt *v.* Cassidy, 53 Fed. 257; 3 C. C. A. 525.

Garretson *v.* Clark, 111 U. S. 120; Blake *v.* Robertson, 94 U. S. 728.

The defendant below insisted that the damages recoverable must be actual, and that proof as to sales to other parties or of an established license fee as royalty, was inadmissible. The trial judge overruled the objection, and, we think, rightly, admitted evidence of sales made and license fees collected. — Houston *v.* Stern, 74 Fed. 636: 20 C. C. A. 636.

§ 298. Segregation.

If the measure of damages be the same whether a patent be for an entire machine, or for some improvement in some part of it, then it follows that each one who has patented an improvement in any portion of a machine may recover the whole profits arising from the skill, labor, material and capital employed in making the whole machine, and the unfortunate mechanic may be compelled to pay treble his whole profits to each of a dozen or more several inventors of some small improvement in the machine he has built.

By this doctrine even the smallest part is made equal to the whole, and "actual damages" to the plaintiff may be converted into an unlimited series of penalties on the defendant. — Seymour *v.* McCormick, 16 How. 480; 14 L. Ed. 1024.

One who invents some improvement in the machinery of a mill could not claim that the profits of the whole mill should be the measure of damages for the use of his improvement. And when the profit of the patentee consists neither in the exclusive use of the thing invented or discovered nor in the monopoly of making it for others to use, it is evident that the rule could not apply. — Seymour *v.* McCormick, 16 How. 480; 14 L. Ed. 1024.

It is true of a process invented as an improvement in a manufacture, as it is of an improvement in a machine, that an infringer is not liable to the extent of his entire profits in the manufacture. — Mowry *v.* Whitney, 81 U. S. 620; 20 L. Ed. 860.

Jones *v.* Morehead, 1 Wall. 155; Seymour *v.* McCormick, 16 How. 480.

Where the infringement is confined to a part of the thing sold, the recovery must be limited accordingly. It cannot be as if the entire thing were covered by the patent; or, where that is the case, as if the infringement were as large as the monopoly. — Philip *v.* Nock, 84 U. S. 460; 21 L. Ed. 679.

Where segregation is necessary and is not made, only nominal damages will be allowed. — Robertson *v.* Blake, 94 U. S. 728; 24 L. Ed. 245.

It does not necessarily follow from this rule (the rule in Mowry *v.* Whitney) that where the patent is for one of the constituent parts and not for the whole machine, the profits are to be confined to what can be made by the manufacture and sale of the patented part separately. If, without improvement, a machine adapted to the same uses can be made, which will be valuable in the market and salable, then as was further said in Mowry *v.* Whitney, the inquiry is, "what was the advantage in cost, in skill required, in convenience of operation or marketability" gained by the use of the patented improvement. If the improvement is required to adapt the machine to a particular use, and there is no other way open to the public of supplying the demand for that use, then it is clear the infringer has by his infringement secured the advantage of a market he would not otherwise have had, and that the fruits of his advantage are the entire profits he has made in that market. Such, we think, is the case. — Goulds *v.* Cowing, 105 U. S. 253; 26 L. Ed. 987.

It is incumbent upon the complainant to separate the profits arising from the saving to defendant by using the patented device from other savings or profits. — Black *v.* Thorne, 111 U. S. 122; 28 L. Ed. 372; 4 S. Ct. 326.

It is provided by sec. 4921 of the R. S. that, in a suit in equity for the infringement of a patent, the plaintiff may, on a decree in his favor, recover the damages he has sustained, in addition to the profits to be accounted for by the defendant, such damages to be assessed by the court, or under its direction, and with the same power to increase the damages, in the discretion of the court, as in the case of verdicts; and the damages intended are "the actual damages sustained" in the language of sec. 4919. Root *v.* R. Co. 105 U. S. 189. By sec. 4933 all these provisions apply to patents for designs.

This court has, in a series of decisions, laid down rules as to what are to be regarded as "profits to be accounted for by the defendant," and what as "actual damages" in suits for the infringement of patents; and no rule has

been sanctioned which will allow, in the case of a patent for a design for ornamental figures created in the weaving of a carpet, or imprinted on it, the entire profit from the manufacture and sale of the carpet, as profits or damages, including all the profits from carding, spinning and weaving, thus regarding the entire profits as due to the figure or pattern, unless it is shown by reliable evidence that the entire profit is due to the figure or pattern. It is matter of common knowledge that there is an infinite variety of patterns in carpets, and that, between two carpets of equal cost to make and equal merit as to durability of fabric and fastness of color, each with a pattern pleasing to the taste, one having a design free to be used and the other a design protected by a patent, the latter may or may not command in the market a price larger than the former. If it does, then the increased price may be fairly attributed to the design, and there is a solid basis of evidence for profits or damages. But, short of this, under the rules established by this court, there is no such basis. The same principle is applicable as in patents for inventions. The burden is upon the plaintiff, and if he fails to give the necessary evidence, but resorts, instead, to inference and conjecture and speculation, he must fail for want of proof. There is another suggestion of great force. The carpet with the infringing design may be made on an infringing loom, and various infringing processes or mechanisms for carding, spinning and dyeing may be used in making it, and if the entire profit in making and selling it is necessarily to be attributed to the pattern, so it may as well, on principle, be attributed to each of the other infringements, and a defendant might be called on to respond many times over for the same amount. There is but one safe rule — to require the actual damages or profits to be established by trustworthy legal proof. — Dobson *v.* Hartford, 114 U. S. 439; 29 L. Ed. 177; 5 S. Ct. 945.

Livingston *v.* Woodworth, 15 How. 546; Seymour *v.* McCormick, 16 How. 480; Mayor *v.* Ransom, 23 How. 487; Mowry *v.* Whitney, 14 Wall. 620; Philip *v.* Nock, 17 Wall. 460; Littlefield *v.* Perry, 21 Wall. 205; Birdsall *v.* Coolidge, 93 U. S. 64; Cawood Pat. 94 U. S. 695; Blake *v.* Robertson, 94 U. S. 728; Garretson *v.* Clark, 111 U. S. 120; Black *v.* Thorne, 111 U. S. 122. Distinguishing Mfg. Co. *v.* Cowing, 105 U. S. 253.

The plaintiff must show what profit or damages are attributable to the use of the infringing design. — Dobson *v.* Dornan, 118 U. S. 10; 30 L. Ed. 63; 6 S. Ct. 946.

Dobson *v.* Hartford, 114 U. S. 439.

Where patent covers only a part or an improvement upon a general machine profits must be segregated. — McCreary *v.* Pennsylvania, 141 U. S. 459; 35 L. Ed. 817; 12 S. Ct. 40.

Seymour *v.* McCormick, 57 U. S. 480; Mowry *v.* Whitney, 81 U. S. 620; Littlefield *v.* Perry, 88 U. S. 205; Elizabeth *v.* Nicholson, 97 U. S. 126; Garretson *v.* Clark, 111 U. S. 120.

Necessary to the recovery of more than nominal damages. — Keystone *v.* Adams, 151 U. S. 139; 38 L. Ed. 103; 14 S. Ct. 295.

Garretson *v.* Clark, 111 U. S. 120.

The rule requiring that profits arising from the patented features must be separated from those arising from the unpatented features has little application in a case where every feature is patented. — Warren *v.* Keep, 155 U. S. 265; 39 L. Ed. 144; 15 S. Ct. 83.

It is, no doubt, well settled that where a patent is for a particular part of an existing machine, it is not sufficient to ascertain the profits on the whole

machine, but it must be shown what portion of the profits is due to the particular invention secured by the patent in suit. But it is equally true that, when the patented invention is for a new article of manufacture, which is sold separately, the patentee is entitled to damages arising from the manufacture and sale of the entire article. — Warren *v.* Keep, 155 U. S. 265; 39 L. Ed. 144; 15 S. Ct. 83.

Robertson *v.* Blake, 94 U. S. 728; Dobson *v.* Hartford, 114 U. S. 439; Goulds *v.* Cowing, 105 U. S. 258; Hurlbut *v.* Schillinger, 130 U. S. 456; Crosby *v.* Consolidated, 141 U. S. 441.

Rule of Garretson *v.* Clark cited and applied. — Mosher *v.* Joyce, 51 Fed. 441; 2 C. C. A. 322.

Dobson *v.* Carpet Co. 114 U. S. 444.

The authorities are full upon the point that a party cannot recover on damages the profits to be derived from the manufacture of the whole of a machine, when only a portion of the same contains a patented feature. — Hunt *v.* Cassidy, 53 Fed. 257; 3 C. C. A. 525.

Garretson *v.* Clark, 111 U. S. 120; Dobson *v.* Carpet Co. 114 U. S. 440; Philip *v.* Nock, 17 Wall. 460.

It would be impossible in the case of a patent such as this to introduce testimony to separate the value of the patented from the unpatented parts. The plaintiffs' invention practically introduced a new cart, — a cart for which a demand at once arose. There is no evidence that at any time carts were constructed after the manner of the plaintiff's but with the patented feature omitted. There would be no demand for such a cart. It was impossible, therefore, to compare the value of the patented cart with a cart which did not contain the invention. There was in the case the admission of the defendants that they had constructed 150 carts in 1893. The testimony of the plaintiffs was that, by reason of the competition of infringers, the price of their cart, which was originally $35, had been reduced to $22.50. The measure of their damages was their entire loss. — Holmes *v.* Truman, 67 Fed. 542; 14 C. C. A. 517.

Fitch *v.* Bragg, 16 Fed. 243; Mfg. Co. *v.* Sargent, 117 U. S. 536.

The defendants insist, however, that they made additions which materially benefited the machines, and increased their effective power. If this is true, although they took the whole of the vital and effective part of the invention, but superadded and annexed an improvement which contributed to the saving which they obtained, they have a right to an apportionment, the burden being upon them to show th t a portion of the profits was the result of the improvement which they annexed. — Tuttle *v.* Claflin, 76 Fed. 227; 22 C. C. A. 138.

Elizabeth *v.* Pavement, 97 U. S. 126: Crosby *v.* Consolidated, 141 U. S. 441.

The general rule is clear that in an accounting of profits derived from the infringement of a patent the plaintiff has the burden of proof, and the infringer is chargeable only with the actual gains and advantages derived from the use of the invention. — Elgin *v.* Nichols, 105 Fed. 780; 45 C. C. A. 49.

Garretson *v.* Clark, 111 U. S. 120; Dobson *v.* Carpet Co., 114 U. S. 439; City *v.* American, 97 U. S. 126.

But it does not follow that, because the only part of the machine sold covered by this claim is the barred cylinder, the patentees' recovery of

profits is to be confined to what can be made by making and sale of this cylinder only. — Penfield *v.* Potts, 126 Fed. 475; 61 C. C. A. 371.

Garretson *v.* Clark, 111 U. S. 120; Reed *v.* Lawrence, 29 Fed. 915; Mosher *v.* Joyce, 51 Fed. 441, Manufacturing Co. *v.* Cowing, 105 U. S. 253; Crosby *v.* Consolidated, 141 U. S. 454.

Here is the rock on which many patent causes have been stranded at the end of their course, for, though it can sometimes be done, it is generally next to impossible to distinguish the profits due to one rather than another of the characteristics of the article sold, or manufactured to be sold. The price is single, and it would rarely happen that either the buyer or the seller would contemplate the price as made up of components grounded on such a distinction. The facts are similar to those which in other cases would condemn the guilty party to suffer the consequences of his mingling indistinguishably the property of an innocent party with his own or that of another. Counsel for defendant has argued this question upon the theory that the rule laid down in the case of Elizabeth *v.* Pavement Co. was an exception to that stated in Garretson *v.* Clark, and seems to suppose that, in every case where some element or elements of a combination found in a former patent is found also in the infringing article, the burden is cast upon the plaintiff to prove either that it did not affect the selling price of the article, or, if it did, to show what part of the price was due to his own invention. But such a rule would be inconsistent with the decision in Elizabeth *v.* Pavement Co. We think the two cases above mentioned are not inconsistent; but that they are easily reconciled upon the assumption that the rule of the first case is applicable to the question of the burden of proof of showing the presence of the extraneous element and the probability that it has affected the price, and that the rule of the second case relates to the burden of proof after these facts are established. Thus in the later case of Keystone *v.* Adams, 151 U. S. 145, in summing up the conclusions reached thereon, one was stated to be, "that when the infringed device was a portion only of defendant's machine, which embraced inventions covered by patents other than that for the infringement of which the suit was brought, in the absence of proof to show how much of that profit was due to such other patents, and how much was a manufacturer's profit, the complainant is entitled to nominal damages only," from which it seems that the conditions stated must have been made to appear before the rule stated could be applied. — Canda *v.* Michigan, 152 Fed. 178; 81 C. C. A. 420.

That the conduct of the infringer may require a modification of this rule see Mast *v.* Superior, 154 Fed. 45; 83 C. C. A. 157.

It is contended that the master should have made some apportionment in his estimate of profits to other features of merit in the devices sold by the defendant. No doubt if the defendant could have satisfied the master that there were some other special features of merit not common to grain drills, which contributed to the profits, it would have been his duty to make an apportionment, and award to the Peckham patent only such part of the profits as the proof would justify; but there was no factor brought forward which was entitled to share in the profits the master was inquiring about. The burden was on the defendant to prove that there existed such a factor. — Mast *v.* Superior, 154 Fed. 45; 83 C. C. A. 157.

Canda *v.* Michigan, 152 Fed. 178; Elizabeth *v.* Pavement Co. 97 U. S. 126; Sayer *v.* Scott, 55 Fed. 971; Tuttle *v.* Claflin, 76 Fed. 227.

Note: Many of the leading cases on this subject will be found under *Profits — Segregation.*

§ 299. Miscellaneous Rulings.

The transfer of title to patent in suit pendente lite does not affect the right to past damages. — Dean *v.* Mason, 61 U. S. 198; 15 L. Ed. 876.

Counsel fees cannot be included in the verdict. — Philip *v.* Nock, 84 U. S. 460; 21 L. Ed. 679.

When a suit in equity has been brought and prosecuted in the name of the patentee alone, with the licensee's consent and concurrence, to final judgement, from which, if for too small a sum, an appeal might have been taken in the name of the patentee, we should hesitate to say that the licensee, merely because he was not a formal plaintiff in that suit, could bring a new suit to recover damages against the same defendant for the same infringement. — Birdsall *v.* Shaliol, 112 U. S. 485; 28 L. Ed. 768; 5 S. Ct. 244.

Proof of what other manufacturers have realized not a measure of damages. — Keystone *v.* Adams, 151 U. S. 139; 38 L. Ed. 103; 14 S. Ct. 295.

The fact that a competing article could be made and sold at an equal profit does not affect the damages. — Warren *v.* Keep, 155 U. S. 265; 39 L. Ed. 144; 15 S. Ct. 83.

It has been often repeated that a patentee has three distinctive rights, — the right to make, the right to sell, and the right to use his patented articles, — and that whoever invades any one of these rights is an infringer, and liable for damages. — Philadelphia *v.* Edison, 65 Fed. 551; 13 C. C. A. 40.

Since Birdsall *v.* Shaliol, 112 U. S. 485, the law has been settled that the recovery of damages from a defendant, for manufacturing and selling, will not prevent the recovery of other substantial damages from the defendant's vendees; for their profits upon reselling the patented articles. — Philadelphia *v.* Edison, 65 Fed. 551; 13 C. C. A. 40.

Kelley *v.* Mfg. Co. 44 Fed. 19; Tuttle *v.* Matthews, 28 Fed. 98.

The second patent is only for an attachment, which doubtless may be usefully employed, especially in power mills, but if left off or removed no equivalent in its place is imperative. There can, therefore, be no good reason for supposing that the profits derived from the manufacture and sale of the mills in which that device was employed were all due to its use. — Elgin *v.* Nichols, 105 Fed. 780; 45 C. C. A. 49.

Neither is there any doubt, since the Act July 8, 1870, R. S. 4921, but that, where the injury resulting from an infringement shall be greater than the gains and profits made by the infringer, the patentee, in addition to the profits to be accounted for, is entitled to recover the damages he has sustained. — Kisinger-Ison *v.* Bradford, 123 Fed. 91; 59 C. C. A. 221.

Root *v.* Railway, 105 U. S. 189; Coupe *v.* Royer, 155 U. S. 565.

DEATH OF APPLICANT.

Miscellaneous Rulings § 300 (*see* § 38)

§ 300. Miscellaneous Rulings.

Power of attorney — right to amend, see Eagleton *v.* West, 111 U. S. 490; 28 L. Ed. 493; 4 S. Ct. 593.

Distinguished, De La Vergne *v.* Featherstone, 147 U. S. 209.

Executor or administrator, powers of defined in De La Vergne *v.* Featherstone, 147 U. S. 209; 37 L. Ed. 138; 13 S. Ct. 283.

Amendment after death of applicant made within the scope of the original application without new oath or new power of attorney does not void patent. — De La Vergne *v.* Featherstone, 147 U. S. 209; 37 L. Ed. 138; 13 S. Ct. 283.
Distinguishing, Eagleton *v.* West, 111 U. S. 490.

Does not void patent issued subsequent to his death for which he made application. — De La Vergne *v.* Featherstone, 147 U. S. 209; 37 L. Ed. 138; 13 S. Ct. 283.

DECREES.

General Statement § 301
Appellate Power Over § 302
Classes § 303
Interlocutory § 304
Miscellaneous § 305
See — Adjudication § 24; *Appeals* §§ 116–21; *Injunction* § 533

§ 301. General Statement.

Since this work deals with pleading, practice and procedure only with reference to matters peculiar to patent causes, such topics and titles as the above will be found fragmentary and unsatisfactory as determining any question arising thereunder. It is always presumed that the practitioner has at hand the standard authorities on pleading, practice and procedure, and that what is here given on such subjects is limited to the special rulings in patent causes.

§ 302. Appellate Power Over.

The general rule that a court of review may, whether the adjudication appealed from be interlocutory or final, direct the court of original jurisdiction to enter whatever decree ought to have been entered in the first instance, as in LeGuen *v.* Gouverneur, 1 Johns, Cas. 436; Richmond *v.* Atwood, 52 Fed. 10; Bissell *v.* Goshen, 72 Fed. 545; and Green *v.* Mills, 69 Fed. 852, the opinion in the last named case being by Chief Justice Fuller, — need not be dwelt on. — Standard *v.* Crane, 76 Fed. 767; 22 C. C. A. 549.

An appellate tribunal cannot change the nature of a decree; it cannot make an interlocutory decree final. — Standard *v.* Crane, 76 Fed. 767; 22 C. C. A. 549.
Disapproving, Bissell *v.* Goshen, 72 Fed. 545.

§ 303. Classes.

The single division of decrees into two classes, and two only, interlocutory and final, has been generally accepted by lawyers and judges in this country and England. — Richmond *v.* Atwood, 52 Fed. 10; 2 C. C. A. 596.

"Decrees are of two kinds, interlocutory and final. An interlocutory decree is properly a decree pronounced for the purpose of ascertaining matter of law or fact preparatory to a final decree." — Richmond *v.* Atwood, 52 Fed. 10; 2 C. C. A. 596.

A preliminary injunction had been granted and no appeal taken. Claim 1 was held invalid at circuit on proofs taken. On motion to dismiss cross-

appeal, *Held:* Here defendants present a complete record. They do not attack merely the injunction respecting the second patent, and that on the ground that it was temporary and improvidently granted; but they contend that, as to the five claims of the two patents held valid, the ultimate merits of the questions of validity and infringement are in their favor. If we were not authorized now to consider and decide the merits with respect to claim 1 of the first patent, which was included in the pleadings and proofs and held invalid, the result would be that the Circuit Court would proceed with the accounting on a basis that does not accord with our views of the ultimate merits, and a new accounting would have to be taken after a subsequent appeal to this court. Motion overruled. — Chicago *v.* Miller, 133 Fed. 541; 66 C. C. A. 517.

§ 304. Interlocutory.

Decree finding certain claims invalid, certain claims valid and infringed, and ordering an injunction.

The decree entered by the circuit court was interlocutory, and not final. — Ex parte National, 201 U. S. 156; 26 S. Ct. 404.

Barnard *v.* Gibson, 7 How. 650; Humiston *v.* Stainthorp, 2 Wall. 106; Esty *v.* Burdette, 109 U. S. 633; McGourky *v.* Toledo, 146 U. S. 536; Hohorst *v.* Hamburg-American, 148 U. S. 262; Smith *v.* Vulcan, 165 U. S. 518.

It will be observed, from an examination of the cases in the Supreme Court of the United States, that a decree in patent cases, declaring the patent in question valid, and that it has been infringed, and for an injunction and an accounting, has uniformly been referred to as an interlocutory decree. — Richmond *v.* Atwood, 52 Fed. 10; 2 C. C. A. 596.

Barnard *v.* Gibson, 7 How. 650; Forgay *v.* Conrad, 6 How. 201; Humiston *v.* Stainthorp, 2 Wall. 106; Railroad *v.* Soutter, 2 Wall. 510; Beebe *v.* Russell, 19 How. 283; Iron Co. *v.* Martin, 132 U. S. 91.

The Supreme Court has held a decree in a patent case, declaring the patent valid and infringed, and for an injunction and accounting, interlocutory. — Richmond *v.* Atwood, 52 Fed. 10; 2 C. C. A. 596.

Barnard *v.* Gibson, 7 How. 650, Forgay *v.* Conrad, 6 How. 201; Humiston *v.* Stainthorp, 2 Wall. 106; Railroad *v.* Soutter, 2 Wall. 510; Beebe *v.* Russell, 19 How. 283; Iron Co. *v.* Martin, 132 U. S. 91.

§ 305. Miscellaneous.

A decree by consent for injunction and accounting does not preclude defendant from objection or exception to proceedings subsequent to the decree. — Livingston *v.* Woodworth, 15 How. 546; 14 L. Ed. 809.

The bill we have seen was taken pro confesso, and a decree pro confesso was regularly entered. The defendants are concluded by that decree, so far at least as it is supported by the allegations of the bill, taking the same to be true. Being carefully based on these allegations, and not extending beyond them, it cannot now be questioned by the defendants unless it is shown to be erroneous by other statements contained in the bill itself. A confession of facts properly pleaded dispenses with proof of those facts, and is as effective for the purposes of the suit as if the facts were proved; and a decree pro confesso regards the statements of the bill as confessed. — Thompson *v.* Wooster, 114 U. S. 104; 29 L. Ed. 105; 5 S. Ct. 788.

Keller. Proced. Rom. § 69; Hawkins *v.* Crook, 2 P. Wons. 556; Davis *v.* Davis, 2 Atk. 21; Williams *v.* Corwin, Hopk. Ch. 471; 1 Smith Ch. Pr. 153; 1 Dan. Ch. Pr. 696; Ogilvie *v.* Hearne, 13 Ves. 463; Geary *v.* Sheridan, 8 Ves. 192; Rose *v.* Woodruff, 4 Johns. Ch. 547.

The patent in suit contains 18 claims, and the prayers of the bill relate to the patent as a whole. The decree below directed that an injunction issue "according to the prayer of the bill" although only claims 2 and 13 were in issue. It has been many times urged that the public has an incidental interest in patent litigation, which throws a duty on the court to notice certain matters of its own motion. This is one of them; and in a patent cause, a decree should not go which is broader than the findings of the court. Heretofore we have been content merely to correct the decree below, but, as the duty of drawing out a proper decree rests on the solicitor for the complainant, we will hereafter endeavor to protect the court by a proper adjustment of costs. As the appellant assigned no error on this account, he is not entitled to costs in this behalf. — Shute *v.* Morley, 64 Fed. 368; 12 C. C. A. 356.

When the decree is drawn broader than the findings the complainant can have no costs on appeal. — Blair *v.* Eastman, 64 Fed. 491; 12 C. C. A. 603.
Following Shute *v.* Morley, 64 Fed. 368.

In connection with the caution which we have heretofore given parties with reference to the proper limiting of decrees and decretal orders, we said in Shute *v.* Machine Co. 64 Fed. 368, that, when the caution was not thereafter regarded, we should endeavor to protect ourselves by a proper adjustment of the costs. — Hatch *v.* Electric, 100 Fed. 975; 41 C. C. A. 133.

When a decree is "affirmed with respect to the merits, it will not be reversed upon the question of costs." — Sproull *v.* Pratt & Whitney, 108 Fed. 963; 48 C. C. A. 167.
DuBois *v.* Kirk, 158 U. S. 58.

That other defendant has rights. If Bouchat had permitted a decree pro confesso to have been entered against him, and this corporation, which was the original defendant, had answered, and had set up an available defense, such defense would inure to the benefit of both defendants. — American *v.* Phœnix, 113 Fed. 629; 51 C. C. A. 339.
Frow *v.* De LaVega, 15 Wall. 552; Andres *v.* Lee, 21 N. C. 319; Bates, Fed. Eq. Pro. sec. 327.

In the preparation of his record, the appellant, although not an attorney, acted as his own counsel. In dismissing the bill for want of equity, but without prejudice, the court below evinced a recognition of the failure of the appellant to properly conduct his case, and therefore dismissed the bill without prejudice to the appellant. — Robinson *v.* Chicago, 118 Fed. 438; 55 C. C. A. 254.

The fact that the decree did not become final until after the interlocutory decree in this case does not affect it as a bar when presented before the final decree. — Penfield *v.* Potts, 126 Fed. 475; 61 C. C. A. 371.
Bradley *v.* Eagle, 57 Fed. 980.

No appeal has been taken by the complainant below from the part of the decree holding claim 2 valid, and we must assume that the validity of this broad claim is acquiesced in. — Press *v.* Westinghouse, 135 Fed. 767; 68 C. C. A. 469.

That a final decree may be amended after entry and after the term of such entry, under certain conditions, see Maginn *v.* Standard, 150 Fed. 139; 80 C. C. A. 15.

DEFENSES.

Statutory Provisions § 306
General Statement § 307
General
Invalidity—Acts of Commissioner § 308
Invalidity -- Defective Grant or Specification § 309 (*see* § 900)
Invalidity — Reissue § 310 (*see* § 869)
License or Purchase § 311
Non-Infringement § 312 (*see* § 445)
Non-Patentability § 313
Non-Utility § 314
Res Judicata § 315
Statutory
Abandonment § 316 (*see* § 1)
Fraud or Misrepresentation in Specification § 317 (*see* § 900)
Fraud or Unfairness as Against another Inventor § 318
Non-Inventorship § 319
Prior patent or Publication § 320 (*see* § 58)
Prior Public Use or Sale § 321 (*see* §§ 58, 849)
Miscellaneous § 322
See — Adjudication §§ 31, 33; *Anticipation* § 58; *Demurrer* § 323; *Double Patenting* § 356; *Estoppel* § 381; *Foreign Patent* § 419; *Infringement* §§ 483–4; *Judicial Notice* § 705; *Jurisdiction* § 713; *Laches* § 726; *License* § 749; *Marking "Patented"* § 776; *Oath* § 779; *Pleading and Practice* § 788; *Public Use* § 849; *Reissue* § 869; *Res Judicata* § 893; *Statute of Limitations* § 921; *Title* § 925

§ 306. Statutory Provisions.

In any action for infringement the defendant may plead the general issue, and, having given notice in writing to the plaintiff or his attorney thirty days before, may prove on trial any one or more of the following special matters:

First. That for the purpose of deceiving the public the description and specification filed by the patentee in the Patent Office was made to contain less than the whole truth relative to his invention or discovery, or more than is necessary to produce the desired effect; or,

Second. That he had surreptitiously or unjustly obtained the patent for that which was in fact invented by another, who was using reasonable diligence in adapting and perfecting the same; or,

Third. That it had been patented or described in some printed publication prior to his supposed invention or discovery thereof, or more than two years prior to his application for a patent therefor; or,

Fourth. That he was not the original and first inventor or discoverer of any material and substantial part of the thing patented; or,

Fifth. That it had been in public use or on sale in this country for more than two years before his application for a patent, or had been abandoned to the public.

And in notices as to proof of previous invention, knowledge, or use of the thing patented, the defendant shall state the names of the patentees and the dates of their patents, and when granted, and the names and residences of the persons alleged to have invented or to have had the prior knowledge of the thing patented, and where and by whom it had been used; and if any one or more of the special matters alleged shall be found for the defendant, judgment shall be rendered for him with costs. And the like defenses may be pleaded in any suit in equity for relief against an alleged infringement; and proofs of the same may be given upon like notice in the answer of the defendant, and with like effect. — R. S. 4920.

§ 307. General Statement.

The classification of defenses in patent causes, as made by the text-book writers, is chiefly a matter of convenience in treatment of the subject. It is unnecessary for present purposes to do more than to make these two general divisions: statutory defenses specially mentioned in the above classes, and the general defenses available under the general issue.

The subject of statutory notice will be found under the title of *Pleading*.

§ 308. General — Invalidity — Acts of Commissioner.

It was not intended then, and is not now, to question the conclusiveness, in suits for infringement of patents, of the decisions of the Commissioner on questions of fact necessary to be decided before issuing such patents, except as the statute gives specific defenses in that regard. But the statutory defenses are not the only defenses which may be made against a patent. When it is evident that the Commissioner, under a misconception of the law, has exceeded his authority in granting or reissuing a patent, there is no sound principle to prevent a party sued for its infringement, from availing himself of the illegality, independently of any statutory permission so to do. — Mahn *v.* Harwood, 112 U. S. 354; 28 L. Ed. 665; 5 S. Ct. 174.

Stoddard *v.* Chambers, 2 How. 318; Easton *v.* Salisbury, 21 How. 426; Richert *v.* Felps, 6 Wall. 160; Meader *v.* Norton, 1 Wall. 442; Best *v.* Polk, 18 Wall. 112; Morton *v.* Nebraska, 21 Wall. 660; Newhall *v.* Sanger, 92 U. S. 761; R. R. *v.* U. S. 92 U. S. 733; Sherman *v.* Brick, 93 U. S. 209.

So far as we know, this is the first time the practical construction of the statute now called in question has been challenged, and much disturbance of things supposed to rest on solid foundations would ensue if such an objection should be sustained. Whether the practice, if promptly challenged by the government in a direct proceeding to recall a patent would be sanctioned, we have not now to consider. We think the patents ought not to be held void for irregularity, if it be such, at the instance of a private party in a collateral proceeding. — Western *v.* North, 135 Fed. 79; 67 C. C. A. 553.

" Where it is evident that the commissioner, under misconception of the law, has exceeded his authority in granting or reissuing a patent, there is no sound principle to prevent a party sued for its infringement from availing himself of the illegality, independently of any statutory permission so to do." — Weston *v.* Empire, 136 Fed. 599; 69 C. C. A. 329.

Mahn *v.* Harwood, 112 U. S. 354; Planing Machine *v.* Keith, 101 U. S. 479.

§ 309. General — Invalidity — Defective Grant or Specification.

A claim is false, though not fraudulent, when founded upon an honest mistake; and, as it must have failed whenever called into question and the facts were made known, it is void. — Hartshorn *v.* Saginaw, 119 U. S. 664; 30 L. Ed. 539; 7 S. Ct. 421.

We think it may be affirmed as a rule resting upon the fundamental principles of patent law that, where the essence of the invention is the location, form, size, or any other characteristic of the means employed, the patent must distinctly specify the peculiarities in which his invention is to be found. — American Lava *v.* Steward, 155 Fed. 731; 84 C. C. A. 157.

Store Co. *v.* Store Co. 150 Fed. 141; Bullock *v.* Gen. Elec. 149 Fed. 409.

Note: This rule is undoubtedly sound, but this is a dangerous case. See same pat. sustained 128 Fed. 599.

§ 310. General — Invalidity — Reissue.

If the defendant means, by the very vague answer to the bill, to set up and to rely on a fraud by which the commissioner was misled and deceived and induced to reissue the patent, and that the plaintiff or its assignors were the guilty parties, that question cannot be raised in this collateral proceeding, and can only be considered in some direct suit to impeach and set aside the patent. — Eureka *v.* Bailey, 78 U. S. 488; 20 L. Ed. 209.

Rubber *v.* Goodyear, 9 Wall. 788.

In this very matter of reissued patents it has also been frequently decided that it is a good defense in a suit on such a patent to show that the Commissioner exceeded his authority in granting it. Such a defense is established by showing that the rescinded patent is for a different invention from that described in the original; inasmuch as the statute declares that it must be for the same invention. — Mahn *v.* Harwood, 112 U. S. 354; 28 L. Ed. 665; 5 S. Ct. 174.

Burr *v.* Duryee, 1 Wall. 531; Gill *v.* Wells, 22 Wall. 1; Collar *v.* Van Deusen, 23 Wall. 530; Wood Paper Pat. 23 Wall. 566; Leggett *v.* Avery, 101 U. S. 259; James *v.* Campbell, 104 U. S. 368.

§ 311. General — License or Purchase.

The defendant cannot justify his act by proving license under other patents. — Blanchard *v.* Putnam, 75 U. S. 420; 19 L. Ed. 433.

Curt. Pat. 350, 353; Carver *v.* Mfg. Co. 2 Story, 432.

Defendants were innocent infringers. When they discovered the fact they purchased a legal title to the patent for this territory. *Held:* That such purchase converted their act into a legal right, and was equivalent to an original lawful purchase or manufacture of the machine. — Eunson *v.* Dodge, 85 U. S. 414; 21 L. Ed. 766.

That part of the defendant's affidavit which asserts that a certain named patentee has served the defendant with notice of a claim for damages for infringement of letters patent by the defendant's use of the machinery and appliances furnished to it by the plaintiff, and that by such use the defendant is also liable to another patentee, affords no ground of defense to this action. A purchaser of property who has had the full use and enjoyment of the same, and is in the undisturbed possession thereof in the absence of fraud, cannot withhold the purchase price because a third person claims to have a superior title thereto, or an adverse right therein, and threatens to bring suit to enforce the same, or because of an alleged liability on the part of a purchaser to a patentee for an infringement of letters patent by reason of the use of the priority. — Consumers *v.* Danville, 50 Fed. 778; 1 C. C. A. 663.

Wanzer *v.* Truly, 17 How. 584; Krumbhaar *v.* Birch, 83 Pa. St. 426; Geist *v.* Stier, 134 Pa. St. 216.

To permit any undisclosed improvements controlled by either party to be set up for the purpose of limiting the rights of the other under the contract at bar, and especially for diminishing the apparent extent or validity of its patents, would effect an unjust evasion of the stipulated terms. — B. & S. Fastener *v.* B. G. Fastener, 58 Fed. 818; 7 C. C. A. 498.

While, under the contract, the state of the art could not be shown to defeat the validity of the patents under the contract, it could be shown to determine the scope of the claims, the character of the invention and the applicability of the rule of equivalents. — B. & S. Fastener *v.* B. G. Fastener, 58 Fed. 818; 7 C. C. A. 498.

Complainant proved infringement by the production of an exhibit made according to the terms of the patent, and proved that the same had been made by defendant. Defendants denied infringement in their answer and alleged invalidity of the patent. After the case was ready for final hearing, defendants having taken no proofs, defendant moved to amend their answer and set up a license. This license ran from complainant to one Bry, who was an importer and dealer, and provided a royalty and also provided that but one royalty should be paid on such goods. Defendant claimed this license a bar

to recovery. *Held:* We are not able to read the complainant's license to Bry as giving any sanction to the manufacture by the defendants of the patented fabric. The defendants are neither parties nor privies to that instrument. That they themselves are not bound by any of its provisions is too plain for argument. The licensee thereunder is Jean Bry, and as to him it is non-assignable personal license. There is no contract relation whatever between the complainant and the defendants; hence no accounting on that basis is enforceable by the complainant against the defendants. If, then, the Bry license is, as claimed, a defense to a bill for infringement, the complainant is remediless as against the defendants in respect to their transactions with Bry. Upon the defendants' theory, by their own simple election to resort to Bry's license they acquired, as against the owner of the patent, a right to manufacture without liability to account to him. But, if Bry's license is thus available to the defendants, it is equally available to every other unlicensed manufacturer in the country. A construction of a license which leads to such results is not to be lightly adopted. — Hanifen *v.* Lupton, 101 Fed. 462; 41 C. C. A. 462.

§ 312. General — Non-Infringement.

Courts did not, perhaps, at first distinguish clearly between a defense which would authorize a verdict and judgement in favor of the defendant in a particular action, leaving the plaintiff free to use his patent, and to bring other suits for its infringement; and one which, if successful, would require the Court to enter a judgement not only for the defendant in the particular case, but one which declares the patent to be void. This distinction is now well settled. — Grant *v.* Raymond, 6 Pet. 218; 8 L. Ed. 376.

There is no inconsistency in the two allegations. The first is a direct, positive denial of infringement; the second, that the acts of the defendant charged as infringing the patent had been done by it since 1891. It does not concede that these acts infringed the patent, but asserts, in legal effect, that if, as the complainant claims, they do so infringe it, then the performance of these acts dated from a period six years prior to the patent, sustaining the defense of a public use, and so establishing want of novelty. — Robinson *v.* American, 135 Fed. 693; 68 C. C. A. 331.

The infringement was conceded in the Circuit Court by the counsel for defendant, and such fact was recited in the opinion of the circuit judge. This understanding was adhered to in the preparation of printed briefs on both sides. Appellee having submitted the case on briefs in this court, counsel for appellant on the oral argument called attention to an alleged distinguishing feature of the defendant's structure which he claimed relieved it from infringement. Even if his proposition were sound from a mechanical standpoint, we should hesitate to entertain the same at this time in view of the history of the case, which shows that this defense has been expressly and deliberately waived by counsel. — Railway *v.* Munroe, 147 Fed. 241; 77 C. C. A. 383.

The answer denied infringement. A supplemental answer alleged use under a patent to defendant, which patent, on its face was an infringement of the patent sued on. *Held:* This pleading, of course, presented no defense to the suit. Its sole effect was to annul the denial of infringement contained in the answer and to relieve plaintiff of the necessity of proving it. It had this effect because it is apparent from an inspection of said patent that the apparatus described in it and to which it related is an infringement of plaintiff's two patents sustained and held to be infringed, and it is alleged that the apparatus in use by defendant is of that character. This left the second

defense of the original answer as the only defense to the suit. — Buser *v.* Novelty, 151 Fed. 478; 81 C. C. A. 16.

Defendant avers that it ceased the sale of said grain drill long prior to the beginning of the present action. Answers in equity must be full, unequivocal, and responsive to the bill. The indefinite, evasive averments of the answer in this case signally fail to respond to the requirements of that rule and well justify us in treating them as negative pregnants admitting the truth of the definite averments of the bill which are not fully answered. — Deere *v.* Dowagiac, 153 Fed. 177; 82 C. C. A. 351.

§ 313. General — Non-Patentability.

We do not attach much significance to the act, which was intended to create an easy system of pleading. Proof that there is no invention strikes at the root of the whole claim. The patent is based on an affirmative act of which this is the direct negative. It needed no statute to aid or justify this defense. It is provable when it exists under any general denial, like the fact of not guilty or non-assumpsit in cases where guilt or a promise is first to be established. — Reckendorfer *v.* Faber, 92 U. S. 347; 23 L. Ed. 719.

A valid defense not given by the statute often arises where the question is, whether the thing patented amounts to a patentable invention. This being a question of law, the courts are not bound by the decision of the Commissioner, although he must necessarily pass upon it. — Mahn *v.* Harwood, 112 U. S. 354; 28 L. Ed. 665; 5 S. Ct. 174.

Brown *v.* Piper, 91 U. S. 38; Glue Co. *v.* Upton, 97 U. S. 3; Dunbar *v.* Myers, 94 U. S. 187; Atlantic *v.* Brady, 107 U. S. 199; Slawson *v.* R. R. 107 U. S. 652; King *v.* Gallun, 109 U. S. 101.

This defense is one which may be availed of without setting it up in an answer. — Hendy *v.* Golden, 127 U. S. 370; 32 L. Ed. 207; 8 S. Ct. 1275.

Dunbar *v.* Myers, 94 U. S. 187; Slawson *v.* Grand, 107 U. S. 649; Mahn *v.* Harwood, 112 U. S. 354.

Want of patentability is a defense, though not set up in an answer or plea. — May *v.* Juneau, 137 U. S. 408; 34 L. Ed. 729; 11 S. Ct. 102.

Brown *v.* Piper, 91 U. S. 37; Dunbar *v.* Myers, 94 U. S. 187; Slawson *v.* Grand, 107 U. S. 649; Hendy *v.* Golden, 127 U. S. 370.

Although want of novelty is not pleaded, the patent may be declared void for want of novelty. — Richards *v.* Chase, 158 U. S. 299; 39 L. Ed. 991; 15 S. Ct. 831.

Dunbar *v.* Myers, 94 U. S. 187; Slawson *v.* Grand, 107 U. S. 649; Brown *v.* Piper, 91 U. S. 37.

§ 314. General — Non-Utility.

The burden is upon the defendant to prove want of utility. He must either show that it is theoretically impossible for such a device to operate, or demonstrate by clear proof that a person skilled in the art to which the invention pertains has endeavored in good faith to make the patent work, and has been unable to do so; and it follows that such evidence is overthrown if it is demonstrated by practical experiments of credible persons that they have succeeded in producing by the patent process the results claimed by the patent. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

The proposition that the invention is without utility is sufficiently answered

by the fact that defendants persistently use it. — Rumford *v.* New York, 134 Fed. 385; 67 C. C. A. 367.

The appellee company, failing to use any of the older forms of clamping jaws, and seizing upon appellant's success, is hardly in a position to question the utility of the novel feature. — Cazier *v.* Mackie-Lovejoy, 138 Fed. 654; 71 C. C. A. 104.

It is asserted by the defendant that the complainant never made fasteners under the patent. If this be true it is wholly immaterial to the present controversy. Where it is asserted that a patented device is inoperative and lacks utility, evidence that it has never been put to use is persuasive, but in a case like the present, where the fact that the device is useful and operative can be seen at a glance, such evidence is negligible. The complainant had a right to use the patent in any way it saw fit. — U. S. Fastener *v.* Bradley, 149 Fed. 222; 79 C. C. A. 180.

§ 315. General — Res Judicata.

This court described the rule in Aspden *v.* Nixon, 4 How. 476, in such cases to be, that a judgement or decree, set up as a bar by plea, or relied on as evidence by way of estoppel, must have been made by a court of competent jurisdiction upon the same subject matter, between the same parties for the same purpose. — Packet Co. *v.* Sickles, 65 U. S. 333; 16 L. Ed. 650.

In the absence of a plea other than res adjudicata based upon an interference and in the absence of any proof other than the record, the prima facie of the patent in suit will entitle a decree. — Garratt *v.* Siebert, 98 U. S. 75; 25 L. Ed. 84.

Without respect to pleading, wherever a former recovery is properly in evidence — as here it was by agreement of the parties — full effect should be given to it, so far as it bears upon the issue presented. The issue here being novelty of invention, and that fact having been determined by the prior adjudication, the former decree becomes conclusive evidence of the validity of the patent as between the parties affected by such prior adjudication. — Bradley *v.* Eagle, 58 Fed. 721; 7 C. C. A. 442.

§ 316. Statutory — Abandonment.

It must, then, be open to every person, charged with an infringement, to show in his defense that the patentee had abandoned his invention before he obtained his patent. — Woodbury *v.* Keith, 101 U. S. 479; 25 L. Ed. 939.

The defense of abandonment was not pleaded, and the appellant had no opportunity to meet it by evidence. It was discovered by the court below at the final hearing, and it rested on the statement in the patent which we have quoted, and that alone. The mere statement was insufficient to support it. — Mast *v.* Dempster, 82 Fed. 327; 27 C. C. A. 191. But see 177 U. S. 485.

§ 317. Statutory — Fraud or Misrepresentation in Specification.

Since that time (the Act 1832) it has been definitely settled that neither reissued nor extended patents can be abrogated by an infringer in a suit against him for infringement, upon the ground that the letters patent were procured by fraud in prosecuting the application for the same before the commissioner. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Rubber *v.* Goodyear, 9 Wall. 797; Stimpson *v.* R. R. 4 How. 404; R. R. *v.* Stimpson, 14 Pet. 458.

The defendants when sued for an infringement, were not at liberty to set up as a defense that the patent had been fraudulently obtained, no fraud appearing on its face. — Railroad *v.* DuBois, 79 U. S. 47; 20 L. Ed. 265.

Rubber *v.* Goodyear, 9 Wall. 788.

Whether under the present act the defense of defective specification implies fraudulent intent, the court said:

There is plausibility in this argument, and if it were necessary to the decision of this case, it might give us some embarrassment. — Loom Co. *v.* Higgins, 105 U. S. 580; 26 L. Ed. 1177.

The right given to the infringer to make this defense is a right given to him personally, and to him alone, and the effect of a successful defense of this character by one infringer is simply to establish the fact that, as between him and the patentee, no right of action exists for the reasons set up in such defense. But the patentee is not prevented by any such decision from suing a hundred other infringers if so many there be, and putting each of them to an expensive defense, — in which they all, or some of them, may be defeated and compelled to pay, because they are not in possession of the evidence on which the other infringer succeeded. On the other hand, the suit of the Government, if successful, declares the patent void, sets it aside as of no force, vacates it or recalls it, and puts an end to all suits which the patentee can bring against anybody. — United States *v.* Am. Bell, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

§ 318. Statutory — Fraud or Unfairness as Against Another Inventor.

The charge that the original patentee in this case fraudulently and surreptitiously obtained the patent for that which he well knew was invented by another, unaccompanied by the further allegation that the alleged first inventor was at the time using reasonable diligence in adapting and perfecting the invention is not sufficient to defeat the patent, and constitutes no defense to the charge of infringement. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.

Reed *v.* Cutter, 1 Story, 599.

§ 319. Statutory — Non-Inventorship.

Viewed in any light the proposition amounts to the charge that the invention was made by the person therein mentioned, and not by the assignor of the complainant, and the burden to prove it is on the respondents, not only because they make the charges, but because the presumption arising from the letters patent is the other way. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.

§ 320. Statutory — Prior Patent or Publication.

The defense of anticipation by a prior patent must be raised by the statutory notice. — Blanchard *v.* Putnam, 75 U. S. 420; 19 L. Ed. 433.

Patented inventions cannot be superseded by the mere introduction of a foreign publication of the kind, though of a prior date, unless the description and drawings contain and exhibit a substantial representation of the patented improvement in such full, clear and exact terms as to enable any person skilled

in the art or science to which it appertains to make, construct and practise the invention to the same practical extent as they would be enabled to do if the information was derived from a prior patent. Mere vague and general representations will not support such a defense, as the knowledge supposed to be derived from the publication must be sufficient to enable those skilled in the art or science to understand the nature and operation of the invention and to carry it into practical use. Whatever may be the particular circumstances under which the publication takes place, the account published to be of any effect to support such a defense, must be an account of a complete and operative invention capable of being put into practical operation. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Web. P. C. 719; Curt. Pat. 278 a; Hill *v.* Evans, 6 Law T. N. S. 90; Betts *v.* Menzies, 4 Bert. & S. Q. S. 999.

The state of the art, in the absence of notice and proof has no bearing upon the question whether the patentee was the first inventor. — Railroad *v.* DuBois, 79 U. S. 47; 20 L. Ed. 265.

Neither the defendant in an action at law, nor a respondent in an equity suit, can be permitted to prove that the invention described in the prior patent, or the invention described in the printed publication, was made prior to the date of such patent or printed publication, for the reason that the patent or publication can only have the effect as evidence that is given to the same by the Act of Congress. Unlike that, the presumption in respect to the invention described in the patent in suit, if it is accompanied by the application for the same, is that it was made at the time the application was filed; and the complainant or plaintiff may, if he can, introduce proof to show that it was made at a much earlier date. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

Evidence to sustain the defense that the improvement had been patented or described in some printed publication, is sufficient, if the patent introduced for the purpose, whether foreign or domestic, was duly issued or the complete description of the invention was published in some printed publication, prior to the patented invention in suit; and the patent offered in evidence or the printed publication will be held to be prior, if it is of prior date to the patent in suit, unless the patent in suit is accompanied by the application for the same, or unless the complainant introduces parol proof to show that his invention was actually made prior to the date of the patent, or prior to the time the application was filed. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

Where the thing patented is an entirety, consisting of a single device or combination of old elements incapable of division or separate use, the respondent cannot escape the charge of infringement by alleging or proving that a part of the entire invention is found in a prior patent, printed publication or machine and another part in another prior exhibit, and still another in a third exhibit, and from these three or any greater number of such exhibits draw the conclusion that the patentee is not the original and first inventor of the patented improvement. — Imhauser *v.* Buerk, 101 U. S. 647; 25 L. Ed. 945.

Bates *v.* Coe, 98 U. S. 31.

It is no answer to patents and publications set up that they are mere paper machines and incapable of successful, practical working. — Pickering *v.* McCullough, 104 U. S. 310; 26 L. Ed. 749.

It does not lie in the mouth of a party who is infringing both the improvement and the original invention to set up the existence of the first

patent as an excuse for the infringement. It is only the patentee of the original invention who has the right to complain of the use made of his invention. — Cantrell *v.* Wallick, 117 U. S. 689; 29 L. Ed. 1017; 6 S. Ct. 970.

The general rule laid down in Seymour *v.* Osborne, 78 U. S. 516, and in Cohn *v.* U. S. 93 U. S. 366, and affirmed in Downton *v.* Yaeger, 108 U. S. 466 recited and approved. — Eames *v.* Andrews, 122 U. S. 40; 30 L. Ed. 1064; 7 S. Ct. 1073.

There is a clear distinction in law between merely anticipatory matter, which, under the statute, must be specially pleaded in defense, and the state of the art, although they, of course, at times run into each other. — Parsons *v.* Seelye, 100 Fed. 452; 40 C. C. A. 484.
Edmund Pat. 2 ed. 48.

§ 321. Statutory — Prior Public Use or Sale.

Evidence to show that the invention of the original patentee, as finally perfected, was on sale and in public use more than two years before he applied for a patent is entirely wanting, and if such evidence was offered, it could not be admitted under the pleadings, as no such defense is set up in the answer. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.
Foster *v.* Goddard, 1 Black 518.

Prior use and knowledge of the thing patented may be pleaded, but the defendant cannot be allowed to give evidence in support of such defense, if seasonable objection is made, unless it appears that he gave the statutory notice in his answer. — Roemer *v.* Simon, 95 U. S. 214; 24 L. Ed. 384.
Blanchard *v.* Putnam, 8 Wall. 420.

The answer set up "that the alleged invention was in public and common use, and on sale, with and by the knowledge and consent of the patentee, for more than two years before the application." It did not in terms allege, that such public use was "in this country," as the statute provides. While this defense may not have been pleaded with technical accuracy, yet the testimony tending to establish it, was received on the final hearing without any objection. The first time the question has been raised, as appears from the record, is on the argument of the appeal in this court; and when it is too late. — Smith & Davis *v.* Mellon, 58 Fed. 705; 7 C. C. A. 439.
Roemer *v.* Simon, 95 U. S. 214; Loom Co. *v.* Higgins, 105 U. S. 580.

§ 322. Miscellaneous.

Defenses of the kind, if the thing patented is an entirety and incapable of division or separate use, must be addressed to the invention and not merely to one or more of the claims of the patent if less than the whole of invention. More than one patent may be included in one suit and more than one invention may be secured by the same patent; in which case the several defenses may be made to each patent in suit and to each invention included in the bill of complaint. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.
Gill *v.* Wells, 22 Wall. 27.

Each of these defenses (statutory) it will be seen goes to the entire invention, and not to separate parts of the thing patented; and the provision is, that if any one or more of the special matters alleged shall be found for the defending party, the judgement or decree shall be rendered in his favor, with costs. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.
R. S. 4920.

The fact that the answer duly sworn to cites anticipatory patents and states that the device was well known in the art prior to complainant's invention does not seem to tally very well with the allegation that the inventor had failed to point out, in his patent, how to use and apply his invention, and that it requires further invention to use and apply it. — Loom Co. *v.* Higgins, 105 U. S. 580; 26 L. Ed. 1177.

In this case a decree pro confesso had been taken and the case sent to a master. Then defendants raised objections as to the validity of the reissue, etc. *Held:* We think that the objection to the decree going to the validity of the patent, and the whole cause of action cannot be sustained. — Thompson *v.* Wooster, 114 U. S. 104; 29 L. Ed. 105; 5 S. Ct. 788.

We have the material for ascertaining its meaning in that view, by means of the evidence on that point contained in the record, which, although objected to on the ground that no prior use or knowledge of the invention claimed had been specifically set up in the answer as a defense, was nevertheless, admissible for the purpose of defining the limits of the grant in the original patent and the scope of the invention described in the specification. — Eachus *v.* Broomall, 115 U. S. 429; 29 L. Ed. 419; 6 S. Ct. 229.

Vance *v.* Campbell, 1 Black. 427; Brown *v.* Piper, 91 U. S. 37.

It may be true that the device used is better than that of the plaintiff, but this cannot relieve them from the charge of infringement if the devices are substantially alike. — Cantrell *v.* Wallick, 117 U. S. 689; 29 L. Ed. 1017; 6 S. Ct. 970.

Machine *v.* Murphy, 97 U. S. 120.

It is not the rule that the decision of the Commissioner of Patents is final as to the matters involved in granting a patent, except as to the questions specifically enumerated as defenses in the five subdivisions of section 4920 of the R. S. Or that, unless substantially the same thing existed before, the article, if useful, is new and patentable; or that the decision of the Commissioner of Patents to that effect is not reviewable in a suit on the patent. — Gardner *v.* Herz, 118 U. S. 180; 30 L. Ed. 158; 6 S. Ct. 1027.

Thompson *v.* Boisselier, 114 U. S. 1; Yale *v.* Greenleaf, 117 U. S. 554.

An affidavit of defense is insufficient to prevent judgment, unless it sets forth all the facts necessary to constitute a substantial defense. Mere general averments amounting to legal conclusions will not do. The specific facts must be stated, so that the court may draw the proper conclusions. Nothing should be left to conjecture, for that which is not stated must be taken not to exist. — Consumers *v.* Danville, 50 Fed. 778; 1 C. C. A. 663.

Bryan *v.* Harrison, 37 Pa. St. 233; Marsh *v.* Marshall, 53 Pa. St. 396; Peck *v.* Jones, 70 Pa. St. 83; Asay *v.* Lieber, 92 Pa. St. 377.

It would seem that the defense of laches will not be favorably regarded, when the defendant denies infringement and then attempts to establish laches through the acquiescence of complainant in the infringement of defendant's concern. — Imperial *v.* Stein, 77 Fed. 612; 23 C. C. A. 353.

That a defendant in an action at law, where the plaintiff has pleaded the terms of the statute limiting recoveries to six years, in the event of the failure of plaintiff to prove under such pleading, the defendant need not have pleaded the statute to take advantage of the facts, see Peters *v.* Hanger, 127 Fed. 820; 62 C. C. A. 898.

The conviction that there was no merit in such defense, and the entire abandonment of the same after it had been set up in the answer, seems to us to be entitled to great weight as the opinions of experts against their interest. — Ideal *v.* Crown, 131 Fed. 244; 65 C. C. A. 436.

Assuming that this question (that the patent is void on its face) may be presented for the first time on appeal, it is manifest that the defendant's contention cannot be maintained. The patent deals with an abstruse and complicated art and there is nothing existing prior to the date of its application, of which the court can take judicial notice, which throws any light upon the question of invention. Obviously the patent is valid on its face and it was the duty of the defendant to prove the contrary. — Fox *v.* Knickerbocker, 165 Fed. 442; C. C. A.

DEMURRER.

Dismissing Bill on § 323
Judicial Notice § 324 (*see* § 705)
Patentability and Novelty § 325
Validity § 326
Miscellaneous § 327
See — *Appeals* § 122; *Jurisdiction* § 713; *Pleading* § 791; *Title* § 925

§ 323. Dismissing Bill on.

While patent causes are usually disposed of upon bill, answer and proof, there is no objection, if the patent be manifestly invalid upon its face, to the point of being raised by demurrer. — Richards *v.* Chase, 158 U. S. 299; 39 L. Ed. 991; 15 S. Ct. 831.

Dunbar *v.* Myers, 94 U. S. 187; Slawson *v.* Grand, 107 U. S. 649; Brown *v.* Piper, 91 U. S. 37.

We think the court erred in holding upon demurrer that the patent was void upon its face. It may be admitted that the patent is one of narrow limitations, but we are not prepared to hold that in the circumstances, which may be susceptible of proof, the patent should be held void in the absence of any anticipation, and supported, as it is possible it may be, by evidence that it fulfils a useful purpose, and has been extensively adopted by the public in practical use, and further supported by the presumption of validity arising from the allowance of the patent, the force of which presumption is augmented by the fact that there was a serious contest in the office. It is undoubtedly established law that the court may, in a clear case, dismiss a bill upon demurrer; but this court has on former occasions in substance said that this ought only to be done when there is no room for thinking that any evidence could be adduced which would, if put into the case, alter the clear conviction of the court. — Milner *v.* Yesbera, 111 Fed. 386; 49 C. C. A. 397.

Richards *v.* Elevator, 158 U. S. 299; American *v.* Buckskin, 72 Fed. 503; Mfg. Co. *v.* Scherer, 100 Fed. 459.

We have not been unmindful in the consideration of this case of the admonition so frequently made by courts, that patents should not be declared invalid, upon demurrer or otherwise, upon the face of the patent itself, unless the invalidity so clearly appears that no testimony can change the legal aspect of the case, and that if doubt exists, the complainant is entitled to its benefit. But in cases thus clear on the face of the patent itself, courts may, even where the question is not raised by the pleadings, suo sponte, declare the patent invalid and dismiss the bill. — Wills *v.* Scranton, 153 Fed. 181; 82 C. C. A. 355.

Brown *v.* Piper, 91 U. S. 37; Slawson *v.* Grand. 107 U. S. 649.

That the question here presented may properly be decided on demurrer was decided by the Supreme Court in Richards *v.* Chase, 158 U. S. 299. This court has frequently approved this practice, believing it for the interests of both parties that the court, when convinced that the complainant cannot succeed, should say so in limine and thus save them from the expense and annoyance of a protracted litigation. — Kuhn *v.* Lock-Stub, 165 Fed. 445; C. C. A.

Fowler *v.* City, 110 Fed. 749, affd. 121 Fed. 747; Lappin *v.* Corning, 94 Fed. 162, affd. 99 Fed. 1004; Conley *v.* Marum, 83 Fed. 309, affd. 85 Fed. 990.

§ 324. Judicial Notice.

It will be observed that the learned judge in the court below was able to point out instances of similar devices within his personal observation of a kind necessarily within common knowledge. Herein is the distinction between this case and the fibre chamois cases (just decided) 72 Fed. 508, 516. — Heaton *v.* Schlochtermayer, 72 Fed. 520; 18 C. C. A. 674.

It is well settled that in considering the question of the validity of a patent on its face, the court may take judicial notice of facts of common and general knowledge tending to show that the device or process patented is old, or lacking in invention, and that the court may refresh and strengthen its recollections and impression of what facts were of common and general knowledge at the time of the application for the patent by reference to any source of general information which is known to the court to be reliable, and to have been published prior to the application for the patent. Brown *v.* Piper, 91 U. S. 38. The presumption from the issuance of the patent is that it involves both novelty and invention. The effect of dismissing the bill upon demurrer is to deny to the complainant the right to adduce evidence to support the presumption. Therefore the court must be able, from the statements on the face of the patent, and from the common and general knowledge already referred to, to say that the want of novelty and invention is so palpable that it is impossible that evidence of any kind could show the fact to be otherwise. Hence it must follow that, if the court has any doubt whatever with reference to the novelty or invention of that which is patented, it must overrule the demurrer, and give the complainant an opportunity, by proof, to support and justify the action of the patent office. This is the view which has been taken by the Supreme Court and the most experienced patent judges upon the circuit. — American *v.* Buckskin, 72 Fed. 508; 18 C. C. A. 662.

N. Y. *v.* N. J., 137 U. S. 445; Mfg. Co. *v.* Adkins, 36 Fed. 554; Blessing *v.* Copper, 34 Fed. 753; Bottle *v.* De La Vergne, 47 Fed. 59; Industries *v.* Grace, 57 Fed. 124; Goeble *v.* Supply, 55 Fed. 825; Hanlon *v.* Primrose, 56 Fed. 600; Dick *v.* Well, 25 Fed. 105; Kaolatype *v.* Hoke, 30 Fed. 444; Coop *v.* Development, 47 Fed. 899; Krick *v.* Jansen, 52 Fed. 823; Mfg. Co. *v.* Housman, 58 Fed. 870; Davock *v.* Railroad, 69 Fed. 468; Henderson *v.* Tompkins, 60 Fed. 758.

§ 325. Patentability and Novelty.

While patent causes are usually disposed of upon bill, answer and proof, there is no objection, if the patent be manifestly invalid upon its face, to the point being raised by demurrer. — Richards *v.* Chase, 158 U. S. 299; 39 L. Ed. 991; 15 S. Ct. 831.

Dunbar *v.* Myers, 94 U. S. 187; Slawson *v.* Grand, 107 U. S. 649; Brown *v.* Piper, 91 U. S. 37.

The rule is now well settled that a defendant to a patent infringement bill may raise the question on demurrer whether the alleged invention, as dis-

closed by the specifications of the patent, is void of patentable novelty or invention. — American *v.* Buckskin, 72 Fed. 508; 18 C. C. A. 662.

Richards *v.* Elevator, 158 U. S. 299; West *v.* Rae, 33 Fed. 45.

Undoubtedly, want of patentability may be adjudged upon demurrer, but only in exceptional cases, where the question is entirely free from doubt. Ordinarily, a patent should not be defeated without a hearing on the proofs. — Chinnock *v.* Paterson, 112 Fed. 531; 50 C. C. A. 384.

New York *v.* New Jersey, 137 U. S. 445; Caldwell *v.* Powell, 73 Fed. 488; Mfg. Co. *v.* Scherer, 100 Fed. 459; Beer *v.* Walbridge, 100 Fed. 465.

Under the well settled rule of this court, a patent is to be declared void upon its face, "only when there is no room for thinking that any evidence can be adduced which would, if put into the case, alter the clear conviction of the court that there is no patentable invention in the production patented." — Drake *v.* Brownell, 123 Fed. 86; 59 C. C. A. 216.

Milner *v.* Yesbera, 111 Fed. 386; Strom *v.* Weir, 83 Fed. 170; Richards *v.* Chase, 158 U. S. 299.

There is nothing new in this device. This is a matter of such common knowledge that the court below took judicial notice of it, and properly held the patent void on demurrer for lack of novelty. The fact that the action was one at law did not place the initial pleading beyond the reach of the demurrer. — Thomas *v.* St. Louis, 149 Fed. 753; 79 C. C. A. 89.

Brown *v.* Piper, 91 U. S. 37; Slawson *v.* Railroad, 107 U. S. 649; Diamond *v.* Excelsior, 156 U. S. 611; Richards *v.* Chase, 158 U. S. 299; Richards *v.* Michigan, 102 Fed. 508; id., 179 U. S. 606; id., 186 U. S. 479; American *v.* Buckskin, 72 Fed. 508; Strom *v.* Weir, 83 Fed. 170; Northwood *v.* Dalzell, 100 Fed. 98; Drake *v.* Brownell, 123 Fed. 86; Baker *v.* Duncombe, 146 Fed. 744.

§ 326. Validity.

It is no longer open to question that where the case as presented is clear, and the court finds no difficulty in understanding the character and scope of the invention from the patent itself, when tested by the common knowledge pertaining to it, and thereupon discerns that the patent is not sustainable, the proper and expedient course is to dispose of the case on demurrer, and thus put an end to useless litigation. — Strom *v.* Weir, 83 Fed. 170; 27 C. C. A. 502.

Locomotive *v.* Medart, 158 U. S. 68; Richards *v.* Elevator, 158 U. S. 299; American *v.* Buckskin, 72 Fed. 508.

Undoubtedly, if there appears upon the face of the patent something inhering in the substance of the invention which is recondite or abstruse, something which creates a difficulty for the court in fully comprehending its nature or its limitations, and the court, upon applying the common knowledge of the art, is embarrassed with doubt as to the proper conclusion to be reached, such difficulty, reinforced by presumption of the validity of the patent, would indicate the propriety of refusing to dismiss the bill upon demurrer, and awaiting the further development of the invention by the proofs. — Strom *v.* Weir, 83 Fed. 170; 27 C. C. A. 502.

That where a device has shown such large utility as to put seeming want of novelty in doubt, a demurrer will not be sustained, see Higgin *v.* Scherer, 100 Fed. 459; 40 C. C. A. 491.

We are of the opinion that the case is one where evidence of a prior art and of the commercial value of the patented article may be persuasive that

the patent is valid, and that the question is too doubtful to be decided upon the face of the patent upon demurrer. — Beer *v.* Walbridge, 100 Fed. 465; 40 C. C. A. 496.

The patent is not so clearly and indubitably void of invention as to justify a ruling to that effect upon demurrer. — Faries *v.* Brown, 102 Fed. 508; 42 C. C. A. 483.

The patent had been sustained on appeal in a former suit. Subsequently, owing to the discovery of a prior construction, a disclaimer had been made. *Held:* The bill presents the disclaimer as well as the patent, and, with the concession that in the prior art the returning ball had been retarded by an up grade, the case may properly be disposed of on demurrer; and, for the reasons set forth in our former opinion (111 Fed. 904) we have reached the conclusion that the patent discloses no patentable invention in claims here in controversy. — Brunswick *v.* Klumpp, 131 Fed. 255; 65 C. C. A. 447.

The manufacture of stovepipes had employed the skill of numberless artisans for generations without the earlier discovery of the simple locking device of the patent. Under such circumstances can it be said, confidently and without doubt, that such device would have occurred to any skilled mechanic engaged in such manufacture, and called for no exercise of the inventive faculty? Unless that can be said, this patent should not have been on demurrer held to be void for lack of invention. — Jackes *v.* Hemp, 140 Fed. 254; 71 C. C. A. 646.

General *v.* Campbell, 137 Fed. 600.

Although the presumption from the issuance of a patent is that it involves both novelty and invention, yet the question of its validity may be raised by demurrer. — Jackes *v.* Hemp, 140 Fed. 254; 71 C. C. A. 246.

American *v.* Buckskin, 72 Fed. 508.

The court below sustained a demurrer on the ground that the patent was on its face void for lack of patentable novelty. While such a decree may be entered where a case is clear from doubt, we are of opinion the present was not one of that character. — Hogan *v.* Westmoreland, 154 Fed. 66; 83 C. C. A. 178.

Caldwell *v.* Powell, 73 Fed. 488; Chinnock *v.* Paterson, 112 Fed. 531.

§ 327. Miscellaneous.

When there is a demurrer to the whole bill, and also to part, and the latter only is sustained, the regular decree is to dismiss so much of the bill as seeks relief in reference to the matters adjudged bad, and to overrule the demurrer to the residue, and direct the defendant to answer thereto. — Powder *v.* Powder, 98 U. S. 126; 25 L. Ed. 77.

That the court, on demurrer, will not pass upon questions requiring evidence of experts, see American *v.* Buckskin, 72 Fed. 508; 18 C. C. A. 622.

It is a general principle of equity pleading that, as a demurrer proceeds upon the ground that, admitting the facts stated in the bill to be true, the complainant is not entitled to the relief he seeks, all matters of fact which are stated in the bill are admitted by the demurrer, and cannot be disputed in arguing the question whether the defense thereby made be good or not, and such admission extends to the whole manner and form in which it is here stated; or, to state the principle more concisely, every change in the

bill, well pleaded, is absolutely admitted by the demurrer. — Caldwell *v.* Powell, 73 Fed. 488; 19 C. C. A. 592.

It has been law time out of mind that a demurrer to an entire declaration must be overruled if there be one good count. Such demurrer asserts that no cause of action is shown. It therefore raises no further question if one count be good. The argument in such case may properly cover all the counts, but the ruling is complete with the determination that one count is good. — Standard *v.* Crane, 76 Fed. 767; 22 C. C. A. 549.

It is contended by appellant that the court below erred in disposing of the demurrer upon the assumption that the state of the art was set forth in the specifications; Fibre Co. *v.* Grace, 52 Fed. 124 being cited in support of such contention. That decision, however, is opposed to the great weight of authority. — Lyons *v.* Drucker, 106 Fed. 416; 45 C. C. A. 368.

Fougeres *v.* Murbarger, 44 Fed. 291; Studebaker *v.* Illinois, 42 Fed. 52; Button Fastener *v.* Schlochtmeyer, 72 Fed. 520.

That the presence of the slightest evidence of novelty is sufficient to defeat a demurrer for want of invention, see Lyons *v.* Drucker, 106 Fed. 416; 45 C. C. A. 368.

A decree on demurrer, in the absence of any specific statement or showing in the pleadings, will be presumed to have been upon the merits. — Bradford *v.* Kisinger-Ison, 113 Fed. 811; 51 C. C. A. 483.

Ashley *v.* Board, 60 Fed. 55; Terry *v.* Davy, 107 Fed. 50; Cattle Co. *v.* Frank, 148 U. S. 603.

There can no longer be a doubt that where, in an infringement suit, profert of the patent is made in the usual form, the patent is regarded as part of the bill and will be examined on demurrer. — Fowler *v.* City of N. Y. 121 Fed. 747; 58 C. C. A. 113.

Heaton *v.* Schlochtmeyer, 69 Fed. 592; Chinnock *v.* Paterson, 110 Fed. 199; International *v.* Maurer, 44 Fed. 618.

DESIGNS.

Statutory Provisions § 328
Definition § 329
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§ 328. Statutory Provisions.

Any person who has invented any new, original, and ornamental design for an article of manufacture, not known or used by others in this country before his invention thereof, and not patented or described in any printed publication in this or any foreign country before his invention thereof, or more than two years prior to his application, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law and other due proceedings had, the same as in cases of invention or discoveries covered by section 4886, obtain a patent therefor. — R. S. 4929.

Patents for designs may be granted for the term of three years and six months, or for seven years, or for fourteen years, as the applicant may, in his application, elect. — R. S. 4931.

All the regulations and provisions which apply to obtaining or protecting patents for inventions or discoveries not inconsistent with the provisions of this Title, shall apply to patents for designs. — R. S. 4933.

Section 4932 provides for conditions arising under the old act, now wholly obsolete. The amendment of Feb. 4, 1887, makes the following provision for protection against infringement:

That hereafter, during the term of letters patent for a design, it shall be unlawful for any person other than the owner of said letters patent, without the license of such owner, to apply the design secured by such letters patent, or any colorable imitation thereof, to any article of manufacture for the purpose of sale, or to sell or expose for sale any article of manufacture to which such design or colorable imitation shall, without the license of the owner, have been applied, knowing that the same has been so applied. * * *

The remainder of this amendment is the provision for the recovery of damages and profits, and will be found quoted under the title *Damages.*

§ 329. Definitions.

The Acts of Congress which authorize the granting of patents for designs were plainly intended to give encouragement to the decorative arts. They contemplate not so much utility as appearance, and that, not an abstract impression or picture, but an aspect given to those objects mentioned in the acts. It is a new and original design for a manufacture, whether of metal or other material. — Gorham *v.* White, 81 U. S. 511; 20 L. Ed. 731.

Modified: Smith *v.* Whitman, 148 U. S. 674.

As the Acts of Congress embrace only designs applied or to be applied, they must refer to finished products of invention rather than to the process of finishing them, or to the agencies by which they are developed. — Gorham *v.* White, 81 U. S. 511; 20 L. Ed. 731.

Modified: Smith *v.* Whitman, 148 U. S. 674.

We are in the habit of regarding a design as a thing of distinct and fixed individuality of appearance — a representation, a picture, a delineation, a device. A design of such a character, of course, addresses itself to the senses and the taste, and produces pleasure or admiration in its contemplation. But in the patent before us, the alleged invention is claimed to be something more than such a design. It is claimed to have an active power of producing a physical effect upon the rays of light, so as to produce different shades and colors according to the direction in which the various corrugated lines are viewed — a sort of kaleidoscopic effect. It is possible that such a peculiar effect, produced by such a particular design, impressed upon the substance of india-rubber, may constitute a quality of excellence which will give to the design a specific character and value and distinguish it from other similar designs which have not such an effect. — New York *v.* New Jersey, 137 U. S. 445; 34 L. Ed. 741; 11 S. Ct. 193.

Design, in the view of the patent law, is that characteristic of a physical substance which, by means of lines, images, configuration, and the like, taken as a whole, makes an impression, through the eye, upon the mind of the observer. The essence of a design resides, not in the elements individually, nor in their method of arrangement, but in the tout ensemble — in

that indefinable whole that awakens some sensation in the observer's mind. Impressions thus imparted may be complex or simple; in one a mingled impression of gracefulness and strength, in another the impression of strength alone. But whatever the impression, there is attached in the mind of the observer to the object observed, a sense of uniqueness and character. — Pelouze *v.* American, 102 Fed. 916; 43 C. C. A. 52.

§ 330. Identity.

We are now prepared to inquire what is the true test of identity of design. Plainly, it must be sameness of appearance, and mere difference of lines in the drawing or sketch, a greater or smaller number of lines, or slight variances in configuration, insufficient to change the effect upon the eye, will not destroy the substantial identity. — Gorham *v.* White, 81 U. S. 511; 20 L. Ed. 731.

The details of the two designs, are, in several particulars, not the same, but to this we would attach no importance if the general effect was substantially identical. On the other hand, their elementary features are, to a very considerable extent, precisely alike, yet this, too, is immaterial, because the impression of the whole upon the eye of even a casual observer is made plainly different, not only by the partial diversity of their elements, but also by the difference in arrangement and correlation of the constituents which are common to both. — Monroe *v.* Anderson, 58 Fed. 398; 7 C. C. A. 272.

The suit was brought upon a patent, not for a mantel but for "a design for a mantel." At best, the patented design and that which is alleged to infringe, are not of a very high order, and the mantels to which they are applied are quite commonplace in style and character. It is by no means improbable that an ordinary purchaser would be wholly regardless of, and absolutely inattentive to, such designs upon such articles, and it may readily be supposed that such a purchaser might be misled by a statement that the mantel having the alleged infringing design was that of the complainant. But design is a distinct matter; and, as to that, accepting the suggestion of learned counsel that nothing is entitled to more weight with the court than "the testimony of its own eyesight" we can only say that each of these judges who heard the argument of this case is, from observation of the two designs, entirely satisfied that they are substantially different in their effect upon the eye, and that his perception was not dependent upon the fact that he saw the two designs side by side and heard counsel compare and contrast them, but that their difference would be manifest to an ordinary observer, giving the usual attention (if any) of a purchaser to that subject. — Monroe *v.* Anderson, 58 Fed. 398; 7 C. C. A. 272.

It has been said that in matters of design patents, infringement must be determined by the similarity of appearance evident to the eyes of an ordinary observer, and that an ordinary observer is an intending purchaser of the article in question, familiar with the various designs of the article sought to be purchased, and who seeks to purchase them for the uses to which they are generally adapted. The eye of the court is also that of a judge competent to pass upon the question of similarity. — Byram *v.* Friedberger, 100 Fed. 963; 41 C. C. A. 121.

§ 331. Infringement.

We hold therefore, that if, in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same, if the resemblance is such as to deceive such an observer,

inducing him to purchase one supposing it to be the other, the first one patented is infringed by the other. — Gorham *v.* White, 81 U. S. 511; 20 L. Ed. 731.
Modified: Smith *v.* Whitman, 148 U. S. 674.

We do not say that in determining whether two designs are substantially the same, differences in the lines, the configuration, or the modes by which the aspects they exhibit are not to be considered; but we think the controlling consideration is the resultant effect. — Gorham *v.* White, 81 U. S. 511; 20 L. Ed. 731.
Modified: Smith *v.* Whitman, 148 U. S. 674; McCrea *v.* Holdsworth, 6 Ch. Ap. L. Rep. 418.

A design is to be tested as to its novelty and infringement as a whole. — Dobson *v.* Dornan, 118 U. S. 10; 30 L. Ed. 63; 6 S. Ct. 946.

In the absence of testimony to establish the identity of the act, the court will upon the introduction of the admitted article, determine the question by comparison. — Kibbe *v.* Jennings, 122 U. S. 640; 30 L. Ed. 861.
Following, Gorham *v.* White, 81 U. S. 511.

As none of the defendant's articles infringe the only specific design exhibited in the patent and shown in the drawing, the decree is reversed. — New York *v.* New Jersey, 53 Fed. 810; 4 C. C. A. 21.

Defendant's mat, therefore, is not an infringement of the "specific design exhibited in the patent and shown in the drawing." If the change of shape involved no change of design, because whoever was shown the square mat and told to make it oblong, with the same design, would inevitably produce an oblong mat of a single specific pattern. But that is not this case. Manifestly in changing from the square to the oblong, there must be a change of pattern, a change which is not a mere duplication of the details of the original, but a rearrangement of the principal lines of the figure, and such rearrangement is not necessarily confined to a single pattern. — New York *v.* New Jersey, 53 Fed. 810; 4 C. C. A. 21.
Gorham *v.* White, 14 Wall. 528.

The point to be determined by the criterion sanctioned is whether "the designs are substantially the same;" that is, whether a purchaser giving the usual attention to the subject-matter of the patent, — the design — would not be deceived into supposing the two designs to be the same; not whether a purchaser not giving any attention to the design might be led to assume that an article embodying the one design was the same article as another by or upon which the other design had been portrayed. — Monroe *v.* Anderson, 58 Fed. 398; 7 C. C. A. 272.
Gorham *v.* White, 14 Wall. 511.

A sameness of appearance which is due to a sameness to forms which were common property does not go to establish infringement. — Sochner *v.* Favorite, 84 Fed. 182; 28 C. C. A. 317.

The head of the defendant's design does not materially differ from that of the patent, being distinguishable from it only by the absence of the ray-like members, "e": and we cannot suppose that the removal of these appendages was at all likely to be observed by an ordinary purchaser. — Scofield *v.* Browne, 158 Fed. 305; 85 C. C. A. 556.
Gorham *v.* White, 14 Wall. 511.

When the question involving the infringement of a design patent is presented, the court is especially entitled to have put before it exhibits to which the testimony of experts may be referred, and by means of which it may make its own comparison and deductions. — Gray *v.* Grinberg, 159 Fed. 138; 86 C. C. A. 328.

§ 332. Invention.

Utility as an element of invention may be considered. — Smith *v.* Whitman, 148 U. S. 674; 37 L. Ed. 606; 13 S. Ct. 768.

Discriminating and limiting Gorham *v.* White, 81 U. S. 511.

Lehnbeuter *v.* Holthaus, 105 U. S. 94; Northrup *v.* Adams, 2 B. & A. 567; Foster *v.* Crossin, 44 Fed. 62; Jennings *v.* Keble, 10 Fed. 669; Ripley *v.* Elson, 49 Fed. 927.

The true test of identity of design is sameness of appearance — in other words sameness of effect upon the eye. — Smith *v.* Whitman, 148 U. S. 674; 37 L. Ed. 606; 13 S. Ct. 768.

Jennings *v.* Kibbe, 10 Fed. 669; Gorham *v.* White, 81 U. S. 511; Ripley *v.* Elson, 49 Fed. 927.

The difference in the curve at the bottom is one which would suggest itself to any workman, and does not involve that exercise of inventive genius which is as necessary to support a design patent as a mechanical patent. — Westinghouse *v.* Triumph, 97 Fed. 99; 38 C. C. A. 65.

Smith *v.* Saddle Co., 148 U. S. 674; Northrup *v.* Adams, 2 Ban. & A. 567; Fed. Cas. 10,328; Foster *v.* Crossin, 44 Fed. 62.

The exercise of the inventive faculty is just as essential to the validity of a design patent as it is to the validity of a patent for any kind of a mechanical device. — Myers *v.* Sternheim, 97 Fed. 625; 38 C. C. A. 345.

Smith *v.* Saddle, 148 U. S. 674; Hammond *v.* Agricultural Works, 7 Fed. 716.

To entitle an inventor to the benefit of the section in regard to design patent, "there must be originality, and the exercise of the inventive faculty." "Mere mechanical skill is insufficient. There must be something akin to genius, — an effort of the brain as well as the hand." — Cary *v.* Neal, 98 Fed. 617; 39 C. C. A. 189.

Smith *v.* Saddle Co. 148 U. S. 674.

Assembling old elements to form a design more convenient and useful without actual invention does not constitute novelty. — American *v.* Newgold, 113 Fed. 877; 51 C. C. A. 501.

If there be a doubt as to whether the departures constituted invention, it should be resolved in favor of the patent, not only by reason of the presumption arising from the grant, but also because the patented construction was adopted and retained on account of the novelty of the design, notwithstanding certain objections resulting from its peculiar conformation, and, furthermore because of the evidence as to the much greater popularity of the new design, because of its attractive appearance, and, finally, because of the actual bodily imitation by defendants of the exact patented construction, under circumstances which indicate an inequitable attempt to appropriate the benefits shown to have resulted from the harmonious arrangement and proportions of the patented design. — West *v.* Frank, 149 Fed. 423; 79 C. C. A. 359.

§ 333. Mechanical.

Section 4922 of the Revised Statutes was not intended to embrace a patent for such a design as is set forth in the design letters patent under consideration. It was intended, in order that a design might be patentable, that it should of itself, as an artistic configuration, present something new and useful from an æsthetic point of view. Within the meaning of the act, there is nothing artistic, ornamental, or decorative in the design of a horseshoe calk; it is essentially a mechanical, and not an æsthetic, device. It is impossible to suppose that it should be bought or used because of its æsthetic features. Its success as a calk would depend upon its useful, and not its artistic, character. — Williams *v.* Kemmerer, 145 Fed. 928; 76 C. C. A. 466.

Rowe *v.* Blodgett, 103 Fed. 873; 112 Fed. 61.

§ 334. Novelty.

A design is to be tested as to its novelty and infringement as a whole. — Dobson *v.* Dornan, 118 U. S. 10; 30 L. Ed. 63; 6 S. Ct. 946.

In order to be novel the design must be the result of industry, effort, genius or expense, and new or original as applied to articles of manufacture. — Smith *v.* Whitman, 148 U. S. 674; 37 L. Ed. 606; 13 S. Ct. 768.

The mere adaptation of shape without producing any novel and general effect, is not invention. — Paine *v.* Snowden, 50 Fed. 776; 1 C. C. A. 122.

Gorham *v.* White, 14 Wall. 511.

The design was for the grouping of certain Odd Fellows symbols in the panel of a rug. The court held: The learned judge below said that if the question of novelty and invention, under the terms of the statute, had been raised for the first time in this suit, his judgment possibly would have been different; and we strongly incline to the opinion that, but for the prior adjudications upon the subject, a finding that this patent is not supported by invention, within the meaning of the law, would have been correct. — Stewart *v.* Smith, 58 Fed. 580; 7 C. C. A. 380.

The novelty of a design is to be tested, not by investigation of the means employed for its creation, but by ocular comparison of the design itself with prior designs which are alleged to be substantially the same, and when tried by this test the novelty of the design covered by the patent in suit is made quite apparent. — Braddock *v.* Macbeth, 64 Fed. 118; 12 C. C. A. 70.

To entitle a party to a patent for a design under this act there must be originality and the exercise of the inventive faculty. This is so because the statute so declares, and because it has been so decided by the Supreme Court. In Smith *v.* Saddle Co. 148 U. S. 674, the court said: "The exercise of the inventive or originative faculty is required, and a person cannot be permitted to select an existing form, and simply put it to a new use, any more than he can be permitted to take a patent for the mere double use of a machine. If, however, the selection and adaptation of an existing form is more than the exercise of the imitative faculty, and the result is in effect, a new creation, the design may be patentable."

In the case at bar, what the plaintiff did, and all that he did, was to substitute for the platform which had previously been used on the rear end of existing street cars, an open compartment precisely similar to the open compartment which was in use at the front end of these cars. This was nothing more than the exercise of the imitative faculty, and did not rise to the dignity of invention. — Hammond *v.* Stockton, 70 Fed. 716; 17 C. C. A. 356.

To entitle a person to a patent under section 4929 R. S., the design must be new, useful, and original, in shape or configuration. It is not shown to be either new or original, and such changes in outline as are visible to the eye relate merely to details, and do not involve any invention. — Koenen *v.* Drake, 101 Fed. 466; 41 C. C. A. 466.

§ 335. Patentability.

It is the appearance itself which attracts attention and calls out favor or dislike. It is the appearance itself, no matter by what agency caused, that constitutes mainly, if not entirely, the contribution to the public which the law deems worthy of recompense. The appearance may be the result of peculiarity of configuration, or of ornament alone, or of both conjointly; but in whatever way produced, it is the new thing or product, which the patent law regards. To speak of the invention as a combination or process, or to treat it as such, is to overlook its peculiarities. — Gorham *v.* White, 81 U. S. 511; 20 L. Ed. 731.

Modified: Smith *v.* Whitman, 148 U. S. 674.

The thing invented or produced, for which a patent is given, is that which gives a peculiar or distinctive appearance to the manufacture, or article to which it may be applied, or to which it gives form. — Gorham *v.* White, 81 U. S. 511; 20 L. Ed. 731.

Modified: Smith *v.* Whitman, 148 U. S. 674.

If the patented design consisted in a transfer of an old form which had existed upon something else to a watch case, or in the mere adaptation by imitation of a pre-existing form to a watch-case, it would not have been invention. If the adaptation "is more than the exercise of the imitative faculty, and the result is in effect a new creation, the design may be patentable." — Untermeyer *v.* Freund, 58 Fed. 205; 7 C. C. A. 183.

Smith *v.* Saddle Co. 148 U. S. 674.

The statute which protects inventors requires the production of a new and pleasing design. The invention demanded consists in the conception and production of a design which can be characterized. — Caldwell *v.* Powell, 73 Fed. 488; 19 C. C. A. 592.

N. Y. *v.* N. J. 137 U. S. 446.

A claim for the general design of a scroll as applied to ornamentation of stoves is too broad to be sustained in such form. — Soehner *v.* Favorite, 84 Fed. 182; 28 C. C. A. 317.

When so placed (a washer for thill-couplings) it is as much out of sight as was the horse-shoe calk in Rowe *v.* Blodgett, 112 Fed. 61, with which cause the one at bar seems to be on all fours. It is another instance of the "liberal" if not lax practice in issuing design patents which was therein referred to. The washer, like the horse-shoe calk, is not intended for display, but for an obscure use. There is no evidence that its form appeals in any way to the eye, or serves to commend it to purchasers and users as a thing of beauty. There is not a scintilla of evidence that the sale of a single washer was ever induced by any attractiveness in its appearance. Functional utility entitled the patentee to the mechanical patent already discussed, but mere functional utility did not entitle him to a design patent for the same article. — Bradley *v.* Eccles, 126 Fed. 945; 61 C. C. A. 669.

There is nothing in the shape or construction of the basket of the patent in suit which "appeals in any way to the eye, or serves to commend it to

purchasers and users as a thing of beauty." It is not useful as a design. "There must be 'originality and beauty; mere mechanical skill is not sufficient.'" — Roberts *v.* Bennett, 136 Fed. 193; 69 C. C. A. 533.

Bradley *v.* Eccles, 126 Fed. 945; Rowe *v.* Blodgett, 193 Fed. 875; Bevin *v.* Starr, 114 Fed. 362; Eaton *v.* Lewis, 115 Fed. 635, affd. 127 Fed. 1018.

If the plaintiff was entitled to any patent for the advantages claimed for such a construction, they were covered by the prior mechanical patent. "Functional utility entitled the patentee to the mechanical patent already discussed, but mere functional utility did not entitle him to a design patent for the same article." — Roberts *v.* Bennett, 136 Fed. 193; 69 C. C. A. 533.

Bradley *v.* Eccles, 126 Fed. 945; Royal *v.* Art, 121 Fed. 128.

§ 336. Penalty.

The act of Feb. 4, 1887, which imposes a penalty for the infringement of a design is not unconstitutional on the ground that a court of equity will not enforce a penalty or forfeiture. — Untermeyer *v.* Freund, 58 Fed. 205; 7 C. C. A. 183.

Root *v.* Railway, 105 U. S. 189; Story Eq. Jus. 2, Sec. 1319; Stephens *v.* Gladding, 15 How. 454; Stephens *v.* Cady, 2 Curt. 200.

The patent is for a single design. It is true that, in order to protect the patentee from any form of infringement, the patent has three claims. There was, however, only one border and sale. It was a single transaction. In no view, then, that can be taken of the case, are the defendants to be subjected to two penalties. — Gimbel *v.* Hogg, 97 Fed. 791; 38 C. C. A. 419.

In law and in fact, the defendants were simply purchasers from the manufacturer and sellers to the government. In making the sale, the defendants acted in perfect good faith, in utter ignorance of any infringement of any patent rights, and without any knowledge whatever that the manufacturer had applied to the carpeting the complainant's design without license. We are, then, of opinion that the defendants are not chargeable with any penalty, under the act of Feb. 4, 1887. — Gimbel *v.* Hogg, 97 Fed. 791; 38 C. C. A. 419.

By the plain terms of the statute, the penalty is incurred by the seller of an article to which a patented design has been applied without license, only where he sells "knowing that the same has been so applied." — Gimbel *v.* Hogg, 97 Fed. 791; 38 C. C. A. 419.

Such knowledge is not to be imputed to the seller from the "notice to the public" by the marking required of the patentee by section 4900, Rev. St. It may be reasonable enough to hold such constructive notice sufficient as against the manufacturer who applied the design; for, if he did so without license, he must have known the fact. But the public notice by marking, under section 4900, gives no information whatever to a seller of an infringement committed by the manufacturer, and that section had no such purpose. — Gimbel *v.* Hogg, 97 Fed. 791; 38 C. C. A. 419.

Pirkl *v.* Smith, 42 Fed. 410; Dunlap *v.* Schofield, 152 U. S. 244; Smith *v.* Stewart, 55 Fed. 481; Stewart *v.* Smith, 58 Fed. 580.

§ 337. Miscellaneous.

A machine for producing a design may be patented, and a claim covering the means for producing such design is not a design claim within the meaning of the statute. — Clark *v.* Bonsfield, 77 U. S. 133; 19 L. Ed. 862.

It would seem that an architectural design, such as an improvement in the construction of jails, is not patentable. — Jacobs *v.* Baker, 74 U. S. 295; 19 L. Ed. 200.

It has a claim for an entire pattern, and then a separate claim for each of the eighteen component parts making up the whole. The bill alleges infringement by making and selling of the "invention," and of carpets containing the "invention." Even if the defendants can raise this point after a decree pro confesso (see Thompson *v.* Wooster, 114 U. S. 104) the patent must be held valid at least for the purposes of this case. — Dobson *v.* Hartford, 114 U. S. 439; 29 L. Ed. 177; 5 S. Ct. 945.

Classification of designs. — Smith *v.* Whitman, 148 U. S. 674; 37 L. Ed. 606, 13 S. Ct. 768.

That marking patented is necessary to recovery of damages in the absence of a specific notice, see Dunlap *v.* Schofield, 152 U. S. 244; 38 L. Ed. 426; 14 S. Ct. 576.

The patent contains no separate claim for the border, as in Dobson *v.* Carpet Co., 114 U. S. 439, and the defendant's combination of his central panel with the complainant's border, cannot be held to be an infringement unless complainant first produced such combination and exhibited it in his patent so clearly and fully that one skilled in the art would understand that it was that specific combination which the patent claimed. As none of the defendant's mats infringe the only specific design exhibited in the patent and shown in the drawing the decree is reversed. — New York *v.* New Jersey, 53 Fed. 810; 4 C. C. A. 21.

Form and shape are elements of a design. — Gaskill *v.* Myers, 81 Fed. 854; 26 C. C. A. 642.

Hammond *v.* Agricultural Works, 70 Fed. 716.

Note: This is both true and untrue. While form and shape are of the essence of a design, form and shape are never in and of themselves the essence of a design.

Whether a form which gives more increased beauty can be the subject of a valid design patent, quaere. — Soehner *v.* Favorite, 84 Fed. 182; 28 C. C. A. 317.

A design which, by its peculiar construction, would convey a false idea of the utility of the article would be a species of deception which could hardly be said to be an improvement in a useful art, which the patent laws are designed to encourage. — Soehner *v.* Favorite, 84 Fed. 182; 28 C. C. A. 317.

We should think it very doubtful whether the word "useful," introduced by revision of the patent laws into the statute, is to have the same meaning that it has in the section providing for patents for useful inventions. The whole purpose of Congress, as pointed out by Mr. Justice Strong, speaking for the Supreme Court, in the case of Gorham Co. *v.* White, 14 Wall. 511, was to give encouragement to the decorative arts. — Westinghouse *v.* Triumph, 97 Fed. 99; 38 C. C. A. 65.

The designers of articles of manufacture not otherwise entitled to receive design patents cannot justify the issuance of such patents on any theory that the design is a trademark. — Rowe *v.* Blodgett, 112 Fed. 61; 50 C. C. A 120.

The practice of the Patent Office in issuing design patents seems not to have been uniform. Prior to 1871 it was "not only liberal, but lax," until in a carefully considered opinion, commissioner Leggett (Ex parte Parkinson, 1871 Dec. Com. Pat. 251) conformed it to a construction of the law which substantially found approval in the cases above cited (Northrup *v.* Adams, 2 Ban. & A. 567; Smith *v.* Saddle Co., 148 U. S. 679; Ex Parte Parkinson, supra). In another case, in 1873 (In re Seaman, 4 O. G. 691), the same commissioner indicated the test to be applied by examiners when an article of manufacture is presented with the request for a design patent:

"Is its form, without reference to the function of the article, intended to be ornamental, and is the article itself a thing which may, for any practical purpose, have a merely ornamental configuration, and therefore have, in that sense, sufficient utility to warrant the grant of a patent?"

It would seem from the patent in suit that this test is no longer applied, and that the practice of the office has again become "not only liberal, but lax." — Rowe *v.* Blodgett, 112 Fed. 61; 50 C. C. A. 120.

The drawing is about seven inches long and two inches wide and shows alternate sections of close and open weaving about three-quarters of an inch wide, separated by longitudinal strands, those on the outside being of greater width than the others. The outside sections have the open weave, are a little over an inch in width and are subdivided by two longitudinal strands about five-sixteenths of an inch apart. The central section shows three bands of close weaving and two of open weaving. No one contends that the design as shown in the drawings could be applied, without change, to a bed-spring intended for actual use. A design patent for which such an elastic construction is asserted can hardly be said to deal fairly with the public. The public is entitled to know what it may and may not do and the patent in hand fails to give this information as explicitly as it should. — Tompkins *v.* New York, 159 Fed. 133; 86 C. C. A. 323.

DESTRUCTION OF INFRINGING MACHINE.

An Obsolete Rule § 338

§ 338. An Obsolete Rule.

That when the entire machine is an infringement it may be ordered delivered up to be destroyed. — Birdsell *v.* Shaliol, 112 U. S. 485; 28 L. Ed. 768; 5 S. Ct. 244.

To the contrary, see American *v.* Kitsell, 35 Fed. 521.

Among the prayers of the bill was one that the infringing machines should be delivered up to be destroyed. This was an unusual prayer, although, of course, not an unwarranted one if the circumstances called for it. It was only, however, by inadvertence that it was sanctioned here; and application having been made to reform the mandate so as to exclude this relief, it will be recalled and corrected accordingly. — American *v.* Mills, 162 Fed. 147.

American *v.* Kitsell, 35 Fed. 521; Birdsell *v.* Shaliol, 112 U. S. 485.

DISCLAIMER.

Statutes § 339
Delay § 340
Effect § 341
Failure to File § 342
Pending Suit § 343
Purpose and Effect § 344
Miscellaneous Rules § 345
See — Abandonment § 1; *Costs* § 274; *Double Patenting* § 357; *Reissue* § 882

§ 339. Statutes.

When judgment or decree is rendered for the plaintiff or complainant, in any suit at law or in equity, for the infringement of a part of a patent, in which it appears that the patentee, in his specification, claimed to be the original and first inventor or discoverer of any material or substantial part of the thing patented, of which he was not the original and first inventor, no costs shall be recovered unless the proper disclaimer, as provided by the patent laws, has been entered in the Patent Office before the suit was brought. — R. S. 973.

Whenever, through inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, a patentee has claimed more than that of which he was the original or first inventor or discoverer, his patent shall be valid for all that part which is truly and justly his own, provided the same is a material or substantial part of the thing patented; and any such patentee, his heirs or assigns, whether of the whole or any sectional interest therein, may, on payment of the fee required by law, make disclaimer of such parts of the thing patented as he shall not choose to claim or to hold by virtue of the patent or assignment, stating therein the extent of his interest in such patent. Such disclaimer shall be in writing, attested by one or more witnesses, and recorded in the Patent Office; and it shall thereafter be considered as part of the original specification to the extent of the interest possessed by the claimant and by those claiming under him after the record thereof. But no such disclaimer shall affect any action pending at the time of its being filed, except so far as may relate to the question of unreasonable neglect or delay in filing it. — R. S. 4917.

Section 4922 is, substantially, a combination and repetition of sections 973 and 4917.

The effect of failure to disclaim as a bar to costs is considered also under the title *Costs*.

§ 340. Delay.

Considering that the question of the validity of the new claim in the reissue is a question of law upon the face of the patent, and that its validity has been sanctioned by the Commissioner of Patents in granting the reissue, and upheld by the circuit court, there has been no unseasonable delay in entering a disclaimer; for the plaintiffs were not bound to disclaim until after a judgement of this court upon the question. — Gage *v.* Herring, 107 U. S. 640; 27 L. Ed. 601; 2 S. Ct. 819.

O'Reilly *v.* Morse, 15 How. 62, 120; Seymour *v.* McCormick, 19 How. 96.

Upon seasonably recording in the Patent Office a disclaimer, the patentee may maintain a suit upon the part which he is entitled to hold, although in a suit brought before the disclaimer he cannot recover costs. — Gage *v.* Herring, 107 U. S. 640; 27 L. Ed. 601; 2 S. Ct. 819.

R. S. 4917, 4922; O'Reilly *v.* Morse, 15 How. 62, 120; Vance *v.* Campbell, 1 Black, 427.

The complainant failed to file a disclaimer until after the case had been once before the circuit court of appeals, and it was contended that this disclaimer came too late to save complainant's rights. *Held:* But the circuit court in that case, with such evidence before it, did not consider disclaimer necessary. It was only when the decision of this court was

filed, that the owners of the patent were appraised of the necessity of disclaimer and they filed it within two months thereafter. They certainly acted with reasonable promptness. — Thompson *v.* Bushnell, 96 Fed. 238; 37 C. C. A. 456.

§ 341. Effect of.

Matters properly disclaimed cease to be a part of the invention; and it follows that the construction of the patent must be the same as it would be if such matters had never been included in the description of the invention or the claim of the specification. — Dunbar *v.* Meyers, 94 U. S. 187; 24 L. Ed. 34.

16 Stat. at L. 206; Seed *v.* Higgins, 8 El. & Bl. 767; O'Reilly *v.* Morse, 15 How. 121; Taylor *v.* Archer, 8 Blatchf. 317.

We are aware of no principle which will permit a patent to be defeated for want of novelty in respect to the subject-matter which has been eliminated from it by disclaimer. — Schwarzwalder *v.* N. Y., 66 Fed. 152; 13 C. C. A. 380.

The office of a disclaimer is to enable the patentee to save himself from the peril of the defense of want of novelty. Matters which have been properly disclaimed cease to be a part of the invention. — Schwarzwalder *v.* N. Y., 66 Fed. 152; 13 C. C. A. 380.

Dunbar *v.* Meyers, 94 U. S. 194.

The literal effect of a disclaimer is to confine the claim to a method in which no other elements are employed except such as those mentioned. It is to be observed, however, that the part disclaimed is not part of the descriptive matter, but a recital intended to enlarge the scope of the claim. The disclaimer consequently operates only to expunge from the claim what otherwise would, by force of the recital, be incorporated into it constructively. Obviously it was intended to obliterate the recital from the patent, and to have no other effect. The patent, after the disclaimer, is to be read exactly as though the recital had never been inserted. — Schwarzwalder *v.* N. Y., 66 Fed. 152; 13 C. C. A. 380.

While a disclaimer in the text of the specification, admitting known methods of performing a given function, precludes a broad claim for means for performing that function, it does not preclude a claim for specific and novel means for performing the same. — Hillborn *v.* Hale, 69 Fed. 958; 16 C. C. A. 569.

The filing of a disclaimer does not change the invention claimed in the patent, but distinguishes what is new from what is old. — Albany *v.* Worthington, 79 Fed. 966; 25 C. C. A. 258.

Chem. Wks. *v.* Lauer, Fed. Cas. 12,135.

That a disclaimer may operate to defeat a patent previously adjudicated and held valid, see Brunswick *v.* Klumpp, 131 Fed. 255; 65 C. C. A. 447.

That a disclaimer may operate to raise a presumption that the invention was not novel, or that the alleged infringement was not within the scope of the patent after disclaimer, see Societe *v.* Lueders, 142 Fed. 753; 74 C. C. A. 15.

§ 342. Failure to File.

No disclaimer has yet been entered, but the delay is not unreasonable. The objectionable claim was sanctioned by the office, held valid by a circuit court, and differed upon here. Under such circumstances the patentee has a right to insist upon it, and not disclaim until the highest court to which it could be carried had pronounced its judgement. The omission to disclaim does not render the patent altogether void; and he is entitled to proceed in this suit for an infringement of that part of his invention which is legally claimed and described, but he cannot recover costs. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

The complainant having failed to file a disclaimer of the invalid claim of his reissue, each party will bear his own costs in this court and one-half the expense of printing the record. — Yale *v.* Sargent, 117 U. S. 536; 29 L. Ed. 954; 6 S. Ct. 934.

Silsby *v.* Foote, 20 How. 378.

On the assumption that it was incumbent on him to disclaim, if his omission to do so was the result of unreasonable neglect or delay, the complainants were not entitled to recover anything, while, if there was no such neglect or delay, they were entitled to recover damages but no costs. No disclaimer was necessary to the recovery either of damages or of costs unless Williames in those 3 claims or one or more of them, included something to which he was not entitled. — McNeely *v.* Williames, 96 Fed. 978; 37 C. C. A. 641.

The effect of these provisions (R. S. secs. 973; 4922) is to save the claims which are valid if they are definitely distinguishable from those parts of the patent claimed without right, whether there has been disclaimer or not. But if there has been no disclaimer entered in the Patent Office before suit brought, it is specifically provided that the patentee shall not recover costs. — Johnson *v.* Foos, 141 Fed. 73; 72 C. C. A. 105.

O'Reilly *v.* Morse, 15 How. 120; Seymour *v.* McCormick, 19 How. 97; Gage *v.* Herring, 107 U. S. 640; Metallic *v.* Brown, 110 Fed. 665; Fairbank *v.* Stickney, 123 Fed. 79; Kahn *v.* Starrels, 136 Fed. 597; Ide *v.* Trorlicht, 115 Fed. 137.

§ 343. Pending Suit.

Under the act of 1837, disclaimers could be made as well after as before the commencement of suit. It would, in such case, be the duty of the court to see that the defendant was not injuriously surprised and to impose such terms as right and justice might require. The question of unreasonable delay would be open for the consideration of the court, and the complainant could recover no costs. We see no reason for turning a party out of court to renew the litigation after filing the disclaimer, thus subjecting both parties to the delay and expense which must necessarily follow, and without any benefit to either. — Smith *v.* Nichols, 88 U. S. 112; 22 L. Ed. 566.

Tuck *v.* Bramhill, 6 Blatchf. 104; Silsby *v.* Foote, 14 How. 220; Aikin *v.* Dolan, 3 Fish, 197; Taylor *v.* Archer, 8 Blatchf. 315; Myers *v.* Frame, 8 Blatchf. 446; Guyon *v.* Serrill, 1 Blatchf. 244; Hall *v.* Wiles, 2 Blatchf. 194.

Pending suits may proceed, but the disclaimer, when recorded, becomes a part of the original specification and must be taken into account in construing the patent, and in ascertaining the rights of the parties to the suit, unless it appears that the effect of the disclaimer is to enlarge the nature of the invention, and prejudice the rights of the respondents. — Dunbar *v.* Meyers, 94 U. S. 187; 24 L. Ed. 34.

Perry *v.* Skinner, 1 Web. P. C. 253; Ralston *v.* Smith, 9 C. B. (N. S.) 117; Smith *v.* Nichols, 21 Wall. 117; Guyon *v.* Serill, 1 Blatchf. 245; Hall *v.* Wiles, 2 Blatchf. 198.

Had the purpose of the disclaimer been to reform or alter the description of the invention, or convert the claim from one thing into something else, it might have been objectionable, as patents can only be amended for mistakes of this kind by a reissue. But the disclaimer in this case appears to have been made to obviate an ambiguity in the specification, and with no idea of obtaining the benefit of a reissue. If the clauses had the effect of broadening the patent the disclaimer removes the objection. If they did not, the disclaimer could do no harm, and cannot be made the subject of criticism. — Carnegie *v.* Cambria, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

§ 344. Purpose and Effect of.

The law which requires and permits disclaimer is not penal but remedial. It is intended for the protection of the patentee as well as the public, and ought not to receive a construction that would restrict its operation within narrower limits than its words fairly import. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

Whether the patent is illegal in part because he claims more than he has sufficiently described, or more than he invented, he must in either case disclaim, in order to save the portion to which he is entitled; and he is allowed to do so when the error was committed by mistake. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

The reasonable presumption is that the disclaimer was inserted in the patent subsequently granted, because it had been previously invented by another. — Ashcroft *v.* Boston, 97 U. S. 189; 24 L. Ed. 982.

It is a patentee who "has claimed more than that of which he was the original or first inventor or discoverer," and only "such patentee" or his assigns who can make a disclaimer; and the disclaimer can be a disclaimer only "of such parts of the thing patented as he shall not choose to claim or hold by virtue of the patent or assignment." A disclaimer can be made only when something has been claimed of which the patentee was not the original or first inventor and when it is intended to limit a claim in respect to the thing so not originally or first invented. It is true that in so disclaiming or limiting a claim descriptive matter on which the disclaimed claim is based, may, as incidental, be erased in aid of or as auxiliary to the disclaimer. But the statute expressly limits a disclaimer to a rejection of something before claimed as new or as invented, when it was not new or invented and which the patentee or his assignee no longer chooses to claim or hold. It is true that this same end may be reached by a reissue, when the patentee has claimed as his own invention more than he had a right to claim as new, but, if a claim is not to be rejected or limited, but there is merely "a defective or insufficient specification," that is, description, as distinguished from a claim, the only mode of correcting it was and is by a reissue. — Union *v.* U. S. 112 U. S. 624; 28 L. Ed. 828; 5 S. Ct. 475.

A disclaimer is usually and properly employed for the surrender of a separate claim in a patent, or some other distinct and separate matter, which can be exscinded without mutilating or changing what is left standing. Perhaps it may be used to limit a claim to a particular class of objects, or even to change the form of a claim which is too

broad in its terms; but certainly it cannot be used to change the character of the invention. And if it requires an amended specification or supplemental description to make an altered claim intelligible or relevant whilst it may possibly present a case for a surrender and reissue, it is clearly not adapted to a disclaimer. A man cannot by merely filing a paper drawn by his solicitor, make to himself a new patent or one for a different invention from that which he has described in his specification. — Hailes *v.* Albany, 123 U. S. 582; 31 L. Ed. 284; 8 S. Ct. 262.

The object of 4917 is to enable the patentee to disclaim what he has not invented; and 4922 is to legalize and uphold suits brought on patents mentioned in 4917. — Hailes *v.* Albany, 123 U. S. 582; 31 L. Ed. 284; 8 S. Ct. 262.

A disclaimer cannot be employed to amend or revise the grant. Such change should be made by other proceedings. — Collins *v.* Coes, 130 U. S. 56; 32 L. Ed. 858; 9 S. Ct. 514.

We think this section (4917) broad enough to cover disclaimers made to avoid the effect of having included in the patent more devices than could properly be made the subject of a single patent. The power to disclaim is a beneficial one, and ought not to be denied except where it is resorted to for a fraudulent and deceptive purpose. — Sessions *v.* Romadka, 145 U. S. 29; 36 L. Ed. 609; 12 S. Ct. 799.

Tuck *v.* Bramhill, 6 Blatchf. 95; Hailes *v.* Albany, 123 U. S. 582; Reed *v.* Cutter, 1 Story, 590; Wyeth *v.* Stone, 1 Story, 273; Gunson *v.* Sewell, 1 Blatchf. 244; Hall *v.* Wiles, 2 Blatchf. 194; Smith *v.* Nichols, 88 U. S. 112; Dunbar *v.* Meyers, 91 U. S. 187.

Does not give any increased validity to a patent. — Grant *v.* Walter, 148 U. S. 547; 37 L. Ed. 552; 13 S. Ct. 699.

In the case under consideration the disclaimer was not of a claim but of certain statements of the specification, which if retained might be construed to have the effect of illegally broadening the second claim. We think there is no force in the criticism that a disclaimer may not extend to a part of the specification as well as to a distinct claim. — Carnegie *v.* Cambria, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

Hurlbut *v.* Schillinger, 130 U. S. 456; Schillinger *v.* Gunther, 17 Blatchf. 66; Schwarzwalder *v.* N. Y. 66 Fed. 152.

Faure has filed a bill in equity for the repeal of the Brush patent, upon the ground that he (Faure) was the prior inventor of the broad invention described in his patent. The court found that he was not the inventor of the subject of certain claims, and that upon filing his disclaimer, thus limiting the first claim of his patent, the accumulator company was entitled to a decree. The complainant in that case, being the defendant here, filed such a disclaimer. After the disclaimer, this bill was dismissed upon Faure's motion. Inasmuch as the defendant, being the owner of the Faure patent, has, as the result of a direct issue on the subject of priority, disclaimed the right of Faure, in this country to the invention, except as limited, a renewal of a discussion of the question of priority is useless. — Electric *v.* Brush, 52 Fed. 130; 2 C. C. A. 682.

But, in differentiating his process from both of these, the patentee had defined it so clearly, so specifically, so exactly, that there can be no room for doubt as to what the process was which he actually did give to the world in exchange for the monopoly to practise it, whatever doubt there may be

as to what he meant to give or the patent office meant to take. — Jackson *v.* Birmingham, 79 Fed. 801; 25 C. C. A. 196.

That where the limitations or requirements of a disclaimer point to an invention which would require an amended specification, or a supplemental description, a disclaimer is not the proper method of correcting a patent, see National *v.* Stecher, 81 Fed. 395; 26 C. C. A. 448.

Hailes *v.* Stove Co. 123 U. S. 582.

In considering the scope and effect to be given a disclaimer the same rules are to be observed as in construing any other written instrument, and so as to carry out the intention of the person executing it, as indicated by its language when construed with reference to the proceedings of which it forms a part. It cannot be read independently of its relation to the original specifications, of which it becomes a part when recorded. — Graham *v.* Earl, 92 Fed. 155; 34 C. C. A. 267.

In view of the fact that the four varieties of this class of saws were well-known in the art, and their differences clearly recognized, as the evidence shows, no amended specification or supplemental description is required to make the new claim intelligible and a disclaimer of the circular and back saws, leaves the patent in force as to the other varieties of the class. — Thompson *v.* Bushnell, 96 Fed. 238; 37 C. C. A. 456.

They do not disclaim anything. Their avowed purpose is "to limit the scope of the letters patent to the mixing of molten metal preparatory to further treatment." This we find to be the limit of the patent as originally granted. The disclaimers, therefore, do not comply with the statutory requirements, that the patentee shall give up some material and substantial part of the thing patented of which he was not the original inventor. — Cambria *v.* Carnegie, 96 Fed. 850; 37 C. C. A. 593. Reversed, 185 U. S. 403.

If the patent, when construed upon what stands "within its four corners," claims more than the actual invention, the patentee must disclaim the excess in order to save that to which he is really entitled. — Lamb *v.* Lamb, 120 Fed. 267; 56 C. C. A. 247.

§ 345. Miscellaneous Rules.

After a case has been heard and decided upon its merits, the plaintiff could not file disclaimer in court or introduce new evidence upon that or any other subject except at a rehearing granted by the court upon terms. — Roemer *v.* Neumann, 132 U. S. 103; 33 L. Ed. 277; 10 S. Ct. 12.

After the decision of the circuit court had been announced, a new solicitor for the complainant was substituted, who thought that his client was entitled to the benefit of a disclaimer, and applied to the circuit court for a re-hearing after it should have been filed. This motion was denied. The proposed disclaimer, which has not been filed, is contained in the record. It is not properly in the case, for, as the allowance of the motion for a re-hearing on condition that the disclaimer should be filed was a matter of discretion, its rejection is not a subject of appeal. — National *v.* Stecher, 81 Fed. 395; 26 C. C. A. 448.

Roemer *v.* Bernheim, 132 U. S. 103.

DISCOVERY.

Statutory Origin § 346 | General Statement and Definition § 347

§ 346. Statutory Origin.

The constitutional provision (Art. I, Sec. 8) employs the term "discoveries," and that term has always been employed in Sec. 4886, thus:

Any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement thereof * * * may * * * obtain a patent therefor.

The term is also used elsewhere in the statutes, but these are the significant instances.

§ 347. General Statement and Definition.

From a practical point of view, it has little significance. No line of distinction has ever been drawn between invention and discovery. It is believed that a nice psychological distinction exists between the act of discovery and the act of invention; but since it is not the mental act, but the disclosure of that act in material form, which constitutes a patentable discovery or invention, such a refinement becomes wholly immaterial. Sometimes an effort has been made to make "discovery" synonymous with "pioneer" or "generic" invention, as in the quotations below; but that distinction does not hold in all cases. Many very simple and unimportant improvements have been stumbled upon, and in that way "discovered," without the ordinary laborious task of "puzzling out" or "working out" an invention; but such discovery of an invention does not necessarily make it a "pioneer" or "generic."

The subject of discovery as constituting patentable invention is fully considered under the title *Invention*.

Such inventions partake of the nature of discoveries, either found out by experiment or the result of a happy thought, which, when once expressed, is plain to all intelligent persons, who could point out at once many devices for making it effectual. Anyone can perceive the difference of such a case from the invention of a labor saving machine, which is a mere combination of certain mechanical devices to produce a desired manufacture in a cheaper or better manner. — Burr *v.* Duryee, 68 U. S. 531; 17 L. Ed. 750.

McClurg *v.* Kingsland, 7 How. 202.

In doing this (applying the undulatory theory of sound to practice) both discovery and invention, in the popular sense of those terms, were involved; discovery in finding the art, and invention in devising means for making it useful. For such discoveries and such inventions the law has given the discoverer and the inventor the right to a patent as discoverer for the useful art, process, method of doing a thing he had found; and as inventor for the means he had devised to make his discovery one of actual value. Other inventors may compete with him for ways of giving effect to the discovery, but the new art he has found will belong to him and those claiming under him during the life of his patent. If another discovers a different art or method of doing the same thing, reduces it to practical use, and gets a patent for his discovery, the new discovery will be the property of the new discoverer, and thereafter the two will be permitted to operate each in his own way without interference by the other. The only question between them will be whether the second discovery is in fact different from the first. — Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

DIVISIONAL PATENTING.
(*See* § 52)

Statute and General Rule § 348
Co-Pending Applications § 349
Dates of Issue § 350
Distinguished from Double Patenting § 351
Extending Monopoly § 352
Generic and Specific Inventions § 353
Identity § 354
Second Patent Void § 355
See — Abandonment § 9; *Anticipation* § 70; *Reissue* § 869

§ 348. Statute and General Rule.

The only statutory authority for divisional patenting is that relating to reissues.

* * * The Commissioner may, in his discretion, cause several patents to be issued for distinct and separate parts of the thing patented, upon demand of the applicant, and upon payment of the required fee for a reissue of each of such reissued letters patent. * * * — R. S. 4916.

Of course it is well settled that double patenting is not permissible; and since the decision of U. S. ex rel. Steinmetz *v.* Allen, 192 U. S. 543, (infra) it is clear that arbitrary requirement, such as separate patenting of machine and product, and machine and process, is in violation of the statute. Further than that, no general rule exists. In the nature of things, no general rule can be framed to meet all cases. The "genus and species" rule which has been a more or less popular doctrine in the Patent Office in recent years is one of those theories possessing much abstract beauty, but little practical utility. It is believed that, on the one hand, some discretion must be left to the Patent Office (Bennett *v.* Fowler, infra), and that, on the other, some latitude must be left to the applicant (Thomson-Houston *v.* Elmira, infra). A striking example of clerical technicality is shown in the case of Benjamin *v.* Dale, quoted below; but errors of this kind are far more rare than the errors of applicants in splitting up inventions and in double patenting, as will be seen from the cases under *Double Patenting.*

Two valid patents for the same invention cannot be granted either to the same or to a different party. — Miller *v.* Eagle, 151 U. S. 186; 38 L. Ed. 121; 14 S. Ct. 310.

Suffolk *v.* Hayden, 70 U. S. 315; James *v.* Campbell, 104 U. S. 382; Mosler *v.* Mosler, 127 U. S. 355; Underwood *v.* Gerber, 149 U. S. 224; Odiorne *v.* Gerber, 2 Mason, 28.

It may be that if the improvements set forth in both specifications had been incorporated in one patent, the patentee taking care to protect himself as to all his improvements by proper and several claims, it would have been sufficient. It is difficult, perhaps impossible, to lay down any general rule by which to determine when a given invention or improvement shall be embraced in one, two or more patents. Some discretion must necessarily be left to the head of the Patent Office. It is often a nice and perplexing question. — Bennett *v.* Fowler, 75 U. S. 445; 19 L. Ed. 431.

Where the inventions were one and the same, the patent office was in error in dividing the invention, and as it adjudged that plaintiff was the prior inventor, he was the one entitled to the patent. — DuBois *v.* Kirk, 158 U. S. 58; 39 L. Ed. 895; 15 S. Ct. 729.

Statement: The application was for process and apparatus; division was required under rule 41 of the office; applicant appealed to examiner-in-chief; the primary examiner refused to answer, and transmit the record;

applicant petitioned the Commissioner and petition was denied. Mandamus was then brought to compel the Commissioner to require the primary examiner to forward an appeal; this was dismissed by Supreme Court D. C. on writ of error.

Held: It was the duty of the primary examiner to accord a hearing, or, refusing to do so, to grant an appeal. It was the duty of the Commissioner to compel an appeal. *Held also:* That rule 41 as amended Feb. 1, 1900, providing,

"Claims for a machine and its product must be presented in separate applications.

"Claims for a machine and the process in the performance of which the machine is used must be presented in separate applications," was bad and in violation of 4886 R. S. — Steinmetz *v.* Allen, 192 U. S. 543; 48 L. Ed. 555; 24 S. Ct. 416.

While two or more inventions residing in the same combination or structure may be covered by a corresponding number of claims in a single patent, the law does not require them all to be claimed in the same patent, and the invention may, at the option of the patentee, be secured by different patents. It is quite immaterial that both inventions originate at the same time and form a single conception. — Thomson-Houston *v.* Elmira, 71 Fed. 396; 18 C. C. A. 145.

Cochrane *v.* Deener, 94 U. S. 780; Miller *v.* Mfg. Co., 151 U. S. 198.

This case is a striking example of the unfortunate result of too close adherence to rule. Benjamin came to the Patent Office with a meritorious invention — a simple one which was quite sufficiently described in a brief specification. The specification and the drawings showed his cluster-unit, by itself and also made practically a commercial article by the use of a cover and switch, varieties of cover with and without bushing being shown. He asked for seven claims. The logical way would have been to include the genus and its varieties in the same patent and a half dozen claims would have covered every possible combination which he was entitled to hold. — Benjamin *v.* Dale, 158 Fed. 617; 85 C. C. A. 439.

By the time the Patent Office got through with him, Benjamin was the holder of four separate patents granted upon divisional applications split off from his original one; the four patents together containing 98 claims. It does not seem just that the patentee, who was powerless to obtain any modification of the rule for dividing applications, should be made to suffer from such misdirected energy. There seems sufficient authority to warrant a construction, which will hold that these two patents, based on a single original application and issued on the same day are to be treated as a single one. — Benjamin *v.* Dale, 158 Fed. 617; 85 C. C. A. 439.

Note: Every lawyer who has prosecuted patent applications in certain divisions of the Patent Office will welcome this holding. While the great majority of the examiners exercise their departmental functions in a conservative and considerate manner, there are some who suffer from the "misdirected energy," as the court says, and particularly along those lines where the applicant is the least able to counteract such activity by appeal or otherwise.

§ 349. Co-Pending Applications.

It is true that under well settled rules, inasmuch as the two patents were pending in the patent office at the same time, and both of them were granted, there is a prima facie presumption that each was properly granted. Never-

theless, it is clear to us that both patents are for the same thing, so far as any inventive quality is concerned, and that only one of them can stand. — Brooks *v.* Sacks, 81 Fed. 403; 26 C. C. A. 456.

Boyd *v.* Tool Co., 158 U. S. 260.

Even where each of several applications which subsequently ripen into patents to the same inventor discloses all the inventions claimed in all the applications, and they are all pending at the same time, no one of the applications or patents can be used to anticipate any of the claims of the others which it does not itself claim and secure. — Anderson *v.* Collins, 122 Fed. 451; 58 C. C. A. 669.

Ide *v.* Trorlicht, 115 Fed. 137; Walk. Pat. sec. 180; Westinghouse *v.* Dayton, 106 Fed. 724; Suffolk *v.* Hayden, 3 Wall. 315; Graham *v.* McCormick, 11 Fed. 859; Graham *v.* Mfg. Co., 17 Fed. 138.

When the patent first granted is distinctly and only for an improvement on another invention which is already the subject of a prior application then pending, and on which a later patent is granted, the patent for the improvement in no wise interferes with the other application or the patent issued thereon. — Cleveland *v.* Detroit, 131 Fed. 853; 68 C. C. A. 233.

Dayton *v.* Westinghouse, 118 Fed. 573; Miller *v.* Eagle, 151 U. S. 186; Thomson-Houston *v.* Ohio, 80 Fed. 712; Palmer *v.* Lozier, 90 Fed. 734.

The patentee filed three applications successively and at separate times. The claim of the patent in suit was, in substance, included in the first application, and the construction was disclosed in all three applications. The claim in suit materialized in the third application. *Held:* Under these circumstances, we think the third application should be regarded as an amendment to the first, and both should be treated as a single continuing application. However this may be, it is apparent that during the whole period from the filing of the first application to the granting of the patent in suit, the applicant was insisting upon his right to have a patent for the invention specified in the claim in controversy, and that he never intended to relinquish or abandon it. It is well settled that an inventor by describing an invention in a patent granted to him does not preclude himself from patenting it subsequently. His omission to claim what he describes may operate as a disclaimer or an abandonment of the matter claimed; but it has no such effect when it appears that the matter thus described but not claimed was the subject of a pending application in the Patent Office by him for another patent. — Kinnear *v.* Wilson, 142 Fed. 970; 74 C. C. A. 232.

Thomson-Houston *v.* Elmira, 71 Fed. 396; Suffolk *v.* Hayden, 3 Wall. 315; Barbed Wire Case, 143 U. S. 275.

The first application was sufficiently broad to have carried the claims of the second application. Six months after the first application was filed, another application was filed eventuating in the patent in suit. The first application also went to patent. *Held:* The specifications in that application for 564,586 (the first application) were full enough to warrant the making of the claims here in controversy. At any time the application might have been amended by adding such claims, and in our opinion it is immaterial that, instead of thus amending it, he took the broader claims on another application, filed while the first was pending. The second may fairly be considered a continuation of the first, and thus Berliner's application antedates the public use, and the facts will not sustain the contention that he abandoned the invention here in suit. — Victor *v.* American, 145 Fed. 350; 76 C. C. A. 180.

§ 350. Dates of Issue.

We do not understand this general doctrine to be denied, but it is said that if, by some chance, the application for the fundamental patent is delayed in its course through the patent office until a patent on the evolved improvement has issued, then the patent on the fundamental invention is void. In cases where the delay in the issuing of the patent for the main invention cannot be charged to the laches or fraud of the patentee, such a rule would be a hard one; and unless it is required by the express words of the statute, or by the express holding of the Supreme Court, we should be inclined, if possible, to avoid declaring it to exist. The contention of counsel for defendant in this behalf instead of having the support of the authority of the Supreme Court, is in the teeth of two decisions of that tribunal. — Thomson-Houston *v.* Ohio, 80 Fed. 712; 26 C. C. A. 107.

Suffolk *v.* Hayden, 3 Wall. 315; Barb. Wire Pat., 143 U. S. 280.

(General rule by Judge Taft.)

We cannot yield to the argument based on such a distinction, because we cannot accept its minor premise, to wit, that the later granting of the patent for the main invention extends the monopoly of the earlier improvement patent. The patent for the improvement expires in 17 years. After that any one may use the improvement without infringing the patent issued upon it. If he uses the improvement without a license to use the main invention he is liable for the infringement, not of the patent for the improvement, but of the patent for the main invention; and, in estimating the damages for the same, the value of the main invention, and not that of the improvement, would be the basis for estimating the damages.

It can make no difference in considering this question whether the patent for the improvement issues to the patentee of the main invention or to another. The right of the public to use the improvement when the patent on it expires is exactly the same, whether the patentees of the two inventions are the same or not, because in each case the improvement can only be used with the license of the patentee of the main invention. If the patentee of the improvement is a stranger to the main invention, it is manifest that he can derive no benefit from the limitation upon the use of his invention after his patent expires, because of the patent on the main invention. Why, then, does he derive an advantage if he happens to own the main patent? The only advantage conferred by the issue of the patent for the main invention is the legitimate monopoly for the statutory period of that invention, and of no other. Did the personality of the owner of two different patents affect the validity of either, then the anomalous result would follow that the owner of one patent would avoid it by acquiring ownership of another. According to the argument of counsel, the patentees of the earlier improvement patent and of the later main patent being the same person, the main patent is void. Let us suppose that they were different persons, but that, by mesne assignments, the two patents became the property of one person; the effect upon the public use of the improvement patent is exactly the same as if the now owner had been the inventor and patentee of both. Does the unity of title avoid the main patent, which was valid before? It must do so if the argument of counsel for defendant in this behalf is to be followed, for the effect of the unity of title is "to extend the monopoly" of the earlier improvement patent in the sense in which counsel uses that phrase. To our minds, this conclusion is reductio ad absurdum. The fact that a patent for an improvement may expire before the patent for the main invention is the result of several circumstances, — one that a patent may be taken out for an improvement on a patentable invention, another that there is no limitation by statute upon the time within which a patent may issue upon an application after it is filed, provided the applicant is not guilty

of violating the two years' restriction imposed by the statute, and a third that the course of an application for a generic or broad invention may legitimately take longer in its course through the patent office than a comparatively unimportant improvement on that invention. — Thomson-Houston *v.* Ohio, 80 Fed. 712; 26 C. C. A. 107.

Where each of several applications which subsequently ripen into patents to the same inventor, describes an entire machine and the inventions claimed in all of the applications, but no one of the applications claims any invention claimed in any of the others, and they are all pending at the same time, the respective dates of the applications and of the patents, and the dates when the applications were filed are immaterial, and the applications and the patents cannot be used to anticipate each other. — Ide *v.* Trorlicht, 115 Fed. 137; 53 C. C. A. 341.

Walk. Pat., 180; Westinghouse *v.* Dayton, 106 Fed. 724; Suffolk *v.* Hayden, 3 Wall. 315; Graham *v.* McCormick, 11 Fed. 859; Graham *v.* Mfg. Co., 11 Fed. 141.

At any time the application (first filed) might have been amended by adding such claims, and in our opinion it is immaterial that, instead of thus amending it, he took the broader claims on another application filed while the first was pending. The second may fairly be considered a continuation of the first, and thus Berliner's application (the first filed, the second did not) antedates the public use, and the facts will not sustain the contention that he abandoned his invention here in suit. — Victor *v.* American, 145 Fed. 350; 76 C. C. A. 180.

The circuit court held that "it is very doubtful whether the second patent is not to be regarded as invalid because anticipated by the first patent. As I understand the rule the patent numbered first takes precedence of the other." This is a correct statement of the general rule. But where the patentee has had an application pending for the allowance of the later numbered patent at the time when the earlier numbered patent was issued, and especially when it was through no fault of his that his original application for a single patent was split up and a plurality of patents issued, an exception is made to the enforcement of this rule. — Benjamin *v.* Dale, 158 Fed. 617; 85 C. C. A. 439.

Underwood *v.* Gerber, 149 U. S. 224; Writing Machine *v.* Elliott, 106 Fed. 507; Willcox *v.* Machine Co., 93 Fed. 206; Crown *v.* Standard, 136 Fed. 841; Electrical *v.* Brush, 52 Fed. 137; Thomson-Houston *v.* Elmira, 71 Fed. 404; Independent *v.* Jeffrey, 76 Fed. 989; Badische *v.* Klipstein, 125 Fed. 554.

§ 351. Distinguished from Double Patenting.

We have no disposition to depart from the rules in respect to the identity of patents and the method of determining it, here adverted to, which we deem sound and reasonable; but it would be a misapplication of them, and contrary to their spirit and purpose, to say that independent inventions may not be the proper subjects of independent patents, even though they may relate to the same subject-matter, and one may dominate the other in the same field. — Dayton *v.* Westinghouse, 118 Fed. 562; 55 C. C. A. 390.

Miller *v.* Mfg. Co., 151 U. S. 186; Palmer *v.* Lozier, 90 Fed. 732; Thomson-Houston *v.* Ohio, 80 Fed. 712; Allington *v.* Globe, 89 Fed. 865; Thomson-Houston *v.* Jeffrey, 101 Fed. 121; Thomson-Houston *v.* Hoosick, 82 Fed. 461; Industrial *v.* Wilcox, 112 Fed. 535.

§ 352. Extending Monopoly.

Having stated that he had made the specific mechanism of the automatic shunting device the subject of an application for another patent, the applicant proceeds to say, "I, therefore, limit myself in this application to the general or broad claims upon the automatic shunting device." The present case is not one where the invention contemplates more than one congeries of parts which, separately, constitute a distinct organization. It seems a necessary inference that the applicant for this patent sought to gather in and monopolize all means which might be employed for the organization of an automatic shunting device, other than such that he had chosen to represent by his actual invention. This he could not do. — Western *v.* Williams-Abbott, 108 Fed. 952; 48 C. C. A. 159.

The truth is that the kernel of the invention was taken out of this and made the subject of another application. Having disclaimed it, the patentee cannot now claim that invention to be within the scope of the patent here in suit. — Western *v.* Williams-Abbott, 108 Fed. 952; 48 C. C. A. 159.

Thomas *v.* Spring, 77 Fed. 420.

The feature which gives validity to the patent in suit was expressly carved out of No. 554,874 and reserved for patenting in No. 580,281. The specification expressly says so. The patent is thus clearly within the rule of Thomson-Houston *v.* Elmira, 71 Fed. 396. — Hillard *v.* Fisher, 159 Fed. 439; 86 C. C. A. 469.

§ 353. Generic and Specific Inventions.

The rule rests upon the broad and obvious ground that, if the second patent is for an invention, that was necessary to the use of the invention first patented, it cannot be sustained. Undoubtedly, as pointed out in Miller *v.* Mfg. Co., 151 U. S. 186, if the second patent is for a distinct and separate invention, or, to put the matter in another way, has not been made integral with another invention already patented, so as to be fairly necessary to its use, it should be sustained if the other requisite conditions exist. — Palmer *v.* Lozier, 90 Fed. 732; 33 C. C. A. 255.

Lock *v.* Mosler, 127 U. S. 354; Plummer *v.* Sargent, 120 U. S. 442; Ohio *v.* Thomson-Houston, 80 Fed. 712.

The conception of a mechanism capable merely of producing motion in a pre-determined form, and the conception of this mechanism combined with other elements, in a machine producing work theretofore done only by hand, are distinct. Had the "movement" been in the prior art, we think that Palmer's claims to the protection by letters patent of his quilting machine would be well founded. As he has produced not only a quilting machine, but a part of that machine which may be used in other machines, we see no reason why, by properly seeking protection for all that he has invented, he should be deprived of the protection of letters patent for that which he regards as his chief invention. — Palmer *v.* Brown, 92 Fed. 925; 35 C. C. A. 86.

Suffolk *v.* Hayden, 3 Wall. 315.

By the general rule of patent law, a patent for the specific device would cover all those equivalents, the range of which would be *more* or less broad according to the scope of the invention. Such equivalents represent, in legal contemplation, the same invention. One cannot divide an integral invention, or have two patents for the same thing. — Western *v.* Williams-Abbott, 108 Fed 952; 48 C. C. A. 159.

Miller *v.* Mfg. Co., 151 U. S. 186; Palmer *v.* Lozier, 90 Fed. 732; Fassett *v.* Mfg. Co., 62 Fed. 404.

Since, therefore, the invention of the specific means covered by these claims for the special means and the generic invention were for independent inventions, and neither had been given to the public, it was competent for the inventor to take out a patent for each; and we do not perceive that in such case it would be material that the taking out of the one patent was prior to that of the other. — Dayton *v.* Westinghouse, 118 Fed. 562; 55 C. C. A. 390.

No valid reason exists why the patentee of an invention may not enjoy the privilege of a stranger in thereafter obtaining a patent for an independent invention made by him, although it relate to the matter of his former patent, and was described but not claimed, therein, provided he has not dedicated such independent invention to the public. — Dayton *v.* Westinghouse, 118 Fed. 562; 55 C. C. A. 390.

Thomson-Houston *v.* Ohio, 80 Fed. 712.

§ 354. Identity.

The presumption is that Jensen invented something new, or he would not have secured the second patent. Where two patents apparently described and claimed the same article, the question of identity is open for examination, with the presumption in favor of their diversity. — Norton *v.* Jensen, 90 Fed. 415; 33 C. C. A. 141.

Rob. Pat., 896.

Are the two patents for the same invention? Looking first to the letters patent themselves, and comparing their claims we are unable to say that the combination claimed in the earlier is identical with that claimed in the later, since the later specifically claims elements not enumerated in the earlier. As the claims are not coextensive, the fact that the given element is common to both may be of little consequence. The test of identity afforded by a comparison of the claims of the two patents, however, is not conclusive. We must be satisfied further that there are substantial differences, not merely varying descriptions of one invention, or descriptions of a single invention in different applications to use. — Palmer *v.* Brown, 92 Fed. 925; 35 C. C. A. 86.

Miller *v.* Mfg. Co., 151 U. S. 186; Thomson-Houston *v.* Elmira, 71 Fed. 396; Simonds *v.* Hathorn, 90 Fed. 201.

That where a substantial difference exists, in the two methods of dealing with the subject matter, it is not a case of double patenting, see Municipal *v.* National, 117 Fed. 284; 46 C. C. A. 270.

§ 355. Second Patent Void.

It seems to me his second patent must have been taken out as a matter only of greater caution, through fear that, by some possible interpretation of the claims of the first every method of using the electric currents would not be covered. To my mind, this was unnecessary; and unless the patents are to be limited to details, the claims of the first patent cover every form of current particularized in either. I think, therefore, that under Leggett *v.* Oil Co., 149 U. S. 287 and more particularly and clearly under Miller *v.* Mfg. Co., 151 U. S. 186, the second patent is void. (Putnam dissenting.) — Gamewell *v.* Municipal, 61 Fed. 948; 10 C. C. A. 184.

One cannot lawfully have two patents for one invention. When once the invention has been used, there is the consideration of a grant, its value for that purpose is spent, and there is nothing in it on which a second grant can be supported. And this rule holds good though the scope of the patents may be different. One cannot extract an essential element of his invention from a former patent, without which the former patent would not have been granted and make it the subject of a subsequent patent. — Palmer *v.* Lozier, 90 Fed. 732; 33 C. C. A. 255.

Miller *v.* Mfg. Co., 151 U. S. 186.

That where two patents have been taken out on the same general invention and it appears that the combination of the first patent would be inoperative without including the combination claimed in the second patent, the second patent is void, see Industrial *v.* Wilcox, 112 Fed. 535; 50 C. C. A. 387.

Miller *v.* Mfg. Co., 151 U. S. 186.

DOUBLE PATENTING.

General Rules § 356
Disclaimer in Later Patent § 357 (*see* § 339)
Extending the Monopoly § 358
Seniority and Priority § 359 (*see* § 808)
Unitary Device § 360
Miscellaneous Rules § 361
See — Abandonment § 9; *Anticipation* § 70; *Defenses* § 320; *Improvement* § 439; *Invention* § 617

§ 356. General Rules.

If two patents be granted for the same invention the latter is void. — Suffolk *v.* Hayden, 70 U. S. 315; 18 L. Ed. 76.

It is hardly necessary to remark that the patentee could not include in a subsequent patent any invention embraced or described in a prior patent to himself, any more than he could an invention embraced or described in a prior patent to a third person. Indeed, not so well; because he might get a patent for an invention before patented to a third person in this country, if he could show that he was the first and original inventor, and if he should have an interference declared. — James *v.* Campbell, 104 U. S. 356; 26 L. Ed. 786.

A man cannot have two separate patents for the same invention. The later patent is void. — McCreary *v.* Pennsylvania, 141 U. S. 459; 35 L. Ed. 817; 12 S. Ct. 40.

A later application covering the same invention as a former application would be void. — Washburn *v.* Beat Em All, 143 U. S. 275; 36 L. Ed. 154; 12 S. Ct. 443.

Suffolk *v.* Hayden, 70 U. S. 315.

Two valid patents for the same invention cannot be granted either to the same or to a different party. — Miller *v.* Eagle, 151 U. S. 186; 38 L. Ed. 121; 14 S. Ct 310.

Suffolk *v.* Hayden, 70 U. S. 315; James *v.* Campbell, 104 U. S. 382; Mosler *v.* Mosler, 127 U. S. 355; Underwood *v.* Gerber, 149 U. S. 224; Odiorne *v.* Amesbury, 2 Mason, 28.

When a patentee secures two patents for the same invention, the later patent is void. — Fassett *v.* Ewart, 62 Fed. 404; 10 C. C. A. 441.

Miller *v.* Mfg. Co., 151 U. S. 186.

The mere fact that a subsequent patent embraces broader claims than those of the prior patent, which might have been made in the prior patent, does not take it outside the rule of Miller *v.* Mfg. Co. that a subsequent patent for the same invention is void. — Fassett *v.* Ewart, 62 Fed. 404; 10 C. C. A. 441.

A subsequent patent, especially to the same patentee for the same invention, even embracing broader claims is void. — Russell *v.* Kern, 69 Fed. 94; 16 C. C. A. 154.

Miller *v.* Mfg. Co., 151 U. S. 186; Oval *v.* Sandy Creek, 69 Fed. 285; Heald *v.* Rice, 104 U. S. 737.

The rule in Miller *v.* Mfg. Co., 151 U. S. 198 construed and explained at length. — Thomson-Houston *v.* Elmira, 71 Fed. 396; 18 C. C. A. 145.

Suffolk *v.* Hayden, 3 Wall. 315; Barbed Wire Case, 143 U. S. 275; Accumulator *v.* Brush, 52 Fed. 130.

The improvement described in claim 1 of the second patent, having been distinctly claimed in a previous patent, is not patentable, unless the last patentee was the earlier inventor. — Morrin *v.* Lawler, 99 Fed. 977; 40 C. C. A. 204.

James *v.* Campbell, 104 U. S. 356; Machine Co. *v.* Hedden, 148 U. S. 490; Mathews *v.* Flower, 25 Fed. 830.

§ 357. Disclaimer in Later Patent.

The switching devices having been fully described, the matter of disclaimer inserted in the later patent is of no more value in determining its scope and interpretation as to the claims in which the switches are an element, than is the matter of disclaimer inserted in the earlier patent as to the claims in which the contact device is an element. — Thomson-Houston *v.* Hoosick, 82 Fed. 461; 27 C. C. A. 419.

That the settlement of priorities on interference, where the patentee has a plurality of applications, relating to the same general subject matter, does not entitle him to claim the counts awarded him on the interference to be amended into either application, regardless of the specification and the particular species of the application, see Nelson *v.* Farmer, 95 Fed. 145; 37 C. C. A. 32.

The complainant relies upon the disclaimer of the earlier patent: "I do not here claim any of the features also shown and claimed in my application and serial Nos. 157,771," etc. Though reference is here made to the application for the patent in suit, it is evident that a patentee cannot thus withdraw the invention which actually is embodied in the structure claimed. He cannot patent the structure, and by disclaimer withdraw the invention which makes the structure patentable. — Otis *v.* Portland, 127 Fed. 557; 62 C. C. A. 339.

Rob. Pat. sec. 465; Miller *v.* Eagle, 151 U. S. 186; Palmer *v.* Lozier, 90 Fed. 745.

§ 358. Extending the Monopoly.

When one inventor makes a generic invention and also subordinate, specific inventions, and presents the whole series in a set of contemporaneous applications, the patentee must not be enabled, by an ingenious use of general terms, to enlarge the boundaries of each invention, to extend each into the borders of another, and obtain a series of overlapping patents. — Elec. Accum. Co. *v.* Brush 52 Fed. 130; 2 C. C. A. 682.

Now, after this lavish issue of patents involving the same subject matter, and to the same patentees, could the monopoly be still further broadened and prolonged by the grant of a later patent? We have no hesitation in responding negatively. Such an extension of exclusive privileges would be a sheer abuse of the patent laws. — Reynolds *v.* Standard, 68 Fed. 483; 15 C. C. A. 516.

Following, Miller *v.* Eagle, 151 U. S. 186.

He made a machine which was a perfect embodiment of his generic idea, and which he thought a better mechanism. He applied for a patent on this machine, knowing it to be a full embodiment of his generic idea, and erroneously thinking it better as a practical mechanism. He did not patent an improvement upon his old mechanism. Surely, under such circumstances, he cannot now invalidate or limit his prior patent by showing that all he had claimed in his first patent had previously been invented by himself. — Otis *v.* Portland, 127 Fed. 557; 62 C. C. A. 339.

The patentee cannot subsequently start afresh and say: "I have now another machine, which is exactly like the old one in the use of the generic idea. I desire a patent upon it, but I do not claim the feature in which the machine of my new application differs from the old, but I claim what is exactly the same as the old. I claim that machine again, and all others containing the same invention." Yet this is substantially the case before us. — Otis *v.* Portland, 127 Fed. 557; 62 C. C. A. 339.

It is insisted that though patent No. 757,762 was applied for more than two years after patent No. 736,999, and was allowed almost eight months afterwards, it constitutes the generic patent — No. 736,999 being for a specific invention only. This is not a case in which a patentee, having first made application for a patent for a generic invention, has subsequently applied for patents for specific improvements. This is a case in which a patentee, possessed of an alleged generic idea, elected to first apply for a patent for a specific embodiment embracing the essential feature of the generic idea, and later specifying such essential feature in another specific embodiment, claims that the generic idea growing out of such essential feature, belongs to the later, and not to the earlier, patent. To allow this, it seems to us, would be to make the second patent overlap the first, a result that involves the patentee in this dilemma, either that his second patent is not generic in the respect named, or that it is a double patenting. — Morse Chain *v.* Link Belt, 164 Fed. 331; C. C. A.

§ 359. Seniority and Priority.

As between two patents for the same invention priority of date in filing does not control. — Birmingham *v.* Gates, 78 Fed. 350; 24 C. C. A. 132.

Miller *v.* Mfg. Co., 151 U. S. 186.

Where two patents are issued on the same day by the Patent Office, and there is no other evidence of seniority between them than such as appears from their serial numbers, the earlier in number must be regarded the senior and the earlier in publication. — Crown *v.* Standard, 136 Fed. 841; 69 C. C. A. 200.

If the invention of the later patent is patented by the earlier patent, the earlier must, of course, invalidate the later, for there cannot be two valid patents for the same invention, and the later patent is therefore void. — Crown *v.* Standard, 136 Fed. 841; 69 C. C. A. 200.

§ 360. Unitary Device.

That where two patents from the same inventor disclose and cover the same general invention, and each covers separate and minor inventions, the inventions claimed being inseparably involved in the same patents, the later patent is void, see Thomson-Houston *v.* Hoosick, 82 Fed. 461; 27 C. C. A. 419.

Miller *v.* Mfg. Co., 151 U. S. 198.

The device patented in the first patent is the same as that in the second. The same elements are claimed in combination in the first as in the second. A difference in statement of their functions cannot and does not make them different claims or different combinations. — Thomson-Houston *v.* Jeffery, 101 Fed. 121; 41 C. C. A. 247.

Thomson-Houston *v.* Hoosick, 82 Fed. 461.

It is identical with the essential feature of the patent in suit and it comes within the rule that forbids the issuance of a second patent to a patentee for an alleged invention, the essential characteristic of which has been already patented to the same patentee. — Newark *v.* Ryan, 102 Fed. 693; 42 C. C. A. 594.

The matter sought to be covered by the later patent is inseparably involved in the matter embraced in the earlier patent, and, therefore, the claims in controversy are void. — Thomson-Houston *v.* Western, 158 Fed. 813; 86 C. C. A. 73.

Miller *v.* Mfg. Co., 151 U. S. 198.

§ 361. Miscellaneous Rules.

The defendants insist that as 337,298 is the earlier patent, and is for the same invention as 337,299, the latter patent is void. This conclusion would be true if the premises were true. The application was filed on the same day, the patents were issued on the same day, and are owned by the same person. The testimony shows that it can never be ascertained which patent actually first received the final signature which rendered it a complete and final deed; the mere fact that one has an earlier number signifies merely that the patent office followed Brush's alphabetical order; so that a judicial ascertainment of the fact of priority is impossible, and there are no known presumptions which can be resorted to upon which to base a finding. The owner of both patents has elected to regard 337,299 as the one upon which it will rest its title to a monopoly, and we are of opinion that it had such power of choice. What would be the condition of separate owners of two separate and contemporaneous patents for the same inventions? is a question which has not yet arisen but it is obviously improper that 337,298 should be left in a condition where it can be assigned or made the subject of sale. It has been suggested that a disclaimer should be filed, but the sections to the statute in regard to disclaimer, were not intended for, and do not seem applicable to, a case of this sort in which the patentee was the actual and first inventor of the whole of the described and patentable thing which is specified in the patent. It, therefore, seems proper that a final decree should be framed in accordance with the circumstances of the case, and should, in connection with the finding of the validity of the specified claims of 337,299, adjudge 337,298 to be inoperative, and prohibit its assignment for sale. — Elec. Accum. Co. *v.* Brush, 52 Fed. 130; 2 C. C. A. 682.

The owner of two conflicting patents is not bound under R. S. 4918, to move to cancel the senior patent before he can maintain suit upon the other patent. — Western Elec. Co. *v.* Sperry, 59 Fed. 295; 8 C. C. A. 129.

Disapproving, Roll Paper Co. *v.* Knapp, 44 Fed. 609.

It is contended that the invention described and claimed in the earlier patent is for one form of the alleged invention described in the later patent, and covered by the first of those claims thereof, and that no one could use the invention of the earlier patent without infringing these later claims. The question there raised is a serious one, but we do not deem it necessary to consider it. — Westinghouse *v.* Edison, 63 Fed. 588; 11 C. C. A. 342.

Miller *v.* Mfg. Co., 151 U. S. 186.

The first two claims contain no patentable improvement upon the form specifically described in the claims of its predecessor, and are void. — Westinghouse *v.* N. Y., 63 Fed. 962; 11 C. C. A. 528.

At the bar the United States rested the point of issuance of a subsequent patent for the same invention, Miller *v.* Mfg. Co., 151 U. S. 186. The principle of this decision is evident and was stated as early as 1865 in Suffolk *v.* Hayden, 3 Wall. 315; and appears from the record that it was recognized by the patent office before Miller *v.* Mfg. Co. was decided. We may remark that the facts in the case at bar on their face are not like those of Miller *v.* Mfg. Co. as here the two patents claimed to interfere were not issued to the same applicant; and the acquirement, after it issued by the Am. Bell Tel. Co. of the Berliner patent of Nov. 2, 1880 would not necessarily estop the assignee. — Am. Bell. Tel. Co. *v.* U. S. 68 Fed. 542; 15 C. C. A. 569.

To avoid the objection of double patenting, it is not enough to show that the prior patent claims a specific machine, and that the later patent contains broader claims, which embrace both the prior specific machine and other machines as well. Two patents may be regarded as for the same invention, though one claims only a special machine, and the other claims broadly a genus which includes the former. —.Otis *v.* Portland, 127 Fed. 557; 62 C. C. A. 339.

Miller *v.* Eagle, 151 U. S. 186; Rob. Pat. secs. 464, 465.

The question whether two patents are for the same invention is to be determined from a comparison of the documents themselves, no extrinsic evidence being necessary to enable the court to ascertain their meaning and true conclusion. — Thomson-Houston *v.* Western, 158 Fed. 813; 86 C. C. A. 73.

The change in phraseology between the claims of the two patents import nothing of substance into the claims of the later patent which, in different language, describe the same combinations covered by the claims of the earlier patent. — Thomson-Houston *v.* Western, 158 Fed. 813; 86 C. C. A. 73.

DRAWINGS.

Statutory Provisions § 362 | Rules § 363
General Statement and General | *See — Claims* § 192

§ 362. Statutory Provisions.

* * * A copy of the specification and drawings shall be annexed to the patent and be a part thereof. — R. S. 4884.

When the nature of the case admits of drawings, the applicant shall furnish one copy signed by the inventor or his attorney in fact, and attested by two witnesses, which shall be filed in the Patent Office; and a copy of

the drawing, to be furnished by the Patent Office, shall be attached to the patent as a part of the specification. — R. S. 4889.

Sec. 4916, which provides for reissues, has the following in regard to drawings in reissue cases:

* * * nor in case of a machine patent shall the model or drawings be amended, except each by the other; but where there is neither model nor drawing, amendments may be made upon proof satisfactory to the Commissioner * * *

§ 363. General Statement and General Rules.

Since the drawings form a part of the specification, special rules relating thereto will be found under *Specification*.

Where the drawings merely show an alternative construction and both covered by same claims, the difference is not material. — Schreiber *v.* Grimm, 72 Fed. 671; 19 C. C. A. 67.

Bussell *v.* Stevens, 137 U. S. 423; Wells *v.* Curtis, 66 Fed. 318.

A drawing is not to be regarded as a working plan, unless it is so stated in the specification. — Elgin *v.* Creamery, 80 Fed. 293; 25 C. C. A. 426.

Caverly *v.* Deere, 66 Fed. 305.

The object of the drawings filed in the patent office is attained if they clearly exhibit the principles involved, and, in a case like this, rigid adherence to the dimensions thus exhibited is not required or expected, and if an intelligent mechanic would so proportion the dimensions as to secure practical results, inutility is not demonstrated by experiments with material identical in form and proportion of parts with the drawings in the patent. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

The drawings are not required to be working plans. They must be read in connection with the description and claims, and any inferences arising from omissions or inconsistencies in the drawings must yield to a legally sufficient specification. — Western *v.* American, 131 Fed. 75; 65 C. C. A. 313.

That an obvious error in a drawing, which would not mislead any person skilled in the art, is insufficient to defeat a patent, see Edison *v.* Novelty, 167 Fed. 977; C. C. A.

EMPLOYER AND EMPLOYEE.

General Statement § 364
Contract — Future Inventions § 365 (*see* § 430)
License — Implied § 366 (*see* § 749)
Rights of
Employee § 367
Employer § 368
Miscellaneous Rulings § 369
See — Assignment § 149; *Government* § 429; *License* § 749; *Licensor and Licensee* § 765

§ 364. General Statement.

No statutory provision exists except that relating to government employees. Those provisions and the special rulings as to employees of the government will be found under the title *Government*. Questions of title and rights as between employers and employees will also be found under *Assignment* and *License*.

§ 365. Contract — Future Inventions.

Complainant and defendant contracted that in consideration of the employment of defendant and wages paid him, defendant would give complainant the exclusive use of any improvements he might make upon their particular machines while in their employ or after. *Held:* such argument to be neither unconscionable, unreasonable nor contrary to public policy. — Bonsack *v.* Hulse, 65 Fed. 864; 13 C. C. A. 180.

Registering Co. *v.* Sampson, L. R. 19 Eq. 465; 1 Sedg. Dam. 455; Horner *v.* Graves, 7 Bing. 735; Ammunition *v.* Nordenfelt, 1 Ch. 630; Match *v.* Rosber, 106 N. Y. 473; Morse *v.* Morse, 103 Mass. 73.

We now pass to the defence that the contract was not enforceable in equity upon the theory of lack of consideration and lack of mutuality. This contract, however, was not without consideration. It was not only by its own express terms in consideration of the employment of the defendant, but this contract was signed and delivered before the employment actually commenced, and before the defendant was permitted to enter the complainant's factory. The hiring, the engagement to pay wages and the introduction of the defendant into the complainant's establishment and to its methods and processes, constituted a valid consideration for his agreement to assign his inventions made during the term of employment. — Mississippi *v.* Franzen, 143 Fed. 501; 74 C. C. A. 135.

Bonsack *v.* Hulse, 65 Fed. 864; Thibodeau *v.* Hildreth, 124 Fed. 892; Rob. Pat. sec. 414; Green *v.* Richards, 23 N. J. Eq. 32, 35; Grove *v.* Hodge, 55 Pa. 504, 516.

§ 366. License — Implied.

For equitable rights of employer, see Hapgood *v.* Hewitt, 119 U. S. 226; 30 L. Ed. 369; 7 S. Ct. 193.

Distinguishing: McClurg *v.* Kingsland, 42 U. S. 202; Continental *v.* Empire, 8 Blatchf. 295; Whiting *v.* Graves 3 B. &. A. 222; Wilkins *v.* Spafford, 3 B. & A. 274.

An employee or shop license growing out of the employment of the inventor, confers an unassignable right only. — Hapgood *v.* Hewitt, 119 U. S. 226; 30 L. Ed. 369; 7 S. Ct. 193.

Troy *v.* Corning, 55 U. S. 193; Oliver *v.* Rumford, 109 U. S. 75.

Where the employee invents in the line of his employment with the tools and at the expense of his employer, the fact that his wages are not increased on account of such services as was the case in McClurg *v.* Kingsland, 42 U. S. 202, makes no vital difference. — Solomons *v.* U. S. 137 U. S. 342; 34 L. Ed. 667; 11 S. Ct. 88.

When employee allows his invention to be constructed and used by his employer before patent he cannot claim royalty or right of injunction thereafter. — Dable *v.* Flint, 137 U. S. 41; 34 L. Ed. 618; 11 S. Ct. 8.

Wade *v.* Metcalf, 129 U. S. 202.

Where employee makes an invention in the shops and with the tools of employer, the employer gains an implied license, and such implied license may be succeeded to by a corporation as successor in business, if such course is acquiesced in by the inventor. — Lane *v.* Locke, 150 U. S. 193; 37 L. Ed. 1049; 14 S. Ct. 78.

McClurg *v.* Kingsland, 42 U. S. 202; Solomons *v.* U. S. 137 U. S. 342.

When an employee made and introduced his invention in employer's furnaces and told his employer he could use the same so long as he remained in defendant's employ, such facts gave defendant an implied license, at least during the period of employment of plaintiff. — Keyes *v.* Eureka, 158 U. S. 150; 39 L. Ed. 920; 15 S. Ct. 772.

The fact that the invention was made and the drawings prepared outside the hours and the shops of the employer, so long as the invention was reduced to practice and made in the employer's shops by the employee and with his consent, does not secure him the right to damages for infringement by his employer. — Gill *v.* U. S. 160 U. S. 426; 40 L. Ed. 480; 16 S. Ct. 322.

An employee paid by salary or wages, who devises an important method of doing his work, using the property or labor of his employer to put his invention into practical form, and assenting to the use of such improvements by his employer, cannot, by taking out a patent upon such invention, recover a royalty or other compensation for such use. — Gill *v.* U. S. 160 U. S. 426; 40 L. Ed. 480; 16 S. Ct. 322.

Pennock *v.* Dialogue, 27 U. S. 1; Grant *v.* Raymond, 31 U. S. 218; McClurg *v.* Kingsland, 42 U. S. 202; Solomons *v.* U. S. 137 U. S. 342; Lane *v.* Locke, 150 U. S. 193; McAleer *v.* U. S. 150 U. S. 424; Keyes *v.* Eureka, 158 U. S. 150.

There was some evidence to show that the original patterns were destroyed by fire before the machines sold by appellant were made and it is insisted that the scope of the license should be limited by the life of the identical patterns. The duration and scope of a license must depend upon the nature of the invention and the circumstances out of which an implied license is presumed, and both must at last depend upon the intention of the parties. — Withington *v.* Kinney, 68 Fed. 500; 15 C. C. A. 531.

Rob. Pat. secs. 809-811; Montross *v.* Mabie, 30 Fed. 4.

Complainant was employed as an expert machinist to devise and construct an improved machine and to direct the making of patterns for the same for machine to be made and sold. Later, complainant obtained a patent, and after ten years brought suit. *Held:* Upon this state of facts, we conclude that the appellee must be presumed to have granted to appellant's licensor a personal license to make and sell machines embodying the improvements covered by his patent. — Withington *v.* Kinney, 68 Fed. 500; 15 C. C. A. 531.

McClurg *v.* Kingsland, 1 How. 202; Solomons *v.* U. S. 137 U. S. 342; Lane *v.* Locke, 150 U. S. 193; Hapgood *v.* Hewitt, 119 U. S. 226.

The case is, therefore, of an inventor, who was a workman in the employ of another, manufactures for him, in his shop, and with his materials, and upon weekly wages, machines which the employer uses as a part of his tools, without knowledge of any objection thereto, and for which the inventor during the terms of his employment, obtains a patent and thereafter seeks to restrain the employer from the use of the particular machine or machines which had been thus made in the employer's shop, under the supervision of the employee, and apparently as a part of his ordinary mechanical work. On the authority of Gill *v.* U. S., 160 U. S. 426, the employee-patentee was estopped. — Blauvelt *v.* Interior, 80 Fed. 906; 26 C. C. A. 243.

§ 367. Rights of — Employee.

Persons employed, as much as employers, are entitled to their own independent inventions, and if the suggestions communicated constitute the

whole substance of the improvement the rule is otherwise, and the patent, if granted to the employer, is invalid because the real invention or discovery belongs to the person who made the suggestion. — Union *v.* Vandeusen, 90 U. S. 530; 23 L. Ed. 128.

Agawam *v.* Jordan, 7 Wall. 602.

When a person has discovered a new and useful principle in a machine manufacture or composition of matter, he may employ other persons to assist in carrying out that principle, and if they, in the course of experiments arising from that employment, make discoveries ancillary to the plan and preconceived design of the employer, such suggested improvements are in general to be regarded as the property of the party who discovered the original principle, and they may be embodied in his patent as part of his invention. — Union *v.* Vandeusen, 90 U. S. 530; 23 L. Ed. 128.

As to rights of a person employed to invent, see Hapgood *v.* Hewitt, 118 U. S. 226; 30 L. Ed. 369; 7 S. Ct. 193.

McClurg *v.* Kingsland, 42 U. S. 202; Continental *v.* Empire, 8 Blatchf. 295; Whiting *v.* Graves, 3 B. & A. 222; Wilkins *v.* Spafford, 3 B. & A. 274.

In the absence of evidence of an agreement that the employer should have any interest in any patentable improvement which the employee might make during the period of his employment, it would seem that the title to the invention made or to any patent subsequently obtained by him, would be unaffected by the fact of his service and in the use of his employer's shop, materials and the service of his employees while devising and perfecting his invention. — Withington *v.* Kinney, 68 Fed. 500; 15 C. C. A. 531.

Hapgood *v.* Hewitt, 119 U. S. 226.

§ 368. Rights of — Employer.

The inventor, while in the employ of the defendant made his invention and perfected the same with the tools and while under pay of defendant, and in his shops. Defendant increased the inventor's wages by reason of such invention. The invention was put in practice by plaintiff in defendant's shops and used without any agreement or license. Subsequently the inventor quit from another cause and this suit was brought. *Held:* That such employment and conduct gave the employer a shop right to said invention. — McClurg *v.* Kingsland, 1 How. 202; 11 L. Ed. 102.

Note: This leading case has generally been construed too broadly. The court did not hold in express terms that the mere employment or the extra pay constituted the license, independent of the subsequent conduct. This case is good for what it holds, but it by no means establishes the relations of employer and employee definitely.

Persons employed, as much as employers, are entitled to their own independent inventions, but where the employer has conceived the plan of an invention and is engaged in experiments to perfect it, no suggestion from an employee, not amounting to a new method or arrangement, is sufficient to deprive the employer of the exclusive property in the perfected improvement. But where the suggestions go to make up a complete and perfect machine, embracing the substance of all that is embodied in the patent subsequently issued to the party to whom the suggestions were made, the patent is invalid, because the real invention or discovery belonged to another. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.

Pitts *v.* Hall, 2 Blatchf. 234; Allen *v.* Rawson, 1 Man. G. & S. 574; Alden *v.* Dewey, 1 Story, 336; Minters Pat. 1 Web. P. C. 132; Curt. Pat. 99; Reed *v.* Cutter, 1 Story, 599.

No one is entitled to a patent for that which he did not invent unless he can show a legal title to the same from the inventor or by operation of law; but when a person has discovered an improved principle in a machine, manufacture or composition of matter, and employs other persons to assist him in carrying out that principle, and they in the course of experiments arising from that employment make valuable discoveries ancillary to the plan and preconceived design of the employer, such suggested improvements are in general to be regarded as the property of the party who discovered the original improved principle, and may be embodied in his patent as a part of his invention. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.

A manufacturing corporation which has employed a skilled workman, for a stated compensation, to take charge of its works, and to devote his time and services to devising and making improvements in articles there manufactured, is not entitled to a conveyance of patents obtained for inventions made by him while so employed, in the absence of express agreement to that effect. — Dalzell *v.* Dueber, 149 U. S. 315; 37 L. Ed. 749; 13 S. Ct. 886.
Hapgood *v.* Hewitt, 119 U. S. 226.

That an agreement by an employee to keep forever secret for the benefit of his employer any invention or discovery he may make during the term of his employment, is not unconscionable, see Thibodeau *v.* Hildreth, 124 Fed. 892; 60 C. C. A. 78.

We do not think that defendant is estopped, by reason of the relation of the parties and his own conduct, to deny such equitable title in complainant. Both must rest upon the same basis of fact and law. Whether the complainant would have been justified in claiming what is called a shop right or a right to a license, irrevocable or otherwise, is not the question raised by its bill. The claim is for the whole and exclusive title, and the demand for a legal assignment of the same. — Pressed Steel *v.* Hansen, 137 Fed. 403; 71 C. C. A. 207.

§ 369. Miscellaneous Rulings.

Suggestions from another, made during the progress of experiments, in order that they may be sufficient to defeat a patent subsequently issued, must have embraced the plan of the improvement and must have furnished such information to whom the communication was made that it would have enabled an ordinary mechanic, without the exercise of any ingenuity and special skill on his part to construct and put the improvement in successful operation. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.

This evidence brings the case clearly within the terms of the decision of McClurg *v.* Kingsland, 1 How. 202, where it was declared that if a person employed in the manufactory of another, while receiving wages, makes experiments at the expense and in the manufactory of the employer has his wages increased in consequence of the useful result of the experiments, makes the article invented, and permits his employer to use it, no compensation for its use being paid or demanded, and then obtains a patent for it, the patent is invalid and void.

And as the employer could defend himself on the ground of public use, so could a third person.

And the fact that the employer just before application purchased an in-

terest in the patent to be granted does not avoid the fact of public use by him. — Worley *v.* Loker, 104 U. S. 340; 26 L. Ed. 821.

Pardy was a mechanic and patent solicitor. Hooker employed him to get up a machine and gave Pardy his own ideas as to how the desired result could be accomplished. The agreement was that Hooker was to pay all cost of the work and pay Pardy for his services, and was to own and control the patent that should be issued covering the machine. Hooker paid all the cost of the machines and paid Pardy in full. We are of opinion that such suit (for infringement) cannot be sustained, in view of the distinct agreement between Hooker and Pardy. We are of the opinion, however, that the court below was, in view of the evidence, in error in adjudging Pardy was not the inventor of the machine patented. Hooker knew, or must be held to have known, that such patent could not have been issued except upon the oath that Pardy was the inventor. Hooker did not himself apply for such patent, and there is nothing to indicate that he ever contemplated doing so. It is true, as has been said, that he gave Pardy his own ideas and employed him to get up such a machine as he (Hooker) desired, but the accomplishment of the desired end was evidently left to Pardy. The court should not have adjudged the patent to be void, or that Pardy was not the inventor. — Pardy *v.* Hooker, 148 Fed. 631; 78 C. C. A. 403.

EQUITY.

The Statutes § 370
Jurisdiction § 371
Miscellaneous § 372
See — Actions § 24; *Damages* § 282; *Decrees* § 301; *Defenses* § 306; *Injunction* § 533; *Interferences* § 582; *Interfering Patents* § 586; *Jurisdiction* §§ 717–20; *Pleading and Practice* § 788; *Profits* § 825

§ 370. The Statutes.

General jurisdiction of courts of equity in patent causes is given under 629 R. S. The specific powers of courts of equity in such actions is found in 4921 R. S., from which is quoted:

> The several courts vested with jurisdiction of cases arising under the patent laws shall have power to grant injunctions according to the course and principles of courts of equity, to prevent the violation of any right secured by patent, on such terms as the court may deem reasonable; and upon a decree being rendered in any such case for an infringement, the complainant shall be entitled to recover, in addition to the profits to be accounted for by the defendant, the damages the complainant has sustained thereby; and the court shall assess the same or cause the same to be assessed under its direction. And the court shall have the same power to increase such damages, in its discretion, as is given to increase the damages found by verdicts in actions in the nature of actions of trespass upon the case.
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> * * * * * * * * * * * *
>
> That said courts (U. S. district courts), when sitting in equity for the trial of patent causes, may empanel a jury of not less than five and not more than twelve persons, subject to such general rules in the premises as may, from time to time, be made by the Supreme Court, and submit to them such questions of fact arising in such cause as such circuit court shall deem expedient.
>
> And the verdict of such jury shall be treated and proceeded upon in the same manner and with the same effect as in the case of issues sent from chancery to a court of law and returned with such findings.

Further consideration of this subject will be found under *Jurisdiction*, especially under §§ 717–720.

§ 371. Jurisdiction.

A bill in equity for a naked account of profits and damages against an infringer cannot be sustained; that such relief ordinarily is incidental to some other equity, the right to enforce which secures to the patentee his standing in court; that the most general ground for equitable interposition is, to recover to the patentee the enjoyment of his specific right by injunction, against a continuance of the infringement, but that grounds of equitable relief may arise other than by way of injunction as when the title of the complainant is equitable merely, or equitable interposition is necessary on account of the impediments which prevent a resort to remedies purely legal; and such an equity may arise out of and inhere in the nature of the account itself, springing from special and peculiar circumstances which disable the patentee from a recovery at law altogether, or render his remedy in a legal tribunal difficult, inadequate and incomplete; and as such cases cannot be defined more exactly, each must rest upon its own peculiar circumstances, as furnishing a clear and satisfactory exception from the general rule. — Root *v.* Ry. 105 U. S. 189; 26 L. Ed. 975.

It is the fundamental characteristic and limit of the jurisdiction in equity that it cannot give relief where there is a plain and adequate and complete remedy at law; and hence it has no original, independent and inherent power to afford redress for breaches of contract or torts by awarding damages: for to do that was the very office of proceedings at law. When, however, relief was sought which equity alone could give, as by way of injunction to prevent a continuance of the wrong, in order to avoid multiplicity of suits and to do complete justice, the court assumed jurisdiction to award compensation for the past injury, not, however, by assessing damages, which was the peculiar office of a jury, but requiring an account of profits, on the ground that if any had been made, it was equitable to require the wrong doer to refund them, as it would be inequitable that he should make a profit out of his own wrong. — Root *v.* Ry., 105 U. S. 189; 26 L. Ed. 975.

It is impossible, we think, to maintain that the Act of 1870 was meant to obliterate the distinctions between the two jurisdictions, or even to confuse the boundaries between them. It is the settled doctrine of this court that this distinction of jurisdiction between law and equity, is constitutional to which the 7th Amendment forbids any infringement of the right of trial by jury, as fixed by the common law. And the doctrine applies to patent cases as well as to others. — Root *v.* Ry. 105 U. S. 189; 26 L. Ed. 975.

A court of equity is to decide on the law and fact (LeGuen *v.* Gouveneur, 1 Johns. Cas. 500) and an appeal in equity is an appeal upon the law and fact involved in the case (Adams, Eq., 375) and that, "in absence of any restrictive clauses, every appellate tribunal is clothed with all the powers of the tribunal appealed from, and is bound to exercise them upon the same principles," (Briggs Petition, 29 N. H. 553) and "ordinarily, from the nature of judgments, the decision of an appellate tribunal must have as great force, at least, as the judgment of the inferior tribunal upon the same matter would have if no appeal had been taken." (Blake *v.* Oxford, 64 N. H. 302.) — Richmond *v.* Atwood, 52 Fed. 10; 2 C. C. A. 596.

For general discussion of equity jurisdiction see Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

Hoe *v.* Knapp, 27 Fed. 204; New York *v.* Hollingsworth, 56 Fed. 224; Packard *v.* Lacing, 70 Fed. 66; Germain *v.* Wilgus, 67 Fed. 598; Root *v.* Railway, 105 U. S. 189; Shaw *v.* Cooper, 7 Pet. 292; Walk. Pat. sec. 106.

§ 372. Miscellaneous.

We are aware of no rule which converts a court of equity into an instrument for the punishment of simple torts. — Livingston *v.* Woodworth, 15 How. 546; 14 L. Ed. 809.

A court of equity will not interfere to enjoin even a pending suit at law, much less the bringing of one, in the future, when the theory of the bill is that there is a perfect defense to each suit. — Hapgood *v.* Hewitt, 119 U. S. 226; 30 L. Ed. 369; 7 S. Ct. 193.

Grand *v.* Winegar, 82 U. S. 373; 1 High Injunctions, secs. 89–93 & cases.

A court of equity will not grant a decree on another ground, where the bill charges actual fraud as the ground of relief, and the fraud is not proven. — Dashiell *v.* Grosvenor, 66 Fed. 334; 13 C. C. A. 593.

The evidence also shows that Tremaine & Pain had constructed the apparatus, and put it in use in the hall of the Aeolian Company in New York on an organ of the Ferrand & Votey Organ Company built for the Aeolian Company, as early as 1895, and it was there publicly used and exhibited in actual use for playing the organ for at least two years. This was sufficient to enable appellees to maintain this action without showing that it had been in constant use ever since. — Los Angeles *v.* Aeolian, 143 Fed. 880; 75 C. C. A. 88.

Pitts *v.* Wemple, 1 Biss. 87; Stitt *v.* Easton, 22 Fed. 649; Masseth *v.* Johnston, 59 Fed. 613.

Note: This rule (Hawley, J., Gilbert and Morrow, J. J., concurring) is, to say the least startling, if the opinion is correctly reported. It will be noted that the patent sued on is that to Tremaine & Pain, and that the *use* shown by the evidence was that of *the complainant and its predecessor in business of the device of the patent in suit.*

EQUIVALENTS.

General Statement and Definitions § 373
Combinations § 374
Generic Inventions § 375
Improvements § 376 (*see* § 430)
Known Elements § 377
Range § 378
Identity § 379
Miscellaneous Rulings § 380
See — Claims § 194; *Infringement* §§ 468, 499, 528; *Process* § 816; *Specification* § 909

§ 373. General Statement and Definitions.

The Patent Statute does not use the word equivalent. The doctrine has been long and slow in development; and since, in every case, the question is likely to be quite as much a question of fact as of law, the rules which have been established should be regarded rather as rules of evidence than as fixed rules. The subject of equivalents also arises under *Claims — Construction*, and under *Infringement — Combinations — Identity*.

The term equivalent, when speaking of machines, has a certain definite meaning, but when used with regard to chemical action of such fluids as can be discovered only by experiment, it only means equally good. — Tyler *v.* Boston, 74 U. S. 327; 19 L. Ed. 93.

Devices in one machine may be called by the same name as those contained in another, and yet they may be quite unlike in the sense of the patent law, in a case where those in one of the machines perform different functions from those in the other. In determining about similarities and differences, courts of justice are not governed merely by the names of things; but they look at the machines and their devices in the light of what they do or what office or function they perform, and how they perform it, and find that a thing is substantially the same as another, if it performs substantially the same function or office in substantially the same way to obtain substantially the same result, and that devices are substantially different when they perform different duties in a substantially different way, or produce a substantially different result. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

Cahoon *v.* Ring, 1 Cliff. 620.

Equivalents may be claimed by a patentee of an invention consisting of a combination of old elements or ingredients, as well as of any other valid patented improvement, provided the arrangement of parts comprising the invention is new, and will produce a new and useful result. Such a patentee may doubtless invoke the doctrine of equivalents as against an infringer of the patent; but the term "equivalent" as applied to such an invention, is special in its signification, and somewhat different from what is meant when the term is applied to an invention consisting of a new device or an entirely new machine. — Imhauser *v.* Buerk, 101 U. S. 647; 25 L. Ed. 945.

In this sense the mechanical devices used by the defendant are known substitutes or equivalents employed in complainant's machine to effect the same result; and this is the proper meaning of the term "known equivalent," in reference to a pioneer machine such as that of complainant. Otherwise, a difference in the particular devices used to accomplish a particular result in such a machine would always enable a defendant to escape the charge of infringement, provided such devices were new with the defendant in such a machine, because, as no machine for accomplishing the result existed before that of the plaintiff, the particular device alleged to avoid infringement could not have existed or been known in such a machine prior to the plaintiff's invention. — Morley *v.* Lancaster, 129 U. S. 263; 32 L. Ed. 715; 9 S. Ct. 299.

An equivalent, in the law of patents, is defined to be "any act or substance which is known in the arts as a proper substitute for some other art or substance, employed already as an element in an invention, whose substitution for that other act or substance does not in any manner vary the idea of means. It possesses three characteristics: (1) It must be capable of performing the same office in the invention as the act or substance whose place it supplies; (2) it must relate to the form of embodiment alone, and not affect in any degree the idea of means; (3) it must have been known in the arts, at the date of the patent, as endowed with this capability." — Duff. Mfg. Co. *v.* Forgie, 59 Fed. 772; 8 C. C. A. 261.

1 Rob. Pat. sec. 247.

One who claims and secures a patent for a new machine thereby necessarily claims and secures a patent for every mechanical equivalent for the device, because, within the meaning of the patent law, every mechanical equivalent of a device is the same thing as the device itself. A device which is constructed on the same principle, which has the same mode of operation, and which accomplishes the same result as another by the same means, or by equivalent mechanical means, is the same device, and a claim in a patent for one such device claims and secures the other. — Lourie *v.* Lenhart, 130 Fed. 122; 64 C. C. A. 456.

Machine Co. *v.* Murphy, 97 U. S. 120.

An equivalent is defined as a thing which performs the same function, and performs that function in substantially the same manner, as the thing of which it is alleged to be an equivalent. But in the application of rules on the subject we must have in view the patent alleged to be infringed. If it is for a primary invention — one which performs a function never performed by an earlier invention — the patentee will have the right to treat as infringers those who make or use machines operating on the same principle and performing the same functions by analogous or equivalent combinations, even though the infringing machine may be an improvement of the original. But if the invention is a secondary invention, that is, one which performs a function previously performed by earlier inventions, but which performs that function in a substantially different way from any which preceded it; an improvement on a known machine by a mere change of form or a new combination of parts, the patentee cannot treat another as an infringer who has improved the original machine by the use of a different form or combination performing the same functions. The first inventor of improvements cannot invoke the doctrine of equivalents and suppress all other improvements. — Central *v.* Coughlin, 141 Fed. 91; 72 C. C. A. 93.

A mechanical equivalent which may be substituted for an omitted mechanical element in a combination claim is one that performs the same function by applying the same course to the same object through the same means and mode of application. — Hardison *v.* Brinkman, 156 Fed. 962; 87 C. C. A. 8.

§ 374. Combinations.

A combination is substantially different from that patented when the substitute for the ingredient left out to perform the same function was not known as a proper substitute therefor when the invention was patented. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Old ingredients known at the date of the letters patent granted for an invention, consisting of a combination of old ingredients, if also known at that date as a proper substitute for one or more of the ingredients of the invention secured by the letters patent, are the equivalents of the corresponding ingredients of the patented combination. Such old ingredients so known at the date of the letters patent granted, are the equivalents of the ingredients of the patented combination, and no others, and it may be added that that and that only, is what is meant by the rule that inventors of a new combination of old ingredients are as much entitled to claim equivalents as any other class of inventors. — Gill *v.* Wells, 89 U. S. 1; 22 L. Ed. 699.

Gould *v.* Rees, 15 Wall. 194.

A party who merely substitutes another old ingredient for one of the ingredients of a combination is an infringer, if the substitute performs the same function as the ingredient for which it was substituted, and was well known at the date of the patent as a proper substitute for the omitted ingredient; but the rule is otherwise if the ingredient substituted was a new one or performed substantially a different function, or was not known at the date of the plaintiff's patent as a proper substitute for the one omitted, as in that event he does not infringe. — Gill *v.* Wells, 89 U. S. 1; 22 L. Ed. 699.

Roberts *v.* Harnden, 2 Cliff. 504.

By an equivalent in such a case is meant that the ingredient substituted for the one withdrawn performs the same function as the other, and that it was well known at the date of the patent securing the invention as a proper

substitute for the one omitted in the patented combination. — Gill *v.* Wells, 89 U. S. 1; 22 L. Ed. 699.

Gould *v.* Rees, 15 Wall. 194.

A patent for a novel combination may invoke the doctrine of equivalents. — Norton *v.* Jensen, 9 Fed. 859; 1 C. C. A. 452.

Imhauser *v.* Buerk, 101 U. S. 655; Norton *v.* Can Co. 45 Fed. 638; Carter *v.* Baker, 1 Sawy. 516; Seymour *v.* Osborne, 11 Wall. 516; Machine Co. *v.* Murphy, 97 U. S. 125; Wicke *v.* Ostrum, 103 U. S. 469.

We do not say what the result might be if the patentee makes his description of the elements of his combination broad enough to include in each or any of them any kind of mechanism adapted to produce the same result as a step in the operation. — Wells *v.* Curtis, 66 Fed. 318; 13 C. C. A. 494.

Phoenix *v.* Spiegel, 133 U. S. 360.

"Mechanical equivalents" as the phrase is to be understood in this connection, are such devices as were known previously, and which, in the particular combinations of devices specified as constituting the patented invention, can be adapted to perform the functions of those specified devices for which they are employed as substitutes without changing the inventor's idea of means. In other words, without introducing an original idea, producing, as the result of it, an improvement which is itself a patentable invention. — Jensen *v.* Norton, 67 Fed. 236; 14 C. C. A. 383.

Rob. Pat. 248, 253, 254.

And here it may be remarked in applying the doctrine of equivalents, a distinction is made between inventions of specific devices and inventions of combinations. In a simple invention the range of equivalents is much wider than in a combination. In the former a change which would be held to be a substitution of equivalents may in the latter be considered to be an introduction of a new idea of means. Therefore it is said, with reference to such elements in any combination as constitute its subordinate means, no other element can be equivalent unless they are equivalent inventions; that is, unless they not merely perform the same functions, but perform them by applying the same force to the same object through the same mode of application. It is only when an invention is broad and primary in its character, and the mechanical functions performed by the machine are, as a whole, entirely new that the courts are disposed to make the range of equivalents correspondingly broad. — Erie *v.* American, 70 Fed. 58; 16 C. C. A. 632.

1 Rob. Pat. 254; Wells *v.* Curtis, 66 Fed. 318; Miller *v.* Mfg. Co. 151 U. S. 207.

The doctrine of mechanical equivalents is governed by the same rules and has the same application when the infringement of a patent for a combination is in question as when the issue is over an infringement of a patent for any other invention. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Schroeder *v.* Brammer, 98 Fed. 880; Imhauser *v.* Buerk, 101 U. S. 647; Griswold *v.* Harker, 62 Fed. 389; Thomson *v.* Bank, 53 Fed. 250; Seymour *v.* Osborne, 11 Wall. 516; Gould *v.* Rees, 15 Wall. 187; Fay *v.* Cordesman, 109 U. S. 408; Water-Meter Co. *v.* Desper, 101 U. S. 332; Gage *v.* Herring, 107 U. S. 640; Machine Co. *v.* Murphy, 97 U. S. 120; National *v.* American, 53 Fed. 367; Belding *v.* Challenge, 152 U. S. 100.

The doctrine of mechanical equivalents is governed by the same rules and has the same application when the infringement of a patent for a com-

bination is in question as when the issue is over the infringement of a patent for any other invention. — Brammer *v.* Schroeder, 106 Fed. 918; 46 C. C. A. 41.

Imhauser *v.* Buerk, 101 U. S. 647; Griswold *v.* Harker, 62 Fed. 389; Thomson *v.* Bank, 53 Fed. 250; Seymour *v.* Osborne, 11 Wall. 516; Gould *v.* Rees, 15 Wall. 187; Fay *v.* Cordesman, 109 U. S. 408; Water-Meter Co. *v.* Desper, 101 U. S. 332; Gage *v.* Herring, 107 U. S. 640; Machine Co. *v.* Murphy, 97 U. S. 120; National *v.* American, 53 Fed. 367; Belding *v.* Challenge, 152 U. S. 100.

The learned judge who decided the case below had no doubt "that the defendant's straps and buckles are an equivalent of the complainant's cords and hooks," and in this we agree with him; but he held that the complainants were not entitled to invoke the doctrine of equivalency, and this ruling we think was erroneous. By the changes in phraseology which were made pending the application, nothing can fairly be said to have surrendered or disallowed that which the third claim as finally approved plainly indicated. That claim, as broadly expressed, is for "lacing devices;" and it is not to be implied that either the Patent Office on the one side or the applicant on the other contemplated any limitation of it which would admit of its evasion by means so palpably colorable as the substitution of straps for cords and buckles for hooks. In no case is a patentee to be denied protection commensurate with the scope of his actual and distinctly described and claimed invention by excluding him from the benefit of the doctrine of equivalents. That doctrine should have been applied; for it is plainly obvious that the departures made by the defendant are merely formal, "and of such character as to suggest that they are studied evasions of those described in the claim in issue." — Lepper *v.* Randall, 113 Fed. 627; 51 C. C. A. 337.

Hillborn *v.* Mfg. Co., 69 Fed. 958; Societe *v.* Rehfuss, 75 Fed. 657; Bundy *v.* Detroit, 94 Fed. 524; Boston *v.* Bemis, 80 Fed. 287.

The range of equivalents covered by the patent corresponds with the character of the invention, and includes all forms which embody the substance of the invention, and by like mechanical co-operation effect substantially the same result. — Dowagiac *v.* Brennan, 127 Fed. 143; 62 C. C. A. 257.

In a combination patent for an improvement in the arrangement or adaptation of old elements, the inventor is not entitled to a broad interpretation of the doctrine of mechanical equivalents, so as to cover a device not specifically included in his claims and specifications. — Hardison *v.* Brinkman, 156 Fed. 962; 87 C. C. A. 8.

Miller *v.* Eagle, 151 U. S. 186.

§ 375. Generic Inventions.

If the patentee be the original inventor of a device or machine, he will have the right to treat as infringers all who make devices operating on the same principle, and performing the same functions by analogous means or equivalent combinations, even though the infringing machine may be an improvement of the original and patentable as such. — McCormick *v.* Talcott, 61 U. S. 402; 15 L. Ed. 930.

The combination of the first claim of the patent being new, and, consequently never having been applied in such a combination, the complainant is entitled to the doctrine of equivalents as applied to the combination. — Clough *v.* Gilbert, 106 U. S. 166; 27 L. Ed. 138; 1 S. Ct. 198.

If the state of the art was such as to entitle the patentee to a broad claim for any device for performing the function by such or similar means, the defendants would infringe. — Newton *v.* Furst, 119 U. S. 373; 30 L. Ed. 442; 7 S. Ct. 369.

Where an invention is one of a primary character, and the mechanical functions performed by the machine are, as a whole, entirely new, all subsequent machines which employ substantially the same means to accomplish the same result are infringements, although the subsequent machine may contain improvements in the separate mechanisms which go to make up the machine. — Morley *v.* Lancaster, 129 U. S. 263; 32 L. Ed. 715; 9 S. Ct. 299.

McCormick *v.* Talcott, 61 U. S. 402; Chicago *v.* Sayles, 97 U. S. 554; Clough *v.* Barker, 106 U. S. 166; Duff *v.* Sterling, 107 U. S. 636; Consolidated *v.* Crosby, 113 U. S. 157; Tilghman *v.* Proctor, 102 U. S. 707; Nelson *v.* Hartford, 1 Web. P. C. 295.

Where an inventor has combined for the first time one organization of mechanism for performing all the several steps of an entire machine process, his invention is infringed by another employing three sets of mechanism in combination, provided each mechanism individually considered is a proper equivalent for the corresponding mechanism of the former patent, and the fact that the mechanism is more simple makes no difference. — Morley *v.* Lancaster, 129 U. S. 263; 32 L. Ed. 715; 9 S. Ct. 299.

In the case of a pioneer patent, where the specification has described or indicated an alternative construction, the claims will be construed to include such alternative construction. — Morley *v.* Lancaster, 129 U. S. 263; 32 L. Ed. 715; 9 S. Ct. 299.

It is well settled that a greater degree of liberality and a wider range of equivalents are permitted where the patent is of a pioneer character than when the invention is simply an improvement, may be the last and successful step, in the art theretofore partially developed by other inventors in the same field. — Cimiotti *v.* American, 198 U. S. 399; 49 L. Ed. 1100; 25 S. Ct. 697.

Westinghouse *v.* Boyden, 170 U. S. 537; Singer *v.* Cramer, 192 U. S. 265.

General application of doctrine and full discussion of the cases in Reece *v.* Globe, 61 Fed. 958; 10 C. C. A. 194.

Morley *v.* Lancaster, 129 U. S. 263; Mfg. Co. *v.* Adams, 151 U. S. 139; Miller *v.* Mfg. Co. 151 U. S. 186; Union *v.* U. S. 112 U. S. 624; Brooks *v.* Fisk, 15 How. 212; Klein *v.* Russell, 19 Wall. 433; Vulcanite *v.* Davis, 102 U. S. 222; Béné *v.* Jeantet, 129 U. S. 683; Gordon *v.* Warder, 150 U. S. 47; Keystone *v.* Phoenix, 95 U. S. 274; Fay *v.* Cordesman, 109 U. S. 408; Mfg. Co. *v.* Sargent, 117 U. S. 373; Dryfoos *v.* Wiese, 124 U. S. 32; Burns *v.* Meyer, 100 U. S. 671; Huber *v.* Mfg. Co. 148 U. S. 270; Brown *v.* Mfg. Co. 57 Fed. 731; Winans *v.* Denmead, 15 How. 330; Sewall *v.* Jones, 91 U. S. 171; Eddy *v.* Dennis, 95 U. S. 560; Werner *v.* King, 96 U. S. 218; Electric *v.* LaRue, 139 U. S. 601; Hoyt *v.* Horne, 145 U. S. 302; Lehigh *v.* Mellon, 104 U. S. 112.

The question of infringement is controlled by the principles restated in Machine Co. *v.* Lancaster, 129 U. S. 263, and confirmed in subsequent and recent cases (Miller *v.* Mfg. Co. 151 U. S. 186) and which makes these actual differences, which would be important in a subordinate patent, unessential when a patent for a pioneer invention is under examination. If such differences should be regarded by courts as essential, when the claims do not make

the specific devices essential, patents for pioneer inventions would ordinarily have but little value. — Westinghouse *v.* N. Y. 63 Fed. 962; 11 C. C. A. 528.

If the invention had been of a time recorder, as a new thing containing these parts, the claims might cover all modes of so bringing the impression platen into operation, but as it was, they can cover only substantially these means. — Bundy *v.* Columbian, 64 Fed. 851; 12 C. C. A. 442.

In view of prior inventions he cannot be deemed a "pioneer in the art," and therefore cannot invoke the doctrine of equivalents, as the courts apply that doctrine to primary inventions, so as to include all forms of devices which operate to perform the same functions or accomplish the same result. — Wells *v.* Curtis, 66 Fed. 318; 13 C. C. A. 494.

Miller *v.* Mfg. Co. 151 U. S. 186.

Whether he specifically claims in his patent the benefit of equivalents or not, the law allows them to him according to the nature of his patent. If it is a mere improvement on a successful machine, a mere tributary invention, or a device the novelty of which is confined by the past art to the particular form shown, the range of equivalents is narrowly restricted. If it is a pioneer patent with a new result, the range is very wide, and is not restricted by the failure of the patentee to describe and claim combinations of equivalents. Nothing will restrict the pioneer patentee's rights in this regard save the use of language in his specifications and claims which permits no other reasonable construction than one attributing to the patentee a positive intention to limit the scope of his invention in some particular to the exact form of the device he shows, and a consequent willingness to abandon to the public any other form, should it be adopted and prove useful. — McCormick *v.* Aultman, 69 Fed. 371; 16 C. C. A. 259.

Distinguishing, Keystone *v.* Phoenix, 95 U. S. 274; Brown *v.* Mfg. Co. 57 Fed. 731.

Winans *v.* Denmead, 15 How. 330; Vulcanite *v.* Davis, 102 U. S. 222; Reece *v.* Globe, 61 Fed. 958; Mfg. Co. *v.* Adams, 151 U. S. 139; Miller *v.* Mfg. Co. 151 U. S. 186.

Claim 1 of the patent in suit is a very broad one, and, as we held it valid, it would seem that no method of making the connection between the actuating jacks and the crank shaft, by means well known in the arts at the date of the patent, would evade it. — Bresnahan *v.* Tripp, 72 Fed. 920; 19 C. C. A. 237.

The pioneer inventor is entitled to a generic claim, under which will be included every species included within the genus. In addition to such generic claim, he may include in the same application, specific claims for one or more of the species. — Von Schmidt *v.* Bowers, 80 Fed. 121; 25 C. C. A. 323.

Machine Co. *v.* Lancaster, 129 U. S. 263; Clough *v.* Barker, 106 U. S. 166; Clough *v.* Mfg. Co. 106 U. S. 178; Rob. Pat. sec. 535; Hammerschley *v.* Seamon, 7 Fed. 584; Telephone *v.* Spencer, 8 Fed. 509; Machine Co. *v.* Teague, 15 Fed. 390; Mfg. Co. *v.* Buffalo, 20 Fed. 126; Brush *v.* Electric, 52 Fed. 945; Ex parte Nagle, 1870 Com. Dec. 137; Ex parte Howland, 12 O. G. 889.

An original inventor, a pioneer in the art, he who evolves the original idea and brings it to some successful, useful, and tangible result, is, by the law of patents, entitled to a broad and liberal construction of his claim; whereas an improver is only entitled, and justly so, to what he claims and nothing more. — Norton *v.* Jensen, 90 Fed. 415; 33 C. C. A. 141.

Note: The first half of this statement is good law; the latter half is not.

The right of an improver to equivalents is commensurate with the extent of his invention.

The McCarty patent, being found at the head of a class, though in a well developed art, is entitled to a liberal range of equivalency. — Lamson *v.* Hillman, 123 Fed. 416; 59 C. C. A. 510.

Consolidated *v.* Crosby, 113 U. S. 157; Morley *v.* Lancaster, 129 U. S. 263; National *v.* Interchangeable, 106 Fed. 693; Crown *v.* Aluminum, 108 Fed. 845.

§ 376. Improvements.

An inventor is not entitled, where his invention covers a particular machine for performing a given function, to claim equivalency in any machine which performs the same function. — Dryfoos *v.* Wiese, 124 U. S. 32; 31 L. Ed. 362; 8 S. Ct. 354.

Where the margin of invention is very narrow, the doctrine of equivalents cannot be invoked to make out infringement. — Doze *v.* Smith, 69 Fed. 1002; 16 C. C. A. 581.

A patent to the original inventor of a machine or construction, which first performs a useful function, protects him against all machines and constructions that perform the same function by equivalent mechanical devices. But a patent to one who has simply made a slight improvement on devices that perform the same function before as after the improvement is protected against those only which use the very improvement he describes and claims, or mere colorable evasions of it. — Murphy *v.* Excelsior, 76 Fed. 965; 22 C. C. A. 658.

McCormick *v.* Talcott, 20 How. 402; Stirrat *v.* Mfg. Co. 61 Fed. 980.

A mere improvement of a narrow character upon well-known devices for accomplishing the same purpose is not entitled to a liberal application of the doctrine of equivalents. — Muller *v.* Lodge, 77 Fed. 621; 23 C. C. A. 357.

Miller *v.* Mfg. Co. 151 U. S. 186; Wright *v.* Yuengling, 155 U. S. 47.

A broad claim, such as is now insisted upon, would make his claim void for anticipation. In view of the history of devices intended to perform the same function, his patent can only be saved by confining him to the specific form he has described and claimed. — Jeffrey *v.* Independent, 83 Fed. 191; 27 C. C. A. 512.

Knapp *v.* Morss, 150 U. S. 221; Miller *v.* Mfg. Co. 151 U. S. 186; Wells *v.* Curtis, 66 Fed. 318; Ney *v.* Mfg. Co. 69 Fed. 405.

This invention is in no sense one of a primary character, and complainant upon this ground is not entitled to that range of equivalents accorded to such an invention. — St. Louis *v.* National, 87 Fed. 885; 31 C. C. A. 265.

McCormick *v.* Talcott, 20 How. 402; Miller *v.* Mfg. Co. 151 U. S. 207; Bragg *v.* Fitch, 121 U. S. 478; Wells *v.* Curtis, 66 Fed. 318.

If his invention is one which has marked a decided step in the art, and has proven of value to the public, he will be entitled to the benefit of the rule of equivalents, though not in so liberal a degree as if his invention was of a primary character. — Bundy *v.* Detroit, 94 Fed. 524; 36 C. C. A. 375.

Miller *v.* Mfg. Co. 151 U. S. 186.

A patent to the original inventor of a machine which first performs a useful function protects him against all mechanisms that perform the same

function by equivalent mechanical devices, but a patent to one who simply made a slight improvement on a device that performed the same function before as after the improvement is protected only against those who use the very improvement that he describes and claims, or mere colorable evasions of it. — M'Bride *v.* Kingman, 97 Fed. 217; 38 C. C. A. 123.

Stirrat *v.* Mfg. Co., 61 Fed. 980; Murphy *v.* Excelsior, 76 Fed. 965; Adams *v.* Lindell, 77 Fed. 432.

He is not entitled to a monopoly of analogous means found in the old art. Subsequent improvers are equally free to accomplish the same general results by different means, if not purely colorable changes. The range of equivalents allowed to the combination must be so narrowed as to include nothing which is not substantially identical with the means employed. — Noonan *v.* Chester, 99 Fed. 90; 39 C. C. A. 426.

Knapp *v.* Morss, 150 U. S. 221; Wright *v.* Clinton, 67 Fed. 790; Wells *v.* Curtis, 66 Fed. 318.

The form he describes and claims is not of the essence of his invention, and the law allows a patentee any form which is the equivalent of that claim, unless he has expressly limited himself to the one claim he describes, or unless it is necessary to limit him to the specific form in order to save his patent from anticipation. Hoyt was not a pioneer. But his invention is purely a meritorious one. In such case he is not cut off from a reasonable range of equivalents measured by the advance he has made over older machines. — McSherry *v.* Dowagiac, 101 Fed. 716; 41 C. C. A. 627.

Bundy *v.* Detroit, 94 Fed. 524; Penfield *v.* Chambers, 92 Fed. 639; McCormick *v.* Aultman, 69 Fed. 371; Muller *v.* Tool Co. 77 Fed. 621.

That in the case of a narrow improvement, an attempt to invoke the doctrine of equivalents to make out infringement may result in defeating the claim of the patent, see Hobbs *v.* Gooding, 111 Fed. 403; 49 C. C. A. 414.

Hoyt, it is true, was not a pioneer; but his invention being meritorious, he is not cut off from a reasonable range of equivalents, measured by the advance he has made over older machines. — Dowagiac *v.* Minnesota, 118 Fed. 136; 55 C. C. A. 86.

Bundy *v.* Detroit, 94 Fed. 524; McSherry *v.* Dowagiac, 101 Fed. 716; Penfield *v.* Chambers, 92 Fed. 639; McCormick *v.* Aultman, 69 Fed. 371; Muller *v.* Tool Co. 77 Fed. 621.

The appellant's invention being obviously not a pioneer, but only an improvement upon the prior art, its claims cannot be given a liberal interpretation; but there is yet a right to a reasonable range of equivalents, measured by the character and extent of the improvement, and infringement cannot be avoided by mere colorable modifications of some of the elements, not essentially varying its principle or mode of operation. — Heekin *v.* Baker, 138 Fed. 63; 70 C. C. A. 559.

National *v.* Interchangeable, 106 Fed. 693; Dowagiac *v.* Minnesota, 118 Fed. 136; Standard *v.* Caster, 113 Fed. 162.

§ 377. Known Elements.

Repeated decisions of this court have settled the rule in such cases that if the ingredient substituted by the defendant for the one left out in the defendant's machine was a newly discovered one, or even an old one performing some new function, and was not known at the date of the plaintiff's patent as a proper substitute for the ingredient left out, the charge of infringement cannot be maintained. — Gill *v.* Wells, 89 U. S. 1; 22 L. Ed. 699.

Seymour *v.* Osborne, 11 Wall. 555; Vance *v.* Campbell, 1 Black, 428; Prouty *v.* Ruggles, 16 Pet. 341.

One point which may be considered in determining equivalents is the age of the two devices, or whether the alleged infringement was known and in force at the time of the granting of complainants' patent; the presumption being in such case that it was used as an equivalent, only to avoid the charge of infringement, and not as an improvement. — Jones *v.* Munger, 49 Fed. 61; 1 C. C. A. 158.

Refinery *v.* Matthiesson, 2 Fish. P. C. 629; O'Reilly *v.* Morse, 15 How. 123; Robertson *v.* Blake, 94 U. S. 732.

Other constructions may now appear to be equivalents, but they were not known to be such when the appellee's patent was issued, and the patentee did not mention them as such in his specifications. The doctrine of equivalents, therefore, does not aid the appellee. — Brown *v.* Stilwell, 57 Fed. 731; 6 C. C. A. 528.

Rowell *v.* Lindsay, 113 U. S. 97; Keystone *v.* Phoenix, 95 U. S. 274; Harris *v.* Allen, 15 Fed. 106; Mfg. Co. *v.* Rosenstock, 30 Fed. 67; Smith *v.* Putnam, 45 Fed. 202; Otley *v.* Walkins, 36 Fed. 323; Burns *v.* Meyer, 100 U. S. 671; Klein *v.* Russell, 19 Wall. 433.

The means by which this or any other result or function is accomplished may be many and various, and, if those several means are not mechanical equivalents, each of them is patentable. — Boyden *v.* Westinghouse, 70 Fed. 816; 17 C. C. A. 430.

A patent covers only known equivalents. — Magic *v.* Economy, 97 Fed. 87; 38 C. C. A. 56.

An attempt is made to escape from this conclusion under the rule that, if the element substituted for the one withdrawn has been discovered since the date of the patent, it cannot be said to be its mechanical equivalent. Gould *v.* Rees, 15 Wall. 187. But it is too plain for argument or serious consideration that there was neither discovery nor invention in perceiving and applying to the device of complainant the fact that an infusible metal secured by wax or other fusible material was the mechanical equivalent of, performed the same function and worked the same result as, the fusible plug of White, and could be effectually used as its substitute. The shot and the wax were not, therefore, newly discovered elements, but constituted a mere mechanical substitute for the element which White described and claimed. — Kinloch *v.* Western, 113 Fed. 652; 51 C. C. A. 369.

§ 378. Range of.

A patentee, entitled to invoke the doctrine of equivalents is entitled so to do whether he has claimed such in his specification or not. — Goodyear *v.* Davis, 102 U. S. 222; 26 L. Ed. 149.

Depends upon the extent and nature of the invention. — Miller *v.* Eagle, 151 U. S. 186; 38 L. Ed. 121; 14 S. Ct. 310.

Morley *v.* Lancaster, 129 U. S. 263.

It is manifest, therefore, that it was not meant to decide that only pioneer patents are entitled to invoke the doctrine of equivalents, but that it was decided that the range of equivalents depends upon and varies with the

degree of invention. — Continental *v.* Eastern, 210 U. S. 405; 51 L. Ed. 922; 28 S. Ct. 748.

Ciniotti *v.* American, 198 U. S. 399; Kokomo *v.* Kitselman, 189 U. S. 8; Miller *v.* Eagle, 158 U. S. 186; Ives *v.* Hamilton, 92 U. S. 426; Hoyt *v.* Horne, 145 U. S. 302; Deering *v.* Winona, 155 U. S. 286; Walk. Pat. sec. 362; Rob. Pat. sec. 258.

The range of equivalents depends upon the extent and nature of the invention. If the invention is broad or primary in its character, the range of equivalents will be correspondingly broad, under the liberal construction which the courts give to such inventions. — Roemer *v.* Peddie, 78 Fed. 117; 24 C. C. A. 39.

Machine Co. *v.* Lancaster, 129 U. S. 263; Miller *v.* Mfg. Co. 151 U. S. 207.

We have discussed this general question so fully in Long *v.* Mfg. Co. 75 Fed. 835, and Reece *v.* Globe, 61 Fed. 958 (an extreme case in one way) and in Ball *v.* Ball, 58 Fed. 818 (an extreme case the other way) that we do not deem it necessary to go over it here. The case at bar lies between the two cases last cited; and it clearly is not shut out from the expression of the Supreme Court cited by us in Reece *v.* Globe at page 962, that "the range of equivalents depends upon the extent and nature of the invention." — Boston *v.* Bemis, 80 Fed. 287; 25 C. C. A. 420.

While it is clear that a patentee is ordinarily entitled to all the uses and all the advantages which his invention developes so far as the new application does not involve additional invention, yet a function not known when the patent issues, and afterwards developed, cannot ordinarily be used to broaden the construction of a claim. — Heap *v.* Tremont, 82 Fed. 449; 27 C. C. A. 316.

Reece Globe, 61 Fed. 958; Wright *v.* Clinton, 67 Fed. 790; Long *v.* Mfg. Co. 75 Fed. 835; Boston *v.* Bemis, 80 Fed. 287.

The range of equivalents depends upon the extent and nature of the invention. — Beach *v.* Hobbs, 92 Fed. 146; 34 C. C. A. 248.

Miller *v.* Mfg. Co. 151 U. S. 186.

The more meritorious the invention, the greater the step in the art, the less the suggestion of the improvement in the prior art, the more liberal are the courts in applying in favor of the patentee the doctrine of equivalents. The narrower the line between the faculty exercised in inventing a device and mechanical skill, the stricter are the courts in rejecting the claim of equivalents by the patentee in respect to alleged infringements. — Penfield *v.* Chambers, 92 Fed. 630; 34 C. C. A. 579.

A patentee who is the original inventor of a device or machine — a pioneer in the art — is entitled to a broad and liberal construction of his claims; but an inventor who only claims to be an improver, is only entitled to what he claims, and nothing more. — Overweight *v.* Improved, 94 Fed. 155; 36 C. C. A. 125.

McCormick *v.* Talcott, 20 How. 402; Norton *v.* Jensen, 90 Fed. 415.

Note: The last clause of the above statement of the general rule attempted to be stated, is unqualifiedly bad law. It is not the law, and never has been the law, that an improver is entitled only to exactly what he claims. The rule is and always has been, that an improver is entitled to a range of equivalency commensurate with the extent of his invention.

This court, following the supreme court, has pointed out in a number of cases that, the more meritorious the patent, the more liberal will the court be in applying the doctrine of equivalents to cover devices adopted for the purpose of appropriating all that is good in a patent without rendering the tribute which the patent law was intended to secure, for a temporary period, to those who by their ingenuity have made possible real progress in the industrial arts. — King *v.* Hubbard, 97 Fed. 795; 38 C. C. A. 423.

Bundy *v.* Detroit, 94 Fed. 524; McCormick *v.* Aultman, 69 Fed. 371; Wells *v.* Curtis, 66 Fed. 318; Miller *v.* Mfg. Co. 151 U. S. 186.

One who merely makes and secures a patent for a slight improvement on an old device or combination, which performs the same function before as after the improvement, is protected against those only who use the very device or improvement he describes or mere colorable evasions thereof. In other words, the term " mechanical equivalent," when applied to the interpretation of a pioneer patent, has a broad and generous signification, while its meaning is very narrow and limited when it conditions the construction of a patent for a slight and almost immaterial improvement. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Adams *v.* Lindell Co., 77 Fed. 432; Stirrat *v.* Mfg. Co., 61 Fed. 980; McCormick *v.* Talcott, 20 How. 402; R. R. Co. *v.* Sayles, 97 U. S. 554; Brill *v.* Car Co., 90 Fed. 666.

The doctrine of mechanical equivalents conditions the construction of all these patents, and in determining questions concerning them the breadth of the signification of the term is proportioned in each case to the character of the advance or invention evidenced by the patent under consideration, and is so interpreted by the courts as to protect the inventor against piracy and the public against unauthorized monopoly. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Schroeder *v.* Brammer, 98 Fed. 880; McSherry *v.* Dowagiac, 101 Fed. 716; Bundy *v.* Detroit, 94 Fed. 524; Miller *v.* Mfg. Co., 151 U. S. 186; Penfield *v.* Chambers, 92 Fed. 639; McCormick *v.* Aultman, 69 Fed. 371; Muller *v.* Tool Co., 77 Fed. 621.

As we have several times had occasion to say, and what is indeed well established patent law, the term " equivalent " has a variable meaning, and is measured by the character of the invention to which it is applied. — Rich *v.* Baldwin, 133 Fed. 920; 66 C. C. A. 464.

McCormick *v.* Aultman, 69 Fed. 371; Penfield *v.* Chambers, 92 Fed. 630; McSherry *v.* Dowagiac, 101 Fed. 716.

The term " mechanical equivalent " has a broad and generous signification in the interpretation of a pioneer patent, a very narrow and restricted one in the construction of a patent for a slight improvement, and, in the interpretation of patents for the great mass of inventions between these extremes, its meaning is always proportioned to the character of the advance or invention under consideration. — Mallon *v.* Gregg, 137 Fed. 68; 69 C. C. A. 48.

National *v.* Interchangeable, 106 Fed. 693.

In a combination device consisting of congeries of well-known mechanical appliances, no liberality of construction is accorded to it to create a monopoly; but is limited to the descriptive elements in the combination as expressed in the specifications; and no great liberality of the doctrine of mechanical equivalents can be indulged in in its favor. As the applicant for such combination of old devices chooses his own expressions in presenting it, and

is required to enumerate the elements of his claim, he is limited to the combined apparatus as specified. And no one is an infringer of a combination claim unless he uses the elements thereof, and in substantially the same mode of co-operation. — Portland *v.* Hermann, 160 Fed. 91; 87 C. C. A. 247.

Cimiotti *v.* American, 198 U. S. 399.

General rule restated without change and cases cited in Union *v.* Diamond, 162 Fed. 148; 89 C. C. A. 172.

That where the improvement is a narrow one, it is not entitled to a range of equivalents of any extent, and to save the patent where the alleged infringement is not an identical act, it must be held not infringed, see Hendey *v.* Prentice, 162 Fed. 481; 89 C. C. A. 401.

U. S. Hog *v.* North, 158 Fed. 818.

We are dealing, not with a great invention, but with a meritorious one which has made a distinct advance in the art in question. We think the claim should be given an interpretation liberal enough to protect the inventor from the use of machines which differ only in nonessential changes which any skilled mechanic would know enough to make. — Benbow-Brammer *v.* Straus, 166 Fed. 114; C. C. A.

§ 379. Identity.

The ends attained being the same, the question is whether the means employed are identical or equivalent. — Ives *v.* Hamilton, 92 U. S. 426; 23 L. Ed. 494.

Authorities concur that the substantial equivalent of a thing, in the sense of the Patent Law, is the same as the thing itself; so that if two devices do the same work in substantially the same way and accomplish substantially the same result, they are the same, even though they differ in name, form or shape. — Union *v.* Murphy, 97 U. S. 120; 24 L. Ed. 935.

Curt. Pat. sec. 310.

Though some of the corresponding parts of the machinery are not the same, and, separately considered, could not be regarded as identical or conflicting, yet, having the same purpose in the combination, and effecting that purpose in substantially the same manner, they are equivalents of each other in that regard. — National *v.* American, 53 Fed. 367; 3 C. C. A. 559.

Cochrane *v.* Deener, 94 U. S. 780.

While the patentee is entitled to the unknown beneficial uses to which his invention may be put, he cannot prevent the use of ingredients in the combination which may accomplish the previously unknown result, but not equivalents of the patented ingredient in the performance of the function which is specified and described in the claim. — Johns Mfg. Co. *v.* Robertson, 77 Fed. 985; 23 C. C. A. 601.

Roberts *v.* Ryer, 91 U. S. 150; Wells *v.* Jacques, 5 O. G. 364; Rowell *v.* Lindsay, 113 U. S. 97.

§ 380. Miscellaneous Rulings.

Every device which is used to produce the same effect is not the equivalent for another. — Burr *v.* Duryee, 68 U. S. 531; 17 L. Ed. 750.

McCormick *v.* Talcott, 20 How. 405.

It is true the patent cannot be extended beyond the claim. That bounds the patentee's right. But the claim in this case covers the whole process invented, and the complainants seek no enlargement of the process. Certainly the claim of the process ought not to be regarded as excluding all other substances than the one mentioned. As already noticed, the specification avows the object of the invention. The subject to be treated is fibrous materials of a vegetable nature. And it may well be doubted, in view of this general declaration of the object, whether there is anything that limits the scope of the invention to a process of treating straw and other like materials. — American *v.* Fiber, 90 U. S. 566; 23 L. Ed. 31.

In machines, when a broken line serves the same purpose as a curved line the one is the equivalent of the other. — Ives *v.* Hamilton, 92 U. S. 426; 23 L. Ed. 494.

The use of a pressure bar in the place of a pressure roll, and the use of springs in the place of weights to produce the pressure are equivalents. — Woodbury *v.* Keith, 101 U. S. 479; 25 L. Ed. 939.

But the lever or its equivalent as a mechanical instrument is made an essential element, and dispensing with the lever and using instead the human hand is not the use of an equivalent, although in the plaintiff's machine the hand is applied to move the lever. — Brown *v.* Davis, 116 U. S. 237; 29 L. Ed. 659; 6 S. Ct. 379.

Water *v.* Desper, 101 U. S. 332; Gage *v.* Herring, 107 U. S. 640; Fay *v.* Cordesman, 109 U. S. 408; Sargent *v.* Hall, 114 U. S. 63.

As that used by the defendants differs from that described in the patent, just as that employed by the prior patentee does, the process of the defendants cannot be construed as an infringement without at the same time declaring that used by the prior patentee to be an anticipation. — Plummer *v.* Sargent, 120 U. S. 442; 30 L. Ed. 737; 7 S. Ct. 640.

This result being different from that in the plaintiff's device, the mechanism is different and is not an equivalent of Button's. The fourth claim of the patent, if valid, cannot be construed so as to cover the defendant's apparatus. — Grier *v.* Wilt, 120 U. S. 412; 30 L. Ed. 712; 7 S. Ct. 718.

Where the claims covered specifically cylinders with chambers or depressions, they cannot be construed to cover plain cylinders. — Hendy *v.* Golden, 127 U. S. 370; 32 L. Ed. 207; 8 S. Ct. 1275.

Fay *v.* Cordesman, 109 U. S. 408; Sargent *v.* Hall, 114 U. S. 63; Shepard *v.* Carrigan, 116 U. S. 593; White *v.* Dunbar, 119 U. S. 47; Crawford *v.* Heysinger, 123 U. S. 589.

There is no invention in substituting one valve or spring of a familiar shape for another. — Westinghouse *v.* Boyden, 170 U. S. 537; 42 L. Ed. 1136; 18 S. Ct. 707.

Imhauser *v.* Buerk, 101 U. S. 647.

Generally, a patentee, no matter what the character of his patent may be, can claim mechanical equivalents known to exist at the time of the application, whether he claims them or not in his application. — Hunt Bros. *v.* Cassidy, 53 Fed. 257; 3 C. C. A. 525.

Walk. Pat. sec. 250; Goodyear *v.* Davis, 102 U. S. 230; Tatum *v.* Gregory, 41 Fed. 142.

The substitution of a weight to perform the same function as a spring, is an equivalent mechanism. — American *v.* Weston, 59 Fed. 147; 8 C. C. A. 56.

There can be no question that a spring rocker is a perfectly familiar way of obtaiuing a tipping or oscillating motion, as well as a pivot or hinge, and that one is a well known equivalent of the other. — M'Kay *v.* Dizer, 61 Fed. 102; 9 C. C. A. 382.

We think these claims and specifications (especially in view of the state of the art) constitute a fair disclaimer and dedication to the public of all right on the part of the patentee to protection against any such device as that used by the appellee. — Stirratt *v.* Excelsior, 61 Fed. 980; 10 C. C. A. 216.

Keystone *v.* Phoenix, 95 U. S. 274; Miller *v.* Brass Co., 104 U. S. 350; McClain *v.* Ortmayer, 141 U. S. 414; Dobson *v.* Cubley, 149 U. S. 117; Heine *v.* Smith, 43 Fed. 786; Maddock *v.* Coxon, 45 Fed. 578.

If the complainant were entitled to have his first claim construed broadly, clearly the defendant's device would be an infringement. But the complainant's invention being limited, as we have seen, by the prior state of the art, if not by the express words of his application, to the use of a single casting, the conclusion necessarily follows that the defendant has not infringed this claim of the patent. — Vulcan *v.* Smith, 62 Fed. 444; 10 C. C. A. 493.

Roemer *v.* Peddie, 132 U. S. 313; Snow *v.* Railway, 121 U. S. 617; Hoff *v.* Mfg. Co. 139 U. S. 326; Derby *v.* Thompson, 146 U. S. 476.

Means must necessarily be shown in the specification, but the identical means or the special devices were not, in the language of Machine Co. *v.* Lancaster, 129 U. S. 263, " necessary constituents " of the invention either in the specification or in the claim. — Westinghouse *v.* N. Y. 63 Fed. 962; 11 C. C. A. 528.

The distinction suggested by the circuit court between inventions employing cranks and levers visible to the senses and those employing compressed air, which operates by modes not visible to the senses, — as to which latter devices the circuit court held that, " in judging of an infringement we are to direct our attention rather to functional equivalents than to mechanical equivalents," — we do not think well taken, even in favor of pioneer inventions. The Supreme Court in its ruling in the great leading case of O'Reilly *v.* Morse, 15 How. 62, which was one in which the far more subtle agency of electricity was under consideration, neither made nor intimated such a distinction. — Boyden *v.* Westinghouse, 70 Fed. 816; 17 C. C. A. 430.

That where the specification contains, in a basic patent, a complete description of a species, it is sufficient to include the genus to which it belongs, or the genera which might properly be included with it. — American *v.* Howland, 80 Fed. 395; 25 C. C. A. 500.

Incandescent Lamp Pat. 159 U. S. 465; Read *v.* Schultze-Berge, 78 Fed. 493; Pearl *v.* Ocean, Fed. Cas. 10876; Rob. Pat. sec. 517.

It is very usual for patentees to assert that Machine Co. *v.* Lancaster has a very general application. On the other hand, it was exceptionable, and the invention in suit there is easily distinguished from the great mass of patented combinations. Its underlying idea was novel. As was said by the Supreme Court at page 273, the mechanical function performed by the

machine covered by the patent, was as a whole entirely new. In the present suit, however, the entirely new function is found in the device of Woodward's earlier patent, and the patent now in issue shows nothing except a method of making the new function more useful. In this particular the case is essentially unlike the conditions of the hypothesis stated in U. S. *v.* Burdan, 156 U. S. 552, as it is entirely plain that the device described in the claim in issue would infringe the device of Woodward's entire patent, although an improvement on it. — Boston *v.* Woodward, 82 Fed. 97; 27 C. C. A. 69.

Machine Co. *v.* Lancaster, 129 U. S. 263.

The defendant's rotary machine has the same anvil die, and its cutters are arranged to operate in relation thereto in exactly the same way as on the reciprocating machine. They must be classed in the same category. — Diamond *v.* Goldie, 84 Fed. 972; 28 C. C. A. 589.

Oval *v.* Mfg. Co. 60 Fed. 285.

While we give full weight to the decision of the Supreme Court in Westinghouse *v.* Boyden, 170 U. S. 537, and recognize that it is an abuse of the term "equivalent" to employ it to cover every combination of devices in a machine which is used to accomplish the same result, we are of the opinion that in that case the Supreme Court left unqualified the previous rulings such as recognized in the case of Imhauser *v.* Buerk, 101 U. S. 647. — Beach *v.* Hobbs, 92 Fed. 146; 34 C. C. A. 248.

Note: I think it is a misapprehension of the holding in the Westinghouse case, to regard it as limiting the proper use of equivalents, since the question in that case turned upon the patentability of a mechanical process; and that the discussion of equivalency was largely collateral thereto.

In our opinion, neither the words "substantially as described" in the claims nor the proceedings in the patent office in which the patentee acquiesced in the decision that these words must be inserted after the word "mechanism," in the claims, prohibit the patentee from invoking the doctrine of known equivalents with respect to alleged infringers. — Beach *v.* Hobbs, 92 Fed. 146; 34 C. C. A. 248.

The meritoriousness of an improvement depends, first, upon the extent to which the former art taught or suggested the step taken; and, second, upon the advance made in the usefulness of the machine as improved. — Bundy *v.* Detroit, 94 Fed. 524; 36 C. C. A. 375.

McCormick *v.* Aultman, 69 Fed. 371.

For concrete illustrations of what are and what are not mechanical equivalents, see Brown *v.* King, 107 Fed. 498; 46 C. C. A. 432.

McKay *v.* Dizer, 61 Fed. 102; Stearns *v.* Russell, 85 Fed. 218; Foster *v.* Moore, Fed. Cas. 4978; Schreiber *v.* Grimm, 72 Fed. 671.

The mere use of known equivalents for some of the elements of prior structures; the substitution for one material of another known to possess the same qualities, though not to the same degree; the mere carrying forward or more extended application of the original idea, involving a change in form, proportions, or degree, and resulting in doing the same work in the same way and by substantially the same means — is not patentable, even though better results are secured; and this is the case, although what preceded rests alone in public knowledge and use, and not upon a patent. — Sloan *v.* Portland, 139 Fed. 23; 71 C. C. A. 460.

Market *v.* Rowley, 155 U. S. 621; Wright *v.* Yuengling, 155 U. S. 47; Adams *v.* Stamping, 141 U. S. 539; Burt *v.* Evory, 133 U. S. 349; Brown *v.* D. C., 130 U. S. 87; Crouch *v.* Roemer, 103 U. S. 797; Roberts *v.* Ryer, 91 U. S. 150; Smith *v.* Nichols, 21 Wall. 115; Hicks *v.* Kelsey, 18 Wall. 670; National *v.* Interchangeable, 106 Fed. 693; National *v.* Lithographic, 81 Fed. 395.

Note: This statement of Judge Hook, Eighth Circuit, like most general statements of the kind, is open to material criticism. While such general propositions are sound, the specific modifications essential to equity render sweeping statements more or less dangerous.

Jordan in his specifications took pains to say that he had adopted the squeezing device, which he preferred, but that the device might be varied by those skilled in the art without departing from the principle of his invention. The Eldridge patent proves that this is true. An examination of the two patents carries the conviction that Eldridge has appropriated Jordan's inventive idea. It is the whole purpose of the doctrine of equivalency to protect the inventor against piracy and secure to him the benefit of that which he has invented. — American *v.* Hickmott, 142 Fed. 141; 73 C. C. A. 359.

Where three separate elements, each performing an individual function, are supplanted by a single element which itself performs the functions of all three, it is quite clear that the three-fold capacity of the single element is not the equivalent of the three single elements. — Lambert *v.* Lidgerwood, 154 Fed. 372; 83 C. C. A. 350.

Assuming that there was an invention at all, under the prior decisions of this court, it was of that class as to which there is barely any room for equivalents. — U. S. *v.* North, 158 Fed. 818; 86 C. C. A. 78.

Ford *v.* Bancroft, 98 Fed. 309. Bradford *v.* Belknap, 105 Fed. 63. Distinguishing Reece *v.* Globe, 61 Fed. 958.

ESTOPPEL.

Corporations § 381
Evidence of § 382
Interference Adjudication § 383 (*see* § 580)
Licensor or Former Owner § 384
Owner of Patent or Licensee § 385
Privity § 386
Miscellaneous § 387
See — Abandonment § 21; *Adjudication* § 33; *Amendment* § 52; *Assignment* § 149; *Attorneys* § 178; *Defenses* § 315; *Disclaimer* § 339; *Employer and Employee* § 366; *Infringement* §§ 509–13; *Laches* § 726; *License* § 754; *Licensor and Licensee* § 765; *Pleading and Practice* § 788; *Res Judicata* § 893

§ 381. Corporations.

The T. H. Co. consolidated with the Edison General. Formerly the T. H. Co. was in co-operation with the Sawyer Man Co. and was bound by various contracts involving the Sawyer Man lamp patents. This was held not to be an estoppel. — Edison Electric *v.* Sawyer-Man, 53 Fed. 592; 3 C. C. A. 605.

It has been suggested, but manifestly cannot be true, that merely because he is a stockholder in the cabinet company, the appellant may not deny the validity of a patent owned by the company. — Antisdel *v.* Chicago, 89 Fed. 308; 32 C. C. A. 216.

The old company held a mere license from the owner of the patent. The managing directors, in the absence of the owner of the patent, clearly gave the representatives of the new company to understand that the patent in

question was an asset of the old company. *Held:* Representations made by the managing directors and principal owners of the old company, even though they were more explicit than they are proved to have been, in his absence or without his certain specific knowledge, could not create an estoppel in favor of the new company as against him. — Standard *v.* Arrott, 135 Fed. 750; 68 C. C. A. 388.

§ 382. Evidence of.

It may be that questions were there involved and decided concerning other claims of the patents and other parts of steam engines in steam pumps. We do not know, and estoppels must be asserted. — Union *v.* Battle Creek, 104 Fed. 337; 43 C. C. A. 560.

Where an estoppel is relied on, the facts upon which it is based must be proved with particularity and precision, and nothing can be supplied by inference or intendment. — Standard *v.* Arrott, 135 Fed. 750; 68 C. C. A. 388

§ 383. Interference Adjudication.

In the absence of proof that defendant was in privity with the applicant whose patent was voided on interference with the patent in suit, the defendant is not estopped to deny the validity of the patent in suit. — McCarty *v.* Lehigh, 160 U. S. 110; 40 L. Ed. 358; 16 S. Ct. 240.

Russell *v.* Place, 94 U. S. 606.

We do not think that petitioner was estopped from insisting upon his application by proceeding with the interference. It would be pressing mere order of procedure and the convenience of the Patent Office too far to give them such result under the circumstances. — Steinmetz *v.* Allen, 192 U. S. 543; 48 L. Ed. 555; 24 S. Ct. 416.

So far as respects the Howe patent, and the machines made and used by the defendant thereunder, it is clear that the decisions of the patent office in favor of Howe have been acquiesced in by the complainant for such length of time as to work an abandonment of any claim to the invention therein involved. — Fassett *v.* Ewart, 62 Fed. 404; 10 C. C. A. 441.

Gandy *v.* Marble, 122 U. S. 432.

§ 384. Licensor or Former Owner.

One of the respondents below was the original patentee, and the title of complainants is derived under assignments from him for a pecuniary consideration, valuable in law, although said to be small. Consequently an estoppel operates against him. The precise nature of this estoppel does not seem to have been always clearly apprehended. It is, in effect, that, when one has parted with a thing for a valuable consideration, he shall not, so long as he retains the consideration, set up his own fraud, falsehood, error or mistake to impair the value of what he has thus parted with. As applied to the specifications of a patent, the vendor patentee is as much barred from setting up that his allegations therein were merely erroneous as that they were wilfully false. — Babcock *v.* Clarkson, 63 Fed. 607; 11 C. C. A. 351.

Sturm *v.* Baker, 150 U. S. 312; Brant *v.* Iron Co. 93 U. S. 326; Cropper *v.* Smith, 26 Ch. Div. 700; L. R. 10 App. Cas. 249; Hall *v.* Conder, 2 C. B. N. S. 22; Chambers *v.* Crichley, 33 Beav. 374; Brazee *v.* Schofield, 124 U. S. 495; Ball *v* Ball, 58 Fed. 818; Clark *v.* Adie, L. R. 2 App. Cas. 423; Trotman *v.* Wood, 16 B. N. S. 479; Crosthwaite *v.* Steele, 6 R. P. C. 190; Ashworth *v.* Roberts, 9 R. P. C. 309.

In a suit for infringement, brought against the assignor of a patent by his assignee, the assignor is estopped from denying the validity of his patent. We cannot say that the patent has been anticipated by prior structures, or that it is void for want of novelty or utility. — Martin *v.* Martin, 67 Fed. 786; 14 C. C. A. 642.

Babcock *v.* Clarkson, 63 Fed. 607 — 58 Fed. 581; Ball *v.* Ball, 58 Fed. 818; Foulks *v.* Kamp, 3 Fed. 898; Onderdonk *v.* Fanning, 4 Fed. 148; Purifier *v.* Guilder, 9 Fed. 155; Curran *v.* Burdsall, 20 Fed. 835; Underwood *v.* Warren, 21 Fed. 573; Parker *v.* McKee, 24 Fed. 808; American *v.* Larraway, 28 Fed. 141; Corbin *v.* Yale, 58 Fed. 563; Chambers *v.* Crichley, 33 Beav. 374; Hocking *v.* Hocking, 4 Web. Pat. Cas. 434; Walton *v.* Lavator, 29 L. J. C. P. 275.

Estoppel was claimed through patents not in suit. *Held:* Non constat that patents which had not been brought to our attention, and not the one in suit, furnish the basis of this alleged estoppel, if such an estoppel can be maintained. — Martin *v.* Martin, 67 Fed. 786; 14 C. C. A. 642.

Being a mere subordinate, he cannot be enjoined, under the circumstances of this case, unless his principles are also subject to injunction. Under the rule in Belnap *v.* Schild, 161 U. S. 10, he cannot be holden to account for profits; so there is no ground for equitable jurisdiction against him severed from the person who employed him. While a person occupying a subordinate position, may be in privity with his principal, in the sense in which that word may properly be used in this connection, the reverse is not ordinarily true. — Boston *v.* Woodward, 82 Fed. 97; 27 C. C. A. 69.

The plaintiff contends that the defendant having granted the license to them, for a valuable consideration, is estopped from denying that the patent is valid, and we are of opinion that he is right in this. In a case recently decided by this court, it was held that the patentee, after having transferred his interest in the patent, was precluded from denying the validity thereof to the same extent, and to the same extent only, that a third person would be, subject to the limitations, however, that he could not allege the total invalidity of the patent. The result being that he is still left at liberty to show that, assuming the patent to be valid, it is nevertheless subject to the limitations imposed thereon by the prior art. — Smith *v.* Ridgley, 103 Fed. 875; 43 C. C. A. 365.

Noonan *v.* Athletic, 99 Fed. 90; Mfg. Co. *v.* Scharling, 100 Fed. 87.

The contention that the defendants are estopped from questioning their (the patent's) validity because of Ratican's relation to them is untenable. Whatever his original part interest in them or his personal conduct with respect to them might have upon his present interests, as to which we express no opinion, the rights of others are now involved in this case, and their relation to Ratican is not so clearly shown as to warrant making any orders affecting their rights on the assumption of identity with him. — St. Louis *v.* Sanitary, 161 Fed. 725; 88 C. C. A. 585.

§ 385. Owner of Patent or Licensee.

The argument is that the United States ought not to be estopped, as a licensee, to deny the validity of the patent because it is not a vendor, but simply a user, of the patented article, and therefore has not enjoyed the advantage of a practical monopoly, as a seller might have enjoyed it even if the patent turned out to be bad. This distinction between sale and use, even for a non-competitive purpose, does not impress us. So far as the practical advantage secured is matter for consideration, whether a thing made

under a patent supposed to be valid is used or sold, it equally may be assumed that the thing would not have been used or sold but for the license from the patentee. — U. S. *v.* Harvey, 196 U. S. 310; 49 L. Ed. 492; 25 S. Ct. 240.

The validity of a patent cannot be disputed by one who undertakes to justify under a license. — Platt *v.* Fire Extinguisher, 59 Fed. 897; 8 C. C. A. 357.

Kinsman *v.* Parkhurst, 18 How. 289; Brown *v.* Lapham, 27 Fed. 77.

The fact that for a time the defendant was a licensee of the patent in suit, cannot, of course, estop the defendant from disputing its validity in a suit for infringements charged to have taken place after the license was withdrawn. Such a fact, in a doubtful case, might have considerable evidential force as an admission of the validity of the patent by the licensee. — Dueber *v.* Robbins, 75 Fed. 17; 21 C. C. A. 198.

The attempt to show by the testimony of the patentee that the patent embraced something which he did not invent, and to restrict the patent to his understanding of the scope of the invention, was unwarranted and improper. Even if he had been a party to the suit, he could not have been bound by a mistaken judgment which he might have been urged to declare of the scope or character of the patent, and, as against the assignee of his title, his testimony in that particular was wholly incompetent. — Elgin *v.* Creamery, 80 Fed. 293; 25 C. C. A. 426.

The question here is whether one who has been under a contract of agency, determinable at will, to sell a patented article, if he discovers or concludes that the patent is valid, may openly repudiate the agency, and, when sued for subsequent acts of infringement, may plead the invalidity of the patent as a defense. We know of no authority, and believe there is no sound reason, to the contrary. — Antisdel *v.* Chicago, 89 Fed. 308; 32 C. C. A. 216.

The defendants had held a license to the patented machines and had marked the machines patented under the patent in suit. The license had expired and the rights of defendants had ceased. *Held:* On questions of utility and invention, facts of this class are sometimes persuasive as matters of evidence but, as the respondents never did use complainant's specific form of feeder, to give these facts any substantial effect in supplementing complainant's case, would be merely reasoning within a circle. — Cushman *v.* Goddard, 95 Fed. 664; 37 C. C. A. 221.

But this estoppel, for manifest reasons, does not prevent him from denying infringement. To determine such an issue, it is admissible to show the state of the art involved, that the court may see what the thing was which was assigned, and thus determine the primary or secondary character of the patent assigned, and the extent to which the doctrine of equivalents may be invoked against the assignor. The court will not assume against an assignor, and in favor of his assignee, anything more than that the invention presented a sufficient degree of utility and novelty to justify the issuance of the patent assigned, and will apply to the patent the same rule of construction, with this limitation, which would be applicable between the patentee and a stranger. — Noonan *v.* Chester, 99 Fed. 90; 39 C. C. A. 426.

Babcock *v.* Clarkson, 63 Fed. 607; Ball *v.* Ball, 58 Fed. 818; Cash Carrier *v.* Martin, 67 Fed. 786; Chambers *v.* Crichley, 33 Beav. 374; Construction Co. *v.* Stromberg, 66 Fed. 550; Clark *v.* Adie, 2 App. Cas. 423.

After the termination of a license, the parties are freed from any estoppel resting upon them while in their former relation. The licensee may dispute

the title or right of the former licensor to the same extent as a stranger might. The estoppel is raised for the protection of the interest which the assignor or licensor professed to convey, and has no further office. — Stimpson *v.* Stimpson, 104 Fed. 893; 44 C. C. A. 241.

Mfg. Co. *v.* Robbins, 75 Fed. 17; Noonan *v.* Athletic, 99 Fed. 90; Smith *v.* Ridgley, 103 Fed. 975.

Being himself the inventor and applicant for the patent, defendant, under well settled principles, may not challenge its validity, and he does not undertake to do so. — Piaget *v.* Headley, 108 Fed. 870; 48 C. C. A. 116.

A subsequent purchaser from a licensor and guarantor takes the patent subject to all equities, but this does not include any obligations of the assignor. — Bradford *v.* Kisinger-Ison, 113 Fed. 811; 51 C. C. A. 483.

There is evidence to show that the Regent Co. had designed the alleged infringing mirrors before employing Curry (one of the inventors of the patent in suit), that Curry had no voice in deciding what should be manufactured, and that his efforts were directed to organizing the factory so as to produce better and cheaper what the Regent Co. had already determined upon. On this showing there is basis for contending that the Regent Co. is not involved in the estoppel against Curry. — Regent *v.* Penn, 121 Fed. 80; 57 C. C. A. 334.

Boston *v.* Woodward, 82 Fed. 97.

Being the assignor, he cannot be permitted to assail the validity of his own patent. — Wold *v.* Thayer, 148 Fed. 227; 78 C. C. A. 350.

Siemens-Halske *v.* Duncan, 142 Fed. 157.

§ 386. Privity.

One who, for his own interests, assumes the defense of an action, is bound by the judgment as if he had been a party thereof or in privity with the defendant. But it must not be overlooked that the rule is subject to the limitation that, in order that one not a party who has assumed the burden of the defense of an action shall be bound by the judgment therein rendered, his connection with the defense must be open and known to the opposite party. Estoppels must be mutual. — Cramer *v.* Singer, 93 Fed. 636; 35 C. C. A. 508.

Herm. Estop. 157; 2 Black. Judgm. sec. 540; Freem. Judgm. 189; Andrews *v.* Pipe Works, 76 Fed. 166; Lacroix *v.* Lyons, 33 Fed. 437; Schroeder *v.* Lahrman, 26 Minn. 87; Ass'n *v.* Rogers, 42 Minn. 123; Allen *v.* Hall, 1 A. K. Marsh, 425.

The evidence before us tends strongly to show that the appellants were privy in fact to the various proceedings involved in this litigation; but if we were to assume that the present appellants were parties in a part of a prior litigation, and that they conducted, controlled, and paid the expenses of that in which they were not parties of record, we could not, in the present aspect of the case accept such conditions as operating as a strict estoppel, for the reason that the final decree in the earlier litigation was not entered after this proceeding was instituted, and is not so pleaded as to strictly and legally present the question of estoppel. — Bresnahan *v.* Tripp, 99 Fed. 280; 39 C. C. A. 508.

An estoppel must be mutual. If the defendants did not openly and avowedly, to the knowledge of complainants, undertake the defense of that suit, the complainants would not have been estopped by the decree, if adverse

to them, in a subsequent suit against the defendants. — Lane *v.* Wells, 99 Fed. 286; 39 C. C. A. 528.

Herm. Estop. p. 157; Andrews *v.* Pipe Works, 76 Fed. 166; Cramer *v.* Mfg. Co. 93 Fed. 636.

Even if B. had been a party, formal admissions made in pleadings by one party to a litigation are not sufficient to bind him in another suit between different parties, involving the same subject-matter. — American *v.* Phoenix, 113 Fed. 629; 51 C. C. A. 339.

Gramophone *v.* Gramophone, 107 Fed. 129.

The doctrine is well settled that one who for his own interest joins in the defense of a suit to which he is not a party of record is as much concluded by the judgment as if he had been a party thereto, provided his conduct in that respect was open and avowed or otherwise well known to the opposite party. An estoppel by decree exists, although the demand in the two cases is not the same, whenever the question upon which the recovery in the second case depends has been before decided, under like conditions, between the same parties or those in privity with them. — Penfield *v.* Potts, 126 Fed. 475; 61 C. C. A. 371.

Lane *v.* Welds, 99 Fed. 286; Southern *v.* U. S. 168 U. S. 1.

§ 387. Miscellaneous.

No principle is better settled than that a party is not estopped by his silence unless it has misled another to his hurt. — Railroad *v.* DuBois, 79 U. S. 47; 20 L. Ed. 265.

Hill *v.* Esplay, 31 Pa. 334.

When the inventor disclosed his invention which defendant did not know was to be patented and defendant used same, he is not estopped by such use to deny the validity of the patent subsequently obtained. — Leggett *v.* Standard, 149 U. S. 287; 37 L. Ed. 737; 13 S. Ct. 902.

The fact that defendant had applied for a patent upon the device which he subsequently infringed and failed does not estop him from denying the novelty of the patent sued on. — Haughey *v.* Lee, 151 U. S. 282; 38 L. Ed. 162; 14 S. Ct. 331.

The same principle is applied to an inventor who makes his discovery public, looks on, and permits others to use it without objection or assertion of a claim for a royalty. In such case he is held to abandon his inchoate right to the exclusive use of his invention, to which a patent would have entitled him, had it been applied for before such use. — Gill *v.* U. S. 160 U. S. 426; 40 L. Ed. 480; 16 S. Ct. 322.

Pennock *v.* Dialogue, 2 Pet. 1, 16.

It may well be doubted whether the pendency of a motion for a new trial would interfere in any way with the operation of the judgement as an estoppel. — Hubbell *v.* U. S. 171 U. S. 203; 43 L. Ed. 136; 18 S. Ct. 828.

Harris *v.* Bernhart, 97 Cal. 546; Chase *v.* Jefferson, 1 Houst. 257; Young *v.* Brehe, 19 Nev. 379.

The issue of estoppel may be raised by the court although neither party intended to raise it. — Woodward *v.* Boston, 63 Fed. 609; 11 C. C. A. 353.

It is said that the right to set up estoppel, was waived in various ways. There was no waiver by the pleadings. The estoppel would properly arise

as a matter of rebuttal by complainant on the proofs, and not on the pleadings. The complainant might have anticipated the defense of invalidity by inserting, in its bill, charges and an avoidance. But it was at its option to do so, and it lost no right by not availing itself of this option. Story Eq. Pl. sec. 33. — Woodward *v.* Boston, 63 Fed. 609; 11 C. C. A. 353.

The defendant, while engaged in selling the patented article, had been accustomed to represent to the public that the patent was valid. As against him, that was better proof of the validity of the letters patent than any ordinary evidence of public acquiescence could have been. — Antisdel *v.* Chicago, 98 Fed. 308; 32 C. C. A. 216.

The appellee contends for an estoppel by reason of a certain release that was obtained from him by the said stockholder and another large stockholder, as a co-partnership just about the time of, or a few days after, the organization of the defendant company. This release was for all past infringements of the parties, in their own personal business, and could not in any way affect the defendant corporation as an estoppel, even if the release had not contained as its concluding paragraph, the following: "It is understood that it does not in any way bind or affect the corporation known as the Newark Spring Mattress Company." — Newark *v.* Ryan, 102 Fed. 693; 42 C. C. A. 594.

In the absence of an expressly proved fraud, there can be no estoppel based upon acts or conduct of the party sought to be estopped, where such conduct is as consistent with honest purpose or with absence of negligence, as with their opposites. — Standard *v.* Arrott, 135 Fed. 750; 68 C. C. A. 388.

EVIDENCE.

Statutory Provisions § 388
Anticipation (*see* § 58)
Prior Art § 389
Prior Patent or Publication § 390
Prior Use § 391
Rebuttal § 392
Miscellaneous § 393
Assignment § 394 (*see* § 149)
Depositions § 395
Documentary § 396
Exhibits § 397
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Facts — For Jury § 404
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Objections and Exceptions § 407
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See — Abandonment § 11; *Anticipation* §§ 71–77; *Assignment* §§ 158, 171; *Infringement* §§ 487-96; *Invention* §§ 620–38, 688; *Judicial Notice* § 705; *Priority* § 809; *Public Use* § 850; *Reopening Case* § 891

§ 388. Statutory Provisions.

The Patent Act makes only the following special provisions:

Written or printed copies of any records, books, papers, or drawings belonging to the Patent Office, and of letters patent authenticated by the seal and certified by the Commissioner or Acting Commissioner thereof, shall be evidence in all cases wherein the originals could be evidence; and any person making application therefor, and paying the fee required by law, shall have certified copies thereof. — R. S. 892.

Copies of the specifications and drawings of foreign letters patent certified as provided in the preceding section, shall be prima facie evidence of the fact of the granting of such letters patent, and of the date and contents thereof. — R. S. 893.

The printed copies of specifications and drawings of patents, which the Commissioner of Patents is authorized to print for gratuitous distribution, and to deposit in the capitols of the States and Territories, and in the clerk's offices of the district courts, shall, when certified by him and authenticated by the seal of his office, be received in all courts as evidence of all matters therein contained. — R. S. 894.

§ 389. Anticipation — Prior Art.

No notice was necessary to justify the admission of evidence to show the state of the art. — Vance *v.* Campbell, 66 U. S. 427; 17 L. Ed. 168.

Evidence of the state of the art is admissible in actions at law under the general issue without a special notice, and in equity cases without any averment in the answer touching the subject. It consists of proof of what was old and in general use at the time of the alleged invention. It is received for these purposes and none other — to show what was then old, to distinguish what was new, and to aid the court in the construction of the patent. — Brown *v.* Piper, 91 U. S. 37; 23 L. Ed. 200.

Proof of the state of the art is admissible in equity cases without any averment in the answer touching the subject, and in actions at law without notice. It consists of proof of what was old and in general use at the time of the alleged invention and may be admitted to show what was the old, or to distinguish what is new, or to aid the court in the construction of the patent. — Dunbar *v.* Meyers, 94 U. S. 187; 24 L. Ed. 34.

Evidence showing the state of the art to limit the construction of the patent is competent under a general denial without special pleading. — Zane *v.* Soffe, 110 U. S. 200; 28 L. Ed. 119; 3 S. Ct. 562.

We have the material for ascertaining its meaning in that view, by means of the evidence on that point contained in the record, which, although objected to on the ground that no prior use or knowledge of the invention claimed has been specifically set up in the answer as a defense, was nevertheless admissible for the purpose of defining the limits of the grant in the original patent and the scope of the invention described in the specification. — Eachus *v.* Broomall, 115 U. S. 429; 29 L. Ed. 419; 6 S. Ct. 229.

Vance *v.* Campbell, 1 Black. 427; Brown *v.* Piper, 91 U. S. 37.

Although the specification of the patent set forth the state of the art sufficiently, the testimony of an expert was admissible, though unnecessary. — Ecaubert *v.* Appleton, 67 Fed. 917; 15 C. C. A. 73.

The defense of want of invention, including the right to introduce evidence of the prior art, is always open, and it is not necessary to set it up in the answer. — Baldwin *v.* Kresl, 76 Fed. 823; 22 C. C. A. 593.

Richards *v.* Elevator Co. 158 U. S. 299.

Ordinarily, prior patents can be offered in evidence, when not specially pleaded, only for the purpose for which the appellee offers the patent to which his motion refers; that is to say, only for the purpose of construing and

limiting the claims of the patent without affecting their validity. — Parsons *v.* Seelye, 100 Fed. 452; 40 C. C. A. 484.

Grier *v.* Wilt, 120 U. S. 412; Edmund Pat. 2 ed. 650.

That prior patents not presented to the circuit court and no explanation of them given will not be considered on appeal, see Scott *v.* Lazell, 160 Fed. 472; 87 C. C. A. 456.

§ 390. Anticipation — Prior Patent or Publication.

Letters patent, though not set up in the answer, may be received in evidence to show the state of the art and to aid in the construction of the plaintiff's claim, though not to invalidate the claim on the ground of want of novelty when properly construed. — Grier *v.* Wilt, 120 U. S. 412; 30 L. Ed. 712; 7 S. Ct. 718.

Vance *v.* Campbell, 66 U. S. 427; Railroad *v.* Dubois, 79 U. S. 47; Brown *v.* Piper, 91 U. S. 37; Eachus *v.* Broomall, 115 U. S. 429.

The respondents cite over 40 patents alleged to either anticipate or narrow the art. Our general observation as to these is that the citation of so many patents by the respondent in an infringement suit sometimes tends, as we have several times said, not so much to weaken the complainant's position as to strengthen it, by showing that the trade had long and persistently been seeking in vain for what the complainant finally accomplished. — Forsyth *v.* Garlock, 142 Fed. 461; 73 C. C. A. 577.

The defense (anticipation) is only suggested by injecting a large number of prior patents into the record without any explanatory testimony. If an examination of the prior art were necessary to the decision of the case, we should not sustain the defense of anticipation upon such mere production of patents for complicated combinations of machinery. — Bell *v.* MacKinnon, 149 Fed. 205; 79 C. C. A. 163.

That a prior patent which fails to mention or disclose a use which it is alleged to anticipate will not be held to possess such qualities to defeat a subsequent patent of undoubted utility, see Lewis *v.* Premium, 163 Fed. 950; C. C. A.

Barbed Wire Pat. 143 U. S. 275; Deering *v.* Winona, 155 U. S. 286.

The Zimmer publication must be given effect as an anticipation only to the extent that it actually gave the public information of a process of filtration. It is not competent to read into such a publication information which it does not give, or by expert opinion explain an otherwise uninforming statement by evidence of some apparatus or article not itself competent as an anticipation. — Loew *v.* German-American, 164 Fed. 855.

Badische *v.* Kalle, 104 Fed. 802.

§ 391. Anticipation — Prior Use.

The alleged prior use must be certain and the anticipating invention reduced to practice. But prior knowledge and use by a single person is sufficient. — Coffin *v.* Ogden, 85 U. S. 120; 21 L. Ed. 821.

Gayler *v.* Wilder, 10 How. 496; Reed *v.* Cutter, 1 Story, 590; Bedford *v.* Hunt, 1 Mus. 303.

The burden of proof of prior use is on the defendant. — Brown *v* Guild, 90 U. S. 181; 23 L. Ed. 161.

Under a general denial of the patentee's priority of invention, evidence of prior knowledge and use, taken without objection, is competent at the final hearing on the question of the validity of the patent. — Zane *v.* Soffe, 110 U. S. 200; 28 L. Ed. 119; 3 S. Ct. 562.

Loom Co. *v.* Higgins, 105 U. S. 580.

Testimony of prior use, produced after adjudication and unsifted by cross-examination, is always to be accepted with caution. It must be most clear and convincing to warrant what is substantially a reversal of an adjudication at a final hearing. — Consolidated *v.* Hays, 100 Fed. 984; 41 C. C. A. 142.

Such evidence, especially when it deals with experiments which resulted only in some two or three specimens, which never left the shop, and were seen years before by but a few persons, who, in giving their recollection of dates, are unable to fix such dates by reference to some transaction whose date is susceptible of definite proof, is rarely satisfactory. — Lein *v.* Myers, 105 Fed. 962; 45 C. C. A. 148.

That a mere accidental or fugitive occurrence is not sufficient in itself to defeat a patent, see Edison *v.* Novelty, 167 Fed. 977; C. C. A.

§ 392. Anticipation — Rebuttal.

The defendant may at all times, under proper pleadings, resort to prior use and the general history of the art to assail the validity of a patent or to restrain its construction. The door is then opened to the plaintiff to resort to the same kind of evidence in rebuttal; but he can never go beyond his claim. — Keystone *v.* Phoenix, 95 U. S. 274; 24 L. Ed. 344.

Where plaintiff had introduced evidence of want of novelty and defendant had rebutted such evidence it was within the discretion of the court to refuse to allow the plaintiff to introduce further evidence. — St. Paul *v.* Starling, 140 U. S. 184; 35 L. Ed. 404; 11 S. Ct. 803.

After defendant had introduced in evidence earlier patents, it was proper for plaintiff to show that prior to the date of any of them he had reduced his invention to a working form. — St. Paul *v.* Starling, 140 U. S. 184; 35 L. Ed. 404; 11 S. Ct. 803.

Elizabeth *v.* Nicholson, 97 U. S. 126; Webster *v.* Higgins, 105 U. S. 580.

Evidence introduced on rebuttal to change the character and force of the prima facie proofs comes too late to be of much weight. — Forgie *v.* Oil Well Supp. Co. 58 Fed. 871; 7 C. C. A. 551.

§ 393. Anticipation — Miscellaneous.

Witness was asked if defendant's machine was like the model in evidence. Objected to on the ground that no notice had been given covering the model. Objection overruled and sustained. — Evans *v.* Hittich, 7 Wheat. 453; 5 L. Ed. 496.

The want of invention in a patent is a matter of defense unless the thing for which a patent is claimed shows on its face that it is without invention. — Hunt Bros. *v.* Cassidy, 53 Fed. 257; 3 C. C. A. 525.

Walk. Pat. sec. 599; Mahn *v.* Harwood, 112 U. S. 354; Hendy *v.* Iron Works, 127 U. S. 370.

It was stipulated that testimony in either one of two pending cases might be used in the other. A patent, without pleading and without notice was introduced in one case for other purposes, and was then set up in the other case in anticipation. Neither pleading nor proof was made to bring it in. *Held:* It was not the intention of the stipulation that a patent offered for one purpose in one case could be used in the other case as an anticipation, without an amendment of the pleadings and without a scintilla of testimony by which the complainant could be warned so as to offer seasonable testimony in regard to the history and character of the alleged anticipation, before the record reached the appellate court. — Vermont *v.* Gibson, 56 Fed. 143; 5 C. C. A. 451.

§ 394. Assignment.

The appellee produced a license in its possession absolute on its face and without any limitation or condition. The burden of proof is upon the appellants to show that it was delivered as an escrow. — Mellon *v.* D. L. & W. 154 U. S. 673; 26 L. Ed. 929; 14 S. Ct. 1194.

But it is the settled rule with respect to the construction of patents that the prior state of the art is admissible in evidence " to show what was old, to distinguish what was new, and to aid the court in the construction of a patent." That this rule applies as between assignor and assignee has been held by this court in two carefully considered cases, — Ball *v.* Ball, 58 Fed. 818, and Babcock *v.* Clarkson, 63 Fed. 607 — 58 Fed. 581. — Martin *v.* Martin, 67 Fed. 786; 14 C. C. A. 642.

Brown *v.* Piper, 91 U. S. 37; Eachus *v.* Broomall, 115 U. S. 429; Grier *v.* Wilt, 120 U. S. 412.

§ 395. Depositions.

A deposition, though in improper form read in evidence without objection and with acquiescence and consent cannot afterwards be objected to. — Evans *v.* Hittich, 7 Wheat. 453; 5 L. Ed. 496.

Statement: Complainant, on order under sec. 870 Code Civ. Pro. N. Y. was examined under objection and exception. Certified to Supreme Court. *Held:* That the order of the Circuit Court directing the president of defendant to appear before a master or commissioner appointed pursuant to the provisions of secs. 870 et sq. of the N. Y. Code of Civil Procedure was invalid and not authorized under the act of Mar. 9, 1892. — Hanks *v.* International, 194 U. S. 303; 48 L. Ed. 989; 24 S. Ct. 700.

The courts of the United States are not given discretion to take depositions not authorized by Federal law, but, in respect of depositions thereby authorized to be taken, they may follow the Federal practice in the manner of taking or that provided by the state law. — Hanks *v.* International, 194 U. S. 303; 48 L. Ed. 989; 24 S. Ct. 700.

Note: Holding the taking of depositions before trial under N. Y. Code to be bad. Citing cases holding all sorts of ways.

§ 396. Documentary.

These objections to proof of records were not urged in the court below, and by well settled principles of practice applicable to appellate courts they cannot be raised here in the first instance. — Paine *v.* Trask, 56 Fed. 233; 5 C. C. A. 497.

Wasatch *v.* Crescent, 148 U. S. 293; Rules Supreme Court, No. 13.

At the hearing in this court, the appellee claimed that this certified copy has probative force of itself and makes out a prima facie case of an assignment. He cited, as sustaining this proposition, Lee *v.* Blandy, 1 Bond, 361. He might also have cited Brooks *v.* Jenkins, 3 McLean, 432; Parker *v.* Haworth, 4 Fed. 370; Dederick *v.* Agricultural Co. 26 Fed. 763; and Rob. Pat. sec. 1040, Walker on Pat. (2 ed. sec. 495) referring to these decisions says that they have been generally acquiesced in for 20 years, and that few rules of patent law have been more frequently made the basis of action by counsel and by courts than the one which they apparently sustain. The author, however, adds "but it hardly seems justified by statute upon which it is based and may even yet be overthrown by the Supreme Court."

R. S. 892, which provides for certified copies from the patent office, relates only to records, books, papers or drawings, "belonging to" that office, and letters patent. If the law required the original assignments to remain on file, and that certified copies should be given of them, a different principle would be involved; but the only thing in this case "belonging to" the patent office, is the record, which is itself only secondary evidence. No provision is made for authentication of the genuineness of the instrument to be recorded, as frequent in laws providing for registry, but a forged assignment may be recorded equally with a genuine one. Neither is there any method given by the law, by which any person prejudiced by the registry in the patent office of a spurious instrument, can purge the records. Neither does this registry have the moral protection presumably given to local county and township records through local publicity and notoriety. The proposition as made by the appellee, is independent of the support which sometimes comes from the fact that one party or the other to an alleged instrument has continued openly to act under it, or from the credibility given to ancient papers and records; but it stands as a universal unqualified claim, with reference to all copies of assignments certified from the patent office records.

It is not, however, necessary that we should determine this point, and we refer to it only for the purpose of making it understood that we cannot acquiesce in it without further consideration. — Paine *v.* Trask, 56 Fed. 233; 5 C. C. A. 497.

Charges were presented against the examiner who passed the application and against the solicitor, asking for the dismissal of the one and the disbarment of the other. Upon these charges the commissioner made a written decision. The charges and the decision were offered by the complainants, and were properly objected to as irrelevant. These proceedings were res inter alios actae, and were of no value in this case. — Ecaubert *v.* Appleton, 67 Fed. 917; 15 C. C. A. 73.

The opinion of the commissioner of patents was properly rejected as irrelevant. The record of the judgement or decree would have been admissible, but the opinion of the commissioner was not a decree, and was not the finding of facts which a court is frequently called upon to make. — Ecaubert *v.* Appleton, 67 Fed. 917; 15 C. C. A. 73.

Buckingham's Appeal, 60 Conn. 143.

The printed copy of the testimony in the interference proceedings before the patent office was properly rejected upon the grounds of irrelevancy. This suit is an independent one, although between the same parties as in the patent office proceeding. — Ecaubert *v.* Appleton, 67 Fed. 917; 15 C. C. A. 73.

That uncertified copies of U. S. letters patent introduced in evidence and not objected to at the proper time are good evidence as to dates, such as the date of invention, see Drewson *v.* Hartje, 131 Fed. 734; 65 C. C. A. 548.

Worley *v.* Tobacco, 104 U. S. 340; Roemer *v.* Simon, 95 U. S. 214; Loom Co. *v.* Higgins, 105 U. S. 580.

§ 397. Exhibits.

Where an alleged prior invention is introduced as an exhibit and accepted by the examiner it is in evidence; and if improper should have been stricken out on motion before the court below. — Clark *v.* Willimantic, 140 U. S. 481; 35 L. Ed. 521; 11 S. Ct. 846.

Hoskin *v.* Fisher, 125 U. S. 217.

If, against the earnest protest of their opponent, they availed themselves of a technicality to prevent a consideration by the court of a patent which they claimed will disclose want of novelty in the invention of the patent in suit, they cannot complain if the court declines to accept their unsupported assertion of the character of that patent. — Red Jacket *v.* Davis, 82 Fed. 432; 27 C. C. A. 204.

The court certainly has the unquestioned right to draw its own conclusions from an exhibition and inspection of the respective machines, or models thereof, as well from the opinion of expert witnesses. It is not bound to accept such testimony as conclusive. — Overweight *v.* Improved, 94 Fed. 155; 36 C. C. A. 125.

The Conqueror, 166 U. S. 111.

Note: As an illustration of the manner in which such a rule, if it were a rule, would utterly fail, suppose that the court had before it a Tesla motor, alleged to be of the polyphase type, and the court should attempt to pass upon the value of that exhibit regardless of the expert testimony essential to determine whether it was a motor of the polyphase type or multiphase or lagphase, or any other of the numerous forms of phase winding which would be absolutely indistinguishable to the naked eye.

The publication was put in evidence by the defendant himself. He may, indeed, have intended to use it for another purpose, but the publication was in the case as evidence for every legitimate purpose. — Maurer *v.* Dickerson, 113 Fed. 870; 51 C. C. A. 494.

Certain patents were printed and indexed in the record and were referred to on the argument. On rehearing it was objected that these patents were not "offered in evidence." *Held:* In view of these circumstances, the objection made at this late day, that the examiner did not formally mark it in evidence as an exhibit, is one not calculated to commend itself to an appellate court. — Smyth *v.* Sheridan, 149 Fed. 208; 79 C. C. A. 166.

§ 398. Expert.

Experts may be examined as to the meaning of terms of art on the principle of "*cuique in suo arte credendum*," but not as to the construction of written instruments. — Corning *v.* Burden, 15 How. 252; 14 L. Ed. 683.

Experts may be examined to explain terms of art, and the state of the art at any given time. They may explain to the court and jury the machines, models or drawings exhibited. They may point out the difference or identity of the mechanical devices involved in their construction. The maxim of *cuique in suo arte credendum* permits them to be examined to questions of art or science peculiar to their trade or profession; but professors or mechanics cannot be received to prove to the court or jury what is the proper or legal construction of any instrument of writing. A judge may obtain information

from them, if he desire it, on matters which he does not clearly comprehend, but cannot be compelled to receive their opinions as matter of evidence. — Winans *v.* New York & Eric, 21 How. 88; 16 L. Ed. 68.

It cannot be expected that the court will possess the requisite knowledge for this purpose, and when necessary it should avail itself of the light necessary by evidence. — Loom Co. *v.* Higgins, 105 U. S. 580; 26 L. Ed. 1177.

Where an expert has merely made experiments for the purposes of the litigation and from such experiments testifies that the results attained by defendant could be attained only by plaintiff's process; and his evidence is rebutted by an experienced expert who establishes the fact that the results had been attained by more than one process to his knowledge, although he does not testify by what process defendant did attain such results, such evidence is sufficient to rebut the negative testimony of complainant's expert. — Béné *v.* Jeantet, 129 U. S. 683; 32 L. Ed. 803; 9 S. Ct. 428.

It would seem that the Supreme Court would disregard the opinions of eminent chemists where such chemists had found a degree of difference in the processes to warrant them in holding the new process to be novel. Such seems to be the position assumed by Justice Blatchford in the case of Commercial *v.* Fairbank, 135 U. S. 176; 34 L. Ed. 88; 10 S. Ct. 972.

Expert testimony is admissible to explain the several drawings, models and machines that are exhibited upon the trial, their operation, purpose and effect, and the differences which exist in the various devices involved in their construction. The opinion of an expert is, in certain cases, admissible in evidence, but it is not conclusive upon the courts. It is to be considered as the judgment and opinion of a person who has had extensive practice, education and knowledge in relation to the particular subject upon which his testimony is given. If the reasons given by the expert witness are deemed reasonable and satisfactory, the court may adopt them, but, if they are unsatisfactory, the court will discard the testimony and act upon its own knowledge and judgment. — Norton *v.* Jensen, 49 Fed. 859; 1 C. C. A. 452.

To sustain the defense of want of novelty the defendants have set up in their answer, and offered in evidence, a large number of patents prior in date to those of the complainant. In the absence of any expert testimony to explain these patents, or indicate what they contain tending to negative the novelty of the complainant's patent, we do not feel called upon to examine them. There may be cases in which the character of the invention has so little complexity that such expert testimony is not necessary to aid the court in understanding whether one patent, or several patents considered together, describe the devices or combination of devices which are the subject matter of a subsequent patent; but this is not one of them. — Waterman *v.* Shipman, 55 Fed. 982; 5 C. C. A. 371.

Scientific expert evidence is not wholly reliable when not subjected to the search light of intelligent cross-examination. — Standard Elevator Co. *v.* Crane, 56 Fed. 718; 6 C. C. A. 100.

If a valuable patent might be overthrown by the testimony of an expert without careful inquiry into and virtual demonstration of its correctness, the rights of patentees would rest upon the testimony of such witnesses rather than the judgement of the court. — National *v.* Belcher, 71 Fed. 876; 18 C. C. A. 375.

In these expressions (determining what was novel) the expert, as is too common in the taking of evidence of that class, goes beyond the province of an expert and into the province of counsel or the court. — Osgood *v.* Metropolitan, 75 Fed. 670; 21 C. C. A. 491.

No detailed analysis of the specifications is made by any of them. The testimony consists of little more than bare opinions. They give no reasons for their conclusions. — Hanifen *v.* Godshalk, 84 Fed. 649; 28 C. C. A. 507.

The testimony of a capable and conscientious expert, in a case which admits of his employment cannot but be at once helpful to the court and creditable to the witness; but it is a sorry situation for the display either of skill or candor when, not to hurt the cause he was employed to promote, the expert must suppress his opinions upon all matters of controlling significance, and restrict his testimony to the pointing out of superficial and obvious distinctions of structural forms that involve no conceivable differences of function or operation, — a task of mere drudgery, which a common mechanic, accustomed to work by lines laid down for him by another, could perform quite as well. — Chase *v.* Ide, 89 Fed. 491; 32 C. C. A. 260.

The value of expert testimony generally depends upon the facts stated, as a reason for their opinions and conclusions. — Overweight *v.* Improved, 94 Fed. 155; 36 C. C. A. 125.

Green *v.* Terwilliger, 56 Fed. 384; 1 Tay. Ev. sec. 58.

That in the absence of expert or scientific explanation of a physical distinction in operation urged upon the argument, the court will not consider such argument, see Dececo *v.* Gilchrist, 125 Fed. 293; 60 C. C. A. 207.

We do not question the rule which permits a complainant to introduce a patent whose mechanical details are simple, and where the issue of infringement is sharply defined, without burdening the court with useless expert testimony. But this rule has no application to a case like this, where the operative construction embodies only a portion of the two patents in suit; where material and difficult questions of form, of operation, and of equivalency of function are involved; where the validity of a reissue is challenged on the ground that the reissued patent is for a different invention; and where the 39 claims of one of the patents are projected before the court without any attempt to analyze them, or read them upon defendant's patent or commercial machine. — Fay *v.* Mason, 127 Fed. 325; 62 C. C. A. 159.

Waterman *v.* Shipman, 55 Fed. 982.

We are aided in the examination of this question by the evidence of experts, but their opinions are not conclusive. We must form our own opinion, based on all the evidence. — American *v.* American, 128 Fed. 709; 63 C. C. A. 307.

Hardwick *v.* Masland, 71 Fed. 887.

Unhappily we cannot accept without reservation the opinions of the experts who have been examined as witnesses, for they are necessarily partisans of the side calling them, and essentially advocates, and their opinions are contradictory, and tend to perplex, instead of elucidating, although they appear to be gentlemen of great ability and deserved eminence. — Ideal *v.* Crown, 131 Fed. 244; 65 C. C. A. 436.

The Segrist patents were not discussed or explained by either counsel on the argument, no model was produced. In these circumstances we are not

disposed to critically discuss the Segrist patents. — Greene *v.* Buckley, 135 Fed. 520; 68 C. C. A. 70.

The admission of an expert witness, is, of course, entitled to weight in the interpretation of technical terms employed in a patent. But the court is not necessarily concluded by such interpretation when other satisfactory evidence is available. — Panzl *v.* Battle Island, 138 Fed. 48; 70 C. C. A. 474.

Defendant's expert claims that this difference of operation is material. But the fact that the defendant commercially manufactures and sells saw-sets with this construction indicates that the difference is theoretical rather than practical. — Morrill *v.* Hardware, 142 Fed. 756; 74 C. C. A. 18.

The defendant undertook to prove that the Blandfield and Andrews supporters (the alleged anticipation) were the embodiment of perfection; the complainant that they were the embodiment of stupidity; and, as generally happens, both succeeded. — Parramore *v.* Siegel-Cooper, 143 Fed. 516; 74 C. C. A. 386.

When once familiarity with the nomenclature and the elementary features of the art is acquired, the character and functions of the respective structures are found to be clearly displayed therein (in the patents). Indeed they are far more illuminative than some of the so-called "simplified diagrammatic drawings" which have been put in evidence. If the expert who is called to testify in such causes would only appreciate that he is not addressing electrical engineers, but laymen, and if, when undertaking to describe what some particular patent showed to a man skilled in the art, he would take the specifications and drawings of the patent as his text, instead of some conventional paraphrase of his own devising with its lettering entirely changed, he would materially lighten the labor of the court. — Western *v.* Rochester, 145 Fed. 41; 75 C. C. A. 313.

We note that more than two thirds of the nearly 1000 pages in this record are taken up by the testimony of expert witnesses, of whom there were 11 or 12, arrayed in about equal numbers on the opposite sides, and the reading of it has imposed upon the court a needless burden. As a contest between gentlemen learned in the science of the subject, it might be interesting if one had leisure, though it seems sometimes to run into very attenuated points. This prolixity seems not so much the fault of the witnesses as a mistake of the counsel. It is not the province of witnesses to advocate the cause of the party who calls him, nor to pass upon the questions of law or facts presented by the controversy. Frequently an expert witness may be of much aid to the court in explaining matters which can only be appreciated and understood by learning higher than the ordinary; but his province is to instruct and not to decide; and even the instruction is of uncertain value when it is colored from standing in the place of the partisan for one of the parties. Usually the testimony of one competent witness on each side is enough to insure a full and fair elucidation of what is recondite in the case. The voice of a single teacher is worth more than a confusion of many tongues. And the expense is worse than useless. — American *v.* Cleveland, 158 Fed. 978; 86 C. C. A. 182.

§ 399. Infringement.

The five averments must all be established. — Cammeyer *v.* Newton, 94 U. S. 225; 24 L. Ed. 72.

Where denial of infringement is made in the answer under oath, infringement must be shown by satisfactory proof. — Lehigh *v.* Mellon, 104 U. S. 112; 26 L. Ed. 639.

The burden of proof of infringement is upon the complainant. — Price *v.* Kelly, 154 U. S. 669; 26 L. Ed. 634; 14 S. Ct. 1208.

In a suit at law where evidence was taken and the question of infringement was determined this court will not review the evidence as if it were a suit in equity. — St. Paul *v.* Starling, 140 U. S. 184; 35 L. Ed. 404; 11 S. Ct. 803.

§ 400. Invention — Fact of.

The question is now well settled, that the question whether the alleged improvement is or is not patentable, is, in an equity suit, a question for the court. — Dunbar *v.* Meyers, 94 U. S. 187; 24 L. Ed. 34.

We have now to allude to a most important factor in determining the weight of evidence, a factor which seems to us to have been overlooked by the learned judge of the court below. It is, that the burden of proof is on the one who disputes it, to repel the presumption of originality arising from the patent. This is a well established rule of evidence, and is the result of long judicial experience in considering the foundations of belief. In a case like the present, it is not a mere balancing of the weight of testimony on one side or the other, but it is a requirement that this presumption of originality of invention must be overcome by proof which fully satisfies the mind respecting the fact. — Keasbey *v.* American, 143 Fed. 490; 74 C. C. A. 510.

When the question (whether he knew of the fact of the application of one of the defendants for a patent) was again asked him on cross-examination, he answered, "To the best of my knowledge and recollection, he never did!" This will not do as an answer to the unequivocal testimony of the defendant inventor. — Keasbey *v.* American, 143 Fed. 490; 74 C. C. A. 510.

§ 401. Law Actions — Depositions.

The Massachusetts interrogatories are sought as a "mode of proof in trials at law." The answers to them are not oral testimony, and therefore, to be admitted must be brought within the exceptions specified in the Revised Statutes. They are not a deposition taken under the circumstances in which it is permitted to take a deposition, by sections 863 and 865 of the Revised Statutes, and, like the New York examination, the Massachusetts interrogatories violate common usage by seeking to call the party in advance of the trial at law, and to "subject him to all the skill of opposing counsel to exact something which he may use then or not as suits his purpose." As the Massachusetts interrogatories fall neither within the rule of section 861 nor within the exceptions allowed by the following section, and as that rule and those exceptions provide an exclusive mode of proof in trials at law in the federal courts, it would seem that the interrogatories are inadmissible here. — National *v.* Leland, 94 Fed. 502; 37 C. C. A. 372.

Railway *v.* Botsford, 141 U. S. 250; ex parte Fisk, 113 U. S. 713.

It is further contended by the plaintiff that the interrogatories in question are admissible as a statutory substitute for a bill of discovery in aid of an action at law, and are thus brought within the provision of section 914 of the Revised Statutes. This view of the Massachusetts interrogatories was taken by the circuit court for this district in Bryant *v.* Leyland, 6 Fed. 125. We think the contention unsound. The Supreme Court has constantly

maintained the distinction between the system of law and equity, and has refused to adopt into the practice of the federal courts any part of the practice of the state courts which confounds the two systems. Moreover, the provisions of section 914 apply only to suits at law in the federal courts, and, in the absence of express language, can hardly be intended to introduce into the practice and procedure of such suits statutory procedure which is in its nature plainly equitable. We find, therefore, that it has been decided by the Supreme Court that, if the statutory interrogatories are to be treated as laying the foundation for a deposition, they are inadmissible in federal practice, because a deposition is not authorized to be taken in such a case by the statutes of the United States; that an examination authorized by state statutes has been excluded on this ground when such examination though not altogether similar, was yet in most respects similar to the interrogatories in the case at bar, the grounds for the exclusion, as stated by the Supreme Court, being largely applicable to the interrogatories in this case. We find, furthermore, that, if these interrogatories are to be treated, not as questions put to a deponent, but as a statutory substitute for a bill of discovery, they are excluded as an encroachment upon that control of equity procedure which belongs to the federal courts except when regulated in express terms by an act of congress. — National *v.* Leland, 94 Fed. 502; 37 C. C. A. 372.

The plaintiff further contends that, even if the statutory interrogatories be treated as the taking of an ordinary deposition, and hence forbidden by section 861, yet they are permitted by chapter 14 of the Act of 1892 (27 Stat. 7), which permits the taking of depositions in the mode described by the laws of the state in which the courts are held. This position seems to us plainly untenable. The act of 1892, as stated by the learned judge in the circuit court, was intended only "to simplify the practice of taking depositions by providing that the mode of taking in instances authorized by the federal laws might conform to the mode prescribed by the laws of the state in which federal courts were held," and not "to authorize the taking of depositions in instances not heretofore authorized by the federal statutes, and to confer additional rights to obtain proofs by interrogatories addressed to the adverse party in actions at law." For these reasons the exception to the refusal of the judge of the circuit court to default the defendants must be overruled. — National *v.* Leland, 94 Fed. 502; 37 C. C. A. 372.

§ 402. Law Actions — Directions and Instructions.

The judgement entered on the verdict rendered in favor of the defendants, in pursuance of the direction of the court, can be maintained only on the ground, either that the legal identity of the furnace described by Karsten with that covered by plaintiff's patent was manifest as a matter of law, or that it was established as a matter of fact so conclusively by the evidence that a verdict the other way could not be supported, within the rule as stated in Randall *v.* Baltimore, 109 U. S. 878. — Keyes *v.* Grant, 118 U. S. 25; 30 L. Ed. 54; 6 S. Ct. 974.

It is not error to refuse to instruct as to an abstract question, and instructions should never be given upon hypothetical statements of fact, of which there is no evidence. — Haines *v.* McLaughlin, 135 U. S. 584; 22 L. Ed. 241; 10 S. Ct. 876.

§ 403. Law Actions — Facts — For Court.

So far as concerns what is for the court and what is for the jury, there is no essential distinction between patents for inventions and other instruments. Primarily the construction of all of them is for the court. — DeLoria *v.* Whitney, 63 Fed. 611; 11 C. C. A. 355.

§ 404. Law Actions — Facts — For Jury.

In law actions the question of infringement is a question of fact for the jury. — Turrill *v.* R. R., 68 U. S. 491; 17 L. Ed. 668.

It is said properly, whether one compound of given proportions is substantially the same as another compound varying in the proportions — whether they are substantially the same or substantially different — is a question of fact and for the jury. — Tyler *v.* Boston, 74 U. S. 327; 19 L. Ed. 93.

Questions of fact must be submitted to the jury if there is so much resemblance as raises the question at all. — Tucker *v.* Spalding, 80 U. S. 453; 20 L. Ed. 515.

This court has no more right than the court below to have decided that the one patent covered the invention of the other or that it did not. — Tucker *v.* Spalding, 80 U. S. 453; 20 L. Ed. 515.

A pure question of fact is for the jury in an action at law, and it is error to take it away. — Burdell *v.* Denig, 92 U. S. 716; 23 L. Ed. 764.

All questions of fact are exclusively for the jury to decide. The court does not decide nor instruct you whether any device was or was not an anticipation of plaintiff's patent. The question of anticipation is purely a question of fact and is exclusively for the jury to determine. — Haines *v.* McLaughlin, 135 U. S. 584; 22 L. Ed. 241; 10 S. Ct. 876.

This court has had occasion more than once, to reverse the trial courts for taking away from the jury the question of infringement, which they have sometimes done by rejecting evidence of earlier patents offered to show anticipation, and sometimes by a peremptory instruction that a patent relied on by the defense was or was not infringement of plaintiff's patent. — Coupe *v.* Royer, 155 U. S. 565; 39 L. Ed. 263; 15 S. Ct. 199.

Tucker *v.* Spalding, 80 U. S. 453; Bischoff *v.* Wethered, 76 U. S. 815; Keyes *v.* Grant, 118 U. S. 36; Royer *v.* Schultz, 135 U. S. 319.

There was no question to go to the jury in this case (the court having determined want of novelty) and the court should have directed a verdict. — Black Diamond *v.* Excelsior, 156 U. S. 611; 39 L. Ed. 553; 15 S. Ct. 482.

This is a question of fact, and in a law case should be submitted to the jury under proper instructions, as to the law applicable to the same. — Hunt Bros. *v.* Cassidy, 53 Fed. 257; 3 C. C. A. 525.

When there is any evidence whatever to go to the jury upon an issue of fact, the refusal of the court to instruct the jury to return a verdict for the defendant is not reviewable in this court. There is nothing in the case before the court to make it an exception to the rule. — Singer Mfg. Co. *v.* Brill, 54 Fed. 380; 4 C. C. A. 374.

Explaining: Heald *v.* Rice, 104 U. S. 737; Lumber Co. *v.* Rodgers, 112 U. S. 659; Fond Du Lac *v.* May, 137 U. S. 395.

Under the issue and evidence, it was for the jury to decide whether the defendant had been licensed to use the patented appliances, and whether the defendant was charged with notice of the patent. — Houston *v.* Stern, 74 Fed. 636; 20 C. C. A. 636.

The question of novelty is a question of fact for the jury, or, when a jury is waived, is a question of fact to be decided by the court. — American *v.* Bullivant, 117 Fed. 255; 54 C. C. A. 287.

Westlake *v.* Carter, 6 Fish. P. C. 519; Battin *v.* Taggart, 17 How. 74.

The question of invention is one of fact, and after examining the testimony we are of opinion that there was sufficient evidence to warrant its submission to the jury. The jury having found for the plaintiffs, the verdict should not be disturbed. — Willis *v.* Miller, 121 Fed. 985; 58 C. C. A. 286.

§ 405. Law Actions — Rules of.

Except as otherwise prescribed by the laws of the United States, state laws governing the admissibility of evidence obtain at common law. — Vance *v.* Campbell, 66 U. S. 427; 17 L. Ed. 168.

§ 406. Law Actions — Miscellaneous Rules.

This contention (want of novelty and non-infringement) in each of its branches, presents a mixed question of law and of fact. — Graham *v.* Earl, 92 Fed. 155; 34 C. C. A. 267.

1 Rob. Pat. 272; California *v.* Molitor, 113 U. S. 609.

That a patent not pleaded, may be introduced in evidence in a law action, not for the purpose of proving anticipation, but for the purpose of showing the prior art to enable the court to construe the claim, may be so employed, see Overweight *v.* Improved, 94 Fed. 155; 36 C. C. A. 125.

On objection by the defendant, the learned judge below held that the witness might describe the results of the omission of the connecting mechanism, but could not be permitted to call that omission a " fatal fault," as the word " fatal " contained an inference which went beyond the province of an expert. — National *v.* Leland, 94 Fed. 502; 37 C. C. A. 372.

That where the mechanism is such that it is difficult for an ordinary person to understand it, an expert may testify as to what are and what are not equivalents, see National *v.* Leland, 94 Fed. 502; 37 C. C. A. 372.

Curt. Pat. 489; Keyes *v.* Grant, 118 U. S. 25; Bischoff *v.* Wethered, 9 Wall. 812.

As the plaintiff claimed that the corporations were mere devices to protect the individual defendants, evidence showing that the defendants were acting in good faith, was admissible. — National *v.* Leland, 94 Fed. 502; 37 C. C. A. 372.

§ 407. Objections and Exceptions.

An objection to the examination of a witness should state specifically the grounds of the objection, in order that the opposite party may have the opportunity of removing it if possible. — Woodbury *v.* Keith, 101 U. S. 479; 25 L. Ed. 939.

Anson and Cole were both examined and testified, without any objection to their competency because of want of notice. Hence it is too late to object to their testimony now. Had objection been taken at the time, the answer might have been amended. — Woodbury *v.* Keith, 101 U. S. 479; 25 L. Ed. 939.

Graham *v.* Mason, 5 Fish. P. C. 6; Brown *v.* Hall, 3 Fish. P. C. 531; Phillips *v.* Paige, 24 How. 164; Roemer *v.* Simon, 95 U. S. 214.

Plaintiff waived the exception to the refusal of this court to instruct the jury to find for defendant by proceeding with the cause and interlocutory evidence. — Hunt Bros. *v.* Cassidy, 53 Fed. 257; 3 C. C. A. 525.

Railway *v.* Cummings, 106 U. S. 700; Insurance Co. *v.* Crandal, 120 U. S. 527; Robertson *v.* Perkins, 129 U. S. 236.

Inasmuch as the respondent did not make specific and clear objections at the time it should have made them, if it is intended to rely thereon, we give no weight to the general objection interposed at the close of the testimony of the witness, in the following language: "Testimony objected to, in whole and in part, as incompetent and insufficient on the issue of priority of invention." In no view of the rules relating to objections with reference to testimony produced in federal courts can one so sweeping as this have effect, unless it is apparent that the facts intended to be proved in whatever form produced, could have no weight. — Westinghouse *v.* Stanley, 133 Fed. 167; 68 C. C. A. 523.

§ 408. Parol.

Parol evidence and documentary evidence are admissible to establish the statutory defenses. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

Oral evidence of anticipation must be regarded with grave doubt. The burden of proof rests upon the defendant and every reasonable doubt should be resolved against him. — Washburn *v.* Beat Em All, 143 U. S. 275; 36 L. Ed. 154; 12 S. Ct. 443.

Coffin *v.* Ogden, 85 U. S. 120.

Oral testimony, unsupported by patents or exhibits, tending to show prior use of a device regularly patented is, in the nature of the case, open to grave suspicion. — Deering *v.* Winona, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

Washburn *v.* Beat Em All, 143 U. S. 275.

Granting the witnesses be of the highest character, and never so conscientious in their desire to tell only the truth, the possibility of their being mistaken as to the exact device, which though bearing a general resemblance to the one patented may differ from it in the very particular which makes it patentable, are such as to render oral testimony particularly untrustworthy; particularly so if the testimony be taken after the lapse of years from the time the anticipating device was used. If there be added to this a personal bias, or an incentive to color the testimony in the interest of the party calling the witness, to say nothing of downright perjury, its value is, of course, still more seriously impaired. This case is an apt illustration of the wisdom of the rule requiring such anticipations to be proven by evidence so cogent as to leave no reasonable doubt in the mind of the court, that the transaction occurred substantially as stated. — Deering *v.* Winona, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

That no two of these witnesses testify as to the same plate, and that none of these old plates are produced, is urged as ground upon which we should hold the anticipation not proven. We are not unmindful of the liability to mistake in oral evidence of anticipation, and of the rule which requires that the evidence relied upon to overthrow the presumption of novelty should be of the most cogent character. Deering *v.* Winona, 155 U. S. 286; American *v.* Weston, 59 Fed. 147. Nevertheless we cannot escape the conviction that this method of making door name-plates is established as convincingly as any such fact can be established where the original article is not produced.

So far as we can see, the witnesses are without bias or incentive to color their evidence. The probability of mistake is reduced to a minimum by the very simple character of the subject about which they testify. The case is therefore quite exceptional, and, if the evidence does in fact produce conviction beyond all reasonable doubt, we are unadvised of any rule which denies to it legal effect in any class of cases, criminal or civil. — Rodwell *v.* Tuchfarber; 127 Fed. 138; 62 C. C. A. 252.

The unsatisfactory character of testimony depending upon the unaided recollection of witnesses of events occurring years previous render courts loth to destroy a patent upon testimony so unreliable. — United *v.* Beattie, 149 Fed. 736; 79 C. C. A. 442.

§ 409. Prima Facie.

The patent is prima facie proof of invention. — Marsh *v.* Seymour, 97 U. S. 348; 24 L. Ed. 963.

Plaintiff introduced his patent in evidence. This was prima facie proof of the validity of his patent. — Hunt Bros. *v.* Cassidy, 53 Fed. 257; 3 C. C. A. 525.

Mitchell *v.* Tilghman, 19 Wall. 390; Walk. Pat. Sec. 491; Blanchard *v.* Putnam, 8 Wall. 420; Seymour *v.* Osborne, 11 Wall. 576.

Counsel for the appellant insisted that, if the testimony left in the mind of the court a reasonable doubt as to complainant's priority, his client was entitled to the benefit of it. A large number of cases, both in the Supreme Court and in the circuits, hold that doctrine, nor do we propose to dispute it. If it were an open question, we might consider whether the presumption arising from the granting of the letters patent, could not be overthrown, as any other presumption at law is overthrown, by the preponderance of evidence. But accepting it as settled that any doubt is fatal to a claim antagonistic to the validity of letters patent themselves because of fraud, we can but say that in this case the principle cannot afford the appellant any assistance. The evidence is too convincing to permit the shadow of a doubt. — Forgie *v.* Oil Well. Supp. Co. 58 Fed. 871; 7 C. C. A. 551.

That the presumption of noninfringement arising from the grant of a subsequent patent is overcome by the finding of the trial court that infringement exists, see Anderson *v.* Collins, 122 Fed. 451; 58 C. C. A. 669.

§ 410. Records and Documents.

Patents are public records and as all persons are bound to take notice of their contents, they consequently have the right to obtain copies of them, by making proper application and paying the required fees. — Boyden *v.* Burke, 14 How. 575; 14 L. Ed. 548.

The application is a public record which the defendant and all others are presumed to know. — Loom Co. *v.* Higgins, 105 U. S. 580; 26 L. Ed. 1177.

A certified copy of a decision will be accepted as against the official report differing from it. — Gamewell *v.* Municipal, 77 Fed. 490; 23 C. C. A. 250.

Some mention is made of the file-wrapper; but this is of no consequence, because at every point the application for the patent was overruled by the examiners, and also on appeal until the commissioner was reached, who

reversed everything appealed against, and what is thus referred to occurred before the inventor reached him, and was wiped out. — Forsyth *v.* Garlock, 142 Fed. 461; 73 C. C. A. 577.

§ 411. Miscellaneous.

It is perfectly clear that a person having an interest only in the question and not in the event of the suit is a competent witness; and in general, the liability of a witness to a like action, or his standing in the same predicament with the party sued, if the verdict cannot be given in evidence, for or against him, and does not exclude him. — Evans *v.* Eaton, 7 Wheat. 356; 5 L. Ed. 472.

The court refused to receive a disclaimer on the ground that it did not recite plaintiff's interest. Defendant later tried to introduce some paper to limit plaintiff's claim. Also refused. *Held:* That while it was error to have refused it in the first instance it was not error in the second case to which exception could be taken. — Silsby *v.* Foote, 14 How. 218; 14 L. Ed. 394.

It would seem, that the defendant may introduce a junior patent in evidence to justify what he has done with the same *prima facie* as attaches to the patent in suit. — Corning *v.* Burden, 15 How. 252; 14 L. Ed. 683.

Note: This rule is doubtful.

The defendant is not at liberty to raise and prove issues outside of the pleadings and direct the attention from the main issue. — Blanchard *v.* Putnam, 75 U. S. 420; 19 L. Ed. 433.

If the defense be that it is for a different invention, the original patent, though inoperative as a cause of action or to protect the rights of the inventor, is yet admissible in evidence to sustain or prove such a defense. — Reedy *v.* Scott, 90 U. S. 352; 23 L. Ed. 109.

The burden of proof is upon defendant when the patent is put in evidence. — Marsh *v.* Seymour, 97 U. S. 348; 24 L. Ed. 963.

Seymour *v.* Osborne, 11 Wall. 516.

Defendant did not apply for a patent until after he had seen plaintiff's drawings and had made a model therefrom. It is difficult to believe, in view of this evidence, that he did not obtain the idea of his alleged invention from the prior invention and patent of plaintiff. — Garrett *v.* Siebert, 98 U. S. 75; 25 L. Ed. 84.

Complainant's testimony as to the date of his invention should be strictly construed against him because such evidence is necessarily subject to the gravest suspicion, however honest and well intentioned the witness may be. — Clark *v.* Willimantic, 140 U. S. 481; 35 L. Ed. 521; 11 S. Ct. 846.

But while the stipulation is undoubtedly admissible in evidence it ought not to be used as a pitfall, and where the facts subsequently developed show with respect to a particular matter, that it was inadvertently signed, we think that, upon giving notice in sufficient time to prevent prejudice to the opposite party, counsel may repudiate any fact inadvertently incorporated therein. — Carnegie *v.* Cambria, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

The Hiram, 1 Wheat. 440; Malin *v.* Kinney, 1 Cai. 117; Barry *v.* N. Y. 53 N. Y. 536.

The opinion of the witnesses as to the relative cost of two machines of which he was competent to judge, was not objectionable on the ground that he had testified that he did not know what one of them had cost. — Hunt *v.* Cassidy, 53 Fed. 257; 3 C. C. A. 525.

Counsel for complainant was justified in refusing, as he did, to cross-examine the witness who was the author of the pamphlet offered in evidence said to contain the views of the witness on the patents in suit, in regard to its contents. The greater part of it was scandalous matter, entirely irrelevant to the present controversy; and he was under no obligation to undertake to read and analyze its contents to see whether it contained anything bearing upon the issue worthy of a cross-examination. — Waterman *v.* Shipman, 55 Fed. 982; 5 C. C. A. 371.

It was incumbent upon the appellant, by fit objection at the time, or by subsequent motion to expunge, to have informed its opponent of the precise ground of objection to the offering in evidence of the former decree. The objection could then have been obviated by amendment to the bill, or by proper supplemental pleading. It is too late to urge such objection for the first time upon an appeal. — Bradley *v.* Eagle Mfg. Co. 57 Fed. 980; 6 C. C. A. 661.

Walsh *v.* Colclough, 56 Fed. 778.

The proposition (of settlement) made by the defendants was purely and simply an offer of compromise. It was not an admission of any fact involved in the litigation. If evidence of the proposition had been offered by the plaintiffs upon the trial it clearly would have been inadmissible, against the defendant's objection; for the law is well settled that the offer of settlement made by a party to a suit with a view to a compromise or an amicable adjustment of the matter in dispute is not admissible against him. — Holmes *v.* Truman, 67 Fed. 542; 14 C. C. A. 517.

9 Am. & Eng. Enc. Law, 353; Stanford *v.* Bates, 22 Vt. 546; West *v.* Smith, 101 U. S. 263; Gerrich *v.* Swectser, 4 Pick. 374.

The oral testimony of two officials in the patent office was taken for the purpose of proving the averment in the bill that the patent was issued either fraudulently or through the gross negligence of the examiner, and was objected to. The evidence was admissible. — Ecaubert *v.* Appleton, 67 Fed. 917; 15 C. C. A. 73.

The attention of the bar of this circuit is again called to the inexpediency of allowing irrelevant matter in depositions in patent causes. — Bonsack *v.* Elliott, 69 Fed. 335; 16 C. C. A. 250.

The conduct of the complainant in harassing purchasers of the product of this process with threats of litigation, when no possible ground for an action existed against them whether the patent be valid or not (Goodyear *v.* Railroad, Fed. Cas. No. 5,563; Boyd *v.* McAlpin, id. 1748; Brown *v.* D. C. 3 Mackey, 502; 3 Rob. Pat. 927) savors of an attempt to use the process of the courts to win customers by unfair means, and thus to reap a harvest of limited duration. It does not indicate that confidence in the validity of the patent which presses to a full investigation of rights and a comprehensive and decisive conclusion. Such a course certainly does not commend the cause of a suitor to a court of equity. — American *v.* Port Huron, 72 Fed. 516; 18 C. C. A. 670.

The appellees caused it to be identified, but failed to introduce it in evidence, and when appellant desired this court to consider it in evidence the

appellees objected. They cannot therefore, take any supposed advantage from a patent which they have failed to produce in evidence, and to the consideration of which they now object. — Red Jacket *v.* Davis, 82 Fed. 432; 27 C. C. A. 204.

Statements of counsel are not evidence; nor is the court bound by their construction of a patent. — Red Jacket *v.* Davis, 82 Fed. 432; 27 C. C. A. 204.

Where both parties lumbered up the record with a mass of evidence which was wholly immaterial and unnecessary, costs may be refused the successful party. — Eastman *v.* Getz, 84 Fed. 458; 28 C. C. A. 459.

More weight is given to the testimony of a witness based upon facts within his own knowledge and experience, than to the testimony of a witness which is "largely the assertion of theory." — Overweight *v.* Improved, 94 Fed. 155; 36 C. C. A. 125.

Béné *v.* Jeantet, 129 U. S. 613; 3 Rob. Pat. sec. 1012.

We do not think the learned judge meant to maintain that the structures to which he referred were matters of which "judicial notice," as that phrase is used in our jurisprudence, could be taken. The reference seems to have been made out of the fulness of his knowledge and experience in regard to these structures and, as naturally, apposite to and illustrative of the questions discussed by counsel in the suit before him. No hint or suggestion is made by the learned judge, that the knowledge of the fact referred to by him, determined the result at which he arrived. That he freely stated the facts he had in mind, in regard to combined gravity and cable roads, tends no more to invalidate or impeach his decree than the fact that he had this knowledge, though he were silent in regard to it. Extended experience in the affairs of life, does not disqualify a judge, who does not use or seek to use it unfairly. — Thompson *v.* Chestnut, 127 Fed. 698; 62 C. C. A. 454.

The preliminary question of the title in complainants was raised by their failure to produce the assignment to them of the sole and exclusive right to the patent, as pleaded in the bill. In view of the finding of the court below that complainants' title as alleged was admitted in the court below, and the statement of counsel that the assignment as pleaded was ready to be produced in court, showing such exclusive license in complainants, we conclude that title has been sufficiently proved. — Kirchberger *v.* American, 128 Fed. 599; 64 C. C. A. 107.

That a written agreement to submit certain questions as to use under a patent to a court of competent jurisdiction is competent evidence upon the trial of such an issue, see Holmes *v.* Kirkpatrick, 133 Fed. 232; 66 C. C. A. 286.

It is true that the testimony of an inventor in derogation of the validity of his own patent is usually open to suspicion; and in a case like this, where he has made oath, for the purpose of obtaining a joint patent, that he and another inventor were the joint inventors of the subject matter, the court should reject his subsequent testimony to the contrary, unless it carries a clear conviction that he did not intend to testify falsely originally, but made oath under misapprehension or mistake. We are not aware of any rule of evidence or any principle of estoppel which precludes a witness who has testified incorrectly, or even falsely, on a former occasion, from telling the truth

later. The joint patentees might be estopped from asserting that they were not joint inventors in a suit against them by the owner to enforce the patent, but a third party, who is in no way in privity with them or with the owner, cannot be affected by an estoppel. — De Laval *v.* Vernont, 135 Fed. 772; 68 C. C. A. 474.

In the nature of the case, it was scarcely to be expected that the complainant could prove that the inventions in question were made during the term of Franzen's employment by the direct and positive testimony of any witness speaking from his own actual or personal knowledge. Naturally the complainant's reliance would be on circumstantial evidence, which often leads to a conclusion more satisfactory than direct evidence can produce. — Mississippi *v.* Franzen, 143 Fed. 501; 74 C. C. A. 135.

The complainant is not concluded by what the defendant testified, or prevented from contending upon the whole evidence that the inventions were actually made while defendant was in its employment, although he asserted the contrary when on the witness stand. A party who calls the opposite party as a witness is not bound by his testimony, but may contradict him. — Mississippi *v.* Franzen, 143 Fed. 501; 74 C. C. A. 135.

1 Whart. Ev. secs. 484, 489; Dravo *v.* Fabel, 132 U. S. 487 distinguished.

The Circuit Court, and we on appeal, proceeding on a bill in equity of this character as finders of the facts have as wide a range for drawing inferences as a jury. — United *v.* Duplessis, 155 Fed. 842; 84 C. C. A. 76.

It will thus be seen that we have nothing before us but the statements of the patent itself and the patents referred to in the specification. With these exceptions there is no prior art. We are permitted to consider the decrees in the first circuit as rules of decision entitled to the highest respect but we are not permitted to consider the facts as stated in the opinions either to sustain or defeat the patent, for the reason that these facts are not in proof here. We have nothing more before us than if the case were here on demurrer to the bill. The rules prescribing the limits beyond which the court is not permitted to go at such hearings is clearly stated in New York *v.* New Jersey, 137 U. S. 445. — American *v.* DeGrasse, 157 Fed. 660; 87 C. C. A. 260.

Whether the application under which the patent in suit was granted be called a formal continuation or not, of the original application for a patent with reference to the same subject-matter, the admissions and statements of the applicant in the former case are not irrelevant to the issues now under consideration, and we are not to be asked to close our eyes to evidential facts upon a ground so slight as the one suggested. — Dodge *v.* Jones, 159 Fed. 715; 86 C. C. A. 191.

EXPERIMENT.

General Statement § 412
Abandonment § 413 (*see* § 1)
Experimental use § 414
Public Use § 415 (*see* § 849)
Reduction to Practice § 416
Secret Use § 417

See — *Abandonment* § 10; *Anticipation* § 78; *Priority* § 811; *Public Use* § 851; *Reduction to Practice* § 863; *Secret Process or Machine* § 898; *Unpatented Invention* § 930

§ 412. General Statement.

The Patent Statute makes no provision as to experiment or experimental use. This subject recurs under the titles *Anticipation* and *Public Use*. The following is, perhaps, the best general statement made by the courts:

The law upon the question of experimental use is well settled. It is the duty of the inventor to file his application within two years after the com-

pletion of his invention. He is permitted to take the time necessary to complete the invention and to make experiments for that purpose, but the moment the invention is completed the two-year period begins to run. The leading case is Elizabeth *v.* Pavement Co. 97 U. S. 126. An experimental public use of six years was there held not to be unreasonable. The invention was for a pavement and durability was the principal object sought to be attained. An invention must not only be new, it must be useful. A pavement that would not last six years was useless, no one would want it, no one would incur the expense of laying it down. There is but one way to ascertain whether a newly invented pavement is durable and that is to test it by public use. A trial of two years will demonstrate nothing. It may stand the test for that period and then suddenly disintegrate. These were the considerations which induced the court to uphold the Nicholson patent. As we shall presently see, there were no such problems to be solved in the case in hand.

Smith *v.* Sprague, 123 U. S. 249, is authority for the following propositions:

First. Where it is clearly shown that there was public use of an invention by the inventor for more than two years prior to the application, the burden rests upon him to establish by convincing proof that the use was for the purpose of perfecting an incomplete invention by tests and experiments.

Second. Where the invention is one of many embodied in a single machine, or where the device contains features not included in the invention covered by the claims, experiments intended to produce more perfect working of these extrinsic features are not such as will prevent the running of the statutory limitation. In other words, the experiments must be made for the purpose of developing the invention as described and claimed and nothing else. When the invention is completed the time begins to run and it is of no moment that something else, not a part of the invention, is incomplete and requires tests and experiments to perfect it. (Citing and explaining Egbert *v.* Lippman, 104 U. S. 333; Root *v.* Railroad, 146 U. S. 210; Worley *v.* Tobacco, 104 U. S. 340; Perkins *v.* Paper, 2 Fed. 451; Hall *v.* Macneale, 107 U. S. 90; Harmon *v.* Struthers, 57 Fed. 637; Swain *v.* Holyoke, 109 Fed. 154; Lettelier *v.* Mann, 91 Fed. 917.)

From these authorities we deduce the following propositions, as applicable to the present controversy:

1. An inventor has a reasonable time in which to experiment for the purpose of perfecting the invention and demonstrating its utility.

2. The time thus spent, if in good faith, is no part of the two-year statute of limitations.

3. The experiments must be made in perfecting the invention as described and shown.

4. Experiments made in testing parts of the machine not covered by the invention will not have the effect of extending the two-year period.

5. As soon as the invention is completed, viz.: "in such a condition that the inventor can apply for a patent for it," the two-year period begins to run and the application must be made within this period.

6. The fact that the invention has been improved since its original embodiment does not demonstrate that it was then embryonic or incomplete.

7. When a clear case of prior public use is established, the burden is on the inventor to prove by convincing proof that the use was experimental. — Eastman *v.* Mayor, 134 Fed. 844; 69 C. C. A. 628.

§ 413. Abandonment.

The use of an invention, by the inventor himself, or of any other person under his direction, by way of experiment, and in order to bring his invention

to perfection has never been regarded as abandonment. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

Curt. Pat. 381; Shaw *v.* Cooper, 7 Pet. 292.

A machine which has been in use, unchanged in the principle of its construction, for some 30 years, until it was taken from the shop to be made an exhibit in suit, cannot be thrown aside as an abandoned experiment. — Woodbury *v.* Keith, 101 U. S. 479; 25 L. Ed. 939.

It is only when experiments fall short of the desired result and are abandoned as failures that they are rejected as proof of want of novelty. — American *v.* Wagner, 151 Fed. 576; 81 C. C. A. 120.

Waterman *v.* Thomson, 2 Fish. P. C. 461; Aikin *v.* Dolan, 3 Fish. P. C. 197.

§ 414. Experimental Use.

A machine need not be put up and used only in the inventor's own shop or premises. He may have it put up and used in the premises of another, and the use may inure to the benefit of the owner of the establishment. Still, if used under the surveillance of the inventor, and for the purpose of enabling him to test the machine and ascertain whether it will answer the purpose intended, and make such alterations and improvements as experience demonstrates to be necessary, it will be a mere experimental use and not a public use, within the meaning of the statute. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

It is not experimental use where an inventor practises his art generally, teaching it to others and receiving pay therefor. — International *v.* Gaylord, 140 U. S. 55; 35 L. Ed. 347; 11 S. Ct. 716.

Smith *v.* Sprague, 123 U. S. 249; Consolidated *v.* Wright, 94 U. S. 92; Egbert *v.* Lippman, 104 U. S. 333; Elizabeth *v.* Nicholson, 97 U. S. 126.

We are convinced that, while the product of the Rieseck machine was sold, such sale was incidental to its experimental use. — Penn *v.* Conroy, 159 Fed. 943; 87 C. C. A. 149.

§ 415. Public Use.

The rule of Coffin *v.* Ogden, 18 Wall. 120 and Egbert *v.* Lippman, 104 U. S. 333 followed. — Hall *v.* Macneale, 107 U. S. 90; 27 L. Ed. 367; 2 S. Ct. 73.

If it be once understood that the object of the act "was to require the inventor to see to it that he filed his application within two years from the completion of his invention, so as to cut off all question of the defeat of his patent by a use or sale of it by others more than two years prior to his application," the courts will no longer be vexed by the perplexing questions which must frequently arise when the intent of the user and the bona fides of the use are questions to be determined on oral testimony. Isolated cases of injustice to inventors may result, but the remedy is certain and sure. The inventor is master of the situation and has it in his power by prompt action to make the defense of prior public use impossible. Surely two years after he has completed his invention is ample time in which to file his application. If he fails to take so simple and reasonable a precaution, why should it not be said that the risk is his and that he cannot complain of the consequences of his own supineness? — Eastman *v.* Mayor, 134 Fed. 844; 69 C. C. A. 628.

§ 416. Reduction to Practice.

A mere experiment is not patentable. It must have been reduced to practice. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

What constitutes legitimate experiment. — Smith *v.* Sprague, 123 U. S. 249; 30 L. Ed. 141; 8 S. Ct. 122.

Putting an invention into public use for more than two years merely to test its efficiency, is not reduction to practice within the meaning of the cases. — Root *v.* Third Ave. 146 U. S. 210; 36 L. Ed. 946; 13 S. Ct. 100.

Elizabeth *v.* Nicholson, 97 U. S. 126; Smith *v.* Sprague, 123 U. S. 249; Hall *v.* Macneale, 107 U. S. 90; Egbert *v.* Lippman, 104 U. S. 333.

§ 417. Secret Use.

The machine was kept under lock and key, hidden from sight, and no employees permitted to see it except the foreman. *Held:* Whatever knowledge, if any, was obtained of the machine by the public was surreptitious and contrary to the manifest wish of the inventor. — Penn *v.* Conroy, 159 Fed. 943; 87 C. C. A. 149.

Elizabeth *v.* Pavement, 97 U. S. 126; Jennings *v.* Pierce, Fed. Cas. 7283; Smith *v.* Sprague, 123 U. S. 249.

EXTENSIONS.

General Statement and Holdings § 418

§ 418. General Statement and Holdings.

Extensions have for long years been obsolete. They can be secured only by special act of Congress (see § 268). The following rulings are given, not because they are of any practical use, but to make the record of cases complete.

In absence of specific agreement the assignee takes no interest in an extension. — Wilson *v.* Rousseau, 4 How. 646; 11 L. Ed. 1141.

The executor or administrator and not a former assignee, has the right to apply for an extension. — Wilson *v.* Rousseau, 4 How. 646; 11 L. Ed. 1141.

1 — The act authorizes an extension on the application of an executor or administrator.

2 — The right of extension inures to the executor or administrator, and not to an assignee.

3 — That such right inures to the administrator notwithstanding a contract of assignment of the existing patent.

4 — That one claiming the title from administrator under extension may maintain an action against the assignees of the former patent.

5 — That the fact that the patentee in his life time had sold all his rights, receiving no contingent interest in the patent, did not permit the executor or administrator from obtaining extension and that such former assignees acquired no rights beyond the original term.

6 — That an assignee of a specific territory, limited to use two machines holds such an interest as will enable him to sue.

7 — That the extended specification is not void for uncertainty.

8 — That the decision of the Commissioners is not conclusive as to their jurisdiction.

9 — That a reissue of an extended patent is lawful. — Wilson *v.* Rousseau, 4 How. 646; 11 L. Ed. 1141.

Upon the authority of Evans *v.* Eaton and Wilson *v.* Rousseau, two propositions are settled: 1. That a special act of Congress in favor of a patentee,

extending the time beyond that originally limited, must be considered as engrafted on the general law. 2. That under the general law, in force when this special act was passed, a party who had purchased the right to use a machine during the period to which the patent was first limited, was entitled to continue to use it during the extension authorized by law. — Bloomer *v.* McQueewan, 14 How. 539; 14 L. Ed. 532.

Evans *v.* Eaton, 3 Wheat. 518; Wilson *v.* Rousseau, 4 How. 688.

Under the former law when extensions were granted, unless special agreement ran to the contrary, the sale or license of a machine carried with it the right under an extension. — Mitchell *v.* Hawley, 83 U. S. 544; 21 L. Ed. 322.

Under the Act of 1836 a license or assignment carried with it the right under the extension of the patent. — Eunson *v.* Dodge, 85 U. S. 414; 21 L. Ed. 766.

Wilson *v.* Rousseau, 4 How. 646; Bloomer *v.* McQueewan, 14 How. 539; Chafee *v.* Belting Co. 22 How. 217; Bloomer *v.* Millinger, 1 Wall. 340.

In the absence of specific terms, an assignment does not carry extensions — on the principle that Nemo dat non habet (Benj. Sales, 2nd ed. 5; Peer *v.* Humphrey, 2 Ad. & Ell. 495); but where the conveyance is of the invention whether before or after the patent is obtained the rule is otherwise, unless there is something in the instrument to indicate a different intention. The rule being that a conveyance of the described invention carries with it all its incidents, and all the well considered authorities concur that the inchoate right to obtain a renewal or extension of the patent is as much an incident of the invention as the inchoate right to obtain the original patent; and if so it follows that both are included in the instrument which conveys the described invention without limitation or qualification. — Hendrie *v.* Sayles, 98 U. S. 546; 25 L. Ed. 176.

Emmons *v.* Sladden, 9 O. G. 354; Gayler *v.* Wilder, 10 How. 477; Clum *v.* Brewer, 2 Curt. 520; Carnan *v.* Bowles, 2 Bro. Ch. 84.

The right of an owner of a patented machine, without any conditions attached to his ownership, to continue the use of his machine during an extended term of the patent is well settled. — Paper Bag cases, 105 U. S. 766; 26 L. Ed. 959.

Bloomer *v.* McQueewan, 14 How, 550; Chaffee *v.* Boston, 63 U. S. 223; Mitchell *v.* Hawley, 83 U. S. 547; Adams *v.* Burks, 84 U. S. 455.

FOREIGN PATENT.

Statutory Provision § 419
General Rulings § 420
Expiration of § 421
Lapse of § 422
Prior § 423
Miscellaneous Rulings § 424
See — Anticipation §§ 80–85; *Defenses* § 320; *Evidence* § 390; *Public Use* § 852

§ 419. Statutory Provision.

No person otherwise entitled thereto shall be debarred from receiving a patent for his invention or discovery, nor shall any patent be declared invalid by reason of its having been first patented or caused to be patented by the inventor or his legal representatives or assigns in a foreign country, unless the application for said foreign patent was filed more than twelve months, in cases within the provisions of section 4886 R. S., and four months in cases of designs, prior to the filing of the application in this country, in which case no patent shall be granted in this country.

An application for patent for an invention or discovery or for a design filed in this country by any person who has previously regularly filed an application for a patent for the same invention, discovery, or design in a foreign country which, by treaty, convention, or law, affords similar privileges to citizens of the United States shall have the same force and effect as the same application would have had if filed in this country on the date on which application for patent for the same invention, discovery, or design was first filed in such foreign country, provided the application in this country was filed within twelve months in cases within the provisions of section 4886 of the Revised Statutes, and within four months in cases of designs, from the earliest date on which any such foreign application was filed. But no patent shall be granted on an application for patent for an invention or discovery or a design which had been patented or described in a printed publication in this or any foreign country more than two years before the date of the actual filing of the application in this country, or which had been in public use or on sale in this country for more than two years prior to such filing. — R. S. 4887.

The foregoing is the statute as twice amended — first by the act of Mar. 3, 1897, and second by the act of Mar. 3, 1903. In order to understand the force and effect of the decisions on this subject, it is necessary to quote the section as originally found in the act of July 8, 1870, and also as amended by the act of Mar. 3, 1897.

As originally passed:

No person shall be debarred from receiving a patent for his invention or discovery, nor shall any patent be declared invalid, by reason of its having been first patented or caused to be patented in a foreign country, unless the same has been introduced into public use in the United States for more than two years prior to the application. But every patent granted for an invention which has been previously patented in a foreign country shall be so limited as to expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the shortest term, and in no case shall it be in force more than seventeen years.

After the amendment of Mar. 3, 1897, the section read thus:

No person otherwise entitled thereto shall be debarred from receiving a patent for his invention or discovery, nor shall any patent be declared invalid, by reason of its having been first patented or caused to be patented by the inventor or his legal representatives or assigns in a foreign country, unless the application for said foreign patent was filed more than seven months prior to the filing of the application in this country, in which case no patent shall be granted in this country.

It is well, also, to have before us the text of Sec. 4886, showing the amendments of Mar. 3, 1897. The amendments are shown in italics:

Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof, not known or used by others in this country, *before his invention or discovery thereof*, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, *or more than two years prior to his application*, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceeding had, obtain a patent therefor.

It will thus be seen that Sec. 4887 has had a somewhat varied career. The decisions following must be read with this in view.

§ 420. General Rulings.

A patent granted subsequent to a foreign patent for the same invention, is limited thereby under sec. 4887 to the term for which the foreign patent is granted, and the word "term" is meant to cover the full period of the foreign grant, without reference to the "terms" for which the patent may be extended, as construed in Pohl *v.* Anchor, 134 U. S. 381. — Bate *v.* Hammond, 129 U. S. 151; 32 L. Ed. 645; 9 S. Ct. 225.

Under 4887 U. S. R. S. a patent expires with the term of the shortest prior foreign patent, the expiration of term meaning the term for which such foreign patent was granted, or could be kept in force. Construing Bate *v.* Hammond, 129 U. S. 151; Pohl *v.* Anchor, 134 U. S. 381; 33 L. Ed. 953; 10 S. Ct. 577.

Holmes *v.* Metropolitan, 21 F. R. 458; Paillard *v.* Bruno, 29 F. R. 864; Bate *v.* Gillett, 31 F. R. 809; Huber *v.* Nelson, 38 Fed. 830.

The expiration of a foreign patent prior to application for a reissue voids the reissue. — Commercial *v.* Fairbank, 135 U. S. 176;. 34 L. Ed. 88; 10 S. Ct. 972.

Voids grant of domestic patent issued after expiration of foreign patent. — Huber *v.* Nelson, 148 U. S. 270; 37 L. Ed. 447; 13 S. Ct. 603.

Bate *v.* Hammond, 129 U. S. 151.

Does not operate to terminate domestic patent if the term for which the foreign patent is undisturbed. — Huber *v.* Nelson, 148 U. S. 270; 37 L. Ed. 447; 13 S. Ct. 603.

Pohl *v.* Brewing Co. 134 U. S. 385.

Under the facts stated (that the American application was filed Dec. 1, 1876; that English patent was issued Jan. 29, 1877; that Canadian patent was issued Jan. 9, 1877; that the American patent was issued Nov. 20, 1877) the invention for which the U. S. patent was issued was "previously patented in a foreign country," within the meaning of those words in sec. 4887 U. S. R. S. and the U. S. patent expired under the terms of that section, before the expiration of seventeen years from its date. — Bate *v.* Sulzberger, 157 U. S. 1; 39 L. Ed. 601; 15 S. Ct. 508.

Compare Bate *v.* Hammond, 129 U. S. 151.

Full statement of present status of sec. 4887.

The French patent for a term of 15 years was issued before the date of the application for the United States patent, and was in full force at that date, but lapsed for the nonpayment of an annuity before the U. S. patent issued. The effect which the lapse had upon the life of the U. S. patent depends upon the proper construction of sec. 4887.

No one of the five decisions of the Supreme Court which may be supposed to bear upon a decision of this motion was based upon the facts in this case. All the decisions of the Supreme Court upon sec. 4887 were intended to be limited to the question which arose upon the precise facts of the respective cases, and are to be so regarded, notwithstanding any general language which was used.

In Bate *v.* Hammond, 129 U. S. 151, the question was whether the U. S. patent expired at the end of 5 years or 15 years, from the date of the previously issued Canadian patent; and it was held that as there was no interruption of the Canadian patent, 15 year period prevailed.

In Pohl *v.* Brewing Co. 134 U. S. 381, the court held that the potential term and not the period of actual existence, was to govern.

In Commercial *v.* Fairbank, 135 U. S. 176, the great question was whether the foreign patents were identical with those of the United States, and finding them to be so, held that the application for the reissue filed subsequent to the expiration of a foreign patent was void.

The decision of Bate *v.* Sulzberger, 157 U. S. 1, was confined to the single point that the provisions of sec. 4887 " refer to foreign patents granted previously to the issue of letters patent for the same invention by the United States, and not to foreign patents granted previously to the application for the American letters."

The case of Huber *v.* Mfg. Co., 148 U. S. 270, was tried in circuit court after the decision in the Bate case and before that in the Pohl case. In this case, the application for the U. S. patent was filed more than 7 months after the English patent had become void. *Held:* " We are of opinion that, as in the case at bar, the foreign patent was not in force when the U. S. patent was issued, the latter patent never had any force or validity;" and gave as the apparent reason for the conclusion that " the delay in applying for the U. S. patent until after the foreign patent expired amounted to an abandonment of the right to a U. S. patent. This is in accordance with Mushet's Case " (1870) which was an application for an extension of a U. S. patent after the foreign patent for the same invention had expired. The Huber case is an authority only for the right to obtain a U. S. patent applied for 7 months after a foreign patent had expired, and after its owners manifestly regarded it as of no importance and consequently after the abandonment of the right to a U. S. patent. There has been no authoritative decision by that court upon the facts of the case at bar.

Section 4887 provided that prior foreign patenting should not be a bar to a United States patent, unless under certain circumstances, but that such patent should not extend beyond the term of the life of its foreign predecessor. If the invention or the right to a patent had been abandoned before the application for a United States patent, its issuance was prohibited under another section. If there had been no abandonment before application, but the issuance of the United States patent was delayed until the foreign patent had become forfeited by noncompliance with some statutory provision, the question is, whether when issued, its life had been destroyed, or whether its life was upon the declared or legal term of the foreign patent. If its life was destroyed, its destruction was effected while the application was under examination, and was delayed in the patent office. Such a result would be at variance with the spirit of the section, the intent of which was to make the United States term coterminous with the possible foreign term.

But there is no requirement that the foreign patent must be in force at the date of the United States patent, and in searching for the meaning of the section, as applied to this case, the words " to expire at the same time " should have the same construction in each set of circumstances, and should be taken to mean that the United States patent expires at the end of the term prescribed in the previous foreign patent. — Welsbach *v.* Apollo, 96 Fed. 332; 37 C. C. A. 508.

Note: Perhaps this decision should set at rest the wandering and disembodied spirit of sec. 4887. The opinion is by Wallace and concurred in by Shipman (only two judges sitting), and the briefs were by Bennett for appellant and Wetmore for appellees. While other conditions may arise, it would seem that thus far the law should remain settled.

The following opinion by Judge Lowell is given, practically in full.

At the time the patent in suit was issued, section 4887 of the Revised Statutes was in force in its original form. By virtue of that section the patent

was limited to expire with the British patent, May 19, 1897. The complainant contended that since the passage of Act Mar. 3, 1903, c. 1019, 32 Stat. 1225, every patent whenever granted is limited only by the term expressed in its grant and is governed by Rev. St. sec. 4884. Under this contention the patent expired May 24, 1904. In order to understand the legislation under consideration it is here printed in full. (Here is quoted sec. 4887; Act Mar. 3, 1897, c. 391, 29 Stat. 692; Act Mar. 3, 1903, c. 1019, sec. 1, 32 Stat. 1225, above quoted.)

Let us consider how the law stood regarding patents like that here in suit at every stage of the legislation, bearing in mind the necessary distinction between the validity of a patent and its term. Act July 4, 1836, c. 357, sec. 8, 5 Stat. 121, provided that prior foreign patenting within six months of the application here should not invalidate the domestic patent, which was left in force as expressed on its face. Act Mar. 3, 1839, c. 89, sec. 6, 5 Stat. 354, did not affect patents validated by the act of 1836, but, in addition thereto, validated American patents for inventions which had been patented abroad more than six months before the application here. It first gave to foreign patenting an effect upon the term of an American patent for the same invention by reckoning the statutory term of the American patent from the foreign rather than from the American issue. The general codification of the patent laws in Act July 8, 1870, c. 230, 16 Stat. 201, materially changed the effect given to foreign patenting, and in this respect did not merely codify existing legislation. Bate *v.* Sulzberger, 157 U. S. 1, 41. The American patent was made to expire with the foreign patent of shortest term, and not at the usual statutory period reckoned from the date of the foreign application. The provisions of sec. 25 of the Act of 1870 were substantially like those of Rev. Stat. 4887. The latter was expressed in two sentences. In substantial accordance with the acts of 1836 and 1839 as amended by the Act of 1870, the first sentence declared that no patent should be deemed invalid because of prior foreign patenting. This sentence dealt with validity as affected by foreign patenting and with that subject only. The second sentence dealt with the term of American patent as affected by prior foreign patenting, and not at all with its validity, carrying out the radical alteration of the term which was introduced by the Act of 1870.

When granted, the patent in suit fell within the purview of both sentences of section 4887. The first saved it from invalidation by the prior British patenting. The second limited its term by that of the British patent; i. e., May 19, 1897. Had the legislation remained unchanged to the present day the defense to this bill would undoubtedly be complete.

The Act of Mar. 3, 1897, was passed before the expiration of the patent in suit. Section 3 amended both sentences of Rev. Stat. 4887. The only important amendment to the first sentence invalidated American patents where the foreign application was filed more than seven months before the American application. The second sentence of sec. 4887 was stricken out altogether. As thus amended, sec. 4887 dealt solely with the invalidation of patents by reason of foreign patenting, and in no way affected their term. As no legislation remained to give to prior patenting any effect upon the term of an American patent for the same invention, that term stood as fixed by the grant issued under Rev. Stat. 4884.

In order to save earlier patents from the operation of the Act of 1897 as to their term or validity, section 8 expressly provided that the amendment of Rev. Stat. sec. 4887 should not apply to patents granted before Jan. 1, 1898. These were left to be governed by section 4887 in its original form. Therefore the patent in suit was left by the Act of 1897 unaffected either as to its validity or as to its term, governed as to the latter by the second clause of sec. 4887, and not by sec. 4884. By this saving of rights, some patents were left valid which would have been invalidated had the Act of

1897 been made retroactive; e. g., cases in which the foreign patent had been applied for more than seven months before the domestic application. Other patents were left invalid which would have been validated had the Act of 1897 been made retroactive; e. g., cases in which the American patent had expired by reason of the expiration of the British patent. The general saving of rights to individuals and to the public made by sec. 8 applied alike to both cases. The patent in suit therefore, expired May 19, 1897, as it would have done had the Act of 1897 never been passed.

The Act of 1903 amended sec. 4887 as amended. It did not purport to affect the term of patents in any respect, but only the requisites of their validity. Before its passage, as has just been said, the patent in suit was controlled as to its term by sec. 4887 in its original form. The Act of 1903 manifested no intention to change this control, or in effect to revive a patent which had expired six years before its passage. Complainant has referred to statutes which repealed earlier legislation imposing penalties or working forfeitures. These repealing statutes have often been given a retroactive effect. But the second sentence of Rev. Stat. 4887, imposed no penalty, and worked no forfeiture. Moreover, the case does not stand as if the second sentence of Rev. Stat. 4887 had been repealed without qualification. Legislation will not easily be construed to destroy by mere implication rights expressly saved to the public or to individuals in earlier legislation from its retroactive operation. As the Act of 1897 expressly left the patent in suit to expire in 1897, and as the Act of 1903 manifested no contrary intention, it follows that the Sherman patent expired before this suit was brought. — Sawyer *v.* Carpenter, 143 Fed. 976; 75 C. C. A. 162.

The patent laws of the different countries vary so much in the extent of the grant provided for, and the limitations placed upon it, that to sustain complainant's proposition would lead to holding that few, if any, of the foreign patents could be included in the terms of section 4887. The words "previously patented in a foreign country," must then be taken to mean "patented according to the laws and usages of such foreign country," provided a substantial monopoly is thereby granted. None of the cases cited by the complainant, all of which have been examined, sustains its contention in this respect. Even the recent case of Societe *v.* General Electric Co. 97 Fed. 604, so much relied upon by complainant, does not, on the precise point determined upon the facts of the case, justify such an interpretation of the meaning of the act in question. It is true, the learned judge in that case said, "A patent implies a grant from the sovereign power, securing to the inventor, for a limited time, the exclusive right to make, use, and vend the invention." If he meant by this that there could be no patent in a foreign country, within the meaning of section 4887, that was not covered by the precise language of this definition, we must hold, not only that the statement was obiter dictum, but inaccurate. We are inclined to think, however, that the learned judge in using the words "make, use and vend," had in mind merely the statutory terms of the grant contained in an American patent, which were sufficient for his then purpose, inasmuch as he decided that in the case before him the Swiss government had granted no patent at all, because the condition required by the Swiss law had not been complied with, and the instrument claimed to be a patent was merely a temporary protection, with a promise that a definitive patent would be granted when the condition prescribed was fulfilled. The conclusion arrived at by the court upon the facts stated was correct, and the reasoning of the court upon those facts was clear and convincing. — Atlas *v.* Simonds, 102 Fed. 643; 42 C. C. A. 398.

§ 421. Expiration of.

A patent granted subsequent to a foreign patent for the same invention is limited thereby under sec. 4887 to the term for which the foreign patent

is granted, and the word "term" is meant to cover the full period of the former patent without reference to the "terms" for which the patent may be extended. As construed in Pohl *v.* Anchor, 134 U. S. 381. — Bate *v.* Hammond, 129 U. S. 151; 32 L. Ed. 645; 9 S. Ct. 225.

A patent shall be so limited as to expire at the same time with the term limited by the foreign patent of prior issue having the shortest time to run; and the word "term" is not subject to any lapse or forfeiture of the foreign patent. Construing, Bate *v.* Hammond, 129 U. S. 151. — Pohl *v.* Anchor, 134 U. S. 381; 33 L. Ed. 953; 10 S. Ct. 577.

Holmes *v.* Metropolitan, 21 F. R. 458; Paillard *v.* Bruno, 29 F. R. 864; Bate *v.* Gillett, 31 F. R. 809; Huber *v.* Nelson, 38 F. R. 830.

"If your invention has not been introduced into public use in the United States for more than two years, you may, upon complying with the conditions prescribed, obtain an American patent, and you may, if you can, obtain a foreign patent. But the American patent will be granted on the condition that if you obtain the foreign patent first, your invention shall be free to the American people whenever by the expiration of the foreign patent it becomes free to people abroad; and in no case shall the term of the American patent exceed seventeen years." This we deem to be a sound interpretation of the statute, giving to the words used the meaning required by their ordinary signification. — Bate *v.* Sulzberger, 157 U. S. 1; 39 L. Ed. 601; 15 S. Ct. 508.

It would seem that the main question in this case, namely, whether the invention for which the patent from the U. S. was issued had been previously patented in a foreign country, within the meaning of those words in sec. 4887 of the R. S. and whether the American patent expired under the terms of that section before the expiration of the seventeen years from its date, was squarely before the Supreme Court in the case of Bate *v.* Hammond, 129 U. S. 151, involving the same patent; but that the court declined to decide it. Such was the statement of counsel in this case; and the court acquiesced therein by neither referring to such statement nor citing that case in this opinion. It follows, therefore, that Bate *v.* Hammond supra, did not decide the question herein determined, although such interpretation has been put upon it by inexperienced or careless annotators and digesters. — Bate *v.* Sulzberger, 157 U. S. 1; 39 L. Ed. 601; 15 S. Ct. 508.

In Bate *v.* Hammond, 129 U. S. 164, it was held that, so far as the term of a Canadian statute operated to curtail the term of the United States patent under 4887 R. S. it should be regarded as a continuous term for the entire period. — Edison *v.* U. S. 52 Fed. 300; 3 C. C. A. 83.

The failure to limit the patent in suit on its face, to a shorter term than 17 years, so as to expire at the same time with the prior foreign patent having the shortest term, does not affect its validity. — Edison *v.* U. S. 52 Fed. 300; 3 C. C. A. 83.

Bate *v.* Hammond, 129 U. S. 151.

It was argued that as a Swedish patent had lapsed under failure to comply with the statute, under the Canadian act the short term patent could not be extended so as to come within Bate *v.* Hammond, 129 U. S. 164. *Held:* That the Canadian act applied only to foreign patents existing prior to the Canadian patent; and, therefore, that neither directly (Pohl *v.* Brewing Co. 134 U. S. 381) nor indirectly, through the Canadian patent, is the patent in

suit affected by what happened to the Swedish patent. — Edison *v.* U. S. 52 Fed. 300; 3 C. C. A. 83.

It will be observed that this section (4887) while it extended the right of a foreign inventor and patentee, as it existed under the acts 1836 and 1839, in regard to the limitation by a two-years public use, on the other hand, changed, in the interest of the American public, the term for which such foreign patentee could obtain a patent in the United States from 14 years from the date of the foreign patent to a period to be measured by the shortest term of the foreign patents previously obtained. This limitation of the term of the monopoly of an American patent, where the patentee has previously obtained a foreign patent, is obviously in the interest of those from whom tribute is exacted by such monopoly; and this purpose to do justice to the American public, by giving them the same privilege as is accorded to the people of the foreign country in which the patent is first granted, challenges the consideration of the Court. — Atlas *v.* Simonds, 102 Fed. 643; 42 C. C. A. 398.

That there was no patent law, in the sense of a legislative enactment, in Denmark, until 1894, does not affect the situation. Prior to the enactment of the law of that year, patents or encrets were granted and issued by the king, in exercise of the royal prerogative, and the term for which they were granted was determined according to what seemed the exigency of each case. Nevertheless such patents were issued by virtue of the recognized lawful authority vested in the reigning monarch, and were acts of a reigning sovereignty as completely as were legislative enactments. — Atlas *v.* Simonds, 102 Fed. 643; 42 C. C. A. 398.

That sec. 4887, before it was amended, and as construed in Bate *v.* Sulzberger, 157 U. S. 1, was sufficiently drastic to warrant a strict construction; and that the question of identity between the foreign patent and the domestic patent depends upon the claim of the domestic patent, and not upon the disclosure of the foreign patent, see Westinghouse *v.* Stanley, 138 Fed. 823; 71 C. C. A. 189.

Commercial *v.* Fairbank, 135 U. S. 176; Rob. on Pat. sec. 623. Criticising Walker on Pat. (4 Ed.) 150. Distinguishing Siemens *v.* Sellers, 123 U. S. 276. See also Sawyer *v.* Carpenter, 133 Fed. 238.

If differences could be set up to defeat the application of sec. 4887 of the R. S., even when they involve no patentable invention, the statute would have been emasculated, and the application could always have been defeated, by trivial and unimportant changes, so that it would be left practically worthless. In Westinghouse *v.* Stanley, 138 Fed. 823, we rested on the fact that the differences between the foreign patent and the domestic patent then in question involved "an essential, [illegible]l, and patentable improvement." We were not then required t[illegible] directly on the question pressed on us here. If it had been pressed [illegible]ld probably have perused Siemens *v.* Sellers, 123 U. S. 276, farther [illegible] did. It was there said at page 283 "a patent cannot be exempt[illegible] the operation of the law (sec. 4887) by adding some new improveme[illegible]ne invention." No mere changes in detail which do not affect the essence of the invention as covered by the respective patents can avail this complainant. — Thomson-Houston *v.* McLean, 153 Fed. 883; 82 C. C. A. 629.

§ 422. Lapse of.

A patent shall be so limited as to expire at the same time with the term limited by the foreign patent of prior issue having the shortest time to run,

and the word " term " is not subject to any lapse or forfeiture of the foreign patent. Construing, Bate *v.* Hammond, 129 U. S. 151. — Pohl *v.* Anchor, 134 U. S. 381; 33 L. Ed. 953; 10 S. Ct. 577.

Holmes *v.* Metropolitan, 21 F. R. 458; Paillard *v.* Bruno, 29 F. R. 864; Bate *v.* Gillett, 31 F. R. 809; Huber *v.* Nelson, 38 F. R. 830.

Nor do we find it necessary to express an opinion whether the lapsing of a foreign patent by the failure of a patentee to pay a renewal fee required by the British law would shorten the term of his patent here. — Hobbs *v.* Beach, 180 U. S. 383; 45 L. Ed. 586; 21 S. Ct. 409.

Bate *v.* Hammond, 129 U. S. 151; Pohl *v.* Anchor, 134 U. S. 381; Bate *v.* Sulzberger, 157 U. S. 36.

§ 423. Prior.

Neither of the English inventions are shown by the testimony to have been patented until after Morse's application for a patent, nor to have been so described in any previous publication as to embrace any substantial part of his invention. And if his application for a patent was made under such circumstances, the patent is good, even if in point of fact he was not the first inventor. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

By the Act of 1870, a foreign patent, in order to invalidate an American patent, must antedate the invention patented. — Cochrane *v.* Deener, 94 U. S. 780; 24 L. Ed. 139.

Under the law prior to the act of 1870 the issue of a prior foreign patent carried the issue date of the American patent back to it. — Siemens *v.* Sellers 123 U. S. 276; 31 L. Ed. 153; 8 S. Ct. 117.

It is true that by Rev. Stat. sec. 4887, " every patent granted for an invention which has been previously patented in a foreign country shall be so limited as to expire at the same time with the foreign patent; " but this obviously presupposes that the foreign patent shall have been obtained by the American patentee or with his consent. This is evident from the somewhat awkward phraseology of the 1st clause of the section, which declares that " no person shall be debarred from receiving a patent for his invention . . . by reason of its having been first patented or caused to be patented in a foreign country," which evidently means that the patentee shall not be debarred from his patent by reason of his having first patented, or caused his invention to be patented in a foreign country. Indeed it would be manifestly unjust that a patentee should lose the full fruit of his patent by the fact that some intermeddler had caused the invention to be patented abroad, that we could not give that construction to the section unless its phraseology imperatively demanded it. This construction would suggest an excellent device for an enemy to bring about the termination of an inconvenient patent. — Hobbs *v.* Beach, 180 U. S. 383; 45 L. Ed. 586; 21 S. Ct. 409.

§ 424. Miscellaneous Holdings.

The effect of a foreign patent of a different date is to limit the duration of the American patent, not to invalidate it. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

The fact that the domestic patent does not bear the same date as a foreign patent does not render the domestic patent void, although the foreign patent limits its duration. — Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

O'Reilly *v.* Morse, 56 U. S. 62; Siemens *v.* Sellers, 123 U. S. 276.

The preamble of complainant's patent contains a recital of several foreign patents which were taken out for the same invention. (And in the oath it is shown the same recital is made.) This recital is erroneous in several particulars, but the record fails to show that there was any intentional misrepresentation. So far as we can discover, the requirement of a reference to foreign patents in the preamble of an application, is a mere regulation of the patent office, which is so far reasonable that it may bar the issue of a patent until it is complied with, but which cannot invalidate a patent once issued unless perhaps when the recital is erroneous through a wilful misrepresentation or some fraudulent purpose. — Heap *v.* Tremont, 82 Fed. 449; 27 C. C. A. 316.

Note: It is a question if the statement were contained in the oath and were false, whether it would not amount to a false oath which could defeat the patent.

The true meaning and purpose of the act of Congress, as expressed in the language used, are accomplished by applying the word " patented " to the having received the grant of an exclusive privilege from a foreign sovereign, if such privilege amounts to a substantial monopoly. The contention of appellant is that, inasmuch as, under our present patent laws, the exclusive privilege granted to an inventor is to " make, use, and vend " his invention, the words " patented in a foreign country " can only refer to an exclusive privilege to this full extent, and are therefore not applicable to the privilege granted by the Danish patent or eneret, which is only " to make and allow to make " the thing invented. In our opinion this contention is not tenable. The Danish word " eneret," according to the Danish expert and patent solicitor produced as a witness by complainant, means " monopoly." There can be no question that the exclusive privilege to make and permit others to make is a substantial monopoly, and within the meaning of the language employed in section 4887. — Atlas *v.* Simonds, 102 Fed. 643; 42 C. C. A. 398.

The complainant maintains that the British patent was taken out by an intermeddler (the evidence was that simultaneous patenting was ordered, but that the parties whether authorized or not acted otherwise). There is no evidence that the inventor, or whoever controlled the invention, ever repudiated the British patent until after this suit was commenced, or attempted to do so. As he, whoever he was, knew that there was to be an application for a British patent, and that there was a purpose to take it out, it is beyond reasonable probability to assume that he never informed himself as to the issue of such a patent. On the other hand, the Circuit Court, and we, are entitled to assume that he obtained knowledge of what was done and acquiesced therein, an hypothesis which would reject the conclusion of the Circuit Court in this respect, to the effect that the British patent was properly taken out, would be unreasonable. — United *v.* Duplessis, 155 Fed. 842; 84 C. C. A. 76.

FRAUD.

Statute and General Statement § 425 | *See — Defenses* §§ 317, 318.

§ 425. Statute and General Statement.

It will be noted that the first and second statutory defenses under Sec. 4920 suggest the question of fraud — the first defense, fraud against the public, and the second, fraud against another inventor. The question of fraud has also arisen in connection with actions to cancel patents (see title *Cancellation of Patent*); but the question of fraud has not entered largely into the subject of patent litigation, as will be seen from the following meagre quotations.

It seems to us that if Bell was aware, at the time that he filed his specifications, asserted his claims, and procured his patents, that the same matter had been previously discovered and put into operation by other persons, he was guilty of such a fraud upon the public that the monopoly which these patents grant to him ought to be revoked and annulled. — U. S. *v.* Am. Bell, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

While equity will always relieve those who suffer from acts of fraud, it has always been required that those who seek its jurisdiction on that account shall, after having carefully scrutinized the cause of complaint, more clearly formulate the allegations of the same, and then that they shall fully prove that which they have so alleged. — Dashiell *v.* Grosvenor, 66 Fed. 334; 13 C. C. A. 593.

Montesquieu *v.* Sandys, 18 Ves. 302; Price *v.* Berrington, 7 Eng. Law. & Eq. 260; Wilde *v.* Gibson, 1 H. L. Cas. 620; Glasscott *v.* Lang, 2 Phil. Ch. 310; Curson *v.* Belworthy, 22 Eng. Law. & Eg. 1; Tillinghast *v.* Champlain, 4 R. I. 173; Fisher *v.* Boody, 1 Curt. 206; Eyve *v.* Potter, 15 How. 42.

We conclude that the statement in the specification to which allusion has been made is a statement which rests upon no substantial foundation, and was most likely inserted in the specification for the purpose of forestalling objections to the granting of a patent. — Mahler *v.* Animarium, 111 Fed. 530; 49 C. C. A. 431.

FUNCTION.

Patentability § 426
Miscellaneous Rules § 427
See — Claims § 196; *Infringement* §§ 448, 490, 527; *Invention* §§ 594, 600, 603; *Machine and Product* § 771; *Process* § 820–1; *Product* § 823, *Specification* § 911

§ 426. Patentability.

It has been perfectly well settled ever since the time of Corning *v.* Burden that a function is not patentable, but to determine whether a claim is so far functional in character as to be invalid is a constantly recurring problem. It is never a question of the rule itself, but whether the claim comes under the rule. This subject recurs under *Invention — Result or Function.*

It is well settled that a man cannot have a patent for the function or abstract effect of a machine, but only for the machine which produces it. — Corning *v.* Burden, 15 How. 252; 14 L. Ed. 683.

An inventor who has devised a machine for performing a particular function cannot claim to cover every machine performing the same function. — Dryfoos *v.* Weise, 124 U. S. 32; 31 L. Ed. 362; 8 S. Ct. 354.

A function which is an incident to the operation of a machine attributable to the skill and deftness of the operator, rather than a distinct function of the machine cannot be claimed as novelty. — Union *v.* Keith, 139 U. S. 530; 35 L. Ed. 261; 11 S. Ct. 621.

The difficulty we have found with this claim is, it is open to the objection (held in several cases to be fatal) that the new function of a machine cannot be patented. — Westinghouse *v.* Boyden, 170 U. S. 537; 42 L. Ed. 1136; 18 S. Ct. 707.

Corning *v.* Burden, 15 How. 252; Burr *v.* Duryee, 1 Wall. 531; Fuller *v.* Yentzer, 94 U. S. 288; Locomotive *v.* Medart, 158 U. S. 68; Paper Bag Case, 30

Fed. 63; Machine Co. *v.* Waterbury, 39 Fed. 389; Travers *v.* Cordage Co. 64 Fed. 771.

That a claim for a function is invalid, see Goshen *v.* Bissell, 72 Fed. 67; 19 C. C. A. 13.

A claim for a function is not patentable. — Boyden *v.* Westinghouse, 70 Fed. 816; 17 C. C. A. 430.

Now, the function or result of the operation of a machine or combination is not patentable under our laws, and therefore the camber in the beam could not be monopolized by means of a patent. The means, the mechanical device, by which that camber was produced and that alone, was capable of protection by such a franchise. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Fuller *v.* Yentzer, 94 U. S. 288; Pencil Co. *v.* Howard, 20 Wall. 498; Miller *v.* Mfg. Co., 151 U. S. 186; Knapp *v.* Morss, 150 U. S. 221; Carver *v.* Hyde, 16 Pet. 513; LeRoy *v.* Tatham, 14 How. 156; Corning *v.* Burden, 15 How. 252; Burr *v.* Duryee, 1 Wall. 531.

Again, since a function is not patentable, a combination of functions is not; nor is a combination of mechanical devices or elements and one of the functions of that combination. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

A valid patent cannot be secured for a function, a mode of operation, or a result, separate from the means or mechanical devices by which the result is accomplished. — Union *v.* Diamond, 162 Fed. 148; 89 C. C. A. 172.

Fuller *v.* Yentzer, 94 U. S. 288; Westinghouse *v.* Boyden, 170 U. S. 537.

§ 427. Miscellaneous Rules.

The distinction between a practically operative mechanism and its function is said to be difficult to define. Rob. Pat. sec. 144. It becomes more difficult when a definition is attempted of a function of an element of a combination which is the means by which other elements are connected and by which they co-act to make complete and efficient the invention. — Continental *v.* Eastern, 210 U. S. 405; 51 L. Ed. 922; 28 S. Ct. 748.

An inventor is entitled to a beneficial function of his invention, whether he knew all its beneficial uses or not. — Goshen *v.* Bissell, 72 Fed. 67; 19 C. C. A. 13.

McCormick *v.* Aultman, 69 Fed. 371; Roberts *v.* Ryer, 91 U. S. 150; Brown *v.* D. C. 130 U. S. 87–103; Eames *v.* Andrews, 122 U. S. 40; Miller *v.* Mfg. Co. 151 U. S. 201; Stow *v.* Chicago, 104 U. S. 550; Tucker *v.* Spalding, 13 Wall. 453; Appleton *v.* Starr, 60 Fed. 411; Western *v.* Sperry, 58 Fed. 186; Galt *v.* Parlin, 60 Fed. 422; Dixon *v.* Pfeifer, 55 Fed. 390; Thompson *v.* National, 65 Fed. 427.

It is not always clear what is meant by the use of this elastic and indefinite word "function." But it is thought that the assertion of a new function or effect should only be sustained upon proof of novel or unexpected properties or uses capable of producing novel results. Smith *v.* Goodyear, 93 U. S. 486. We are not aware of any case where a claim for a new function has been sustained in the absence of such element of novelty or unexpectedness. — General *v.* Yost, 139 Fed. 568; 71 C. C. A. 552.

GOVERNMENT.

Statutory Provisions § 428
General Rulings § 429
See — Employer and Employee § 364; *Infringement* § 498; *Injunction* § 553; *Jurisdiction* § 715; *License* § 749

§ 428. Statutory Provisions.

All officers and employees of the Patent Office shall be incapable, during the period for which they hold their appointments, to acquire or take, directly or indirectly, except by inheritance or bequest, any right or interest in any patent issued by the Office. — R. S. 480.

No royalty shall be paid by the United States to any one of its officers or employees for the use of any patent for the system, or any part thereof, mentioned in the preceding section (marine engines), nor for any such patent in which said officer or employee may be directly or indirectly interested. — R. S. 1673.

* * * * * * * * * * * * *

The Secretary of the Interior and the Commissioner of Patents are authorized to grant any officer of the Government, except officers and employees of the Patent Office, a patent for any invention of the classes mentioned in sec. 4886 of the Revised Statutes when such invention is used or to be used in the public service, without the payment of any fee: *Provided*, That the applicant in his application shall state that the invention described therein, if patented, may be used by the Government, or any of its officers or employees in prosecution of work for the Government, or by any other person in the United States, without the payment to him of any royalty thereon, which stipulation shall be included in the patent. — Act Mar. 3, 1883, appended to 4886 R. S. See App. § 428.

§ 429. General Rulings.

As will be seen, the Government has no different property rights and no different exemption from liability than any other person or corporation. Of course, an injunction will not lie, and actions lie in the Court of Claims instead of in the circuit court. The subject of jurisdiction is treated under *Jurisdiction — Court of Claims*, and the subject of governmental infringement is treated under *Infringement — Government*. See App. § 828.

The government of the United States has no prerogative right which gives it any right to use the patented invention of a citizen on other terms than any citizen. — James *v.* Campbell, 104 U. S. 356; 26 L. Ed. 786.

There is no difference between the government and any other employer. If one is employed to devise and perfect an instrument, or means for accomplishing a desired result, he cannot, after successfully accomplishing his work for which he was employed plead title thereto as against his employer. That which he has been employed and paid to accomplish, becomes, when accomplished the property of his employer. So also when one is in the employ of another in a certain line of work, and devises an improved method or instrument for doing the work, and uses the property of his employer and the services of other employees to develop and put in practicable form his invention, and explicitly assents to the use by his employer of his invention, a jury, or a court trying the facts, is warranted in finding that he has so far recognized the obligations of service flowing from his employment and the benefits resulting from his use of the property, and the assistance of the co-

employees of his employer, as to have given to such employer an irrevocable license to use such invention. — Solomons *v.* U. S. 137 U. S. 342; 34 L. Ed. 667; 11 S. Ct. 88.

McClurg *v.* Kingsland, 42 U. S. 202.

The government has no more right to appropriate a man's property invested in a patent than it has to take his property vested in real estate; nor has the fact that an inventor is at the time of his invention in the employ of the government transfer to it any title or interest therein. There is no difference between the government and any other employer in this respect. But when he is employed to and does invent in his capacity, the government acquires the same rights, and the same rules obtain, as in the case of any other employee. — Solomons *v.* U. S. 137 U. S. 342; 34 L. Ed. 667; 11 S. Ct. 881.

It would seem that, although the contractor in the performance of his contract and with the knowledge of the officers of the government may infringe a patent in the actual performance of such work (as infringing a process for laying a pavement) the government is in no way liable in damages. — Schillinger *v.* U. S. 155 U. S. 163; 39 L. Ed. 108; 15 S. Ct. 85.

Harlan and Shiras dissenting.

There is no doubt whatever of the proposition laid down in Solomons *v.* U. S. 137 U. S. 342, that the mere fact that a person is in the employ of the Government does not preclude him from making improvements in the machines with which he is connected, and obtaining patents therefor as his individual property, and that in such cases the government would have no more right to seize upon and appropriate such property than any other proprietor would have. On the other hand, it is equally clear that, if the patentee be employed to invent or devise such improvements, his patents obtained therefor belong to his employer, since in making such improvements he is merely doing what he was hired to do. — Gill *v.* U. S. 160 U. S. 426; 40 L. Ed. 480; 16 S. Ct. 322.

The United States may be sued by a patentee for their use of his invention under a contract made with him by the United States or by their authorized officers. — Belknap *v.* Schild, 161 U. S. 10; 16 L. Ed. 599; 16 S. Ct. 443.

U. S. *v.* Burns, 79 U. S. 246; U. S. *v.* Palmer, 128 U. S. 262; U. S. *v.* Berdan, 156 U. S. 552.

IMPROVEMENT.

Statute Authority and General Statement § 430
Carrying Forward § 431
Claims § 432 (*see* § 184)
Combinations § 433 (*see* § 249)
General Rules § 434
Generic § 435
Infringement of § 436 (*see* § 445)
Mechanical Skill § 437
Old Device, New Use § 438
On Prior Patent to Same Inventor § 439
Patentability § 440
Scope — Limitations § 441
Specific § 442
Utility § 443
Miscellaneous § 444
See — Assignment §§ 160–62; *Claims* §§ 198, 205; *Divisional Patenting* § 348; *Double Patenting* § 356; *Employer and Employee* § 365; *Equivalents* § 376; *Infringement* §§ 471, 506–7; *Invention* §§ 646–8, 659.

§ 430. Statute Authority and General Statement.

Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof * * * — R. S. 4886.

The term "improvement" is used with great freedom in the statute, by the Patent Office, and by the courts. It is no more definable than the term invention. Some have tried to classify improvements as a separate class of inventions, but the attempt has not proved wholly satisfactory. The author has not undertaken to correct the custom and usage of the legislative, executive or judicial departments of Government, however wrong or loose the same may have been. Supplemental sections will be found under *Infringement* and *Invention*.

§ 431. Carrying Forward.

But a mere carrying forward or new or more extended application of the original thought, a change only in form, proportions or degree, the substitution of equivalents, doing substantially the same thing in the same way by substantially the same means with better results, is not such invention as will sustain a patent. These rules apply alike, whether what preceded was covered by a patent or rested only in public knowledge or use. In neither case can there be an invasion of such domain and an appropriation of anything found there. In one case everything belongs to the prior patentee; in the other to the public at large. — Smith *v.* Nichols, 88 U. S. 112; 22 L. Ed. 566.

The mere carrying forward of an old idea, though effecting an improvement, is not invention. — Guidet *v.* Brooklyn, 105 U. S. 550; 26 L. Ed. 1106.

In short, this is a patent for superior workmanship, and within all the authorities is invalid. This court has repeatedly stated that all improvement is not invention. If a certain device differs from what precedes it only in superiority of finish, or in greater accuracy of detail, it is but carrying forward of an old idea, and does not amount to invention. Thus if it had been customary to make an article of unpolished metal it does not involve invention to polish it. If a telescope had been made with a certain degree of power, it involves no invention to make one which differs from the other only in its having greater power. If boards had heretofore been planed by hand, a board better planed by machinery would not be patentable, although in all those cases the machinery itself may be patentable. — Risdon *v.* Medart, 158 U. S. 68; 39 L. Ed. 899; 15 S. Ct. 745.

Smith *v.* Nichols, 88 U. S. 112; Pickering *v.* McCullough, 104 U. S. 310; Burt *v.* Evory, 133 U. S. 349; Wooster *v.* Calhoun, 11 Blatchf. 215.

A mere carrying forward or an extended application of the original device with the change only in degree, is not patentable invention. — Eames *v.* Worcester, 123 Fed. 67; 60 C. C. A. 37.

Smith *v.* Nichols, 21 Wall. 112; Burt *v.* Evory, 133 U. S. 349; Grant *v.* Walter, 148 U. S. 547; Market *v.* Rowley, 155 U. S. 621; Fox *v.* Perkins, 52 Fed. 205; Galvin *v.* Grand Rapids, 53 Fed. 165.

It is not invention to merely carry forward an invention shown in a prior machine. — Van Epps *v.* United, 143 Fed. 869; 75 C. C. A. 77.

Smith *v.* Nichols, 21 Wall. 112; Ansonia *v.* Electrical, 144 U. S. 11.

This simplifying of the process may have involved an exercise of the inventive faculties, but surely does not entitle its author to rank as a pioneer. Such improvements are a part of the evolution and natural development of every art. An inventor of such an improvement must be confined strictly to the particular advantage which he has made and cannot levy tribute

on the improvement of others. — Universal *v.* Sonn, 154 Fed. 665; 83 C. C. A. 422.

§ 432. Claims.

An inventor who has made an improvement in a machine cannot include all previous inventions, and have a claim to the whole art, discovery, or machine which he has improved. All others have an equal right to make improved machines, provided they do not embody the same or substantially the same devices or combination of devices, which constitute the peculiar characteristic of the previous invention. — Burr *v.* Duryee, 68 U. S. 531; 17 L. Ed. 750.

A patent is addressed to those familiar with the art. A new and useful improvement upon an old machine is just as much the subject of a patent as a new machine. All that the inventor is required to do is to point out distinctly the part he claims as new, so as to advise the public as to the extent of his invention, and what is thereby withdrawn from the public. — Goshen *v.* Bissell, 72 Fed. 67; 19 C. C. A. 13.

Parks *v.* Booth, 102 U. S. 96; Seymour *v.* Osborne, 11 Wall. 516; Roberts *v.* Nail Co. 53 Fed. 916; 2 Rob. Pat. 530–534.

The claims of a patent covering a mere improvement upon prior machines, which were capable of accomplishing the same general result, must receive a narrow interpretation. — Greene *v.* Buckley, 135 Fed. 520; 68 C. C. A. 70.

Morley *v.* Lancaster, 129 U. S. 263.

§ 433. Combinations.

Improvements in machines protected by letters patent may also be mentioned, of a much more numerous class, where all the ingredients of the invention are old, and where the invention consists entirely of a new combination of old ingredients, whereby a new and useful result is obtained, and many of them are of great utility and value, and are just as much entitled to protection as those of any other class. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Union *v.* Matthieson, 2 Fish. P. C. 605.

The patent is not a pioneer or primary one in any sense, and the owner is not entitled to much range of equivalents. The claims must be limited in their scope to the actual combination of essential parts as shown, and cannot be construed to cover other combinations of elements or different construction of arrangement. — St. Louis *v.* American, 156 Fed. 574; 84 C. C. A. 340.

Cimiotti *v.* American, 198 U. S. 399; Kokomo *v.* Kitselman, 189 U. S. 8; Greene *v.* Buckley, 135 Fed. 520.

§ 434. General Rule.

Nor can its validity be impeached upon the ground that it is an improvement upon a former invention, for which the patentee had himself already obtained a patent. Any other inventor might do so; and there can be no reason, in justice or in policy, for refusing the like privilege to an original inventor. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

But if the invention claimed be itself but an improvement on a known machine by a mere change of form or combination of parts, the patentee cannot treat another as an infringer who has improved the original machine

by use of a different form or combination performing the same functions. The inventor of the first improvement cannot invoke the doctrine of equivalents to suppress all other improvements which are not mere colorable invasions of the first. — McCormick *v.* Talcott, 61 U. S. 402; 15 L. Ed. 930.

For ordinary improvers the stimulus of the rewards offered by our patent laws is needed to encourage by the hope of profit that zealous eagerness to improve processes, to remedy defects in machinery, to invent new methods and appliances for saving labor and cheapening productions in the numberless articles that are in daily use. It is this stimulus that has made the American mechanic the most alert, observant, and studious of any in the world, and it is the indefinite multiplication of these small inventions and improvements that has wrought an industrial revolution and brought this country to the forefront of the world's commerce. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

The alleged improver may have a valid patent for his new means, and is entitled to its exclusive use; but the prior patent equally excludes him from the use of the prior invention, with or without his improvement. — Columbia *v.* Kokomo, 143 Fed. 116; 74 C. C. A. 310.

Cochrane *v.* Deener, 94 U. S. 780.

§ 435. Generic.

The Arnold and Pipo machines merely gave hints how a plaiting machine could be made. The manufacture of plaits originated with the mechanism of Crosby and Kellogg, whose machine was not an addition to an old structure, as in Garretson *v.* Clark, supra, or in Reed *v.* Lawrence, 29 Fed. 915. — Tuttle *v.* Claflin, 76 Fed. 227; 22 C. C. A. 138.

If the evidence was true that Cramer was the first to present a new and useful combination by mounting his treadle in the vertical cross-brace, thereby obtaining the advantages which some of the witnesses testified to, he was undoubtedly entitled to the protection, and to the exclusive right to mount a treadle in the cross brace, no matter what the form of the bearings of the treadle might be. — Singer *v.* Cramer, 109 Fed. 652; 48 C. C. A. 588.

Reversed, 192 U. S. 265.

Winans *v.* Denmead, 15 How. 330; Ives *v.* Hamilton, 92 U. S. 426; Machine Co. *v.* Murphy, 97 U. S. 120; Heyt *v.* Horne, 145 U. S. 308.

The device was wholly novel, performing a function never before performed, achieving at once an extensive demand and a successful use; and the invention, small in character though it seem, is therefore entitled to a primary rank. — Chicago *v.* Miller, 133 Fed. 541; 66 C. C. A. 517.

Westinghouse *v.* Boyden, 170 U. S. 537.

We think it cannot be said that Jordan was a pioneer inventor in the sense that he was first to produce a machine to successfully form can bodies. He was first, however, to form can bodies by the use of a rotating horn. His invention must be accorded a place inferior, perhaps, to that of a primary invention, but far in advance of those which constitute but a slight improvement on the prior art. His claims, therefore, while not entitled to the broadest construction accorded to the former, are not to be restricted to the narrow construction applicable to the latter. He is entitled to the protection of the doctrine of equivalency in proportion to the nature of the advance which his invention indicates. — American *v.* Hickmott, 142 Fed. 141; 73 C. C. A. 359.

Penfield *v.* Chambers, 92 Fed. 630; McCormick *v.* Aultman, 69 Fed. 371; Muller *v.* Tool, 77 Fed. 621; Letson *v.* Alaska, 130 Fed. 140; Miller *v.* Eagle, 115 U. S. 186.

The conception of Bates was not pioneer invention in the broad sense of the term, and the mechanism described in the patent was merely an improvement upon the old wire-barbing machines. Nevertheless the invention was meritorious — a marked advance in the art, and of unquestionable utility — so that the patentee is not only entitled to protection of his monopoly against colorable evasions, but, for such protection, is entitled as well to the benefit of the doctrine of equivalents, commensurate with the invention disclosed, though not of the broad range which is accorded an invention of primary character. — Columbia *v.* Kokomo, 143 Fed. 116; 74 C. C. A. 310.

Miller *v.* Eagle, 151 U. S. 186; Bundy *v.* Detroit, 94 Fed. 524; National *v.* Interchangeable, 106 Fed. 693.

The assumed prototype of the device was a failure, and Bates was the pioneer in his conception of a combination, which solved the problem where other inventors had failed in the quest. Exact measurement of the faculty thus brought to the solution is needless in the face of the undeniable achievement. The combination so devised is both new and useful in the sense and within the objects of the patent law. — Columbia *v.* Kokomo, 143 Fed. 116; 74 C. C. A. 310.

The defendant contends that, inasmuch as Chadbourn (the inventor of the prior device) discloses the generic combination, the only novelty of Johnson (the inventor of the patent in suit) lies in the form of the secondary motor, or in the form of the secondary valve. This, in our opinion, is erroneous. He (Johnson) was first to regulate the heat supply, using a relay or secondary motor operated by compressed air, and this seems to have been a very practical and important contribution to the art of heat regulation. We are of the opinion, therefore, that Johnson, and not Chadbourn, is to be regarded as the inventor of the generic combination, and that the claims are to be construed not merely as for minor and detailed improvements, but for a primary invention in the specific field of heat regulation. In order to hold that Chadbourn's patent in any respect anticipates or limits the patent in suit, we should be obliged to lay great stress upon a mere verbal suggestion of Chadbourn as to the use of air, and to ignore the fact that he had apparently no conception whatever of the modifications which the use of a compressed-air relay would permit in practical apparatus for heat regulation. We also should be obliged to ignore entirely Johnson's exact and definite conception which led to an important improvement upon an art which Johnson had already brought to a high degree of development. We are of opinion that, in sustaining the Johnson patent and giving it a construction commensurate with Johnson's actual contribution to the practical art, we are well within the principles laid down and applied in Lawther *v.* Hamilton, 124 U. S. 1; Western *v.* LaRue, 139 U. S. 601; Potts *v.* Creager, 155 U. S. 597; Cash Register Case, 156 U. S. 502; Hobbs *v.* Beach, 180 U. S. 383; and applied by us in Watson *v.* Stevens, 51 Fed. 757; Davey *v.* Prouty, 107 Fed. 505; Forsyth *v.* Garlock, 142 Fed. 461. — Weld *v.* Johnson, 147 Fed. 234; 77 C. C. A. 376.

Gathright's device, though an improvement upon existing tabulators, was an improvement of such vital importance that it may be said that the art, when considered from a practical and commercial point of view, began with him. He converted a theory into a fact. His invention belongs to that large class which have been treated with liberality by the courts, when the inventor by an apparently simple change, addition or transposition of parts

has converted imperfection into completeness. — Wagner *v.* Wycoff, 151 Fed. 585; 81 C. C. A. 129.

Westinghouse *v.* Boyden, 170 U. S. 537; Barbed Wire Patent, 143 U. S. 275; Consolidated *v.* Crosby, 113 U. S. 157; Hobbs *v.* Beach, 180 U. S. 383; Topliff *v.* Topliff, 145 U. S. 156.

§ 436. Infringement of.

One invention may include within it many others, and each and all may be valid at the same time. This only consequence follows: that each inventor is precluded from using inventions made and patented prior to his own, except by license from the owners thereof. His invention and his patent are equally entitled to protection from infringement, as if they were independent of any connection with them. — Cochrane *v.* Deener, 94 U. S. 780; 24 L. Ed. 139.

An improvement, although it may be a proper subject of a patent, in use may involve the prior invention, and therefore infringe it. — Morley *v.* Lancaster, 129 U. S. 263; 32 L. Ed. 715; 9 S. Ct. 299.

That a narrow improvement, while of undoubted utility, which must be very narrowly construed in order to save the patent from anticipation, must be construed equally narrowly as to infringement, see Tower *v.* Eagle, 94 Fed. 361; 36 C. C. A. 294.

That an improvement suggested by acquaintance with a prior patented device is not necessarily indicative of infringement or lack of invention, see Cushman *v.* Goddard, 95 Fed. 664; 37 C. C. A. 221.

Westinghouse *v.* Boyden, 170 U. S. 537.

Note: This may be an inference from the Westinghouse case, but its value is very doubtful; because it is merely an inference, and unless positively backed up by substantial proof, has very small evidential value.

That the claims for improvements in a well-worked art will be strictly construed when both patents in litigation — the patent sued on and the patent justified under — are of such a character, see Mayor *v.* Holmquist, 145 Fed. 179; 76 C. C. A. 149.

Milwaukee *v.* Brunswick, 126 Fed. 185; Loew *v.* Miller, 138 Fed. 889.

§ 437. Mechanical Skill.

It may be admitted that the inventor's later patent performed the work it was designed to accomplish in a better and more workmanlike manner than any of the preceding devices patented, because, as stated, there were constant improvements in the art to which it related. So far as this record shows, it was the last of a series of patents designed to accomplish the same object. As such, it necessarily retained all the beneficial features of the earlier patents, and, to a certain extent, improved upon them. Such improvement, however, was an improvement in degree only, and was therefore not patentable. — Busell *v.* Stevens, 137 U. S. 423; 34 L. Ed. 719; 11 S. Ct. 150.

Burt *v.* Evory, 133 U. S. 349.

Something more is required to support a patent than a slight advance over what had preceded it or mere superiority in workmanship or finish. — International *v.* Gaylord, 140 U. S. 55; 35 L. Ed. 347; 11 S. Ct. 716.

Smith *v.* Nichols, 88 U. S. 112; Atlantic *v.* Brady, 107 U. S. 192; Pickering *v.* McCullough, 104 U. S. 310.

When the field is new inventions are striking and novel; when old improvements are so slight as to fall near to mechanical skill. — Haughey *v.* Lee, 151 U. S. 282; 38 L. Ed. 162; 14 S. Ct. 331.

Where, of a number of independent inventors working in the same field, one takes the last step which accomplishes the result sought, a strong presumption of invention is raised in his favor. But where a number of workers in a single field, when confronted by an obstacle to the development of a device, naturally, and practically contemporaneously, independently substitute one well-known material for another, and, finding that it successfully overcomes such obstacle, use it publicly and privately without any claim of exclusive right, the presumption is raised that such workers rightly regarded the substitution as a mere improvement, a mere choice of material such as would be adopted or selected by the skilled workman, or a double use. — Thomson-Houston *v.* Lorain, 117 Fed. 249; 54 C. C. A. 281.

At most, this addition is but the mere extension of an old idea, and nothing more than the ordinary mechanical skill of one conversant with the art could readily supply. To admit patentability in this would be to hold that every duplication ad infinitum of similar forms founded on an old principle would be patentable invention. — Standard *v.* Computing, 126 Fed. 639; 61 C. C. A. 541.

Smith *v.* Nichols, 21 Wall. 112; Grant *v.* Walter, 148 U. S. 547; Schreiber *v.* Grimm, 72 Fed. 671; Soelmer *v.* Favorite, 84 Fed. 182.

It did not involve invention to weaken the entire enclosing head so that the whole head would yield under excessive interior pressure produced by freezing, instead of weakening a part of the enclosing head. Such a change would fall within the established principle that a mere carrying forward of an original conception patented; a new and more extended application of it, involving only change of form, proportions or degree; the substitution of equivalents doing substantially the same thing in the same way, by substantially the same means, with better results — is not such invention as will sustain a patent. — Neptune *v.* National, 127 Fed. 563; 62 C. C. A. 345.

Smith *v.* Nichols, 21 Wall. 112; Burt *v.* Evory, 133 U. S. 349; Hollister *v.* Benedict, 113 U. S. 59.

The result of the application of the common skill and experience of a mechanic, which comes from habitual and intelligent practice of his calling, to the correction of some slight defect in a machine or combination, or to a new arrangement or grouping of its parts, tending to make it more effective for the accomplishment of the object for which it was designed, not involving a substantial discovery, nor constituting an addition to our knowledge of the art, is not within the protection of the patent laws. — Sloan *v.* Portland, 139 Fed. 23; 71 C. C. A. 460.

Gates *v.* Fraser, 153 U. S. 332; Florsheim *v.* Schilling, 137 U. S. 64; Hollister *v.* Benedict, 113 U. S. 59; Atlantic *v.* Brady, 107 U. S. 192; Dunbar *v.* Meyers, 94 U. S. 187; Hotchkiss *v.* Greenwood, 11 How. 267; Adams *v.* Lindell, 77 Fed. 432; Tiemann *v.* Kraatz, 85 Fed. 437.

§ 438. Old Device, New Use.

This inventor took the well-known parts of an ordinary double-action pump, changed some of them slightly in form, added a new device, and produced something which would do what was wanted. While nominally he only made an improvement in pumps, he actually made an improved pump. For ordinary uses the improvement added nothing to the value of the old

pump, but for the new and special purpose in view, the old pump was useless without the improvement. — Goulds *v.* Cowing, 105 U. S. 253; 26 L. Ed. 987.

All the elements in the combination have been used before, and the functions of each were well known in the art, but it does not appear that they had ever been similarly, specifically combined for effectuating the purpose here accomplished. The grant of the patent carries with it the presumption of patentability, and this presumption has been strengthened by the general acceptance of the device, the acquiescence of those skilled in the art, and their willingness to accept licenses thereunder. — Millheim *v.* Western, 95 Fed. 152; 37 C. C. A. 38.

His contribution to the art did not consist in improving the form or location or sequence of elements in an existing combination, but in taking and combining the elements to produce a new result. He is entitled to an application of the doctrine of equivalents in proportion to the scope of his invention. — Adam *v.* Folger, 120 Fed. 260; 56 C. C. A. 540.

§ 439. On Prior Patent to Same Inventor.

He must stand on the same footing with any other inventor of an improvement upon a previous discovery. Nor is he bound in his new patent to refer specially to his former one. All that the law requires is that he shall not claim as new what is covered by a former invention, whether made by himself or any other person. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

§ 440. Patentability.

That an improvement upon a well-known device is patentable; and that proof of the existence of the old device does not defeat the improvement. — Evans *v.* Eaton, 3 Wheat. 454; 4 L. Ed. 433.

If the same combinations existed before in machines of the same nature up to a certain point, and the party's invention consists in adding some new machinery, or some improved mode of operation, to the old, the patent should be limited to such improvement, for if it includes the whole machinery, it includes more than his invention, and therefore cannot be supported. — Evans *v.* Eaton, 7 Wheat. 356; 5 L. Ed. 472.

Improvements for which a patent may be granted must be new and useful, within the meaning of the patent law, or the patent will be void, but the requirement of the Patent Act in that respect is satisfied if the combination is new and the machine is capable of being beneficially used for the purpose for which it was designed, as the law does not require that it should be of such general utility as to supersede all other inventions in practice to accomplish the same object. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Lowell *v.* Lewis, 1 Mason, 182; Bedford *v.* Hunt, 1 Mason, 302; Many *v.* Jagger, 1 Blatchf. 372; Barret *v.* Hall, 1 Mason, 447.

Particular changes must be made in the construction and operation of an old machine so as to adapt it to a new and valuable use not known before, and to which the old machine had not been, and could not be, applied without those changes and, under the circumstances, if the machine, as changed and modified, produce a new and useful result, it may be patented, and the patent will be upheld under existing laws. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Bray *v.* Hartshorn, 1 Cliff. 541; Losh *v.* Hague, 1 Web. P. C. 207; Hind. Pat. 95; Phillips *v.* Page, 24 How. 166; Norm. Pat. 25.

A new idea may be engrafted upon an old invention, but distinct from the conception which preceded it, and be an improvement. In such case it is patentable. — Smith *v.* Nichols, 88 U. S. 112; 22 L. Ed. 566.

When a subsequent apparatus is substantially the same as one which precedes it, it is not the proper subject of a patent; but if it be substantially different in construction and mode of operation, then it is as much the proper subject of a patent as if nothing of the kind had ever before been invented. — Fuller *v.* Yentzer, 94 U. S. 299; 24 L. Ed. 107.

Dissenting: Waite, Strong, Miller, Bradley.

The first defense is based on the theory that a patent cannot be valid unless it is new in all its elements as well as in the combination. But this theory cannot be maintained. If it were so no patent for an improvement on a known contrivance or process could be valid. And yet the great majority of patents are for improvements in old and well known devices or on patented contrivances. — Cantrell *v.* Wallick, 117 U. S. 689; 29 L. Ed. 1017; 6 S. Ct. 970.

Seymour *v.* Osborne, 11 Wall. 516; Loom *v.* Higgins, 105 U. S. 580; Hailes *v.* Van Wormer, 20 Wall. 353; Star *v.* Crossman, 4 Cliff. 568.

Two patents may be both valid when the second is an improvement upon the first, in which event, if the second includes the first, neither of the two patentees can lawfully use the invention of the other without the other's consent. — Cantrell *v.* Wallick, 117 U. S. 689; 29 L. Ed. 1017; 6 S. Ct. 970.

Star *v.* Crossman, 4 Cliff. 568.

The test of an improvement is that it must be the product of an original conception. — Burt *v.* Evory, 133 U. S. 349; 33 L. Ed. 640; 11 S. Ct. 349.

Pearce *v.* Mulford, 102 U. S. 112; Slawson *v.* Grand, 107 U. S. 649; Munson *v.* N. Y. 124 U. S. 601; Smith *v.* Nichols, 88 U. S. 112.

It may be true, as claimed, that complainants' machine is superior to prior devices; but the question is whether, in view of what is disclosed, in the previous machines, it can be properly said that his machine or combination constitutes such a substantial advance or improvement over prior devices as involves invention, and will entitle him to a patent therefor. "It is well settled that not every improvement in an article is patentable. The test is that the improvement must be the product of an original conception. A mere carrying forward or more extended application of an original application of an original idea — a mere improvement in degree — is not invention." — Fox *v.* Perkins, 52 Fed. 205; 3 C. C. A. 32.

Burt *v.* Evory, 133 U. S. 358; Smith *v.* Nichols, 21 Wall. 112; Howe *v.* National, 134 U. S. 397; Ansonia *v.* Electrical, 144 U. S. 11; Roller Co. *v.* Walker, 138 U. S. 124.

The history and nature of the invention shows that it did not consist in a mere change of material. It was not an India rubber surgical instrument, as distinguished from an instrument made of metal or webbing, but it was an improvement upon an existing India-rubber tube, which was valuable, and which the record shows had evaded invention, study and skill. — Stohlmann *v.* Parker, 53 Fed. 925; 4 C. C. A. 109.

For any new and useful improvement which contained also the element of invention, or for a separate invention, a subordinate patent could be obtained. — Westinghouse *v.* N. Y. 63 Fed. 962; 11 C. C. A. 528.

§ 441. Scope — Limitations.

Where the specification discloses several combinations and separate inventions the word improvement will be construed as in the plural. — Evans *v.* Eaton, 3 Wheat. 454; 4 L. Ed. 433.

Under the proofs, we find ourselves unable to assent to the proposition that the plaintiff was a pioneer. While it must be conceded that none of the earlier patents anticipate him, his true relation to this particular branch of the art seems to be nothing more than that of an improver. — Lewis *v.* Pa. Steel Co. 59 Fed. 129; 8 C. C. A. 41.

This is not a case where Adams preceded all the rest, and struck out something which included and underlay all that they produced. It is a case in which the principles to be applied, and the mechanical elements to be used, were all old and well known. Many minds were independently striving to accomplish the same purpose. Adams formed and patented one combination. Edison, Finney, and Sprague devised and used others. Each is entitled to his own form, so long as it differs from that of his competitor, and does not include theirs, and neither is entitled to subject to tribute those whose combinations are not mere evasions of his own. The franchise of Adams was limited by the state of the art to the specific combination he described and claimed in his patent, and to palpable evasions of it. — Adams Elec. Ry. *v.* Lindell, 77 Fed. 432; 23 C. C. A. 223.

No one can claim the complete whole, and each is entitled only to the specific form or device which he produces, and every other inventor is entitled to his own specific form, so long as it differs from those of his competitors, and does not include theirs. — Mann *v.* Hoffman, 104 Fed. 245; 43 C. C. A. 514.

Railway *v.* Sayles, 97 U. S. 554; Duff *v.* Pump Co. 107 Fed. 636; Boyd *v.* Janesville, 158 U. S. 260.

When the advance toward the desideratum is gradual, and several inventors form different combinations which accomplish the desired result with varying degrees of success, each is entitled to his own combination so long as it differs from those of his competitors and does not include theirs. — Kinloch *v.* Western, 113 Fed. 659; 51 C. C. A. 369.

National *v.* Interchangeable, 106 Fed. 693; Railway *v.* Sayles, 97 U. S. 554; McCormick *v.* Talcott, 20 How. 402; Stirrat *v.* Mfg. Co. 61 Fed. 980; Griswold *v.* Harker, 62 Fed. 389; Adams *v.* Lindell, 77 Fed. 432.

Where the advance in the art is gradual, and several inventors make valuable improvements varying in degrees of success, each is entitled to his own combination, so long as it differs from those of his competitors and does not include theirs. — Ide *v.* Trorlicht, 115 Fed. 137; 53 C. C. A. 341.

National *v.* Interchangeable, 106 Fed. 693; Railway *v.* Sayles. 97 U. S. 554; McCormick *v.* Talcott, 20 How. 402; Stirrat *v.* Mfg. Co. 61 Fed. 980; Griswold *v.* Harker, 62 Fed. 389; Adams *v.* Lindell, 77 Fed. 432.

Where the advance in the art is gradual, and several inventors make valuable improvements and form different combinations, which accomplish the desired result with varying degrees of success, each is entitled to his own combination, so long as it differs from those of his competitors, and does not include theirs. — Anderson *v.* Collins, 122 Fed. 451; 58 C. C. A. 669.

National *v.* Interchangeable, 106 Fed. 693; Railway *v.* Sayles, 97 U. S. 554; McCormick *v.* Talcott, 20 How. 402; Stirrat *v.* Mfg. Co. 61 Fed. 980; Griswold *v.*

Harker, 62 Fed. 389; Adams *v.* Lindell, 77 Fed. 432; Ide *v.* Trorlicht, 115 Fed. 137.

He did not acquire the right to use the Bradley process simply because he had improved that process. — Electric Smelting *v.* Pittsburg, 125 Fed. 926; 60 C. C. A. 636.

Where the advance towards the desideratum is gradual, and several inventors form different combinations and make different improvements which materially aid to accomplish the desired results, each is entitled to his own combination or improvement, so long as it differs from those of his competitors and does not include theirs. — Mallon *v.* Gregg, 137 Fed. 68; 69 C. C. A. 48.

National *v.* Interchangeable, 106 Fed. 693; Railway *v.* Sayles, 97 U. S. 554; McCormick *v.* Talcott, 20 How. 402; Stirrat *v.* Mfg. Co. 61 Fed. 980; Griswold *v.* Harker, 62 Fed. 389; Adams *v.* Lindell, 77 Fed. 432.

There is room for such an adapter (a narrow improver) to have only a specific patent for his particular form of adaptation, and he is not privileged to exclude others from gleaning in the same general field. — Loew *v.* Miller, 138 Fed. 886; 71 C. C. A. 266.

Milwaukee *v.* Brunswick, 126 Fed. 171.

It is not given to any person to preclude all others from providing means for accomplishing any beneficial result. If the means are different — are not substantially the same — there is no infringement; there is not the use of the means contrived by the inventor; his idea is not appropriated, except the idea of the result to be accomplished, and in that there is no quality of invention. — Wessel *v.* United, 139 Fed. 11; 71 C. C. A. 423.

That he improved upon the prior structures in the way of simplifying the form and cheapening the casting when made integrally, is undoubted, and such improvement may involve invention; but it is well settled that the patent which may then be granted must be limited to the scope of the actual invention — to his "particular form of adaptation." — Hunt *v.* Milwaukee, 148 Fed. 220; 78 C. C. A. 116.

Loew *v.* Miller, 138 Fed. 886.

§ 442. Specific.

When a valid patent has been obtained, under such conditions (from a study of the state of the art) the claims of the patentee must be restricted to the precise form and arrangement of parts described in the specification. Such a patent is an entirety, and it is a familiar principle that all the parts of the combination must be used by the defendant in order to constitute an infringement. — Mott Iron Works *v.* Standard, 53 Fed. 819; 4 C. C. A. 28.

Howe *v.* Neemes, 18 Fed. 40; Matteson *v.* Caine, 17 Fed. 525; Bragg *v.* Fitch, 121 U. S. 478; Railway *v.* Sayles, 97 U. S. 554.

As these means existed in earlier machines, though not exactly in the same form, he was not entitled to make such claims, and they cannot be sustained, without restrictions on the specifications. His invention being not of a primary character, but of special means of accomplishing results that had hitherto been attained by means but little different in their nature, the invention was limited to the particular means provided. — Brown *v.* King, 107 Fed. 498; 46 C. C. A. 432.

MacCormick *v.* Aultman, 69 Fed. 371; Noonan *v.* Athletic, 99 Fed. 90; Wells *v.* Curtis, 66 Fed. 318.

Crary apparently originated the improvement, but it was, strictly speaking, a secondary invention, for it performs the function previously performed by the stationary platen, although it performs it in a much better way than had been accomplished by its predecessor. It was a substantial and meritorious invention, and was not limited to the details of the mechanism shown in the specification. — Writing Mach. *v.* Elliott, 108 Fed. 628; 47 C. C. A. 536.

Walk. Pat. sec. 359.

When two inventors have each adopted the substantial features or elements of an earlier invention, making respectively but slight changes in or improvements upon the earlier device, each will be limited to his own specific form of device; and, if there are differences therein, neither device will be held to be an infringement of the other. In all such cases the general words of a claim, especially where the claim contains words of reference to a more particular description of the thing patented, which is contained in the specification, will be held to cover only the structure of the device so particularly described. — Sander *v.* Rose, 121 Fed. 835; 58 C. C. A. 171.

McCormick *v.* Talcott, 20 How. 402; Railway *v.* Sayles, 97 U. S. 554; National *v.* Interchangeable, 106 Fed. 693; Brill *v.* St. Louis, 90 Fed. 666.

Even if the inventive faculty, as distinguished from ordinary mechanical skill, was exercised, yet, as the invention is not primary, and the patent of doubtful validity, the patentee should be limited to the specific form of machine which he produced, and describes in his specification. — Wilson *v.* Townley, 125 Fed. 491; 60 C. C. A. 327.

Railway *v.* Sayles, 97 U. S. 554; Morley *v.* Lancaster, 129 U. S. 263; McCormick *v.* Talcott, 20 How. 402; Stirrat *v.* Excelsior, 61 Fed. 980.

To the extent of the specific claim, we are not inclined to defeat the patent merely because the change from earlier devices is slight and apparently simple, when it is, as this appears to be, novel, efficient, and popular. — Bradley *v.* Eccles, 126 Fed. 945; 61 C. C. A. 669.

Taking into consideration then just what Motsinger has done — the constructive idea being old, the mechanism being old, except his substitution of frictional peripheral engagement (frictional engagement being old) for cog peripheral engagement — we are forced to the conclusion, that though Motsinger's patent may cover a valuable improvement, it is not a pioneer patent, and must therefore be limited to the substantial mechanical means therein pointed out, or to their mechanical equivalents. . . .

Considered then, as a limited patent for a specific form of construction, we do not think the appellee infringes appellant's patent. Progress in nearly every field of mechanical activity is like the advance of the tide — the last high mark having been attained, not by a single thought thrown far in advance of the flood, but by the column of thought that the weight of the flood projects. Where one inventive mind has run far out, marking a distinct field to be thereafter covered, it is not difficult for the courts to set the stakes that give boundary to the advance. But when the advance is an item only of a similar advance all along the line — is borrowed almost altogether from the advance along the line — care must be taken that the boundaries given do not include, up and down the line, every character of mechanism that may thereafter bring about similar results. — Motsinger *v.* Hendricks, 149 Fed. 995; 79 C. C. A. 505.

§ 443. Utility.

It is quite true that this was not a very important discovery. The art in which it was devised is not the most useful. It could not properly be described as either a pioneer or primary invention, but it does indicate a distinct step forward in the art. It certainly is not in that class of patented devices which are on the border line of mechanical skill and invention, and for which courts have devised the strictest canons of construction. It shows an ingenuity which courts are glad to reward, and which they will not allow technical rules of interpretation intended to narrow the scope of patents of doubtful merit, to impair or destroy. — Bonnette *v.* Koehler, 82 Fed. 428; 27 C. C. A. 200.

Blandy *v.* Griffith, Fed. Cas. 1529.

It is not a pioneer or primary invention, but its successful use proves it to be a step in the art sufficiently meritorious to warrant the monopoly of the patent. — Kisinger-Ison *v.* Bradford, 97 Fed. 502; 38 C. C. A. 300.

In that case (Krementz *v.* Cottle, 148 U. S. 556) novelty was found to reside in making a stud or collar-button by swedging a piece of sheet metal into the desired form although the form was old, the process of swedging metal into any desired form, and the studs made in the same way, but more solidly, were likewise old. The patent was sustained because of the recognition by the trade of the practical merits of the stud. So in this case, where, so far as it appears, it had never occurred to the many persons who were experimenting with asbestos fabrics, that the sheets could be stitched to a solid backing, and the threads so embedded in the fibres as to be impervious to fire, if it should be shown that the article was practically valuable and had created a new industry, the question of patentable novelty might well be decided in favor of the patent. — Beer *v.* Walbridge, 100 Fed. 465; 40 C. C. A. 496.

The embodiment of this conception in mechanical form, necessarily embraced the disk conception, and to that extent infringed it; but, though an outgrowth, it goes distinctly beyond the disk apparatus substantially improving it, as we have already said, in those features that give to the disk apparatus its chief merit and purpose. Why is not improvement patentable? Its patentability will exclude no one who chooses, from the use of the previous disk apparatus. It is a further step in the direction towards which the disk conception was the first long step; it is a decided and valuable addition to the mechanism used in oil fields, and in connection with the disk form, for the purposes in view, it has no predecessor in the whole previous uses of eccentrics. This consideration, in our judgment, raises it to the merit of invention. — Grimes *v.* Allen, 102 Fed. 606; 42 C. C. A. 559.

It must be remembered, however, that an improvement of an old device or a new combination of old elements not infrequently marks a greater advance in the art and discloses a more useful invention than the conception of the original machine or a knowledge of the old elements of the combination, and that such an improvement is equally entitled with the conception of the original device to the protection of a patent. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

§ 444. Miscellaneous.

The right to improve on prior devices by making solid castings in lieu of constructions of attached parts is so universal in the arts as to have become a common one, so that the burden rests on any one who sets up this improve-

ment, in any particular instance as patentable to show special reasons to support his claims. — Consolidated *v.* Holzer, 67 Fed. 907; 15 C. C. A. 63.

Where a claim is predicated upon an improvement, the bill and the proof must show in what the improvement consists. — Tiemann *v.* Kraatz, 85 Fed. 437; 29 C. C. A. 257.

Peterson *v.* Wooden, Fed. Cas. 11,038.

Note: This I think is bad law and without any sound foundation. The patent is prima facie under the statute.

He was entirely familiar with the Painter inventions. He took his chances in the lottery of infringement, and has lost, and cannot be heard now to complain that he was misled. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

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§ 445. The Statute.

The district courts shall have original jurisdiction as follows:

* * * * * * * * * * * *

Seventh. Of all suits at law or in equity arising under the patent, the copyright, and the trade-mark laws of the United States. — Jud. Code, Sec. 24.

Damages for the infringement of any patent may be recovered by action on the case, in the name of the party interested either as patentee, assignee, or grantee. * * * — R. S. 4919.

The several courts vested with jurisdiction of cases arising under the patent laws shall have power to grant injunctions according to the course and principles of courts of equity, to prevent the violation of any right secured by patent * * * — R. S. 4921.

Special provisions relating to actions for infringement will be found in sections 973, 4897, 4899, 4917, 4920, 4922 and 4923, R. S.

§ 446. General Statement.

The subject of infringement is so interrelated with almost every other subject in the law of patents that any division must necessarily be arbitrary. Especially is this true with reference to such subjects as *Claims*, *Combinations*, and *Invention*, and to a certain extent with such subjects as *Abandonment*, *Anticipation*, *Defenses*, *Equivalents*, *Machine*, *Process*, *Product*, and *Specifications*.

There is no definition of the term infringement. The term relates to a condition which arises out of the combination of events, the creation of the monopoly by the Government and the invasion of that monopoly by a natural or artificial person. Notwithstanding a few stray expressions (see §§ 403, 406) the question of infringement, per se, is a question of fact; but since the marshalling of facts upon which the act of infringement may or may not be predicated is a matter of law in construing the specification and claims of the patent, and a matter of law in segregating the acts of the alleged infringer which may constitute infringement from those which may not, the actual problem, the difficult problem, is always one of law, or, at the least, one of mixed law and fact.

§ 447. Additions. — Elements.

The defendant's device, therefore, though it involves additional elements, involves every element present in the Morrison coupling. — Kisinger-Ison *v.* Bradford, 97 Fed. 502; 38 C. C. A. 300.

The whole testimony impresses us with the belief that the introduction of the soda ash was intended, not to bring about a product essentially different from the patented product, but to interpose a process so colorably different that it might be used as a shelter against the charge of infringement; and in this respect we are constrained to look upon the defense of infringement differently from the view taken by the Circuit Court. — National *v.* Elkhart, 123 Fed. 431; 59 C. C. A. 471.

If it be conceded that improvements are added, it is nevertheless an infringement. — American *v.* American, 128 Fed. 709; 63 C. C. A. 307.

Cantrell *v.* Wallick, 117 U. S. 689; Simmons *v.* Standard, 62 Fed. 928; Robbins *v.* Dueber, 71 Fed. 186; Pennington *v.* King, 7 Fed. 462.

The defendant certainly has the patented lining; what else he has is not important. Of course, the addition of the inner brick wall does not avoid infringement. — American *v.* DeGrasse, 157 Fed. 660; 87 C. C. A. 260.

§ 448. Additions — Functions.

Infringement is not avoided by the fact that at the same time a revolutionary movement is imparted to the mechanism, which carries both the cap and the can during the operation. — Litson *v.* Alaska, 130 Fed. 129; 64 C. C. A. 463.

Ives *v.* Hamilton, 92 U. S. 426; Machine Co. *v.* Murphy, 97 U S. 120; Brush *v.* Condit, 132 U. S. 39; Hoyt *v.* Horne, 145 U. S. 302.

If the infringing device performs the same function as the patented device, it is immaterial that it also performs some other function. It is still none the less an equivalent of the patented device, and an appropriation of the patented invention. — Comptograph *v.* Mechanical, 145 Fed. 331; 76 C. C. A. 205.

Walker on Pat. (4th Ed.) 308, 309: Norton *v.* Jensen, 49 Fed. 859; Norton *v.* California, 45 Fed. 637; Sarven *v.* Hall, 21 Fed. Cas. 512; Masseth *v.* Palm, 51 Fed. 824; Wheeler *v.* Clipper, 29 Fed. Cas. 881; Kendrick *v.* Emmons, 14 Fed. Cas. 305.

§ 449. Assignor and Assignee — By Assignee.

The title to a patent conveyed by a written assignment cannot be revested in the assignor by a breach of contract on the part of the assignee, so as to enable the former to maintain a suit upon the patent. — Atkins *v.* Parke, 61 Fed. 953; 10 C. C. A. 189.

Hartell *v.* Tilghman, 99 U. S. 547.

§ 450. Assignor and Assignee — By Assignor.

An assignor of a territorial right to make and sell, may make and sell articles to be sold out of his territory, and a purchaser may buy with the understanding and purpose of selling the same out of the territory. — Keeler *v.* Standard, 157 U. S. 659; 39 L. Ed. 848; 15 S. Ct. 738.

Dissented to by Brown, Fuller and Field.

Goodyear *v.* Beverly, 1 Cliff. 348; Wilson *v.* Rousseau, 45 U. S. 688; Bloomer *v.* McQueewan, 55 U. S. 539; Mitchell *v.* Hawley, 83 U. S. 547; Adams *v.* Burks, 84 U. S. 453; Boesch *v.* Graff, 133 U. S. 698; Hobbie *v.* Jennison, 149 U. S. 355.

The grantor conveyed to the grantee rights held to be an assignment under the patent. Upon alleged failure of assignee to comply with the terms of the agreement the assignor began manufacturing under alleged right under the patent. Assignee brought suit for infringement, and on leave, assignor

filed a cross bill. The proofs showed that there was no default in the payment of royalty at the time the assignor attempted to cancel the contract. *Held:* that the cross bill cannot be maintained. — Atkins *v.* Parke, 61 Fed. 953; 10 C. C. A. 189.

§ 451. Assignor and Assignee — By Inventor-Assignor.

The defendant is not at liberty to urge the defense of invalidity in a suit upon his own patent against a party who derives title to that patent through h[illegible]n. It is clearly inequitable for a patentee to sell or assign his patent, and t[illegible], in a suit against him for infringement by his assignee, to set up that th[illegible]atent is void for want of invention. The assignor of a patentable invention is estopped from denying the validity of the patent or his own title to the interest transferred. He cannot practise the invention contrary to the provisions of his assignment; and, when sued for infringement, he is not permitted to set up in his defense the invalidity of the patent or his own inability to convey it. — Woodward *v.* Boston, 60 Fed. 283; 8 C. C. A. 622.

2 Rob. Pat. 555; Walk. Pat. 469; Underwood *v.* Warren, 21 Fed. 573; Telegraph *v.* Carey, 22 Blatchf. 34, 19 Fed. 322; Parker *v.* McKee, 24 Fed. 808; Morey *v.* Jagger, 1 Blatchf. 372; Curran *v.* Burdsall, 20 Fed. 835; Burdsall *v.* Curran, 31 Fed. 918; Rumsey *v.* Buck, 20 Fed. 697.

The fact that the infringing machines were designed by the inventor of the patent in suit, and constructed according to his designs, and that they were made, used experimentally, and offered for sale by a co-defendant, in the absence of any further evidence creates such a presumption of privity between the parties that all are estopped from disputing the validity of the patent. — Woodward *v.* Boston, 60 Fed. 283; 8 C. C. A. 622.

Telegraph Co. *v.* Carey, 19 Fed. 322.

We find, therefore, that during the existence of the contract of 1889, Headley made banks precisely like those now complained of, marked them "Patented March 13th, 1888," and sold them to complainant's predecessor at a price per bank which included, not only the cost of production, but also a considerable royalty; that, upon application of this contract, he sold the same party a considerable number of the same banks, stamped in the same way, and received a price; that he gave to the same party a license to go on and manufacture the same bank which had been theretofore made by his firm, and received royalty on banks manufactured under that license. We are satisfied that now, when complainant has obtained title to this patent of March 13th, 1888, it does not lie in the mouth of Headley to assert, as against complainant, that the banks he used to stamp and sell as being within said patent are not infringement. — Piaget *v.* Headley, 108 Fed. 870; 48 C. C. A. 116.

Granting, they say, that Duncan is estopped from asserting that the claims are void for lack of invention or lack of novelty, he may nevertheless bring in the prior art to limit the claims and thus defeat the suit. Why one defense and not the other? They are of as like blood as brothers. One is somewhat larger than the other, is all. Lack of novelty defeats the complainant's title to the whole of the property within the metes and bounds of the claims. Limitation destroys his title, in part. If a stranger were occupying part, but not all, of the property described in the deed, he could answer, "I am not concerned with your title to the residue, but what I am occupying is not yours." The contention that Duncan can do likewise brings the estoppel to nothingness. Duncan's assignment, in fact and likewise by its very terms, was a conveyance not only of the franchise to exclude strangers,

but was also a conveyance of the inventions described in the claims. — Siemens-Halske *v.* Duncan, 142 Fed. 157; 73 C. C. A. 375.

§ 452. Avoidance — Adding Elements or Functions.

If appellees are using Fisk's invention as it is defined in the patent, it is immaterial how much of the prior art they also employ. — Western *v.* American, 131 Fed. 75; 65 C. C. A. 313.

That the fact that a device performs another function in addition to the function of the patent infringed does not avoid infringement, see American *v.* Wyeth, 139 Fed. 389; 71 C. C. A. 485.

It is, of course, immaterial that the defendant's device is operated through intermediate mechanism. Under these circumstances, to hold that the defendant's device does not infringe, we must limit the Felt device to mere details of construction. If the Felt invention were for a mere improvement, such a narrow construction might be warranted. — Comptograph *v.* Mechanical, 145 Fed. 331; 76 C. C. A. 205.

§ 453. Avoidance — Concealment and Subterfuge.

Ingenuity displayed in evading the salient feature of a patent and ingenuity displayed in covering up such salient point in an alleged improvement will be considered favorably in determining novelty. — Hoyt *v.* Horne, 145 U. S. 302; 36 L. Ed. 713; 12 S. Ct. 922.

Winans *v.* Denmead, 56 U. S. 330.

Infringement is not averted merely because the machine alleged to infringe may be differentiated from the patented machine, even though the invention embodied in the latter be not primary. — Continental *v.* Eastern, 210 U. S. 405; 51 L. Ed. 922; 28 S. Ct. 748.

The fact that a defendant uses a particular device to avoid infringement does not of itself constitute grounds of complaint. — Rose *v.* Hirsh, 77 Fed. 469; 23 C. C. A. 246.

A mere subterfuge resorted to to avoid infringement does not avail as a defense. — Rose *v.* Hirsh, 77 Fed. 469; 23 C. C. A. 246.

The court will look through the disguises, however ingenious, to see whether the inventive idea of the original patentee has been appropriated, and whether the defendant's device contains the material features of the patent in suit, and will declare infringement even when those features have been supplemented and modified to such an extent that the defendant may be entitled to a patent for the improvement. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

Clough *v.* Mfg. Co. 106 U. S. 166: and 106 U. S. 178; Consolidated *v.* Crosby, 113 U. S. 157.

When the court is convinced that a meritorious invention has been made, it should not permit infringers to evade the patent on narrow and technical grounds. — Cimiotti *v.* American, 115 Fed. 498; 53 C. C. A. 230.

Proctor *v.* Bennis. 36 Ch. Div. 740; Machine Co. *v.* Murphy, 97 U. S. 120; Cantrell *v.* Wallick, 117 U. S. 689; Reece *v.* Globe, 61 Fed. 959; Blanchard *v.* Reeves, Fed. Cas. 1,515.

One may not escape infringement by adding to or subtracting from a patented device, by changing its form, or making it more or less efficient,

while he retains its principle and mode of operation, and attains its result by the use of the same or equivalent mechanical means. — Lourie *v.* Lenhart, 130 Fed. 122; 64 C. C. A. 456.

Sewall *v.* Jones, 91 U. S. 171; Coupe *v.* Weatherhead, 16 Fed. 673.

All the elements of the patent combination are employed with substantial identity in their use, and departure appears from the letter of the claims only, in the arrangement of these elements, without substantial difference in the principle of operation. The policy and rules of the patent law require that the patentee be protected against such evasions of the wording of a claim in form of nonessential details, when the substance of the invention is thus used and is unmistakably shown in the specification and claims. — Columbia *v.* Kokomo, 143 Fed. 116; 74 C. C. A. 310.

Winans *v.* Denmead, 15 How. 330; Ives *v.* Hamilton, 92 U. S. 426; Machine *v.* Murphy, 97 U. S. 120; Elizabeth *v.* Paving, 97 U. S. 126; Hoyt *v.* Horne, 145 U. S. 302; Westinghouse *v.* Boyden, 170 U. S. 537; International *v.* Brammer, 138 Fed. 396.

There is a constant tendency by those who seek to evade the claims of a patent to dwell too much on verbal refinements, and not enough on the reality and substance of the things to which the language of the claim refers. This tendency must be avoided in order to do justice to inventors, and it sometimes must be avoided in order to protect the public from too great scope of the monopoly claimed by the patentee. It is true that the law requires that precise invention of the patent should be described adequately in the claims, and, if the patentee has claimed less than he is obviously entitled to, as manifested in the specifications and drawings, he must suffer the consequences. But this requirement of the law only makes the caution above expressed the more necessary, and mere verbal refinement must not be allowed to obscure the real nature of the patented invention, if it can be fairly gathered from the language of the claims. — Robins *v.* American, 145 Fed. 923; 76 C. C. A. 461.

§ 454. Avoidance — Impairing Efficiency.

While the appellant has avoided a mere servile copy of form, he has appropriated the substance of the Dodge invention. That in doing so he has rendered inoperative the function of one groove will not suffice to relieve him from the charge of infringement. — Mitchell *v.* Ewart, 81 Fed. 390; 26 C. C. A. 443.

The fact that the set of several pulleys differs, in that it is more cumbersome, and involves delays, is only an ordinary feature of colorable infringements, which are characterized by a mere imitative capacity without the spirit of invention. — Heap *v.* Tremont, 82 Fed. 449; 27 C. C. A. 316.

An infringer cannot evade liability for his invention by deliberately diminishing its utility without changing materially its form, its chief function, or its manner of operation. — Penfield *v.* Chambers, 92 Fed. 630; 34 C. C. A. 579.

Sewing Machine *v.* Frame, 24 Fed. 596.

This is an instance, not infrequent in patent litigation, where the infringer has sought to evade the claims of a patent, the substance of which he is appropriating, by deliberately impairing the function of one element, without destroying the substantial identity of structure, operation and result. — King *v.* Hubbard, 97 Fed. 795; 38 C. C. A. 423.

Sewall *v.* Jones, 91 U. S. 171; Coupe *v.* Weatherhead, 16 Fed. 673; Machine Co. *v.* Binney, 24 Fed. Cas. 653.

§ 455. Avoidance — Improving Efficiency.

Superiority of quality or operation is not an avoidance of infringement. — Marsh *v.* Seymour, 97 U. S. 348; 24 L. Ed. 963.

§ 456. Avoidance — Omitting Element.

The law is well settled that there is no infringement of a patent which claims mechanical powers in combination, unless all the parts have been substantially used. The use of a part less than the whole is no infringement. — Eames *v.* Godfrey, 68 U. S. 78; 17 L. Ed. 547.

Prouty *v.* Ruggles, 16 Pet. 341.

Where the patent in suit covered, and the reissue limited it to, a specific process; and the alleged infringing process omitted the essential feature and element of said process, there is no infringement. — California *v.* Schalicke, 119 U. S. 401; 30 L. Ed. 471; 7 S. Ct. 391.

The fact that the defendant was able, by a skilful contrivance, to dispense with one of the elements of plaintiff's claim, the plaintiff's patent not being generic, does not make the device an infringement. — Derby *v.* Thompson, 146 U. S. 476; 36 L. Ed. 1051; 13 S. Ct. 181.

The stationary card shown at " E " in the drawing, is made in the eighth claim an essential part of the mechanism described. It may be that this card is unnecessary, but as Judge Wallace in his dissenting opinion in Cimiotti *v.* Nearseal, 115 Fed. 507 said: " the patent industriously makes the stationary cards, substantially as described, an element of the claim." — Cimiotti *v.* American, 198 U. S. 399; 49 L. Ed. 1100; 25 S. Ct. 697.

Unless the defendant's device contains the elements claimed or their mechanical equivalents, it is clear that the charge of infringement is not made out. — Wheaton *v.* Norton, 70 Fed. 833; 17 C. C. A. 447.

Modfg. Norton *v.* Jensen, 49 Fed. 859.

McCormick *v.* Talcott, 20 How. 402; Vance *v.* Campbell, 1 Black, 427; Schumacher *v.* Cornell, 96 U. S. 554.

That omitting to use parts of a structure, but using the combination, does not avoid infringement, see Clinton *v.* Hendrick, 86 Fed. 137; 29 C. C. A. 612.

This principle, however, is qualified by another principle, which is that the absent element must be an essential one, and that the substitute for it must not be a mechanical equivalent for it. — Dowagiac *v.* Minnesota, 118 Fed. 136; 55 C. C. A. 86.

McSherry *v.* Dowagiac, 101 Fed. 716.

The defendant used the combination of the patent, but claimed that one of the elements necessary to the combination of the patent did not contribute to the function of the machine, and thus no infringement existed in fact. *Held:* Unnecessary to consider whether its idler wheel can be taken out and leave the machine operative minus the function of the idler. If infringement thus appears, the owner of the patent cannot be denied relief, though protection may be limited by the terms of the claims to such three-wheel form. — Columbia *v.* Kokomo, 143 Fed. 116; 74 C. C. A. 310.

Du Bois *v.* Kirk, 158 U. S. 58.

It was urged that, as the infringing machine did not embody certain functional advantages recited in the specifications and urged in the Patent Office, infringement could not be established. *Held:* No doubt this functional advantage was claimed in argument in the Patent Office, and not a little made of it there. And it was also put into the specifications, where it now appears, before the patent was allowed. But at the most it is merely descriptive of the supposed action of the machine, and not a limitation upon it, to which the inventor committed himself; there being no amendment or restatement of the claims by which the invention was defined. It is the mechanical combination there specified which is patented, and not the particular functions or advantages claimed for the different parts; and infringement is not escaped where there is a substantial appropriation of the mechanical construction, even though, by slight variations, unimportant changes in the mode of operation may be made. — American *v.* Mills, 149 Fed. 743; 79 C. C. A. 449.

If for any reason the defendants are enabled to dispense with one of the elements of the claim, or, to speak more accurately, with one step of the process, they cannot be held as infringers. — Universal *v.* Sonn, 154 Fed. 665; 83 C. C. A. 422.

As we have seen, this restraining shoulder of the annular plate is of the very gist of the device. Discard it or its function in substantial form, and we do not obtain the result that makes Nolan's device useful and patentable. — Westinghouse *v.* Prudential, 158 Fed. 987; 86 C. C. A. 434.

But while the requirement of an additional passage-way may have been necessary, the patentee does not make it an element of his claims. The defendant's device does not possess it, or its equivalent. Consequently, while the defendant's construction may accomplish the same purpose as that of the complainant's, it does not infringe. — Consolidated *v.* Landers, 610 Fed. 79; 87 C. C. A. 235.

Wright *v.* Yuengling, 155 U. S. 52.

A combination is not infringed unless all of its elements as they are claimed are used, whether they are essential or not. — Portland *v.* Hermann, 160 Fed. 91; 87 C. C. A. 247.

Royer *v.* Schultz, 28 Fed. 850; Snow *v.* Lake Shore, 18 Fed. 602.

No device can be held to infringe a combination claim unless it employs all the elements of it. — Union *v.* Diamond, 162 Fed. 148; 89 C. C. A. 172.

Cimiotti *v.* American, 198 U. S. 399; Brammer *v.* Witte, 159 Fed. 726; Portland *v.* Hermann, 160 Fed. 91.

§ 457. Avoidance — Transposition of Parts.

The appellants have transposed the position of the parts. Do they escape infringement thereby? We think not. The appellants have appropriated the gist of the invention. The changes found in their device do not at all affect either the principle of operation or the result. — Devlin *v.* Paynter, 64 Fed. 398; 12 C. C. A. 188.

Winans *v.* Denmead, 15 How. 330; Machine *v.* Murphy, 97 U. S. 120; Hoyt *v.* Horne, 145 U. S. 302.

The transposition of resiliency between stud and socket would surely suggest itself to a mind of ordinary intelligence. Such a trivial alteration, the fundamental structure of the socket member remaining unchanged, would

not avoid infringement. — Consolidated *v.* Hays, 100 Fed. 984; 41 C. C. A. 142.

A transposition of parts or of motion will not negative infringement when the same result is obtained in substantially the same way. — International *v.* Bundy, 159 Fed. 464; 86 C. C. A. 494.

Consolidated *v.* Hays, 100 Fed. 984.

§ 458. Avoidance — Miscellaneous Conditions.

Therefore it follows that, while the complainant has a title to old elements as combined in his particular device, to accomplish certain results, the respondents have an equal right to avail themselves of all the same elements in their particular device to accomplish other special results, so long as it is apparent, as is the fact in the case at bar, that what they did could not justly be held to be an intended piracy under the color of apparent differences. — Davey *v.* Prouty Co. 107 Fed. 505; 46 C. C. A. 439.

That the fact that an infringer uses an inferior form of construction, so long as the combination of the patent is employed, does not avoid the act, see Cazier *v.* Mackie-Lovejoy, 138 Fed. 654; 71 C. C. A. 104.

§ 459. Change of Form — Colorable.

It is a well settled principle of law, that the mere change in the form of the machinery (unless a particular form is specified as the means by which the effect described is produced) or an alteration in some of its essential parts, or in the use of known equivalent powers, not varying essentially the machine, or its mode of operation or organization, will not make the new machine a new invention. It may be an improvement upon the former; but that will not justify its use without the consent of the first patentee. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

The patentee having described his invention and shown its principles, and claimed it in that form which most perfectly embodies it, is deemed to claim every form in which his invention may be copied. — Winans *v.* Denmead, 15 How. 330; 14 L. Ed. 717.

The property of inventors would be valueless if it were enough for the defendant to say, your improvement consisted in a change of form; I have not taken that, and so do not infringe. — Winans *v.* Denmead, 15 How. 330; 14 L. Ed. 717.

Upon well established principles of patent law, a change of form and not of substance constitutes no defense to a bill for an infringement. — Morey *v.* Lockwood, 75 U. S. 230; 19 L. Ed. 339.

Curt. Pat. 260, 261, 264.

If he has taken the same plan and applied it to the same purpose, notwithstanding he may have varied the process of application, his manufacture will be substantially identical with that of the patentee. — Sewall *v.* Jones, 91 U. S. 171; 23 L. Ed. 275.

Curtis. sec. 312 ; Walton *v.* Potter, Web. P. C. 385, 607.

It is difficult to read the schedules of the parties in the presence of the models, and resist the conviction that the appellant has carefully studied the invention of the appellees as described in their reissue, not with any view

to its improvement, but solely for the purpose of evasion. — Hyndman *v.* Roots, 97 U. S. 224; 24 L. Ed. 975.

No one can avoid infringement simply by means of ingenious diversities of form and proportion, presenting simply the appearance of something unlike the patented machine. It is well settled that a copy of the principle or mode of operation described in the prior patent is an infringement of it. If the patentee's ideas are found in the construction and arrangement of the subsequent device, no matter what may be its form, shape or appearance, the parties making or using it are deemed appropriators of the patented invention, and are infringers. An infringement takes place whenever a party avails himself of the invention of the patentee without such a variation as constitutes a new discovery. — Norton *v.* Jensen, 49 Fed. 859; 1 C. C. A. 452.

Blanchard *v.* Beers, 2 Blatchf. 416; Tatham *v.* LeRoy, 2 Blatchf. 486; Winans *v.* Denmead, 15 How. 343; Potter *v.* Schenck, 1 Biss. 518.

Yet, notwithstanding these changes and some others, the defendant really has copied the substance of the inventions in different forms. In principle the two machines are alike, and they accomplish the same result. — Rogers *v.* Mergenthaler, 64 Fed. 799; 12 C. C. A. 422.

The owner of a patent, though the claim be limited, is to be protected from mere colorable changes in matter of pure form. — McDowell *v.* Kurtz, 77 Fed. 204; 23 C. C. A. 119.

The substitution of one for the other in this combination, works no new or different result whatever. The first claim of the patent does not name "fixed" switch-tracks. The change in the mere form of the switching device which the defendants have adopted is altogether immaterial. The changed form embodies the invention described and claimed. There is substantial identity between these two coasting structures. In this class of cases, we have repeatedly held that such mere formal changes are unavailing to avoid infringement. — Thompson *v.* Second Avenue, 93 Fed. 824; 35 C. C. A. 620.

Winans *v.* Denmead, 15 How. 330; Devlin *v.* Paynter, 64 Fed. 398; Hillborn *v.* Mfg. Co. 69 Fed. 958; McDowell *v.* Kurtz, 77 Fed. 206.

Bundy prints by pressing his record strip against the type, while defendant prints by pressing the type down upon the recording strip. That the printing is done by a blow delivered by Bundy's "hammer," and by pressure only in the device of the defendant, is not material. Both methods of printing were well known and one is the full equivalent of the other. — Bundy *v.* Detroit, 94 Fed. 524; 36 C. C. A. 375.

Neither was it invention to cause the printing to be done by pressing the type down upon the paper strip instead of pressing the paper strip against the type. The one was the plain equivalent of the other. That defendant's impression mechanism is not in the form or shape of a hammer, is of no consequence unless the form itself is of the essence of the invention. — Bundy *v.* Detroit, 94 Fed. 524; 36 C. C. A. 375.

Winans *v.* Denmead, 15 How. 330; Machine Co. *v.* Murphy, 97 U. S. 120.

The mere change of the location of the parts of a combination, if the parts still perform the same duty, and by the same mode of operation, will not take the structure out of the bounds of the patent. — Union *v.* Battle Creek, 104 Fed. 337; 43 C. C. A. 560.

Northwestern *v.* New Haven, 28 Fed. 234; Roller Mill *v.* Coombs, 39 Fed. 25; Knox *v.* Mining Co. 6 Sawy. 430; Devlin *v.* Paynter, 64 Fed. 398.

If, however, such change of size, form or location effect a change in the principle or mode of operation, such as breaks up the relation and coöperation of the parts, this results in certain change in the means as displaces the conception, and takes the new structure outside of the patent. — Union *v.* Battle Creek, 104 Fed. 337; 43 C. C. A. 560.

Brooks *v.* Fisk, 15 How. 212; Mfg. Co. *v.* Brill, 54 Fed. 380; Gould *v.* Rees, 15 Wall. 187.

The fact that the two machines differ slightly as to the distance from each other of the intermeshing teeth cannot, we think, be very material. — Krajewski *v.* Pharr, 105 Fed. 514; 44 C. C. A. 572.

Potts *v.* Creager, 155 U. S. 597; Roller-Mill Co. *v.* Coombs, 39 Fed. 25; Schroeder *v.* Brammer, 98 Fed. 880; Beach *v.* Box-Machine Co., 63 Fed. 597; Mfg. Co. *v.* Beach, 18 C. C. A. 165; Westinghouse *v.* Power-brake Co., 170 U. S. 537.

Mere changes of the form of a device or of some of the mechanical elements of a combination secured by patent will not avoid infringement, where the principle or mode of operation is adopted, unless the form of the machine or of the elements changed is the distinguishing characteristic of the invention. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Watch Co. *v.* Robbins, 64 Fed. 384; New *v.* Bevin, 64 Fed. 859.

Mere changes in the form of a device or of some of the mechanical elements of a combination secured by a patent will not avoid infringement, where the principle or mode of operation is adopted, unless the form of the machine or of the elements changed is the distinguishing characteristic of the invention. — Kinloch *v.* Western, 113 Fed. 652; 51 C. C. A. 369.

National *v.* Interchangeable, 106 Fed. 693; Watch Co. *v.* Robbins, 64 Fed. 384; New Departure *v.* Bevin, 64 Fed. 859.

It is a rule of law that one does not escape liability for infringement by changing the form or dimensions of the parts of a patented combination, where such change does not break up or essentially vary the principle or mode of operation pervading the original invention. — Dowagiac *v.* Superior, 115 Fed. 886; 53 C. C. A. 36.

Cochrane *v.* Deener, 94 U. S. 787; Morey *v.* Lockwood, 8 Wall. 230; Elizabeth *v.* Pavement, 97 U. S. 126; Loom Co. *v.* Higgins, 105 U. S. 585; Penfield *v.* Chambers, 92 Fed. 630; Bundy *v.* Detroit, 94 Fed. 524; King *v.* Hubbard, 97 Fed. 795; McSherry *v.* Dowagiac, 101 Fed. 716; Taylor *v.* Spindle Co. 75 Fed. 301; National *v.* Interchangeable, 106 Fed. 693.

Mere change in the form of a device, or of some of the mechanical elements of a combination, will not avoid infringement, where the principle or mode of operation is adopted, except in those rare cases where the form of the improvement or of the element changed is the distinguishing characteristic of the invention. — Ide *v.* Trorlicht, 115 Fed. 137; 53 C. C. A. 341.

National *v.* Interchangeable, 106 Fed. 693; Watch Co. *v.* Robbins, 64 Fed. 384; New Departure *v.* Bevin, 64 Fed. 859.

Note: This is a loose statement. If the changed element were a non-equivalent the infringement would be avoided.

By changing the form of the parts of complainant's combination, and not essentially varying the principle or mode of operation pervading the original invention, defendant cannot escape infringement. — Dowagiac *v.* Minnesota, 118 Fed. 136; 55 C. C. A. 86.

Dowagiac *v.* Superior, 115 Fed. 886; Cochrane *v.* Deener, 94 U. S. 787; Morey *v.* Lockwood, 8 Wall. 230; Elizabeth *v.* Pavement, 97 U. S. 126; Loom Co. *v.* Higgins, 105 U. S. 585; Penfield *v.* Chambers, 92 Fed. 630; Bundy *v.* Detroit, 94 Fed. 524; Ax *v.* Hubbard, 97 Fed. 795; McSherry *v.* Dowagiac, 101 Fed. 716; Taylor *v.* Spindle, 75 Fed. 301; National *v.* Interchangeable, 106 Fed. 693.

Form, location or sequence of elements are all immaterial, unless form or location or sequence is essential to the result, or indispensable, by reason of the state of the art, to the novelty of the claim. — Adam *v.* Folger, 120 Fed. 260; 56 C. C. A. 540.

Winans *v.* Denmead, 15 How. 330; Reece *v.* Globe, 61 Fed. 958; Bundy *v.* Detroit, 94 Fed. 524; Extraction Co. v. Brown, 104 Fed. 345; Norton *v.* Jensen, 49 Fed. 859; Consolidated *v.* Crosby, 113 U. S. 157; Hoyt *v.* Horne, 145 U. S. 302.

A valid patent monopoly cannot be evaded by such substitution or change of form, except through the terms of the grant, express or implied, limiting the invention to the special means and form shown in the patent. — Austin *v.* American, 121 Fed. 76; 57 C. C. A. 330.

Mere changes in the form of a patented device, where the principle or mode of operation is adopted, will not avoid infringement, unless the form of the machine is the distinguishing characteristic of the invention. — Lourie *v.* Lenhart, 130 Fed. 122; 64 C. C. A. 456.

National *v.* Interchangeable, 106 Fed. 693; Kinloch *v.* Western, 113 Fed. 659.

The making of the arm in a more bulging shape and less useful does not avoid infringement. — Milner *v.* Yesbera, 133 Fed. 916; 67 C. C. A. 210.

Penfield *v.* Chambers, 92 Fed. 630; Chicago *v.* Bush, 2 Biss. 472; Roberts *v.* Harnden, 2 Cliff. 506.

That a mere change of form does not avoid infringement even if the change of form is a distinct improvement, see American *v.* Sexton, 139 Fed. 564; 71 C. C. A. 548.

This shaping of the packing is done deliberately by the seller, and by so doing he secures all the advantages of the Bradley packing, or, at least, all the advantages which can be secured by apparently inferior material. If the same result was produced by forming the packing in a press constructed on the same lines as the coupling, removing the packing therefrom and riveting it to the jaw of the coupling, it is manifest that infringement would be established. And yet, in effect, this is precisely what is done; the necessity of a separate press being avoided by using the coupling for that purpose. — Eccles *v.* Bradley, 158 Fed. 98; 85 C. C. A. 566.

It matters not that the devices may differ in form, in appearance and in the manner of operation; if they combine to do the same work in substantially the same way it is enough. — Hillard *v.* Fisher, 159 Fed. 439; 86 C. C. A. 469.

This court has repeatedly held that mere formal changes where there is substantial identity are unavailing to escape infringement. — Delaware *v.* Shelby, 160 Fed. 928; 88 C. C. A. 110.

Mitchell *v.* Ewart, 81 Fed. 390; Thompson *v.* Second Ave., 93 Fed. 824; Smeeth *v.* Perkins, 125 Fed. 285; Ives *v.* Hamilton, 92 U. S. 431; Elizabeth *v.* Pavement, 97 U. S. 137; Hoyt *v.* Horne, 145 U. S. 302.

§ 460. Change of Form — Location.

A segment has been omitted. That which remains performs the function of the complete ring, perhaps not so well as if the ring had been completed.

But the impairment of the function of this hollow ring by omitting a short segment will not escape infringement. — Nathan *v.* Howard, 143 Fed. 889; 75 C. C. A. 97.

King *v.* Hubbard, 97 Fed. 795; Winans *v.* Denmead, 15 How. 330.

A person making, using, or selling the patented device (a hose supporter) would infringe, and he would not be permitted to escape on the plea that it was intended for use on an underwaist or a belt. It follows, as a necessary corollary, that such a structure in the prior art will anticipate irrespective of its connection, use or lack of use. — Parramore *v.* Siegel-Cooper, 143 Fed. 516; 74 C. C. A. 386.

§ 461. Change of Form — Modification.

Infringement cannot ordinarily be escaped by merely cutting in two a device made in one piece, or by making integral an article formerly made in two. — Standard *v.* Caster, 113 Fed. 162; 51 C. C. A. 109.

Bundy *v.* Detroit, 94 Fed. 524.

The Peckham invention is not obscured by the change, which does not affect its distinguishing feature or the leading purpose thereof, — that of keeping the furrow clear, — though it modifies to some extent the manner of effecting the distribution of the seed in the furrow. — Dowagiac *v.* Superior, 115 Fed. 886; 53 C. C. A. 36.

Electric *v.* LaRue, 139 U. S. 601; Cochrane *v.* Deener, 94 U. S. 780.

§ 462. Change of Form — Number of Parts.

The device goes further than to make mere formal changes in the complainants' patent. Its deviations therefrom do not consist in the mere transposition of parts, but it introduces such change in the construction of parts as to avoid the elements of complainants' invention, limited as we have found the same to be by the pre-existing devices. These differences, slight as they may be, are, in our judgment, as great as the changes, which the complainant made in adopting the former devices, and are sufficient to relieve the defendant of the charge of infringement. — Vulcan *v.* Smith, 62 Fed. 444; 10 C. C. A. 493.

But the rule that changes of form do not avoid infringement has at least two exceptions — when the form of the mechanical element is the distinguishing characteristic of the invention, and when the change in the form of the element changes the principle or mode of operation of the combination. — Jewell *v.* Jackson, 140 Fed. 340; 72 C. C. A. 304.

§463. Change of Material.

Where applicant claimed use of soft metal pin specifically, the use of safety pins being old, not infringement to employ a hard cast iron safety pin to perform same function. — Gates *v.* Fraser, 153 U. S. 332; 38 L. Ed. 734; 14 S. Ct. 883.

Now, the fibrous asbestos wool which the defendant employed in making his sealing compound may not be produced by grinding mechanism; but it is a finely divided fibrous material, not differing in appearance or otherwise from the fibrous material of the Coddington invention. To all intents and purposes, it is the " finely-ground fibrous material " of the patent. — Propfe *v.* Coddington, 108 Fed. 86; 47 C. C. A. 218.

§ 464. Combinations — Adding Elements.

When several elements, no one of which is novel, are united in a combination which is the subject of a patent, and these several elements are thereafter united with another element into a new combination, and this new combination performs a work which the patented combination could not, there is no infringement. — U. S. *v.* Berdan, 156 U. S. 552; 39 L. Ed. 530; 15 S. Ct. 420.

One who appropriates a new and valuable patented combination cannot escape infringement by uniting or operating those elements by means of appropriate mechanical devices which differ from those which are pointed out for that purpose, but which are not claimed in the patent. — Brammer *v.* Schroeder, 106 Fed. 918; 46 C. C. A. 41.

Deering *v.* Harvester Works, 155 U. S. 286; City of Boston *v.* Allen, 91 Fed. 248.

§ 465. Combinations — Concealment or Subterfuge.

The purpose, principle and operation of the machines are the same, and the defendant escapes exact similitude of construction to the plaintiff's only by a few alterations. It is not a case of using the elements of a combination less than all. It is a case of using the same number of elements, and altering the form of one and not materially altering the relation of any of the others. — Consolidated *v.* Pacific, 53 Fed. 385; 3 C. C. A. 570.

§ 466. Combinations — Construction of.

While under sec. 9, ch. 45, act 1837 (see amended law sec. 4922 R. S. Act 1870) excessive claims do not defeat a suit, this provision cannot be applied to the present case, for, unless the combination is maintained, the whole of the invention fails. The combination is an entirety; if one of the elements is given up, the thing claimed disappears. — Vance *v.* Campbell, 66 U. S. 427; 17 L. Ed. 168.

A combination of elements, not the equivalents of his, would be a different machine, and consequently not an infringement. By his patent he appropriated to himself only as much of the field of invention which his idea embraced, as the machine he described in his specification and claimed in his application covered. — Wicke *v.* Ostrum, 103 U. S. 461; 23 L. Ed. 409.

A claim must be limited to the elements claimed, or their equivalents. — Gage *v.* Herring, 107 U. S. 640; 27 L. Ed. 601; 2 S. Ct. 819.

Water *v.* Desper, 101 U. S. 332; Eames *v.* Godfrey, 1 Wall. 78; Murray *v.* Clayton, L. R. 10 Ch. 675; Clark *v.* Adie, L. R. 10 Ch. 667.

The claims of the patents sued on in this case are claims for combinations. In such a claim if the patentee specifies any element as entering into the combination, either directly by the language of the claim or by such a reference to the descriptive part of the specification as carries such elements into the claim, he makes such element material to the combination, and the court cannot declare it to be immaterial. It is his province to make his own claim and his privilege to restrict it. If it be a claim to a combination and be restricted to specified elements, all must be regarded as material, leaving open only the question, whether an omitted part is supplied by an equivalent device or instrumentality. — Fay *v.* Cordesman, 109 U. S. 408; 27 L. Ed. 979; 3 S. Ct. 236.

Water *v.* Desper, 101 U. S. 332; Gage *v.* Herring, 107 U. S. 640.

§ 467. Combinations — Different Combination, Same Result.

Combinations effecting similar results by similar means, but employing different precedent conditions, are not necessarily identical or equivalent. — National *v.* Wheeler, 79 Fed. 432; 24 C. C. A. 663.

If the combination of a defendant shows a mode of operation substantially different from that of the complainant, infringement is avoided even though the result of the operation of each is the same. — Brammer *v.* Witte, 159 Fed. 726; 86 C. C. A. 207.

Ciniotti *v.* American, 198 U. S. 399; Brooks *v.* Fiske, 15 How. 211; Union *v.* Battle Creek, 104 Fed. 337.

§ 468. Combinations — Equivalents.

Mere formal alterations of a combination in letters patent do not constitute any defense to the charge of infringement, as the inventor of a combination is as much entitled to suppress every other combination of the same ingredients to produce the same result, not substantially different from what he had invented and caused to be patented, as the inventor of any other patented improvement. Such inventors may claim equivalents as well as any other class of inventors. — Rees *v.* Gould, 82 U. S. 187; 21 L. Ed. 39.

Seymour *v.* Osborne, 11 Wall. 555.

Whether one device is or is not an equivalent for another, is usually a question of fact, and often becomes a difficult issue to decide. Grave doubts were at one time entertained whether the patentee of an invention consisting of a combination of old ingredients was entitled to equivalents, but it is now well settled that he is just as much as the patentee of any other class of inventions; but it is very important to understand what is meant by an equivalent of an ingredient in such a combination. Questions of this kind usually arise in comparing the machine of the defendant, in a suit for infringement, with that of the plaintiff, and the rule is that if the defendant omits entirely one of the ingredients of the plaintiff's combination, without substituting any other, he does not infringe, and if he substitutes another in the place of the one omitted, which is new or which performs a substantially different function, or even if it was old but was not known at the date of the plaintiff's patent as a proper substitute for the omitted ingredient, it does not infringe. — Gill *v.* Wells, 89 U. S. 1; 22 L. Ed. 699.

Carver *v.* Hyde, 16 Pet. 514; Brooks *v.* Fiske, 15 How. 212; Stimpson, *v.* R. R. 10 How. 329; Prouty *v.* Ruggles, 16 Pet. 341.

Alterations in a combination which are merely formal do not constitute a defense to the charge of infringement, as the inventor of a new and useful combination of old ingredients is as much entitled to claim equivalents as any other class of inventors, but they cannot suppress subsequent improvements which are substantially different from their combinations, whether the new improvement consists in a new combination of the same ingredients or of some newly discovered ingredient, or even of some old ingredient performing some new function not known at the date of the letters patent as a proper substitute for the ingredient withdrawn. — Gill *v.* Wells, 89 U. S. 1; 22 L. Ed. 699.

Taken by themselves, as separate pieces of machinery, they are not the same, and the one is not an infringement of a patent for the other. — Cochrane *v.* Deener, 94 U. S. 780; 24 L. Ed. 139.

Curtis, sec. 332; Foster *v.* Moore, 1 Curt. C. C. 279.

Alterations or modifications of combinations by substitution of equivalents does not avoid infringement. — Fuller *v.* Yentzer, 94 U. S. 299; 24 L. Ed. 107.

A party who merely substitutes an old ingredient for one of the ingredients of the patent is an infringer if the substitute performs the same function as the ingredient for which it was substituted, and it appears that it was well known at the date of the patent that it was applicable to that use. — Imhauser *v.* Buerk, 101 U. S. 647; 25 L. Ed. 945.

Gill *v.* Wells, 22 Wall. 1, 28.

An inventor is entitled to the benefit of all the mechanical equivalents of his several elements, known at the time of his invention, if used in the same combination. — Wicke *v.* Ostrum, 103 U. S. 461; 26 L. Ed. 409.

Clough was the first person who applied a valve regulation of any kind to the combination to which he applied it; and the first person who made such combination; and he is entitled under the decisions heretofore made by this court to hold as infringements all valve regulations applied to such a combination, which performs the same office in substantially the same way as, and were known equivalents for, his form of valve regulation. — Clough *v.* Gilbert, 106 U. S. 166; 27 L. Ed. 138; 1 S. Ct. 198.

A combination may be infringed when some of the elements are employed and for the others mechanical equivalents are used which were known to be such at the time when the patent was granted. — Rowell *v.* Lindsey, 113 U. S. 97; 28 L. Ed. 906; 5 S. Ct. 507.

Seymour *v.* Osborne, 11 Wall. 516; Gould *v.* Rees, 15 Wall. 187; Imhauser *v.* Buerk, 101 U. S. 647.

When complainant's claim covers a specific construction and claims as an element of a combination a groove, and defendant employs an artificial ridge to perform the same function, the narrowness of complainant's invention precludes equivalency. — Forncrook *v.* Root, 127 U. S. 176; 32 L. Ed. 97; 8 S. Ct. 1247.

Gage *v.* Herring, 107 U. S. 640.

The claim is in terms, for mechanism "combined with" other mechanisms. It is true that certain particular mechanism is mentioned, but it does not necessarily result that the patentee intended to limit the claim to any special devices, or that the law will so restrict it. — National *v.* American, 53 Fed. 367; 3 C. C. A. 559.

It is a combination of five elements. The infringing device is also a combination of five elements, and four of them, it is conceded, resemble four elements of the plaintiff's combination. In the fifth element, the bell crank lever acting as a toggle joint was the equivalent of the friction rollers. — Consolidated *v.* Pacific, 53 Fed. 385; 3 C. C. A. 570.

It is urged that a combination claim composed of old elements is not infringed by using one of its elements less than all. But the qualification must be added that no equivalent be substituted for the omitted element. — Consolidated *v.* Pacific, 53 Fed. 385; 3 C. C. A. 570.

A charge of infringement cannot be overcome by the substitution of a well-known equivalent for one element in a patented combination, although the result of the working of the combination as a whole may be slightly dif-

ferent, especially when no new or useful result is obtained, and the only effect is the production of an inferior device. — Standard *v.* Osgood, 58 Fed. 583; 7 C. C. A. 382.

The rule, prima facie, is that, while the use of equivalents for an element in a combination is not lawful, yet a combination which does not include all the elements does not infringe. There may be exceptions where the nature of the invention is of such a primary or broad character that it is plain some of the elements named are unessential; in other words, where the invention is so broad that the range of equivalents will be correspondingly broad, under the liberal construction which the courts give to such inventions. — DeLorica *v.* Whitney, 63 Fed. 611; 11 C. C. A. 355.

Miller *v.* Mfg. Co. 151 U. S. 207; Meter Co. *v.* Desper, 101 U. S. 332; Fay *v.* Cordesman, 109 U. S. 408; Knapp *v.* Morss, 150 U. S. 221; Dunham *v.* Mfg. Co. 154 U. S. 103.

This is not a case of an integral thing made in parts, and then combined so as to constitute but one integer, operating in the same way as if constructed as a unit. In this connection it is necessary to observe the wide distinction which prevails between inventions of specific devices and inventions of combinations. In the former a much wider range of equivalents is recognized. In the latter the range is limited, and an element is not an equivalent unless it is substantially the same thing as the patentee has described, operating in the same way. We do not say what the result might be if the patentee makes his description of the elements of his combination broad enough to include in each or any of them any kind of mechanism adapted to produce the same results as a step in the operation. — Wells *v.* Curtis, 66 Fed. 318; 13 C. C. A. 494.

Rob. Pat. sec. 254; Caster Co. *v.* Spiegel, 133 U. S. 360.

In combinations, the doctrine of equivalents is construed most strongly against him who alleges infringement, and each party is held to his own element or device, or a positive and exact equivalent which performs the same function in the same manner; the burden being upon the complainant to show this. — Erie *v.* American, 70 Fed. 58; 16 C. C. A. 632.

To support the charge of infringement of a combination it must show use substantially of the same combination, including every one of the elements, or a mechanical equivalent for every one that is omitted. — Erie *v.* American, 70 Fed. 58; 16 C. C. A. 632.

One who appropriates a new and valuable patented combination cannot escape infringement by uniting or operating its elements by means of mere mechanical devices which differ from those which are pointed out for that purpose, but which are not claimed in the patent. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Deering *v.* Harvester Works, 155 U. S. 286; City of Boston *v.* Allen, 91 Fed. 248; Schroeder *v.* Brammer, 98 Fed. 880.

One who merely makes and secures a patent for a slight improvement on an old device or combination, which performs the same function before as after the improvement, is protected against those only who use the very device or improvement he describes and claims or mere colorable evasions of it. In other words, the term " mechanical equivalent " when applied to the interpretation of a pioneer patent, has a broad and generous signification: but where it is applied to a slight and almost immaterial improvement, in the

progress of an art, it has a very narrow and limited meaning. — Brammer *v.* Schroeder, 106 Fed. 918; 46 C. C. A. 41.

Adams *v.* Lindell, 77 Fed. 432; Stirrat *v.* Mfg. Co., 61 Fed. 980; McCormick *v.* Talcott, 20 How. 402; Railway Co. *v.* Sayles, 97 U. S. 554.

One who claims and secures a patent for a new machine or combination, thereby necessarily claims and secures a patent for every mechanical equivalent for that device or combination, because, within the meaning of the patent law, every mechanical equivalent of a device is the same thing as the device itself. Moreover, in determining what is a mechanical equivalent of a given device, where, as in the case at bar, form is not the essence of the invention, forms and names are of little significance. The similarities and differences of machines and combinations are to be determined by the offices or functions which they perform, by the principles on which they are constructed, and by the modes which are used in their operation. A device which is constructed on the same principle, which has the same mode of operation, and which accomplishes the same result as another by the same or by equivalent mechanical means, is the same device, and a claim in a patent of one such device claims and secures the other. — Kinloch *v.* Western, 113 Fed. 652; 51 C. C. A. 362.

Machine Co. *v.* Murphy, 97 U. S. 120.

The patents are not for methods, but for particular mechanisms. As such, like all machine patents, they are entitled to a fair construction, and to one that will fully secure to the inventor the monopoly of his real invention, any device or combination which accomplishes the same result, by substantially the same means, will be held an invasion of that monopoly. Care must be taken, however, in all cases, that we do not by an unealled for application of the doctrine of equivalents, practically give to the patentee a monopoly of the function of the mechanism. This, of course, we are not permitted to do, directly or indirectly. — Bryce *v.* National, 116 Fed. 186; 53 C. C. A. 611.

The use of a different, but mechanically equivalent, method or material to construct some of the elements of a patented combination will not avoid infringement where the principle or mode of operation is adopted, and the elements, when completed, perform the functions by the same means as, or by mechanically equivalent means to, those described in the patent. — Anderson *v.* Collins, 122 Fed. 451; 58 C. C. A. 669.

Ide *v.* Trorlicht, 115 Fed. 137; National *v.* Interchangeable, 106 Fed. 693; Watch *v.* Robbins, 64 Fed. 384; New Departure *v.* Bevin, 64 Fed. 859.

The patent is granted for the combination, as "the particular means devised by the inventor by which that result is attained," and the patentee is entitled to protection against any use of the same combination of elements, combined in the same way, so that each element performs the same function, or against substantially the same use with deviations which are merely colorable. But each of these well-known elements remains open to the use of subsequent inventors for a different combination for like results. — Milwaukee *v.* Brunswick-Balke, 126 Fed. 171; 61 C. C. A. 175.

Electric *v.* Hall, 114 U. S. 87.

He has devised an organism by which the desired result can be attained without the employment of this essential constituent of the patented construction; and to deny him the right to make, use, or vend that organism would be to accord to the appellees a monopoly, not only of the means which they described and claimed, but also of the end which they effected, even

when achieved by means materially different. Such a monopoly, of course, is not obtainable under the patent laws. — Mahoney *v.* Jenkins, 138 Fed. 404; 70 C. C. A. 662.

If no one can be held to infringe a patent for a combination unless he uses all the parts of the combination and the same identical machinery as that of the patentee, then will no patent for a combination ever be infringed; for certainly no one capable of operating a machine could be incapable of adopting some formal alteration in the machine or of substituting mechanical equivalents. It is true no one infringes a patent for a combination who does not employ all the ingredients of the combination; but if he employs all the ingredients, or adopts mere formal alterations, or substitutes for one ingredient another which performs substantially the same function as the one withdrawn, he does infringe. — International *v.* Brammer, 138 Fed. 396; 71 C. C. A. 633.

We have had frequent occasion in this court to pass upon the equivalency of mechanical devices, and we have never held that so slight a change (a mere change of form) as that indicated above in one of the parts of the machine would deprive the owner of the benefit of his patent. — American *v.* Sexton, 139 Fed. 564; 71 C. C. A. 548.

Columbus *v.* Robbins, 64 Fed. 384; McSherry *v.* Dowagiac, 101 Fed. 716; McCormick *v.* Aultman, 69 Fed. 371; Bundy *v.* Detroit, 94 Fed. 524; Dowagiac *v.* Superior, 115 Fed. 886; Eames *v.* Worcester, 123 Fed. 67.

§ 469. Combinations — Identity.

In order to constitute an infringement, the whole combination must be used, because he claims not the various parts, but the whole combination together. — Case *v.* Brown, 69 U. S. 320; 17 L. Ed. 817.

Where the device of the patent in suit showed a duplication of parts, viz. a double time movement to control the lever which controls the dog, and the infringing device uses the single combination, such omission does not avoid infringement. — Yale *v.* Berkshire, 135 U. S. 342; 34 L. Ed. 168; 10 S. Ct. 884.

Every element of the combination must be used as patented, or the entire result is changed, and the machine sought to be held as infringing is a different one. — Jones *v.* Munger, 49 Fed. 61; 1 C. C. A. 158.

Vance *v.* Campbell, 1 Black, 427.

We find the patent to be for a combination of well-known devices, but producing a new and useful result, and entitled to letters patent. But while the law recognizes the patentability of such combination of known devices, it patents the entire combination of the elements and not any single element of it, or any combination containing any other or different elements. The patent must be considered to be for the entire apparatus, and in order to claim damage for infringement, it is necessary to show that each and every element, or its equivalent, entered into respondents' machine. — Jones *v.* Munger, 49 Fed. 61; 1 C. C. A. 158.

Loom Co. *v.* Higgins, 105 U. S. 591; Gill *v.* Wells, 22 Wall. 1; Collar Co. *v.* Van Deusen, 23 Wall. 538; Fuller *v.* Yentzer, 94 U. S. 297.

The appellers' expert in effect testified, and we think with accuracy, that there had not previously existed any combination including each of the elements of either claim, and, accepting this statement, it follows that, if the construction of the appellees does embody those elements in the same com-

bination, it is an infringement. — McMichael *v.* Ruth, 128 Fed. 706; 63 C. C. A. 304.

National *v.* American, 53 Fed. 367.

Where it appears from the proceedings in the Patent Office and a consideration of the state of the art that a patent is not a pioneer patent, its claims must be limited in their scope to the actual combination of essential parts as shown, and cannot be construed to cover other combinations of elements, of different construction and arrangements. In such cases there should be identity of means and identity of operation combined with identity of result, in order to constitute infringement. — Greene *v.* Buckley, 135 Fed. 520; 68 C. C. A. 70.

Kokomo *v.* Kitselman, 189 U. S. 19.

Note: Taken alone and by itself, this statement is too broad. Between a pioneer patent and mere servile improvements there is a field of legitimate invention which requires the highest inventive genius and which is entitled to equivalency in proportion to the quality of invention disclosed.

§ 470. Combinations — Impairing Efficiency.

The tubular coupler of the appellant is employed strictly as a coupler and wholly fails to perform the unitary construction of the appellee, whatever other advantage the appellant may derive from its use. — Peerless *v.* White, 118 Fed. 827; 55 C. C. A. 502.

Sewall *v.* Jones, 91 U. S. 171.

Note: Clearly this is a dangerous pronouncement; and it will be noted that Judge Acheson vigorously dissents.

§ 471. Combinations — Improvements.

The plaintiff's patent being a patent for a combination of old devices, the question of the infringement depended upon whether or not the changes from that combination adopted in defendant's device, were merely changes in form, or such as arose from the substitution of equivalents. The defendant had the right to make improvements upon the plaintiff's combination, and defendant's patent cannot be held to be an infringement if it presents a new combination of the elements that are found in plaintiff's patent, or substitutes for one or more of the same a new ingredient, performing a new function. — Singer Mfg. Co. *v.* Brill, 54 Fed. 380; 4 C. C. A. 374.

§ 472. Combinations — Old Elements, New Functions.

Actual inventors of a combination of two or more ingredients, are entitled though the ingredients are old, if they produce a new and useful result, to restrain others from using the same. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Pitts *v.* Whiteman, 2 Story, 619; Ames *v.* Howard, 1 Sumn. 487.

Valid letters patent undoubtedly may be granted for an invention which consists entirely in a new combination of old elements or ingredients, provided it appears that the new combination of the ingredients produces a new and useful result, but the rule is equally well settled that the invention in such a case consists merely in the new combination, and that a suit for infringement cannot be maintained against a party who constructs or uses a substantially different combination, even though it includes the exact same elements or ingredients, if the combination is, in fact, new and useful and substantially

different from the one which preceded it. — Fuller *v.* Yentzer, 94 U. S. 288; 24 L. Ed. 103.

Gill *v.* Wells, 22 Wall. 14.

Dissenting: Strong, Waite, Miller and Bradley.

If, however, one invents and secures a patent for a new combination of old mechanical elements which first performs a useful function, he is protected against all machines and combinations which perform the same function by equivalent mechanical devices to the same extent and in the same way as one who invents and patents a machine or composition of matter of like primary character. — Brammer *v.* Schroeder, 106 Fed. 918; 46 C. C. A. 41.

§ 473. Combinations — Omitting Element.

The patent is for a combination and consists in arranging the different portions and combining them in the manner stated in the specification for the purpose of producing a certain effect. None of the parts referred to are new, and none are claimed as new, nor is any portion of the combination less than the whole claimed as new, or stated to produce any given result. The end in view is proposed to be accomplished by the union of all, arranged and combined together in the manner described. The use of any two of these parts only, or of two combined with a third, which is substantially different, in form or in the manner of its arrangement or construction with others, is therefore not the thing patented. It is not the same combination if it substantially differs from it in any of its parts. — Prouty *v.* Ruggles, 16 Pet. 336; 10 L. Ed. 985.

The patent is for a combination. None of the parts are new or claimed as new. The use of any two of these parts only, or of two combined with a third, which is substantially different in form or in the manner of its arrangement and connection with the others, is therefore not the thing patented. It is not the same combination, if it substantially differs from it in any of its parts. — Stimpson *v.* Railroad, 10 How. 329; 13 L. Ed. 441.

Prouty *v.* Ruggles, 16 Pet. 341; Carver *v.* Hyde, 16 Pet. 513.

The rule is, that if a combination has, as here, three different known parts, and the result is proposed to be accomplished by the union of all three parts, arranged with reference to each other, the use of two of these parts only, combined with a third, which is substantially different in the manner of its arrangement and connection with the others, is not the same combination, and not infringement. — Brooks *v.* Fiske, 15 How. 212; 14 L. Ed. 665.

A claim for a combination of mechanical devices or parts, is not infringed by one who uses a part of the combination. — McCormick *v.* Talcott, 61 U. S. 402; 15 L. Ed. 930.

The omission of a material element of a combination avoids it. — Vance *v.* Campbell, 66 U. S. 427; 17 L. Ed. 168.

The law is well settled that there is no infringement of a patent which claims mechanical powers in combination, unless all of the parts have been substantially used. The use of the part less than the whole is no infringement. — Eames *v.* Godfrey, 68 U. S. 78; 17 L. Ed. 547.

Prouty *v.* Ruggles, 16 Pet. 341.

Where the defendant in constructing his machine omits entirely one of the ingredients of the plaintiff's combination without substituting any other, he

does not infringe, and if he substitutes another in the place of the one omitted, which is new or performs a substantially different function, or if it is old, but was not known at the date of plaintiff's invention as a proper substitute for the omitted ingredient, then he does not infringe. — Rees *v.* Gould, 32 U. S. 187; 21 L. Ed. 39.

Carver *v.* Hyde, 16 Pet. 514; Vance *v.* Campbell, 1 Black, 427; Roberts *v.* Herndon, 2 Cliff. 504; Mabie *v.* Haskell, 2 Cliff. 511; Brooks *v.* Fiske, 15 How 219; Stimpson *v.* R. R. 10 How. 329; Prouty *v.* Ruggles, 16 Pet. 341; Barrett *v.* Hall, 1 Mas. 477; Howe *v.* Abbott, 2 Story, 194.

It is undoubtedly the law, that if the subject of a patent is a combination of several processes, parts or devices, the use of any portion of the combination less than the whole cannot be infringement. There may indeed be a patent for a combination of many parts, and at the same time for an arrangement of some of the parts constituting another combination, but still a part of the larger. Yet if there be no patent for the constituents, they are open to the public for use in combination, provided all the elements of the patented combination be not employed. — Garratt *v.* Siebert, 131 U. S. cxxvi, app.; 21 L. Ed. 956.

It is substantially for a combination of the material parts of the entire machine, and no one can be said to infringe it who does not use the entire combination. — Brown *v.* Guild, 90 U. S. 181; 23 L. Ed. 161.

The rights of a patentee for a mere combination of old ingredients are not infringed unless it appears that the alleged infringer made, used or sold the entire combination. — Fuller *v.* Yentzer, 94 U. S. 288; 24 L. Ed. 103.

Gould *v.* Rees, 15 Wall. 194; Prouty *v.* Ruggles, 16 Pet. 341; Vance *v.* Campbell, 1 Black, 427.

Dissenting: Strong, Waite, Miller, Bradley.

Omission of an essential element avoids infringement. — Dunbar *v.* Meyers, 94 U. S. 187; 24 L. Ed. 34.

Gould *v.* Rees, 15 Wall. 194; Prouty *v.* Ruggles, 16 Pet. 341; Vance *v.* Campbell, 1 Black, 427; Gill *v.* Wells, 22 Wall. 28.

If more or less than the whole of his ingredients are used by another, such party is not liable as an infringer, because he has not used the invention or discovery patented. With the change of elements the identity of the product disappears. — Schumacher *v.* Cornell, 96 U. S. 549; 24 L. Ed. 676.

Vance *v.* Campbell, 1 Black, 427.

It is a well known doctrine of patent law, that the claim of a combination is not infringed if any of the material parts of the combination are omitted. It is equally well known that if any one of the parts is only formally omitted, and is supplied by a mechanical equivalent, performing the same office and producing the same result, the patent is infringed. — Union *v.* Desper, 101 U. S. 332; 25 L. Ed. 1024.

It is not the same combination if it differs from it in any of its parts. — McMurray *v.* Mallory, 111 U. S. 97; 28 L. Ed. 365; 4 S. Ct. 375.

Prouty *v.* Ruggles, 16 Pet. 336.

The omission of an essential element in a specific claim, without equivalency avoids infringement. — Blake *v.* San Francisco, 113 U. S. 679; 28 L. Ed. 1070; 5 S. Ct. 692.

It is clear that if the patent is to be construed as a combination, the appellant does not infringe, because he does not use one of the elements of the combination. — Voss *v.* Fisher, 113 U. S. 213; 28 L. Ed. 975; 5 S. Ct. 511.

Prouty *v.* Ruggles, 16 Pet. 336; Gould *v.* Rees, 15 Wall. 187; Rowell *v.* Lindsay, 113 U. S. 97.

The patent being for a combination, there can be no infringement unless the combination is infringed. — Rowell *v.* Lindsay, 113 U. S. 97; 28 L. Ed. 906; 5 S. Ct. 507.

Prouty *v.* Ruggles, 16 Pet. 336; Stimpson *v.* R. E. 10 How. 329; Eames *v.* Godfrey, 1 Wall. 78; Seymour *v.* Osborne, 11 Wall. 516; Dunbar *v.* Meyers, 94 U. S. 187; Fuller *v.* Yentzer, 94 U. S. 288.

The defendant does not use the same combination, and employs no device as an equivalent and substitute for the omitted element. It is not therefore liable as an infringer. — Yale *v.* Sargent, 117 U. S. 373; 29 L. Ed. 950; 6 S. Ct. 931.

Meter *v.* Desper, 101 U. S. 332; Gage *v.* Herring, 107 U. S. 640.

When the device of the patent in suit shows duplicate parts, viz. a double time movement to control the lever which controls the dog, and the infringing device uses the single combination, such omission does not avoid infringement. — Yale *v.* Berkshire, 135 U. S. 342; 34 L. Ed. 168; 10 S. Ct. 884.

In conformity with the ruling of the Supreme Court in the case of Corn Planter Patent, 23 Wall. 181, it was right, we think, to construe the claims of the patent in question as embracing the devices shown in the specifications, each claim being regarded as including such devices and combination as a necessary element to meet the requirements of the general terms in which it is expressed. When the claims are so construed, it may be said of each of them, in the language of that case: "The claim thus limited is considerably narrowed in its operation. It is substantially for a combination of the material parts of the entire machine, and no one can be said to infringe it who does not use the entire combination." This, of course, does not exclude the doctrine of equivalents. — Illinois *v.* Robbins, 52 Fed. 215; 3 C. C. A. 42.

It is well settled that the omission in the alleged infringing device, of an element named in a combination claim of a patent said to be infringed is a complete defense to the charge of infringement. — Brown *v.* Stilwell, 57 Fed. 731; 6 C. C. A. 528.

Rowell *v.* Lindsay, 113 U. S. 97.

It is well settled that, in order to constitute the infringement of a combination, it must appear that the alleged infringing device included every element of the combination as claimed. It is immaterial that the elements claimed in the patent of plaintiff and omitted in the defendant's device are not of the essence of the real invention. — Kinzel *v.* Luttrell, 67 Fed. 926; 15 C. C. A. 82.

Electric *v.* Hall, 114 U. S. 87; Voss *v.* Fisher, 113 U. S. 213; Gage *v.* Herring, 107 U. S. 640; Water *v.* Desper, 101 U. S. 332; Dunbar *v.* Meyers, 94 U. S. 187; Reely *v.* Scott, 23 Wall. 352.

But the appellant is met here by the unquestioned rule that the absence from a device or construction, that is alleged to infringe, of a single essential element of a patentable combination of old elements, is fatal to the claim of infringement. — Murphy *v.* Excelsior, 76 Fed. 965; 22 C. C. A. 658.

Building Co. *v.* Eustis, 65 Fed. 804; Hailes *v.* VanWormer, 20 Wall. 353; Bragg *v.* Fitch, 121 U. S. 478.

The absence, from a device that is alleged to infringe a patented combination of old elements, of a single essential element of that combination, is fatal to the claim of infringement. — Adams Elec. Ry. *v.* Lindell, 77 Fed. 432; 23 C. C. A. 223.

Hailes *v.* VanWormer, 20 Wall. 353; Bragg *v.* Fitch, 121 U. S. 478; Building Co. *v.* Eustis, 65 Fed. 804; Murphy *v.* Excelsior, 70 Fed. 491.

"There is no infringement of a patent which claims mechanical powers in combination, unless all the parts have been substantially used." Eames *v.* Godfrey, 1 Wall. 78. A combination of the mechanical parts of an entire machine is not infringement, except by the use of the entire combination. Brown *v.* Guild, 23 Wall. 181. — Carter *v.* Hanes, 78 Fed. 346; 24 C. C. A. 128.

The defendant ought not to escape because it does not use subordinate or unimportant elements of the combinations described in other claims, which were undoubtedly omitted from this claim that the inventor might more perfectly secure the essential elements of his invention. — Mast *v.* Dempster, 82 Fed. 327; 27 C. C. A. 191. But see 177 U. S. 485.

Mfg. Co. *v.* Wharton, 28 Fed. 189; Tondeur *v.* Stewart, 28 Fed. 561; Coupler *v.* Pratt, 70 Fed. 622.

While it is true that the machine used by the appellant brings together several of the old devices which formed part of the Streat combination, still it is also true that it omits other important parts thereof, and consequently there is no infringement. — American *v.* Streat, 83 Fed. 700; 28 C. C. A. 18.

Schumacher *v.* Cornell, 96 U. S. 549; Palmer *v.* Corning, 156 U. S. 342.

The combination is not infringed unless all of the elements of the combination are found in the infringing device. — St. Louis *v.* National, 87 Fed. 885; 31 C. C. A. 265.

The new Jensen machine manifestly does not infringe, as it does not contain all the elements of the combination patent of Norton, or their mechanical equivalents. — Norton *v.* Jensen, 90 Fed. 415; 33 C. C. A. 141.

Prouty *v.* Ruggles, 16 Pet. 337; Stimpson *v.* Railroad, 10 How. 329; Eames *v.* Godfrey, 1 Wall. 78; Seymour *v.* Osborne, 11 Wall. 516; Dunbar *v.* Meyers, 94 U. S. 187; Fuller *v.* Yentzer, 94 U. S. 298; Merrill *v.* Yeomans, 94 Fed. 568; Meter Co. *v.* Desper, 101 U. S. 332; Miller *v.* Brass Co. 104 U. S. 350; Rowell *v.* Lindsay, 113 U. S. 97.

Plaintiff's patent being for a combination, it necessarily follows that there cannot be any infringement unless the defendant's elevator contains all of the elements of the combination in plaintiff's patent, or their mechanical equivalent. — Overweight *v.* Improved, 94 Fed. 155; 36 C. C. A. 125.

Norton *v.* Jensen, 90 Fed. 415; DeLorica *v.* Whitney, 63 Fed. 611.

The absence from a device that is alleged to infringe a patented combination of a single element of that combination is fatal to the claim of infringement. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Adams *v.* Lindell, 77 Fed. 432.

Nothing in the law of patents is better settled than the rule that a claim for a combination is not infringed if any one of the described and specified elements is omitted, without the substitution of anything equivalent thereto. — Pittsburg *v.* Pittsburg, 109 Fed. 644; 48 C. C. A. 580.

Water-Meter *v.* Desper, 101 U. S. 332; Weatherhead *v.* Coupe, 147 U. S. 322; Wright *v.* Yuengling, 155 U. S. 47.

It is well settled that there is no infringement if any one of the material parts of the combination is omitted, and that a patentee will not be heard to deny the materiality of any element included in his combination claim. — Adam *v.* Folger, 120 Fed. 260; 56 C. C. A. 540.

Vance *v.* Campbell, 1 Black, 427; Meter *v.* Desper, 101 U. S. 337; McClain *v.* Ortmayer, 141 U. S. 423.

The nonuse of any specific element of a combination claim or its equivalent avoids infringement. — American *v.* Cimiotti, 123 Fed. 869; 59 C. C. A. 357.

Water-Meter *v.* Desper, 101 U. S. 332; Weatherhead *v.* Coupe, 147 U. S. 322; Wright *v.* Yuengling, 155 U. S. 47.

While the parts of the last are separable, the invention is unitary, and incapable of being divided into patentable parts; and therefore the use of the heel part or of the fore part cannot be said to be a use of a part of the Clark invention within the reasonable meaning of the license. — Wright *v.* Fitz, 133 Fed. 394; 66 C. C. A. 456.

As one element of appellees' combination has thus been replaced by a device that is materially different, the appellant's lantern does not infringe. — Keystone *v.* Spear, 136 Fed. 595; 69 C. C. A. 369.

Since at least one element of each of the combinations secured by the claims is wanting, they cannot be held to infringe. The absence from a device that is alleged to infringe a patented combination of a single mechanical element of that combination is fatal to the claim of infringement. — Mallon *v.* Gregg, 137 Fed. 68; 69 C. C. A. 48.

Adams *v.* Lindell, 77 Fed. 432; National *v.* Interchangeable, 106 Fed. 693.

The combination is an entirety. If one of its elements is omitted, it ceases to exist. It is well settled, therefore, that the omission of any one ingredient of the combination covered by the claim averts any charge of infringement. — Central *v.* Coughlin, 141 Fed. 91; 72 C. C. A. 93.

Prouty *v.* Draper, 16 Pet. 336; Black Diamond *v.* Excelsior, 156 U. S. 611.

The absence from a combination that is alleged to infringe of a single essential element is fatal to the claim for infringement. — Brammer *v.* Witte, 159 U. S. 726; 86 C. C. A. 207.

Cimiotti *v.* American, 198 U. S. 399; Adams *v.* Lindell, 77 Fed. 432; National *v.* Interchangeable, 106 Fed. 693.

§ 474. Contributory — Furnishing Material.

That the complainants were entirely within the boundary of their patent rights in permitting the use of their invention only in connection with wire sold by themselves is not an open question in this court. — Rupp *v.* Elliott, 131 Fed. 730; 65 C. C. A. 544.

Heaton-Peninsular *v.* Eureka, 77 Fed. 288; Bement *v.* National, 186 U. S. 70; Cortelyou *v.* Lowe, 111 Fed. 1005; Victor *v.* The Fair, 123 Fed. 424; Tubular *v.* O'Brien, 93 Fed. 200; Edison *v.* Pike, 116 Fed. 863.

It is, therefore, the use of such powder which constitutes infringement and when a manufacturer of acid phosphates sells a manufacturer of baking powder a barrel of granular acid phosphate the presumption is not unfair that he expects it to be used for baking powder. — Rumford *v.* Hygienic, 159 Fed. 436; 86 C. C. A. 416. Reversed, 215 U. S. 156.

§ 475. Contributory — Intent.

The intention to assist in infringement must be shown affirmatively and cannot be inferred from the mere fact that the articles are in fact used in the patented combinations or may be so used. But where the article can only be used in the patented combination, the inference and intent of the maker and seller is certain, and the right of the patentee to injunction ought, we think, to be equally certain. — Thomson-Houston *v.* Ohio, 80 Fed. 712; 26 C. C. A. 107.

Thomson-Houston *v.* Kelsey, 75 Fed. 1005.

Of course, if it made or sold scales having peculiar provision for the intended incorporation therein of a valid patented device of the appellee, it would be liable as a contributor, if the expected incorporation should thereafter be made by another. But if it makes and sells scales having simply adaptations for a proper adjustment, such as was known in the art, it would not be liable if another person should of his own volition put into the scales a form of adjustment patented by the appellee. — Standard *v.* Computing, 126 Fed. 639; 61 C. C. A. 541.

§ 476. Contributory — Making Elements.

What contributory infringement is, and why it should be enjoined, was clearly shown in Wallace *v.* Holmes, 9 Blatchf. 65, the earliest case in this country upon the subject, and upon which the subsequent cases of contributory infringement rest. The willingness of the defendant in this case to aid other persons in any attempts which they may be disposed to make towards infringement is also apparent. It sufficiently appears from the defendant's advertisements and affidavits that it was ready to sell to any and all purchasers, irrespective of their character as infringers. A proposed concert of action with infringers, if they present themselves, is fairly to be inferred from the obvious facts of the case; and an injunction order is the proper remedy against wrongful acts which are proposed, or are justly to be anticipated. — Thomson-Houston *v.* Kelsey, 75 Fed. 1005; 22 C. C. A. 1.

We would not be understood as deciding that the defendant company has the right to manufacture the knuckles which form a part of the complainant's device, and to sell them indiscriminately to all persons who see fit to buy them; for, clearly, such is not the law. We have no doubt that the defendant would be liable as an infringer if it so happened that the knuckles by it made and sold should be used by the purchasers in the construction of complete couplers such as are described in the complainant's patents. Wallace *v.* Holmes, Fed. Cas. No. 17,100. Therefore, if the defendant continues to manufacture the coupling head or knuckles, and keeps them in stock, it must see to it that they are sold, for the purpose of repairing the patent coupling device, to persons or corporations who have acquired the right to make and use them for that purpose. — Shickle *v.* St. Louis, 77 Fed. 739; 23 C. C. A. 433.

The principle governing infringement of combination patents by furnishing a necessary element in the combination is applicable to the case at bar. To make or sell a single element may be quite an innocent act, for a combination is not infringed except by uniting all of the necessary elements. But "to make or sell a single element with the intent that it shall be united to the other elements, and so complete the combination is infringement." Rob. Pat. sec. 924, and cases cited. Judge Shepley stated the rule quite clearly in Saxe *v.* Hammond, Fed. Cas. No. 12,411, when he said:

"Different parties may all infringe by respectively making or selling, each of them, one of the elements of a patented combination, provided these

separate elements are made for the purpose and with the intent of their being combined by a party having no right to combine them. But the mere manufacture of a separate element of a patented combination, unless such manufacture be proved to have been conducted for the purpose and with the intent of aiding infringement, is not in and of itself infringement." — Heaton *v.* Eureka, 77 Fed. 288; 25 C. C. A. 267.

Wallace *v.* Holmes, 9 Blatchf. 65; Holly *v.* Machine Co. 18 Blatchf. 327, 4 Fed. 74; Traverse *v.* Beyer, 26 Fed. 450; Willis *v.* McCullen, 29 Fed. 641; Alabastine *v.* Payne, 27 Fed. 559; Celluloid *v.* American, 30 Fed. 437; Boyd *v.* Cherry, 50 Fed. 279; Supply Co. *v.* McCready, 4 B. & A. 588; Morgan *v.* Albany, 152 U. S. 425; Wilson *v.* Simpson, 9 How. 109.

It is well settled that where one makes and sells one element of a combination covered by a patent with the intention and for the purpose of bringing about its use in such a combination, he is guilty of contributory infringement and is equally liable to the patentee with him who in fact organizes the complete combination. — Thomson-Houston *v.* Ohio, 80 Fed. 712; 26 C. C. A. 107.

Wallace *v.* Holmes, Fed. Cas. 79; Tie Co. *v.* Simmons, 106 U. S. 89; Heaton *v.* Eureka, 77 Fed. 288; Bowker *v.* Daws, 3 Fed. Cas. 1070; Richardson *v.* Noyes, 20 Fed. Cas. 723; Traverse *v.* Beyer, 26 Fed. 450; Willis *v.* McCullen, 29 Fed. 641; Alabastine *v.* Payne, 27 Fed. 559; Celluloid *v.* American, 30 Fed. 437; Morgan *v.* Albany, 152 U. S. 425.

They make and sell pumps in all the essential respects like that of the patent. They do not, indeed, make the lower cylinder but they manufacture pumps to be used in tubular wells, the tube and valve placed therein supplying the lower cylinder and valve of the patent. Their pumps are inoperative and useless unless so constructed, the case presented is therefore one of contributory infringement. — Red Jacket *v.* Davis, 82 Fed. 432; 27 C. C. A. 204.

Wallace *v.* Holmes Fed. Cas. 17,100; Renwick *v.* Pond, Fed. Case, 11,702.

It would seem clear enough that the judge who granted this injunction made no mistake in holding that the making and selling these filters, adapted to and intended as they were, for no other use than filtering beer or similar fluids, should be held as contributing to such use by brewers, and as standing on the same liability as the parties actually using them. — Loew *v.* German American, 107 Fed. 949; 47 C. C. A. 94.

Heaton-Peninsular *v.* Eureka, 77 Fed. 288; Edison *v.* Peninsular, 101 Fed. 831; Thomson-Houston *v.* Kelsey, 75 Fed. 1005.

If the defendant constructed and sold an essential part of the infringing structure for the purpose of enabling another person to infringe the patent by adding something else to make the entire infringing article, it made itself a contributory infringer to, and liable for, the infringement. And we have no doubt that this was the fact. The casings without bottoms which the defendant made and sold were good for nothing else. Their form and characteristics plainly indicated their purpose. The case is not like one where the thing made is also adapted to use in other ways. It would be wholly inadmissible to shut out the manufacture or sale of things adapted to a proper and lawful use. That would interfere with the rights and privileges of the public. But it has been held that, even in that case if it were proven that the thing, although adapted to other uses, was nevertheless intended by the seller to go into, and contribute to, the infringement by another, the furnisher could not escape the consequences of the infringement. — Canda *v.* Michigan, 124 Fed. 486; 61 C. C. A. 194.

Heaton *v.* Eureka, 77 Fed. 288; Edison *v.* Peninsular, 95 Fed. 669.

He who makes and sells one or more elements of a patented combination, with the intention and for the purpose of bringing about its or their use in an infringing combination, is guilty of contributory infringement, and is equally liable with him who in fact organizes and uses the complete combination. — Heekin *v.* Baker, 138 Fed. 63; 70 C. C. A. 559.

Wallace *v.* Holmes, Fed. Cas. 17,100; Heaton *v.* Eureka, 77 Fed. 288; Thomson-Houston *v.* Ohio, 80 Fed. 712; Red Jacket *v.* Davis, 82 Fed. 432; Loew *v.* German, 107 Fed. 949.

They have infringed the process of Johnson because they supplied the apparatus adapted to employ Johnson's process with intent that the plant should be or would be operated with that process. It was therefore guilty of contributing to the infringement. — Johnson *v.* Foos, 141 Fed. 72; 72 C. C. A. 105.

Heaton *v.* Eureka, 77 Fed. 288; Thomson-Houston *v.* Ohio, 80 Fed. 712.

The arrangement of the different parts was therefore of the essence of the invention, and the Foos Company had a legal right to continue to make and sell attrition mills and other parts of the mechanism which were old, provided only that they did so with no purpose to contribute to the plans of one intending an infringement by combining the parts. — Johnson *v.* Foos, 141 Fed. 73; 72 C. C. A. 105.

Heaton *v.* Eureka, 77 Fed. 288; Thomson-Houston *v.* Ohio, 80 Fed. 712; German *v.* Loew, 103 Fed. 303; Loew *v.* German, 107 Fed. 949.

On ample evidence, the court below found that most of the sales of Leeds & Catlin records were knowingly made by the plaintiff in error to enable the owners of Victor Talking Machines to reproduce such musical pieces as they wished by the combination of Leeds & Catlin records with said machines. Upon these facts it is clear that the Leeds & Catlin Company have made and sold a single element of the claims of the Berliner patent with the intent that it should be united to the other element and complete the combination; and this is infringement. — Leeds *v.* Victor, 154 Fed. 58; 83 C. C. A. 170.

Heaton *v.* Eureka, 77 Fed. 297; Cortelyou *v.* Lowe, 111 Fed. 1005.

Plaintiff in error seeks to avoid that result by asserting that the records under consideration are but temporary, perishable, and unpatented parts of the patented combination, and therefore under Morgan *v.* Albany, 152 U. S. 425, free to be manufactured and sold by anyone. This contention is not supported by the evidence. Disk records are fragile (i. e. brittle and easily broken) but they are not perishable, (i. e. subject to decay by their inherent qualities, or consumed by a few uses or a single one). Neither are they temporary, i. e., not intended to endure; on the contrary we find them capable of remaining useful for an indefinite period. — Leeds *v.* Victor, 154 Fed. 58; 83 C. C. A. 170.

The doctrine of contributory infringement has never been applied to a case where the thing contributed is one of general use, or suitable to a variety of other uses, especially where there is no definite purpose that the thing sold shall be employed with others to infringe a patent right. Rumford *v.* Hygienic, 148 Fed. 866. But this plaintiff in error is shown to have manufactured and sold records for the express purpose of supplying users of Victor machines; nor are such records staple articles of commerce. Cortelyou *v.* Johnson, 145 Fed. 935. — Leeds *v.* Victor, 154 Fed. 58; 83 C. C. A. 170.

§ 477. Contributory — Rules.

General rule by Taft, J.

It being established that defendant is offering for sale articles, intending them to be used in combinations which, if unlicensed by complainant, would be infringements of complainant's patents, we think that it is the duty of the defendant to see to it that such combinations which it is intentionally inducing and promoting shall be confined to those which may be lawfully organized. We are unable to see why any different rule should be applied in such a case from that applicable to a case in which a defendant makes a patented machine to order. He may make such a machine upon the order of the patentee or a licensee, but not otherwise. Upon him is the peril of a mistake as to the lawful authority of him who gives the order. So, he may knowingly assist in assembling, repairing, and renewing a patented combination by furnishing some of the needed parts; but, when he does so, he must ascertain, if he would escape liability for infringement, that the one buying and using them for this purpose has a license, express or implied, to do so. What we have said has application only to cases in which it affirmatively appears that the alleged infringer is offering the parts with the purpose that they shall be used in the patented combination. — Thomson-Houston *v.* Ohio, 80 Fed. 712; 26 C. C. A. 107.

Underlying principles stated by Judge Taft.

From the earliest times, all who take part in a trespass, either by actual participation therein or by aiding and abetting it, have been held to be jointly and severally liable for the injury inflicted. There must be some concert of action between him who does the injury and him who is charged with aiding and abetting, before the latter can be held liable. When that is present, however, the joint liability of both the principal and the accomplice has been invariably enforced. If this healthful rule is not to apply to trespass upon patent property, then, indeed, the protection which is promised by the constitution and laws of the United States to inventors is a poor sham. Many of the most valuable patents are combinations of non-patentable elements, and the only effective mode of preventing infringement is by suits against those who, by furnishing the parts which distinguish the combination, make it possible for others to assemble and use the combination, and who, by advertisement of the sale of such parts and otherwise, intentionally solicit and promote such invasions of the patentee's rights. — Thomson-Houston *v.* Ohio, 80 Fed. 712; 26 C. C. A. 107.

Morgan *v.* Envelope Co. 152 U. S. 425 explained and distinguished (Taft).

The Morgan-Envelope Co. case, so far from departing from the doctrine of contributory infringement, expressly recognizes it and the authorities in which it is announced and enforced. The court held, however, that the doctrine of contributory infringement could not apply in a case in which the claim of the patent embraces a machine and something to be treated thereby, which is perishable in its nature, and the alleged infringer furnishes the latter element to be used with the machine and consumed. Whether this holding is really a limitation upon the doctrine of contributory infringement, or is to be regarded only as in effect deciding that such combinations are impossible in a patent, may admit of question. — Thomson-Houston *v.* Ohio, 80 Fed. 712; 26 C. C. A. 107.

Heaton *v.* Eureka, 77 Fed. 288.

It does appear that defendant is offering for sale articles that can be used only in combinations covered by complainant's claims. This is an effort to secure a concert of action by which the combinations of complainant's

patents may be assembled. If successful, infringement will follow; hence the preliminary steps which are intentionally taken to bring about the injury may be enjoined. — Thomson-Houston *v.* Ohio, 80 Fed. 712; 26 C. C. A. 107.

Wallace *v.* Holmes, 29 Fed. Cas. 79.

Infringement is the unlawful making or selling or using of a patented invention. Contributory infringement is " the intentional aiding of one person by another in the unlawful making or selling or using of the patented invention; " and this is usually done by making or selling a part of the patented invention with the intent and purpose of so aiding. The essence of contributory infringement lies in concerting or planning with others in an unlawful invasion of the patentee's rights. — Goodyear *v.* Jackson, 112 Fed. 146; 50 C. C. A. 159.

Howson, Contrib. Inf. Pat. 1; Thomson-Houston *v.* Kelsey, 72 Fed. 1016; Thomson-Houston *v.* Ohio, 78 Fed. 139; Wallace *v.* Holmes, 9 Blatchf. 65; Renwick *v.* Pond, 10 Blatchf. 39; Saxe *v.* Hammond, 1 B. & A. 629; Richardson *v.* Noyes, 2 B. & A. 398; Schneider *v.* Pountney, 21 Fed. 399; Traverse *v.* Beyer, 26 Fed. 450; Snyder *v.* Bunnell, 29 Fed. 47; Celluloid *v.* American, 30 Fed. 437; Singer *v.* Springfield, 34 Fed. 393; Schneider *v.* Missouri, 36 Fed. 582; Heaton *v.* Eureka, 77 Fed. 288.

The intent and purpose that the element made and sold shall be used in a way that shall infringe the combination in which it is an element constitutes the necessary concert of action between him who furnished the single part and he who actually does the injury by the assembling and using of all the parts in such a way as to be an infringement. This principle runs through all the cases upon contributory infringement. — Bullock *v.* Westinghouse, 129 Fed. 105; 63 C. C. A. 607.

Heaton *v.* Eureka, 77 Fed. 288; Saxe *v.* Hammond, Fed. Cas. 12,411; Wallace *v.* Holmes, 9 Blatchf. 65; Thomson-Houston *v.* Kelsey, 75 Fed. 1005; German-American *v.* Loew, 103 Fed. 303, affd. 107 Fed. 949; Snyder *v.* Bunnell, 29 Fed. 47; Thomson-Houston *v.* Ohio, 80 Fed. 712.

It is the sale of material adapted to the infringing use, with the intent and purpose that it shall be so used, which constitutes contributory infringement. It is the intent and purpose to aid and assist in bringing about an infringement which is the essence of the tort. — Rupp *v.* Elliott, 131 Fed. 730; 65 C. C. A. 544.

Loew *v.* German-American, 107 Fed. 949; Thomson-Houston *v.* Ohio, 80 Fed. 712.

The majority of the court (Coxe and Townsend JJ.) is of the opinion that the decree at bar pushes the doctrine of contributory infringement to its extreme limits. The doctrine originated in a desire to secure to a patentee complete protection in all the rights granted to him by the patent, but it was confined to those rights; it went no farther. One who sold an element of a patented combination, which could not be used except in an infringing combination or device, was not permitted to reap the benefits of such sale. He did not directly infringe, but he promoted the infringement of others by putting in their hands a device which could only be used in violation of the patent. When confined to articles, whether covered by the patent or not, which are made for the express purpose of inducing infringement and are not intended for any legitimate use, the doctrine of contributory infringement is logical, just and salutary. But we doubt the wisdom of extending it to the ordinary commodities of life, used in connection with a patented machine, because the patentee sells or licenses the machine upon the condition that he alone is to furnish these commodities. Care should be taken

that the courts, in their effort to protect the rights of patentees, do not invade the just rights of others, engaged in legitimate occupations, by creating new monopolies not covered by patents and by placing unwarrantable restrictions upon trade. We incline to the opinion that the line should be drawn to include those articles which are either parts of a patented combination or device or which are produced for the sole purpose of being so used and to exclude the staple articles of commerce. — Cortelyou *v.* Johnson, 145 Fed. 933; 76 C. C. A. 455.

The true inquiry is whether the owner of a patented combination, the elements of which are durable, unbroken, and in good repair, may buy from the patentee one specimen of a single element, from an outsider an indefinite number of identical specimens of the same element, and keep and use them all, under cover of the word "substitution;" it further appearing that the element so procured and used is useful and commercially known only in respect of said combination. — Leeds *v.* Victor, 154 Fed. 58; 83 C. C. A. 170.

Thomson-Houston *v.* Kelsey, 75 Fed. 58; Chaffee *v.* Belting Co. 22 How. 223.

§ 478. Contributory — Miscellaneous Rules.

When it is or is not infringement to supply or to use fully discussed with cases. — Morgan *v.* Albany, 152 U. S. 425; 38 L. Ed. 500; 14 S. Ct. 627.

That a manufacturer who sold ink to be used in a patented device, the device being sold with restrictions that it be used only with ink made by the owner of the patent and notice of such restriction being printed on the bottom of such device; that such ink manufacturer having no other notice than that communicated to a selling agent who took the ink order and who did not communicate such notice to his principals: and that filling such order, and not entering into the manufacture and sale of ink to be so used with the patented device, is not contributory infringement, see Cortelyou *v.* Johnson, 207 U. S. 196; 52 L. Ed. 167; 28 S. Ct. 105.

The decree dismissing the bill against the Lowell Light & Power Company was clearly right. It sold the current which it generated to the Peninsular Company. That current was as well adapted for use in one mode of distribution as in another and was adapted equally well for furnishing power as for illuminating purposes. — Edison *v.* Peninsular, 101 Fed. 831; 43 C. C. A. 479.

That one who designs and constructs an infringing machine for others, under contract and pay for his services, is a contributory infringer, see Trent *v.* Risdon, 102 Fed. 635; 42 C. C. A. 529.

That where a sale constituting contributory infringement is solicited by the complainant, said complainant is not in a position to charge defendant with injury, see Cortelyou *v.* Johnson, 145 Fed. 933; 76 C. C. A. 455.

But the purchaser of the No. 78 machine acquired no right to infringe the patentee's right to manufacture said combination known as No. 79. When these defendants therefore, supplied said attachment and added it to said No. 78 machine, and therefore converted it into a No. 79 machine by uniting it to the patented attachment which made up the complete combination of No. 79, they infringed said right of manufacture of the patented combination, with which complainant had not parted by the sale of a No. 78 machine.

The well settled rule is that the purchase of a patented article from the patentee acquires the absolute right to the unrestricted use of said article; that by the sale it passes beyond the limit of the monopoly. But it would

be perversion of this rule to say that such a purchaser may use a portion of said article for the purpose of enabling the owner of a machine sold by the patentee, without said portion to construct a patented combination which he is not licensed to manufacture or use. — National *v.* Grobet, 153 Fed. 905; 82 C. C. A. 651.

The evidence warrants the finding that in at least one instance defendants sold rolls to be used in one of complainant's Pianolas after it had been informed by the purchaser that his instrument contained the notice (prohibiting such purchase) . . . injunction was properly issued. — Æolian Co. *v.* Juelg Co. 155 Fed. 119; 86 C. C. A. 205.

§ 479. Corporations — Common Carriers.

When one engages in such public business it is of no consequence whether the means or instruments whereby it is conducted are patented or not. It is the *business* that is regulated. A patent secures title to the thing patented and its use, just as the law secures title to other description of property. The owner need not apply his property of either description to such public employment, but if he does, the employment itself will be subject to the rules which the law has prescribed for its government, without respect to the means or instrument by which it is conducted. — Delaware & A. Tel. *v.* Delaware, 50 Fed. 677; 2 C. C. A. 1.

Defendant was sued as infringer and set up its duty as a common carrier and disclosed the ownership of the alleged infringing cars. On petition by the owners, they were allowed to intervene and defend. — Standard Oil Co. *v.* Southern, 54 Fed. 521; 4 C. C. A. 491.

§ 480. Corporations — Joint Stock.

It does not appear that the statutes of New York require that the president and treasurer of a joint-stock association should be a shareholder therein, and there is no proof in the record that defendant is, or ever was, a shareholder or associate in such association. *Held:* that suit could not be maintained against such officer for infringement on authority of Tyler *v.* Galloway, 13 Fed. 477. — National *v.* Stolts, 135 Fed. 534; 68 C. C. A. 84.

§ 481. Corporations — Officers of.

It is well settled that a mere workman or servant who makes, uses or vends for another, and under his immediate supervision, a patented article, is not liable in an action at law for damages. This rule is an apparent exception to the general principle of law which makes all who participate in a tort of misfeasance principals, and liable for damages therefor; and we do not think it should be so extended as to exempt from liability the general manager of a business which infringes upon the exclusive right of a patentee. — Graham *v.* Earl, 92 Fed. 155; 34 C. C. A. 267.

Creamer *v.* Fry, 68 Fed. 201; Lightner *v.* Brooks, Fed. Cas. 8,344.

It is sufficient to say that a director's liability to an injunction does not conclusively establish his liability in an action at law for damages, and, conversely, that his liability in an action at law does not conclusively establish that he may properly be enjoined or ordered to account for profits. We are of opinion, that by the general principles of law, and by analogy with other courts, a director of a corporation, who, as director, by vote or otherwise, specifically commands the subordinate agents of the corporation to engage in the manufacture and sale of an infringing article, is liable individually in action at law for damages brought by the owner of the patent so

infringed. As with other infringers, it is immaterial whether the director knew or was ignorant that the article manufactured and sold, did infringe a patent. We think that the request was sufficiently explicit to require the judge to charge the jury that a defendant who directed the infringing machines should be manufactured and put upon the market, and that their sale should be pushed, was not relieved from liability by reason of the fact that he was acting as a director of a corporation, or in its behalf. — National *v.* Leland, 94 Fed. 502; 37 C. C. A. 372.

Mitchell *v.* Harmony, 13 How. 115; Pol. Tort. 5 ed. 190; Weir *v.* Bell, 3 Exch. Div. 238; Brown *v.* Lent, 20 Vt. 529; Wilson *v.* Peto, 6 Moore 47; Power Co. *v.* Allen, 120 Mass. 252; Peck *v.* Cooper, 112 Ill. 192; Weir *v.* Barnett, 3 Exch. Div. 32; Amy *v.* Supervisors, 11 Wall. 136; Ferguson *v.* Earl, 9 Clark. & F. 251; Belknap *v.* Schild, 161 U. S. 10; National *v.* Boston, 156 U. S. 502; (reversing) Nickel *v.* Worthington, 13 Fed. 392.

Note: On the question of liability of the directors and officers of a corporation, Brown, D. J., dissents. This rule of the first circuit is contrary to the rule well established in the second circuit, and also in a number of the other circuits. It is doubtful whether an officer of a corporation per se is personally liable unless the conduct of such corporation or such officer is such as to constitute an open, personal and flagrant invasion of an established and known right.

We have no doubt, if there is infringement, that Lamb (an officer of the defendant, the inventor and assignor of the patent in suit, and formerly with complainant) should be held to be a contributor to it. — Lamb *v.* Lamb, 120 Fed. 267; 56 C. C. A. 247.

With respect to the matter of infringement, the defendants North and Steele are not shown to have been individually guilty of any infringing act. There is therefore no excuse for joining them as parties, unless it be that they were offending officers of the corporation, and this is no excuse. It may be, however, that the complainant mistakenly supposed the officers were active participants in the infringement, and has been disappointed in the proofs. However this may be, the bill was properly dismissed as to them, and so far the decree of the circuit court will be affirmed, with costs of both courts to those defendants. — Western *v.* North, 135 Fed. 79; 67 C. C. A. 553.

The appellee company, a corporation, can act only through its officers and agents. We find nothing in the record to show that the appellee Deknatel acted beyond the ordinary scope of his office. No cause of action against him is made out. — Cazier *v.* Mackie-Lovejoy, 138 Fed. 654; 71 C. C. A. 104.

Inasmuch as it does not appear that the defendant Kerman has any connection with the infringement, except as an officer of said corporation, the bill should be dismissed as to him with costs. — Scott *v.* Fisher, 145 Fed. 915; 76 C. C. A. 447.

Hutter *v.* De Q. Bottle, 128 Fed. 283.

That officers of a corporation are not personally liable as tort feasors in damages and profits when the corporation received the benefit of their acts, wholly regardless of the inequitable conduct of such officers, see McSherry *v.* Dowagiac, 160 Fed. 948; 89 C. C. A. 26.

The bill prays, as usual, an injunction and account against both the American Loom Co. and the officer referred to. The circuit court dismissed the bill, and the complainant has appealed to us. So far as the officer of the re-

spondent corporation is concerned, the case is not brought within the rule of National *v.* Leland, 94 Fed. 502. Therefore, as to him, the final decree will provide that the bill be dismissed; and, as he has been brought in as one against whom substantial relief is asked, he will recover his costs in the circuit court. — Draper *v.* American, 161 Fed. 728; 88 C. C. A. 588.

§ 482. Corporations — Miscellaneous Holdings.

As a corporation cannot absolve itself from liability without the consent of the legislature, its liability is fixed by the acts of persons using the corporate name with the assent of the corporate authorities. — Railroad *v.* Winans, 58 U. S. 31; 15 L. Ed. 27.

Beman *v.* Rufford, 1 Simon N. S. 550; Winch *v* Ry. 13 L. & E. 506.

§ 483. Defenses — Anticipation.

For further treatment of this subject the titles *Abandonment, Anticipation, Defenses* and *Invention* should be examined. It is not possible, without undue repetition, to assemble all of the rulings under this title.

Letters patent, though not set up in the answer, may be received in evidence to show the state of the art and to aid in the construction of the plaintiff's claim, though not to invalidate the claim on the ground of want of novelty when properly construed. — Grier *v.* Wilt, 120 U. S. 412; 30 L. Ed. 712; 7 S. Ct. 718.

Vance *v.* Campbell, 66 U. S. 427; Railroad *v.* Dubois, 79 U. S. 47; Brown *v.* Piper, 91 U. S. 37; Eachus *v.* Broomall, 115 U. S. 429.

Where defendant obtained his idea from the patent in suit he is none the less entitled to claim anticipation by setting up a prior patent, especially when such prior device appears to show full anticipation of his own. — Hoff *v.* Iron Clad, 139 U. S. 326; 35 L. Ed. 179; 11 S. Ct. 580.

Defendant may show that the invention claimed was patented or described in some printed publication (not before the American Patent was granted — nor before the application for it was filed) but before the patentee's supposed invention or discovery thereof. — Clark *v.* Willimantic, 140 U. S. 481; 35 L. Ed. 521; 11 S. Ct. 846.

U. S. R. S. 4920.

§ 484. Defenses — Miscellaneous.

It is not easy to perceive why the defendant who uses a patented machine should not have the benefit of a like presumption in his favor, arising from a like investigation of the originality of his invention, and the judgement of the public officers, that his machine is new and not an infringement of the patent previously granted to the plaintiff. It shows at least that the defendant has acted in good faith, and is not a wanton infringer. — Corning *v.* Burden, 15 How. 252; 14 L. Ed. 683.

Reversed in Blanchard *v.* Putnam, 8 Wall. 420; Reaffirmed in Ransome *v.* Hyatt, 69 Fed. 148.

We are not at all satisfied that, in equity, the defendant can be permitted to set up the defense of non-infringement; while it makes no attempt by cross bill or even in the answer to show that the agreements were obtained by fraud, surprise or imposition. — Eureka *v.* Bailey, 78 U. S. 488; 20 L. Ed. 209.

Defendants were innocent infringers. When they discovered the fact they purchased a legal title to the patent for their territory. *Held:* that such

purchase converted their act into a legal right and was equivalent to an original lawful purchase or manufacture of the machine. — Eunson *v.* Dodge, 85 U. S. 414; 21 L. Ed. 766.

When the thing patented is an entirety, consisting of a separate device or of a single combination of old elements incapable of division or separate use, the respondent cannot make good the defense in question by proving that a part of the entire invention is found in one prior patent, printed publication or machine and another part in another, and so on indefinitely, and from the whole or any given number expect the court to determine the issue of novelty adversely to the complainant.

Common justice forbids such a defense, as it would work a virtual repeal of so much of the Patent Act as gives to inventors the right to a patent consisting of old elements, when the combination itself is new and produces a new and useful result. New elements in such a patent are not required, and if such a defense were allowed, not one patent of the kind in a thousand of modern date could be held valid. Nor is such a defense consistent with the regulations enacted by Congress in respect to the procedure in litigations in respect to patent rights. — Parks *v.* Booth 102 U. S. 96; 26 L. Ed. 54.

Imhauser *v.* Buerk, 101 U. S. 647.

The contention that the device of the patent sued on was not successful, where the failure appears to have been due to other defects in the machine will not be regarded as important. — Gordon *v.* Warder, 150 U. S. 47; 37 L. Ed. 992; 14 S. Ct. 32.

Although the original machine was wanting in accuracy of operation and could not always be depended on, the machine did practical work. It was an operative machine, and demonstrated to the world the practicability and utility of the invention. It matters little that there was a lack of mathematical accuracy, and certainly the defect affords no defense here. — Rogers *v.* Mergenthaler 64 Fed. 799; 12 C. C. A. 422.

The patent in suit specified "chamotte" as a specific, required element to the compound. The defendant contended that "chamotte" was merely one form of fire-clay, and as the use of fire-clay for the process of the patent was old the claim was bad. *Held:* Inasmuch as the term "fire-brick" if used in the patent would not have sufficiently identified the peculiar product to enable one skilled in the art to produce the patented product, but would have obliged him to experiment with the various materials known under said name, we think the patentee was justified in the use of said word; that it may even have been necessary to a full disclosure of his alleged invention; and that, in view of the evidence, the court correctly found that fire-brick was not necessarily the equivalent of chamotte. — Panzl *v.* Battle Island, 138 Fed. 48; 70 C. C. A. 474.

It is urged on us that the complainant made no commercial use of the patented device; but, utility and patentability being otherwise established, we are not required to investigate the excuse given by complainant for non-user. — Draper *v.* American, 161 Fed. 728; 88 C. C. A. 588.

It is objected that no machine, conforming to the specification of the first patent, was ever used or put upon the market. During the life of his monopoly, a patentee is under no obligation to use or place upon the market a device or machine embodying his invention. — Lewis *v.* Premium, 163 Fed. 950; C. C. A.

Continental *v.* Eastern, 210 U. S. 405.

§ 485. Division or Union of Parts or Elements.

It does not void infringement to make an element of the patent infringed integral with another part. — Capital *v.* National, 70 Fed. 709; 17 C. C. A. 355.

Approving, 53 Fed. 367.

One may not escape infringement by the mere joinder of two elements into one integral part. If the united parts affect the same result, in substantially the same way as the separate parts before the union, the change is colorable. — Bundy *v.* Detroit, 94 Fed. 524; 36 C. C. A. 375.

McDonald *v.* Whitney, 24 Fed. 600; Ballard *v.* McCluskey, 58 Fed. 880; Dish Co. *v.* Sandy, 60 Fed. 285.

That subdividing a part or combining two parts in one without change of function is not ordinarily invention, see Kalamazoo *v.* Duff, 113 Fed. 264; 51 C. C. A. 221.

Bundy *v.* Detroit, 94 Fed. 524; Sessions *v.* Gould, 49 Fed. 855.

That forming an article in two parts which, under the patent was made in one piece, does not avoid the infringement, see Kahn *v.* Starrels, 135 Fed. 532; 68 C. C. A. 82.

Lepper *v.* Randall, 113 Fed. 627.

Neither the joinder of two elements into one integral part accomplishing the purpose of both and no more, nor the separation of one integral part into two, together doing precisely or substantially what was done by the single element, will evade a charge of infringement. This principle is even more applicable when the change made relates to mere matter of form not of the essence of the invention. — Nathan *v.* Howard, 143 Fed. 889; 75 C. C. A. 97.

Bundy *v.* Detroit, 94 Fed. 524; Dowagiac *v.* Brennen, 127 Fed. 150; Winans *v.* Denmead, 15 How. 330.

The mere joinder of two elements into one integral part or the separation of one part into two may be an infringement if the change in the structure accomplishes the same results in substantially the same way. — Dunlap *v.* Willbrandt, 151 Fed. 223; 80 C. C. A. 575.

Of course there are cases in which, in determining whether a subsequent device infringes, it is unimportant whether it is made in two pieces instead of three, or whether a member is mechanically attached to the remainder of the structure or made integral with it. They are, however, inapplicable to a case in which the very divisibility into parts or in which the particular method of attachment constitutes the law of the structure or is declared or appears to be of the essence of the supposed invention. — Dunlap *v.* Willbrandt, 151 Fed. 223; 80 C. C. A. 575.

Clough *v.* Barker, 106 U. S. 166; Standard *v.* Caster, 113 Fed. 162; Mabie *v.* Haskall, 2 Cliff. 507.

§ 486. Duplication.

If the inventor has sufficiently described and pointed out his improvement to meet the requirement of the patent law, then he is not to be deprived of the benefit of this feature because, by a duplication of his wheels, this advantage can be obtained to a greater degree. Appellant cannot escape liability as an infringer by a mere duplication of the combination. That is a

mere carrying forward of his idea, duplicating the parts, doing the thing in identically the same way, with better results. — Goshen *v.* Bissell, 72 Fed. 67; 19 C. C. A. 13.

Roberts *v.* Ryer, 91 U. S. 150; Belding *v.* Challenge, 152 U. S. 107.

It seems clear to us that Anderson took the principle of Bonnette's invention, and merely doubled the parts. It is well settled that the mere doubling of parts to produce the same result does not prevent infringement, even though it may involve tributary invention. — Bonnette *v.* Koehler, 82 Fed. 428; 27 C. C. A. 200.

The defendant's spike point embodies all that was of value in the Goldie device, and the mere duplication of the point does not enable the defendants to evade the charge of infringement. — Diamond *v.* Goldie, 84 Fed. 972; 28 C. C. A. 589.

Hoyt *v.* Horne, 145 U. S. 302.

There is, moreover, a class of cases to which we cannot broadly apply the rule that results which may be gained by a device are protected although not foreseen by the patentee; in other words, cases in which the rule of "double use," as it is often called, does not apply in behalf of the inventor. They all turn on the fact that, under peculiar circumstances, the application to some particular purpose of an element used generally throughout the arts or an improvement in various details as in the present case, amounts to invention, on account of the particular end accomplished, although the patent issues for the device, and not for the process, product, or result. Ordinarily, such inventions are of a limited or low order, and must be restricted to the express purposes pointed out by the inventor, or they obstruct the advance of the beneficial arts, rather than assist it. — Davey *v.* Prouty Co. 107 Fed. 505; 46 C. C. A. 439.

Electric *v.* LaRue, 139 U. S. 601; Watson *v.* Stevens, 15 Fed. 757; Consolidated *v.* West End, 85 Fed. 664; Electric *v.* Fuller, 59 Fed. 1005.

§ 487. Evidence of — Acts of Defendant.

The conduct of defendant, by way of evasive pleading and testimony and unsatisfactory answer to interrogatories, evidences infringement. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.

Infringement by defendant is evidence as against him of the utility of the thing patented. — Gandy *v.* Main, 143 U. S. 582; 36 L. Ed. 272; 12 S. Ct. 598.

Ingenuity displayed in the evasion of the salient feature of an invention and in concealing the same as an element in a subsequent application will be considered favorably in determining novelty. — Hoyt *v.* Horne, 145 U. S. 302; 36 L. Ed. 713; 12 S. Ct. 922.

Winans *v.* Denmead, 56 U. S. 330.

Actions often speak louder, and frequently more truthfully than words. It is not impossible that the reason why the appellees are not using the old devices they plead is that the improvements described in this patent have made them useless and unmerchantable. If this is not so, they can abandon the improvements of these patentees, and go back to the devices they plead. — Griswold *v.* Harker, 62 Fed. 389; 10 C. C. A. 435.

Apparently defendants used the patented device, denied infringement, and refused to disclose the exact use and workings of the device. *Held:*

The course of defendants naturally subjects them to unfavorable comment, and throws a certain suspicion on the device, which it is impossible to entirely cast aside. But this circumstance cannot influence the judgment of the court. Its duty still remains to decide these cases simply upon the evidence presented. — Goodyear *v.* Spaulding, 110 Fed. 393; 49 C. C. A. 88.

Note: True, in this case, the court did so decide; but I think that if the question had been a very close one, the conduct of the defendant would have unconsciously led the court against him.

The persistency with which the defendant clings to the vertical rotatable plug (the device of the patent in suit) furnishes one of the principal reasons which leads us to reject the defense of non-patentability. — Empire *v.* Sears, 160 Fed. 668; 87 C. C. A. 556.

§ 488. Evidence of — Burden.

The burden is upon plaintiff to establish both the allegation of invention and that of infringement. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

Seymour *v.* Osborne, 11 Wall. 538.

The burden of proof of infringement is upon the complainant. — Price *v.* Kelly, 154 U. S. 669; 26 L. Ed. 634; 14 S. Ct. 1208.

§ 489. Evidence of — Expert.

Expert witnesses on both sides have been examined also upon the issue of infringement, but they differ so widely in opinion that their testimony affords the court but little aid in determining the question, which, after all, must depend chiefly upon the comparison of the descriptive portions of the two specifications. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

Hill *v.* Thompson, 1 Web. P. C. 232; Turner *v.* Winter, 1 Web. P. C. 77.

§ 490. Evidence of — Function.

On a legal construction of this claim, anything which does not possess this function and this action, no matter to what extent in other particulars it may answer its cause, does not infringe it. — Eppler *v.* Campbell, 86 Fed. 141; 29 C. C. A. 616.

That the defendant's meter and the meter of the Youngs patent may effect the same result is not determinative of the question of infringement. — Pittsburg *v.* Pittsburg, 109 Fed. 644; 48 C. C. A. 580.

Water-Meter *v.* Desper, 101 U. S. 332; Westinghouse *v.* Brake Co. 170 U. S. 537.

That their apparatus has the capacity of readjusting the position of the packer in the well, and resetting it above or below its original position, is not conclusive of the question of infringement. — Masseth *v.* Larkin, 119 Fed. 171; 56 C. C. A. 167.

O'Reilly *v.* Morse, 15 How. 62; Westinghouse *v.* Brake Co. 170 U. S. 537.

The element of "a wrapping mechanism" in appellee's machine cannot also be the element of a "twisting mechanism" in the sense of appellant's claims merely because the wrapping mechanism inevitably tends to give a slight twist to the pliable strands. — American *v.* Choate, 159 Fed. 429; 86 C. C. A. 409.

Ajax *v.* Pettibone, 125 Fed. 748.

§ 491. Evidence of — Identity.

If the patent in suit is limited by the state of the art to a specific construction, a claim, to be valid, cannot be construed to cover a device employing a mechanism not the equivalent thereof. — Grier *v.* Wilt, 120 U. S. 412; 30 L. Ed. 712; 7 S. Ct. 718.

The jury will not consider any former device to be an anticipation unless they believe such former device developed the same mode of operation as the device described in the plaintiff's patent. — Haines *v.* McLaughlin, 135 U. S. 584; 22 L. Ed. 241; 10 S. Ct. 876.

§ 492. Evidence of — Law Actions.

The claim in the specification was for a combination of such parts of the described mechanism as were necessary to the operation of the device. The defendants had not infringed the patent unless they had used all the parts embraced in the plaintiff's combination. It was a question for the jury to find what those parts were, and whether the defendants had used them. — Silsby *v.* Foote, 14 How. 218; 14 L. Ed. 394.

The question of anticipation is purely a question of fact, and is exclusively for the jury to determine. — Haines *v.* McLaughlin, 135 U. S. 584; 22 L. Ed. 241; 10 S. Ct. 876.

We think the circuit court erred in not submitting to the jury the question of infringement, under proper instructions. If the patented invention was within the rule in Morley *v.* Lancaster, 129 U. S. 263, "one of a primary character," and the patent was "a pioneer patent," which were questions of fact to be passed upon by the jury, then the question, on a proper construction of the patent, whether the defendant's machine infringed its claims, was a question of fact for the jury to determine, on all the evidence which the case might present. — Royer *v.* Schultz, 135 U. S. 319; 34 L. Ed. 214; 10 S. Ct. 833.

Tucker *v.* Spalding, 80 U. S. 453.

It was not a matter of mere judicial knowledge that the mechanical differences between the two machines were material, in view of the character of the patented invention and of the claims of the patent; and we are unable to concur with the view of the circuit court (29 Fed. 281) that this is a case where, if the jury had found a verdict for the plaintiff, on the evidence put in by him on the question of infringement, all of which evidence the bill of exceptions states is set forth therein, it would have been proper for the court to set aside such verdict. — Royer *v.* Schultz, 135 U. S. 319; 34 L. Ed. 214; 10 S. Ct. 833.

Keyes *v.* Grant, 118 U. S. 25.

§ 493. Evidence of — Parol.

Oral testimony, unsupported by patents or exhibits, tending to show prior use of a device regularly patented is, in the nature of the case, open to grave suspicion. — Deering *v.* Winona, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

Washburn *v.* Beat Em All, 143 U. S. 275.

§ 494. Evidence of — Sufficiency.

The proper evidence from which to determine the infringement is the patent in suit and the device made by the defendant. — Blanchard *v.* Putnam, 75 U. S. 420; 19 L. Ed. 433.

Persons seeking redress for the unlawful use of letters patent, in which they have an interest, are obliged to allege and prove that they, or those under whom they claim, are the original and first inventors of the improvement embodied in the letters patent on which the suit is founded, and that the same has been infringed by the party against whom the suit is brought. The burden of proof is upon the party instituting the suit. The letters patent, if in due form, and introduced in evidence are prima facie proof of the first allegation, and in the absence of proof to the contrary afford a presumption sufficient for a recovery. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Infringement must not only be alleged but must be specifically proved by the complainant. — Imhauser *v.* Buerk, 101 U. S. 647; 25 L. Ed. 945.

Where denial of infringement is made in the answer under oath, infringement must be shown by satisfactory proof. — Lehigh *v.* Mellon, 104 U. S. 112; 26 L. Ed. 639.

To establish infringement there must be a preponderance of evidence in complainant's favor. — Béné *v.* Jeantet, 129 U. S. 683; 32 L. Ed. 803; 9 S. Ct. 428.

As this is not the only way in which the parts may be attached, it was incumbent on the plaintiff to show that the defendant used castings and bottom plates of that fashion; otherwise infringement is not proved. — Canda *v.* Michigan, 124 Fed. 486; 61 C. C. A. 194.

A single sale made in circumstances which indicate a readiness to make other similar sales upon application is sufficient to make out a prima facie case. — Hutter *v.* De Q. Bottle, 128 Fed. 283; 62 C. C. A. 652.

That the proof of infringement must be positive, and that testimony of infringing articles "substantially identical" and "good representations" is insufficient, see Gray *v.* Grinberg, 159 Fed. 138; 86 C. C. A. 328.

The burden of proof rested upon the complainant to show a completed act of infringement. The defendant's alleged threatened infringement was insufficient. — Gray *v.* Grinberg, 159 Fed. 138; 86 C. C. A. 328.

Westinghouse *v.* Stanley, 116 Fed. 641.

§ 495. Evidence of — Utility — Use by Defendant.

It does not lie in the mouth of an infringer to deny the utility of the device of the patent in suit. The presumptions at least are against him. — DuBois *v.* Kirk, 158 U. S. 58; 39 L. Ed. 895; 15 S. Ct. 729.

Lehnbeuter *v.* Holthaus, 105 U. S. 94; Western *v.* LaRue, 139 U. S. 601; Gandy *v.* Main, 143 U. S. 577.

The facts that its usefulness is not denied, and that the appellant has seen fit to depart from the many devices open to his use, and to adopt that of the appellee, strongly indicate that it marks a distinct and useful advance in the progress of this art. — Brammer *v.* Schroeder, 106 Fed. 918; 46 C. C. A. 41.

We may add that the evidence warrants the conclusion that complainant's lantern never went into practical use, whereas the defendant's lantern has gone into extensive public use. Of course, these facts as to use are by no means decisive, but they tend to negative the charge of infringement. — Raymond *v.* Keystone, 134 Fed. 866; 67 C. C. A. 492.

§ 496. Evidence of — Miscellaneous Holdings.

The question of infringement is a mixed question of fact and of law. — California *v.* Molitor, 113 U. S. 609; 28 L. Ed. 1106; 5 S. Ct. 618.

Where there is evidence contradictory of the infringement, we cannot, in the absence of ocular inspection, take it upon ourselves to say that the circuit court erred in finding infringement. — Dobson *v.* Dornan, 118 U. S. 10; 30 L. Ed. 603; 6 S. Ct. 946.

If the method pursued by the patentee for the performance of the function discovered by him would naturally have suggested the device adopted by the defendant, that is in itself evidence of an intended infringement; but although Mr. Boyden may have intended to accomplish the same results, the Westinghouse patent if he had had it before him, would scarcely have suggested the method he adopted to accomplish these results. Under such circumstances, the law entitles him to the rights of an independent inventor. — Westinghouse *v.* Boyden, 170 U. S. 537; 42 L. Ed. 1136; 18 S. Ct. 707.

The question of infringement or no infringement is one of law, and susceptible of determination on this writ of error. — Singer *v.* Cramer, 192 U. S. 265; 48 L. Ed. 437; 24 S. Ct. 291.

Heald *v.* Rice, 104 U. S. 737; Market *v.* Rowley, 155 U. S. 621.

The action was upon a patent for a current regulator. Anticipation was set up under a former patent to the same parties upon a sparking regulator. Expert proof determined that a device made according to either patent could be determined to perform the function of the other only by experimental tests. *Held:* This alone ought to be conclusive of the dispute. When such tests are necessary to distinguish one device from another, it is a manifestly impracticable, not to say dangerous, proposition that the making or using of either under a given patent may be declared to be an infringement of a different patent upon the other. — Thomson-Houston *v.* Western, 70 Fed. 69; 16 C. C. A. 642.

It is manifest on the face of the patent that the specification was prepared by one perfectly familiar with the Shuman invention, and that there is a studied effort throughout the patent to differentiate the alleged invention thereof from his. — Streator *v.* Wire-Glass Co. 97 Fed. 950; 38 C. C. A. 573.

The applications for both patents were pending in the Patent Office at the same time, and the decision of that office that no interference was found in the claims on the part of the appellee, and the subsequent draft of both patents, with the modifications in the Leslie claims as shown in the record, are strongly corroborative of this view of non-infringement. — Mann *v.* Hoffmann, 104 Fed. 245; 43 C. C. A. 514.

The evidence was not admitted for the purpose of showing what was the intention of the corporation. It was admitted for the purpose of explaining the language of the articles. The articles referred to the manufacture of directory machines, without describing or specifying them. It is evident that the incorporators had some particular machine in view. Such being the case, any witness who knew what was referred to was competent to testify as to that fact. — National *v.* Polk, 121 Fed. 742; 58 C. C. A. 24.

When the question of infringement depends entirely upon the construction of a patent, either upon its face or in connection with facts of such a nature

and effect as not to be reasonably disputed, the question is one of law for the court. — Western *v.* Robertson, 142 Fed. 471; 73 C. C. A. 587.

De Loriea *v.* Whitney, 63 Fed. 611; Black Diamond *v.* Excelsior, 156 U. S. 611; Singer *v.* Cramer, 192 U. S. 265.

There is no dispute of fact in regard to the features of the cans manufactured by the defendant, and the opinions of the experts upon the question whether or not they embody all the essential parts of the claim are of no assistance to the court, because their value depends altogether upon the construction to be given to the claim, and this is a matter wholly for the court. — Ironclad *v.* Dairyman's, 143 Fed. 512; 74 C. C. A. 372.

The defendant filed application for patent on the device here in infringement and the claims were rejected on the patent here sued on. *Held:* This acquiescence is persuasive evidence of an admission on the part of the patentee of the defendant's car that the O'Leary device was an anticipation, or at least a disclosure, of certain of the elements of defendant's construction, and therefore is persuasive evidence of an admission that if the means covered by said claims were later than those covered by the patent in suit, they would be an infringement thereof. — O'Leary *v.* Utica, 144 Fed. 399; 75 C. C. A. 377.

The issuance of a patent to the appellee creates a prima facie presumption of a patentable difference from the invention of the patent sued on. — Hardison *v.* Brinkman, 156 Fed. 962; 87 C. C. A. 8.

Miller *v.* Eagle, 151 U. S. 186.

It is not disputed that there is no proof in the record that such cables were made, sold, or used by defendant before Feb. 1900, a year and a half after the bill was filed. This alleged sample, therefore, cannot be considered in determining the question of infringement. — National *v.* Roebling's, 158 Fed. 99; 85 C. C. A. 567.

The complainant introduced "Complainant's Exhibit Scott Bustle," the counsel for the respective parties having previously agreed "that the same is a fair specimen of the device of the patent in suit." This is, in effect, an admission that the bustle purchased of the defendant is substantially identical with the one made under the patent, or, in other words, it is an admission of infringement. However, as counsel for the defendants insist that the stipulation was made inadvertently and under a misapprehension of the facts, we think the defendants should not be foreclosed thereby. — Scott *v.* Lazell, 160 Fed. 472; 87 C. C. A. 456.

That the grant of a subsequent patent to the same inventor is presumptive evidence that the first patent is not infringed by manufacture under the second patent, see D'Arcy *v.* Staples, 161 Fed. 733; 88 C. C. A. 606.

Miller *v.* Eagle, 151 U. S. 186.

It is urged upon us that inasmuch as the bill of complaint was brought in a district in which the defendants are not inhabitants, the burden of proof was upon the complainant to show a complete act of infringement in such district — otherwise the Circuit Court for that district would be without jurisdiction to hear the cause; and the case of Gray *v.* Grinberg, 159 Fed. 138, along with other cases is cited. The usual rule is that whether a defendant shall be required to defend in a court other than the Circuit Court for the district of which he is an inhabitant is a question of privilege that he may insist upon or waive, at pleasure. Gray *v.* Grinberg is not opposed

to this rule. The question in that case was, whether as a matter of procedure, the defendant had waived that privilege — whether by the bill alleging that infringing acts had been committed within the district, an issue of fact involving the question of privilege was not thereby tendered — an averment of fact that the defendant, wishing not to waive, but to exercise his privilege, had not the right to traverse by answer. We need not enter, however, into this question of procedure, for the proof before us satisfies us — all the circumstances being taken into consideration — that acts of infringement were actually committed within the district where the suit was brought, and before the suit was brought. — American Mattress *v.* Springfield, 165 Fed. 191; C. C. A.

§ 497. Generic Patent.

Those claims are not for a result or effect, irrespective of the means by which the effect is accomplished. It is open to a subsequent inventor to accomplish the same result, if he can, by substantially different means. The effect of the rule before laid down is merely to require that, in determining whether the means employed in the defendant's machine, are substantially the same means as those employed in complainant's machine, the complainant's patent is to receive a liberal construction, in view of the fact that he was a pioneer in the construction of an automatic button-sewing machine, and that his patent, especially in view of the character and terms of the four claims in question, is not to be limited to the particular devices or instrumentalities described by him, used in the three main elements of his machine, which, combined together make it up. This is the principle applied by this court in Consolidated *v.* Crosby, 113 U. S. 157. — Morley *v.* Lancaster, 129 U. S. 263; 32 L. Ed. 715; 9 S. Ct. 299.

Where an invention is one of a primary character, and the mechanical functions performed by the machine are, as a whole, entirely new, all subsequent machines which employ substantially the same means to accomplish the same result are infringements, although the subsequent machine may contain improvements in the separate mechanisms which go to make up the machine. — Morley *v.* Lancaster, 129 U. S. 263; 32 L. Ed. 715; 9 S. Ct. 299.

McCormick *v.* Talcott, 61 U. S. 402; Chicago *v.* Sayles, 97 U. S. 554; Clough *v.* Barker, 106 U. S. 166; Duff *v.* Sterling, 107 U. S. 636; Consolidated *v.* Crosby, 113 U. S. 157; Tilghman *v.* Proctor, 102 U. S. 707; Nelson *v.* Hartford, 1 Web. P. C. 295.

If the plaintiff had invented an entirely new process, which had revolutionized the art, it might be that the court ought to give that broad construction to the patent which was justified in the case of a foundation patent; but when, as in this case, all the substantial steps in the process were old, the utmost that the plaintiff was entitled to was protection against those who used, in substance, his precise forms. — Royer *v.* Coupe, 146 U. S. 524; 36 L. Ed. 1073; 13 S. Ct. 166.

Norton being the original inventor, he, and those claiming under him, would have the right to treat as infringers all persons who make devices or machines operating on the same principle and performing the same functions by analogous means or equivalent combinations, even though the infringing machine may be an improvement of the original, and patentable as such. — Norton *v.* Jensen, 49 Fed. 859; 1 C. C. A. 452.

McCormick *v.* Talcott, 20 How. 405; Wells *v.* Gill, 1 Ban. & A. 77; Kendrick *v.* Emmons, 2 Ban. & A. 208; Turrell *v.* Spaeth, 3 Ban. & A. 458; Colt *v.* Arms Co.

1 Fish. P. C. 108; Winans *v.* Railroad, 4 Fish. P. C. 2; Whipple *v.* Mfg. Co. 4 Fish. P. C. 29; Fruit Co. *v.* Curran, 8 Fed. 150.

With respect to such a patent (a pioneer) the well-settled rule is that the patentee who has, by the success of his patent, pointed out the combination of functions needed to reach the new result, and has claimed the combination of mechanical parts performing those functions, may enjoin the use of another machine producing the same result where the second machine differs from the first only in a substitution, for parts or elements in the patented device, of parts or elements which though different in form and kind, perform the same functions in substantially the same way. It may be that the substituted parts are well known equivalents of those shown in the patent for the performance of the functions to which they are respectively applied, in which case there is manifestly no inventive faculty shown in the change; or it may be that, being shown by the successful operation of the patent the exact nature of the functions to be performed by a part of the patented device, the infringer, by the use of his inventive faculty, hits upon something as a substitute which will perform the same functions more completely and satisfactorily. In the latter case he is a tributary inventor; but he is none the less an infringer if he uses the whole machine, with his substituted parts to accomplish the same new result. The rule as to infringement of pioneer inventions which point the way to new products or results is analogous to that applied in cases of infringements of process patents in which the discoverer is only required to point out one practical method of using his process, and is permitted to claim tribute from all who thereafter use the process, whether with his apparatus or with a different or improved means. In Machine Co. *v.* Lancaster, 129 U. S. 263, the Supreme Court said:

Where an invention is of a primary character and the mechanical functions performed by the machine as a whole are entirely new, all subsequent machines which employ substantially the same means to accomplish the same result are infringements, although the subsequent machine may contain improvements in the separate mechanisms which go to make up the machine. — McCormick *v.* Aultman, 69 Fed. 371; 16 C. C. A. 259.

Consolidated *v.* Crosby, 113 U. S. 157; Rover *v.* Belting Co. 135 U. S. 319; Machine Co. *v.* Murphy, 97 U. S. 120; Sessions *v.* Romadka, 145 U. S. 29; Clough *v.* Barker, 106 U. S. 160; Winans *v.* Denmead, 15 How. 330; McCormick *v.* Talcott, 20 How. 402; Railway *v.* Sayles, 97 U. S. 554.

All subsequent machines which employ substantially the same means to accomplish the same results are infringements, notwithstanding the subsequent machine may contain improvements in separate mechanism which go to make up the machine. — VonSchmidt *v.* Bowers, 80 Fed. 121; 25 C. C. A. 323.

McCormick *v.* Talcott, 20 How. 402; Railway *v.* Sayles, 97 U. S. 554; Clough *v.* Barker, 106 U. S. 166; Consolidated *v.* Crosby, 113 U. S. 517.

Where a patent represents a marked advance in the art, such a patent is called a "pioneer;" and the courts in its construction, have adopted a liberal rule with respect to equivalents. While the Morris patent describes a machine of the "pioneer" type, it did not solve the problem. No practical machine embodying the invention has ever been constructed. The successful solution of the problem was subsequently attained in a patented machine constructed on a different principle. The Morris machine having proved a practical failure, it is manifest that the defendant's machine cannot be held to infringe. — Ford *v.* Bancroft, 98 Fed. 309; 39 C. C. A. 91.

Machine *v.* Lancaster, 129 U. S. 263; Reece *v.* Globe, 61 Fed. 958.

§ 498. By Government.

If an officer in the military service, not especially employed to make experiments with a view to suggest improvements, devises a new and useful improvement in arms, tents, or any other kind of war material, he is entitled to the benefit of it and to letters patent for the improvement, equally with any other citizen not engaged in such service; and the Government cannot, after the patent is issued, make use of the improvement any more than a private individual, without license of the inventor or making compensation to him. — United States *v.* Burns, 79 U. S. 246; 20 L. Ed. 388.

Unlawful use by a government employee is infringement. — Cammeyer *v.* Newton, 94 U. S. 225; 24 L. Ed. 72.

Mitchell *v.* Harmony, 13 How. 115; U. S. *v.* Russell, 13 Wall. 623; U. S. *v.* Burns, 12 Wall. 246.

The exemption of the United States from judicial process does not protect their officers and agents, civil or military, in time of peace from being personally liable to an action of tort by a private person whose rights of property they have wrongfully invaded or injured, even by authority of the United States. — Belknap *v.* Schild, 161 U. S. 10; 16 L. Ed. 599; 16 S. Ct. 443.

Little *v.* Barreme, 6 U. S. 170; Bates *v.* Clark, 95 U. S. 204; Cammeyer *v.* Newton, 94 U. S. 225; Feather *v.* Queen, 6 Best & S. 257; Vavasseur *v.* Krupp, L. R. 9 Ch. Div. 351.

The United States have not consented to be liable to suits founded in tort, for wrongs done by their officers, though in the discharge of their official duties. The United States, therefore, are not liable to a suit for an infringement of a patent, that being an action sounding in tort. — Belknap *v.* Schild, 161 U. S. 10; 16 L. Ed. 599; 16 S. Ct. 443.

Gibbons *v.* U. S. 75 U. S. 269; Morgan *v.* U. S. 81 U. S. 531; Langford *v.* U. S. 101 U. S. 341; U. S. *v.* Jones, 131 U. S. 1; German *v.* U. S. 148 U. S. 573; Hill *v.* U. S. 149 U. S. 593; Schillinger *v.* U.S. 155 U. S. 163; U.S. *v.* Berdan, 156 U. S. 552.

This court has repeatedly and uniformly held that the United States have no more right than any private person to use a patented invention without license of the patentee or making compensation to him. — Belknap *v.* Schild, 161 U. S. 10; 16 L. Ed. 599; 16 S. Ct. 443.

U. S. *v.* Burns, 79 U. S. 246; Cammeyer *v.* Newton, 94 U. S. 225; James *v.* Campbell, 104 U. S. 356; Hollister *v.* Benedict, 113 U. S. 59; U. S. *v.* Palmer, 128 U. S. 262.

The United States cannot be sued in their courts without their consent, and they cannot be sued for tort, as for the infringement of a patent. — Schillinger *v.* U. S. 155 U. S. 163; 39 L. Ed. 108; 15 S. Ct. 85.

Gibbons *v.* Wilson, 75 U. S. 269; Morgan *v.* U. S. 81 U. S. 531; Hill *v.* U. S. 149 U. S. 593; U. S. *v.* Palmer, 128 U. S. 262; U. S. *v.* Russell, 80 U. S. 623; U. S. *v.* Great Falls, 112 U. S. 645.

The United States may appropriate and use the invention of an individual for its necessary uses, the fifth amendment to the constitution requiring only that due compensation shall be made. But this provision does not prescribe that the usual method of condemnation of property is essential. (In this case the Chief of Ordnances wanted to use a certain breech-loading mechanism, which was patented to complainant's assignor, and he proceeded to use it without license or right.) It does not appear, and it was not the fact that this was the only mechanism available. — Dashiell *v.* Grosvenor, 66 Fed. 334; 13 C. C. A. 593.

Kohl *v.* U. S. 91 U. S. 367; James *v.* Campbell, 104 U. S. 356; U. S. *v.* Great Falls, 112 U. S. 645; Hollister *v.* Benedict, 113 U. S. 59; U. S. *v.* Palmer, 128 U. S. 262; Schillinger's Case, 24 Ct. Cl. 278; Gill's Case, 25 Ct. Cl. 415; Berdan's Case, 26 Ct. Cl. 48.

§ 499. Identity — Equivalents.

He is entitled to protect himself from all other modes of making the same application; and every question of infringement will present the question whether the different mode, be it better or worse, is in substance an application of the same principle. — Sewall *v.* Jones, 91 U. S. 171; 23 L. Ed. 275.

Curtis, sec. 320.

A construction employing substantial equivalents of mechanism and performing the same function is an infringement. — Gage *v.* Herring, 107 U. S. 640; 27 L. Ed. 601; 2 S. Ct. 819.

Gould *v.* Rees, 15 Wall. 187; Ives *v.* Hamilton, 92 U. S. 426; Machine *v.* Murphy, 97 U. S. 120.

The bolt and the clevis perform the same office in the two structures, and the mechanical differences are merely formal and not substantial. The combination consists of the same four parts, differing only in form. — Lake Shore *v.* National, 110 U. S. 229; 28 L. Ed. 129; 4 S. Ct. 33.

Where a defendant employs substantially the same devices as the plaintiff, but seems to have adopted prior and known means rather than to have purloined the device of plaintiff it will be considered in determining infringement. — Pope *v.* Gormully, 144 U. S. 254; 36 L. Ed. 420; 12 S. Ct. 637.

The specification was coextensive with the actual invention, and described three methods of construction. The defendant took one of the methods of construction described in the specification and included in the claim. It is not of importance that it did not take the best method which was so described. — Judd Co. *v.* Fowler, 61 Fed. 821; 10 C. C. A. 100.

Two devices doing the same thing in substantially the same way with substantially the same result are the same in the patent sense. — Thomson-Houston *v.* National, 65 Fed. 427; 12 C. C. A. 671.

Machine *v.* Murphy, 97 U. S. 120.

It is no less true that a copy of the thing described and claimed in a patent either without variation, or with such variations as are consistent with its being in substance the same thing, is, for all the purposes of the patent law, the same device or combination as that described in the patent. — Kinloch *v.* Western, 113 Fed. 652; 51 C. C. A. 362.

Burr *v.* Duryee, 1 Wall. 531.

§ 500. Identity — Means Employed.

An infringement involves substantial identity, whether that identity be described by the terms "same principle," same "modus operandi" or any other. — Burr *v.* Duryee, 68 U. S. 531; 17 L. Ed. 750.

Two things are not the same under the patent law, when one is, in practice, substantially better than the other in a case where the second improvement is not gained by the use of the same means or known mechanical equivalents. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

Curt. Pat. sec. 330.

Identity of detail in a combination like the one under consideration, is not necessary in order to constitute infringement. The patentee took pains to point out that "the specific construction of the mechanism shown . . . is not essential." This was unnecessary precaution; the law gave him ample protection in this regard. — International *v.* Dey, 142 Fed. 736; 74 C. C. A. 68.

Machine *v.* Murphy, 97 U. S. 120.

§ 501. Identity — Non-Essentials.

Slight differences in degree cannot be regarded as of weight in determining the question of substantial similarity or substantial difference, but in all cases the question whether the difference in degree is insufficient to prove the alleged infringement is a question of fact to be determined by the jury in an action at law, or by the court in a suit in equity. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

Cahoon *v.* Ring, 1 Cliff. 621.

But it is no less an infringement if it performs its primary function in practically the same way. We are not concerned with the subordinate differences in the mechanism, least of all with the different names given by Horton to parts of his machine similar to the corresponding parts in the Beach patent. As the two machines are alike in their functions, combination and elements, it is unnecessary to go farther and inquire whether they are alike or unlike in their detail. — Hobbs *v.* Beach, 180 U. S. 383; 45 L. Ed. 586; 21 S. Ct. 409.

The substantial identity of the Walker and Birkenhead rests is not affected by the circumstance that in that of the former it is composed of one part, while that of the latter is composed of two. — Eames *v.* Worcester, 123 Fed. 67; 60 C. C. A. 37.

Rob. Pat. sec. 252; Stearns *v.* Russell, 85 Fed. 218; Brown *v.* King, 107 Fed. 498.

The rule is well settled that if two machines be substantially the same, and operate in the same manner, though they may differ in form, proportion and utility, they are the same in principle. — Los Angeles *v.* Aeolian, 143 Fed. 880; 75 C. C. A. 88.

Converse *v.* Cannon, 2 Woods, 7; Machine *v.* Murphy, 97 U. S. 120; Cantrell *v.* Wallick, 117 U. S. 689; Blandy *v.* Griffith, 3 Fish. P. C. 609; Walker on Pat. sec. 376; Rob. on Pat. sec. 30; Curtis on Pat. sec. 320.

§ 502. Identity — Result or Function.

The fact that by careful workmanship the products are indistinguishable by mere inspection does not establish the identity of the processes; and as the patent for the product must be limited to an article made by the particular process, the inquiry must be determined by a comparison between the methods actually employed. — Plummer *v.* Sargent, 120 U. S. 442; 30 L. Ed. 737; 7 S. Ct. 640.

This result being different from that in the plaintiff's device, the mechanism is different and is not an equivalent of that of the plaintiff. — Grier *v.* Wilt, 120 U. S. 412; 30 L. Ed. 712; 7 S. Ct. 718.

Looking at the improvement in issue in view of the cases cited, it consists of mechanical details accomplishing a useful result, but of a low order; and the mechanical details of respondent's devices are different, in the sense

of the patent law, and accomplish a result also in a large part different, and cannot be held to infringe. — Electric *v.* Fuller, 59 Fed. 1003; 8 C. C. A. 442.

Knapp *v.* Morss, 150 U. S. 221; Gordon *v.* Warder, 150 U. S. 47.

If it be conceded that it will do that work in substantially the same way, infringement is not thereby established. Substantial identity between the combinations must be found in their capacity to do the same work in substantially the same way, and it does not suffice to show that they will do one part of their work. The argument for complainant seems to proceed upon the theory that the combinations are substantially the same because each will perform the several operations of the system, and each is composed of essentially the same devices. The answer is that the differences in organization introduce different modes of operation except in a single instance, and the identity is incomplete, being partial, instead of general. — Westinghouse *v.* N. Y. 119 Fed. 874; 56 C. C. A. 404.

That the two machines of respondents and complainants both accomplish the same result may be conceded, but identity of result is not the test of infringement. There must in the ordinary patent be identity of means and identity of operation as well. — American *v.* Cimiotti, 123 Fed. 869; 59 C. C. A. 357.

Kokomo *v.* Kitselman, 189 U. S. 8.

§ 503. Identity — Tests of.

Proofs of infringement consist in a comparison of the machine made by respondents with the mechanism described in the patent, and in the testimony of scientific experts. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.

To infringe a patent it is not necessary that the thing patented should be adopted in every particular. If the patent is adopted substantially by the defendants they are guilty of infringement. — Sewall *v.* Jones, 91 U. S. 171; 23 L. Ed. 275.

Root *v.* Ball, 4 McLean, 177; Alden *v.* Dewey, 1 Story, 336; Howe *v.* Abbott, 2 Story, 190; Parker *v.* Haworth, 4 McLean, 370.

It is not only necessary to an infringement that the arrangement which infringes should perform the same service or produce the same effect but it must be done in substantially the same way. — Werner *v.* King, 96 U. S. 218; 24 L. Ed. 613.

Burr *v.* Duryee, 1 Wall. 531.

To constitute identity of invention, and therefore, infringement, not only must the result attained be the same, but in case the means used for its attainment is a combination of known elements, the elements combined in both cases must be the same, and combined in the same way, so that each element shall perform the same function, provided however, that the differences alleged are not merely colorable, according to the rule forbidding the use of known equivalents. — Electric *v.* Hall, 114 U. S. 87; 29 L. Ed. 96; 5 S. Ct. 1069.

The jury will not consider any former device to be an anticipation unless they believe such former device developed the same mode of operation, as the device described in plaintiff's patent. — Haines *v.* McLaughlin, 135 U. S. 584; 22 L. Ed. 241; 10 S. Ct. 876.

The identity or diversity in inherent quality of two devices or manufactures will be considered in determining identity or diversity of invention. — Dobson *v.* Cubley, 149 U. S. 117; 37 L. Ed. 671; 13 S. Ct. 796.

We have repeatedly held that a charge of infringement is sometimes made out though the letter of the claims be avoided. The converse is equally true. The patentee may bring the defendant within the letter of his claims, but if the latter has so far changed the principle of the device that the claims of the patent, literally construed, have ceased to represent his actual invention, he is as little subject to be adjudged an infringer as one who has violated the letter of a statute has to be convicted, when he has done nothing to conflict with its spirit and intent. — Westinghouse *v.* Boyden, 170 U. S. 537; 42 L. Ed. 1136; 18 S. Ct. 707.

Machine Co. *v.* Murphy, 97 U. S. 120; Ives *v.* Hamilton, 92 U. S. 431; Morey *v.* Lockwood, 8 Wall. 230; Elizabeth *v.* Pavement Co. 97 U. S. 137; Sessions *v.* Romadka, 145 U. S. 29; Hoyt *v.* Horne. 145 U. S. 302; Burr *v.* Duryee, 1 Wall. 531.

The plaintiff's cutting edge and the defendant's cutting edge perform the same function in substantially the same way and accomplishes the same result. Therefore, in the sense of the patent law, they are the same thing. — Sayre *v.* Scott, 55 Fed. 971; 5 C. C. A. 366.

Machine Co. *v.* Murphy, 97 U. S. 120.

The appellant's machine is not, it is true, in every detail identical with that of the patent, but in all material respects it is the same. In substantially the same way, and by substantially the same means, it accomplished the same end. That it constitutes infringement we have no doubt. — Scott *v.* Hoe, 70 Fed. 781; 17 C. C. A. 410.

It is more important to observe what are the features of essential identity between devices than to descant upon those which are merely accidental, and might be substituted one for another, or entirely removed without disturbing the relation of parts or the principle of construction or operation. — Ferguson *v.* Roos, 71 Fed. 416; 18 C. C. A. 162.

Temple *v.* Goss, 58 Fed. 196; De La Vergne *v.* Brewing Co. 66 Fed. 765.

Section 4888 requires that an application for a patent (not the claim) shall contain a written description of the supposed invention, and of the manner of constructing and using it, "in such full, clear, concise and exact terms as to enable any person skilled in the art . . . to make and use the same;" and it follows that, in determining whether the invention described in one patent differs from that described in another, evidence may be heard, — and, in a difficult case, manifestly ought to be heard — concerning the construction and actual operation of each. — Thomson-Houston *v.* Western, 72 Fed. 530; 19 C. C. A. 1.

It may be conceded, as asserted that the differences of operation could be brought about by mechanical changes so minute that the most expert telephonist in the world, taking an instrument at random out of the line could not tell by mere inspection whether it would be a Reis or a Blake in operation or result; but a mere hearing would be enough. By way of further illustration, it is said that "there is a cabinet in the Agassiz Museum at Cambridge, containing a row of mounted skeletons, beginning at one end with a monkey and ending at the other with a Caucasian. The difference between the extremes is wide enough, but the two half-way chaps look like brothers." But they are not brothers. By neither man nor monkey has a live one of

either kind ever been mistaken for the other, and in skeleton, with all the zeal of the Darwinians to find the missing link, they remain, to the experts, easily distinguishable, and can only be said to resemble. In the light of present knowledge, the Caucasian, as an invention, is not anticipated by the Simian. — Thomson-Houston *v.* Western, 72 Fed. 530; 19 C. C. A. 1.

Each element being one of the operative means, identity depends not merely upon the function performed, but upon the manner in which it is performed. — Imperial *v.* Crown, 139 Fed. 312; 71 C. C. A. 442.

§ 504. Identity — Miscellaneous Rules.

It must be remembered it is an absolutely essential ingredient of a double use that the alleged infringing device or mechanism must be identical with the patented invention. — Duff. Mfg. Co. *v.* Forgie, 59 Fed. 772; 8 C. C. A. 261.

It is clear that the patent as granted is for a mechanism only, and while, under a liberal application of the doctrine of equivalents, "if the device is appropriated in its essential features it will be an infringement, notwithstanding some change in the location and relation of parts," even though a doubtful function of little comparative worth be eliminated (Western Elec. *v.* Sperry, 58 Fed. 186) yet the proposition enunciated in Temple *v.* Goss, 58 Fed. 196, is not inapplicable, namely:

"That when a device designed merely for the improvement of a well advanced art is described as having particular features of construction, which are adapted to accomplish specific results or modes of operation, and the claim of the patent is for that device, the features so described are covered by the claim, and may not be rejected, or treated as of secondary importance, in order to extend the patent over other forms or features not described." — Brush *v.* Western, 76 Fed. 761; 22 C. C. A. 543.

§ 505. Importation and Exportation.

A person residing in the U. S. cannot purchase in another country articles patented there, from a person authorized to sell them, and import them to and sell them in the U. S. without the license or consent of the owners of the U. S. patent. — Boesch *v.* Graff, 133 U. S. 697; 33 L. Ed. 787; 10 S. Ct. 378.

Wilson *v.* Rousseau, 45 U. S. 646; Bloomer *v.* McQueewan, 55 U. S. 539; Adams *v.* Burks, 84 U. S. 453.

A purchaser in a foreign country of an article patented in that country and also in the United States, from the owner of each patent, or from a licensee under each patent, who purchases without any restrictions upon the extent of his use or power of sale, acquires an unrestricted ownership in the article, and can use or sell it in this country. — Dickerson *v.* Matheson, 57 Fed. 524; 6 C. C. A. 466.

Bloomer *v.* Millinger, 1 Wall. 340; Mitchell *v.* Hawley, 16 Wall. 544; Paper Bag cases, 105 U. S. 770; Holliday *v.* Matthewson, 24 Fed. 185.

A purchaser in a foreign country of an article patented in that country and also in the United States, from a licensee under the foreign patent only, does not give the purchaser the right to import the article into, and sell it in, the United States, without the consent or license of the owner of the United States patent. — Dickerson *v.* Matheson, 57 Fed. 524; 6 C. C. A. 466.

Boesch *v.* Graff, 133 U. S. 697.

The cases of Adams *v.* Burke, 17 Wall. 453; Hobbie *v.* Jennison, 149 U. S. 355; and Keeler *v.* Folding Bed Co., 157 U. S. in which it was held that one who purchases patented articles of a territorial assignee within the district of the United States assigned to him, may sell them again in the territory owned by another, do not rule the case in hand. They rest upon the principle that one who buys the patented article of a party who is legally empowered to sell it under the patent has once paid tribute to the monopoly, and has thereby acquired the right to use and sell the article he buys elsewhere within the United States. But one who purchases in a foreign country, of others than the owners of the United States patent or their vendees pays nothing, either directly or indirectly to the owners of the patent, and therefore he acquires no right to make, use, or vend the article which he buys within the territorial limits of their monopoly. — Dickerson *v.* Tinling, 84 Fed. 192; 28 C. C. A. 139.

The right to sell the patented article in the United States is not governed by the laws of Germany or of England, but by the laws of this nation; and under those laws and the patent before us Bayer & Co. has the "exclusive right to make, use and vend" phenacetine in the United States. Thus, in Boesch *v.* Graff, 133 U. S. 697, a case in which the defendant had purchased in Germany, from one Heeht, who had the legal right to sell them there, certain burners, which had been patented in both Germany and the United States, Chief Justice Fuller said:

"The right which Heeht had to make and sell the burners in Germany was allowed him under the laws of that country, and purchasers from him could not be thereby authorized to sell the articles in the United States, in defiance of the rights of the patentees under a United States patent."

Nor does one who buys of the owner of the patent in a foreign country under restriction free the article from the rule. — Dickerson *v.* Tinling, 84 U. S. 192; 28 C. C. A. 139.

Holliday *v.* Mattheson, 24 Fed. 185; Dickerson *v.* Matheson, 57 Fed. 524; Dickerson *v.* Matheson, 50 Fed. 73; Dickerson *v.* Matheson, 47 Fed. 319.

The complainant was the owner of the patent on phenacetine. A quantity of the drug was smuggled, confiscated by the government, and sold to defendant who undertook to sell the same. Complainant sued for infringement. *Held:* the defendant's main contention appears to be that, by passing through the hands of the federal government, the infringing phenacetine has been in some way freed from the operation of the latter's patent; that the rights of the patentee, so far as they relate to this particular phenacetine, have been abrogated by the action of the acting officers. This proposition is wholly without support in any case cited in the brief. — Dickerson *v.* Sheldon, 98 Fed. 621; 39 C. C. A. 191.

Belknap *v.* Schild, 161 U. S. 15; James *v.* Campbell, 104 U. S. 358.

The defendant bought a patented article smuggled in and condemned by the government. On suit for infringement, *Held:* The defendant contends that, by the condemnation proceedings, the statutory notice having been given, the absolute title to the property sold passed to the purchaser, freed from any lien, interest, incumbrance, or reservation. This is correct as to property sold. All persons having title to it, or lien upon it, or interest in it, are cut off. But the owner of the patent is in none of these categories. He has no title to, or lien on, or legal or equitable interest in, the infringing property. "The right of property in the physical substance, which is the fruit of the discovery, is altogether distinct from the right in the discovery itself." "Title in the thing manufactured does not give the right to use the patented invention. No more does the patent right in the inven-

tion give title in the thing made in violation of the patent." — Dickerson *v.* Sheldon, 98 Fed. 621; 39 C. C. A. 191.

Paterson *v.* Kentucky, 97 U. S. 506; Belknap *v.* Schild, 161 U. S. 24.

While it is true that the monopoly of the plaintiff's patents did not extend beyond the limits of the United States, yet it would be no defense to say that the patented article had been made in the United States only for the purpose of being sold and used in a country to which the protection of the laws of the United States did not extend. The patentee is entitled to monopolize the making of his device in the United States as well as a monopoly of there selling or using it. — Bullock *v.* Westinghouse, 129 Fed. 105; 63 C. C. A. 607.

Dorsey *v.* Bradley, 12 Blatchf. 202; Ketchum *v.* Johnson, 8 Fed. 586; Adriance *v.* McCormick, 55 Fed. 288; Gould *v.* Sessions, 67 Fed. 163.

The burden of proof was upon the complainant to show that the products imported by defendants were derived from the sources named in the patent after disclaimer. The testimony of the experts for complainant fails to establish this fact, and it is therefore insufficient. — Societe *v.* Lueders, 142 Fed. 753; 74 C. C. A. 15.

§ 506. Improvement — By an Improvement.

The patentee of an original invention cannot use a patented improvement, nor can the patentee of an improvement use the original patented machine, the one without the consent of the other. — Evans *v.* Eaton, 7 Wheat. 356; 5 L. Ed. 472.

The prior patentee cannot use an improvement without the consent of the improver, and the latter cannot use the original invention without the consent of the former. — Smith *v.* Nichols, 88 U. S. 112; 22 L. Ed. 566.

Where an original machine and an improvement upon it are both patented, neither patentee can use what does not belong to him. — Robertson *v.* Blake, 94 U. S. 728; 24 L. Ed. 245.

An improvement, although it may be a proper subject for a patent, in use may include the prior invention and therefore infringe it. — Morley *v.* Lancaster, 129 U. S. 263; 32 L. Ed. 715; 9 S. Ct. 299.

A machine operating on the same principle and performing the same functions by analogous means or equivalent combinations, even though the infringing machine may be an improvement of the original, and patentable as such, is an infringement. — Norton *v.* Jensen, 49 Fed. 859; 1 C. C. A. 452.

McCormick *v.* Talcott, 20 How. 405; Wells *v.* Gill, 1 Ban. & A. 77; Kendrick *v.* Emmons, 2 Ban. & A. 208; Turrell *v.* Spaeth, 3 Ban. & A. 458; Colt *v.* Arms Co. 1 Fish. P. C. 108; Winans *v.* Railroad, 4 Fish. P. C. 2; Whipple *v.* Mfg. Co. 4 Fish. P. C. 29; Fruit Co. *v.* Curran, 8 Fed. 150.

It may be that these alleged infringing machines are an improvement upon the invention covered by the patent in suit, but they still have all the essential elements of the best form of that invention, and therefore must be held to infringe it. — Woodward *v.* Boston, 60 Fed. 283; 8 C. C. A. 622.

Since the case of O'Reilly *v.* Morse, 15 How. 61, it has been well settled that a patent may issue for an improvement on an earlier invention either to the original inventor or to a stranger. Of course, no one can use the improvement without right or license to use the fundamental invention; but, on the other hand, the right to use the original invention does not confer the right

to use the improvement without license from the tributary inventor. — Thomson-Houston *v.* Ohio, 80 Fed. 712; 26 C. C. A. 107.

Even if it required the inventive faculty to make the change, it would nevertheless be an invention tributary to the first, and therefore an infringement. — Penfield *v.* Chambers, 92 Fed. 630; 34 C. C. A. 579.

It is true, ordinarily, that the mere fact that a machine effects better results than the patented device, or that a patented device is applied to purposes not foreseen by the patentee, does not relieve against the charge of infringement. — Davey *v.* Prouty Co. 107 Fed. 505; 46 C. C. A. 439.

U. S. *v.* Berdan, 156 U. S. 552.

In view of the facts that the respondents' device thus accomplishes a substantially different result from the complainant's, and has a substantial function which the latter does not possess, and for which it was not intended, and that, also, the latter can do the fine work for which the former was not adapted, the remark made in the opinion of Judge Hawley, given in behalf of the Circuit Court of Appeals for the Ninth Circuit, in Norton *v.* Jensen, 49 Fed. 859, seems pertinent: "It would be a perversion of the law to hold a machine which can do certain kinds of work to be an infringement on a patent for a different machine, which cannot do the same work." — Davey *v.* Prouty Co. 107 Fed. 505; 46 C. C. A. 439.

There are changes here and there — oftentimes for its betterment — of the details, but they do not make the appellee's machine, any the less, the direct offspring of Kitselman's thought, and its mechanical embodiment. — Kitselman *v.* Kokomo, 108 Fed. 632; 47 C. C. A. 538.

The fact that defendants' new structure is patented does not relieve them from infringement. — Dowagiac *v.* Minnesota, 118 Fed. 136; 55 C. C. A. 86.

Clough *v.* Barker, 106 U. S. 166; Consolidated *v.* Crosby, 113 U. S. 157.

Conceding the validity of his patent for present purposes, it raises no presumption against the earlier patent, and cannot furnish the defendant a license to use with impunity any combination described in the prior patent. — Ryder *v.* Schlichter, 126 Fed. 487; 61 C. C. A. 469.

It would be none the less an infringement, if the defendant, by additional efforts, had produced a better barrel, provided that in the process of making the improved barrel the defendant used any part of that device or method for which East's patent was granted. — Farmers' *v.* Spruks, 127 Fed. 691; 62 C. C. A. 447.

Where a complainant patentee has accomplished a new result by a new means, a defendant cannot escape the charge of infringement merely by showing a later patent. The field covered by the primary patent is not free for defendant's plowing without the owner's consent. True, the defendant may have devised an independent method of arriving at the same result; but it is also true that he may merely have added supplementary devices, or improved some details of the primary patent. There is no presumption either way. The facts are to be taken from the proofs. — Ries *v.* Barth, 136 Fed. 850; 69 C. C. A. 528.

Consolidated *v.* Crosby, 113 U. S. 157; Morley *v.* Lancaster, 129 U. S. 263; National *v.* Interchangeable, 106 Fed. 693; Crown *v.* Aluminum, 108 Fed. 845; Lamson *v.* Hillman, 123 Fed. 416; Western *v.* American, 131 Fed. 78.

This is a mere addition to the patented machine, supplementing the function of one element, without changing the co-operative function of the wheels in their combination. So, assuming that it is an important improvement, and patentable as an improvement, its association with the means of the prior patent is unauthorized without license from such patentee. — Columbia *v.* Kokomo, 143 Fed. 116; 74 C. C. A. 310. Reversed, 189 U. S. 8.

Cochrane *v.* Deener, 94 U. S. 780; Cantrell *v.* Wallick, 117 U. S. 689; Hoyt *v.* Horne, 145 U. S. 302; Walker on Pat. sec. 347.

That an infringer may not justify himself on the ground that his act is in accordance with the claims of a subsequent patent, especially where such patent was declared, in the Patent Office proceedings, to be an improvement upon the patent in suit, see Columbia *v.* Kokomo, 143 Fed. 116; 74 C. C. A. 310.

Possibly the improvement may be patentable, but that circumstance will not relieve it from infringement, if it contains the specific device which Benjamin made and patented. — Benjamin *v.* Dale, 158 Fed. 617; 85 C. C. A. 439.

Thomson-Houston *v.* Ohio, 130 Fed. 549; Perkins *v.* Buchanan, 129 Fed. 135.

These modifications and additions may be improvements, meritorious enough to secure a patent for them, but they will not negative infringement if a defendant uses the broad invention which a prior patentee has described and covered in his claims. — International *v.* Bundy, 159 Fed. 464; 86 C. C. A. 494.

Electric *v.* Pittsburgh, 124 Fed. 933.

§ 507. Improvement — Of an Improvement.

We think with the court below, that the patentee, if entitled to anything, is only entitled to the precise device which he has described and claimed in his patent; and as the defendants use a different device, they are not guilty of infringement. — Bridge *v.* Excelsior, 105 U. S. 618; 26 L. Ed. 1190.

The defendant adopts another form. Under such circumstances the Todd patent cannot be extended so as to embrace the defendant's form. The latter is not a mere colorable departure from the form of Todd, but is a substantial departure. — Duff *v.* Sterling, 107 U. S. 636; 27 L. Ed. 517; 2 S. Ct. 487.

Merrill *v.* Yeomans, 94 U. S. 568.

As the claim comes down to the merest mechanical details, a change in such details is not a colorable departure, but a substantial one, so far as this patent is concerned. — B. & S. Fastener *v.* B. G. Fastener, 58 Fed. 818; 7 C. C. A. 498.

Duff *v.* Pump Co. 107 U. S. 636.

One who invents and secures a patent for a machine or combination which first performs a useful function is protected thereby against all machines and combinations which perform the same function by equivalent mechanical devices; but one who merely makes and secures a patent for a slight improvement on a device or combination, is protected against those only who use the very improvement that he describes and claims, or mere colorable evasions of it. "If one inventor precedes all the rest, and strikes out something which includes and underlies all that they produce, he acquires a monopoly, and subjects them to tribute. But if the advance toward the thing desired is gradual, and proceeds step by step, so that no one can claim

the complete whole, then each is entitled only to the specific form of device which he produces, and every other inventor is entitled to his own specific form, so long as it differs from those of his competitors, and does not include theirs." — Adams Elec. Ry. *v.* Lindell, 77 Fed. 432; 23 C. C. A. 223.

Railway *v.* Sayles, 97 U. S. 554; McCormick *v.* Talcott, 20 How. 402; Stirrat *v.* Mfg. Co. 61 Fed. 980; Griswold *v.* Harker, 62 Fed. 389.

If the inventor had been the first to perform the function which his machine did perform, he would be entitled to a liberal construction and a reasonable range of equivalents; but the improvement being narrow and specific infringement, to be established, must lie within his narrow and specific field, see — MacColl *v.* Crompton, 95 Fed. 987; 37 C. C. A. 351.

Where the advance towards the desideratum is gradual, and several inventors form different combinations which accomplish the desired result with varying degrees of operative success, each is entitled to his own combination so long as it differs from those of his competitors and does not include theirs. — National *v.* Interchangeable, 106 Fed. 693; 15 C. C. A. 544.

Railway Co. *v.* Sayles, 97 U. S. 554; McCormick *v.* Talcott, 20 How. 402; Stirrat *v.* Mfg. Co., 61 Fed. 980; Griswold *v.* Harker, 62 Fed. 389; Adams *v.* Lindell, 77 Fed. 432.

Comparing the two devices, not with respect to the point of exit, but in respect to the means by which the exit is secured, it is clear that the defendant's organization involves an original conception, is meritorious and ingenious, and not an infringement. — U. S. Envelope *v.* Sherman, 122 Fed. 464; 58 C. C. A. 624.

In order to establish the infringement of a mere improvement in a machine of former devices already in use for accomplishing a similar purpose, the means must be substantially the same, operating in the same way, and accomplishing the same result. — Rich *v.* Baldwin, 133 Fed. 920; 66 C. C. A. 464.

Ross-Moyer *v.* Randall, 104 Fed. 355.

The patentee of a mere improvement cannot treat another as an infringer, who has improved the original machine by use of a different form or combination performing the same function. Where the result is old, and the novelty consists only of improvements in a known machine for producing a known result, the patentee must be tied down strictly to the mode which he has described for effecting such improvements. — Greene *v.* Buckley, 135 Fed. 520; 68 C. C. A. 70.

McCormick *v.* Talcott, 20 How. 402; Proctor *v.* Bennis, 36 Ch. Div. 740.

Where neither a new result nor a new principle of operation in producing the result has been achieved, and the patentee has merely improved upon the old way of accomplishing the old result, the presumption is that his patent is not infringed by a later patent for improvements upon the same old way of accomplishing the same old result. That is, presumably, each is an independent improver in a field that was as open to one as the other — presumably the thought of the one has not overlapped the thought of the other. But the presumption is not conclusive, and, even in cases of the narrowest patents, it is always open for the complainant to show that the defendant has appropriated his property. — Ries *v.* Barth, 136 Fed. 850; 69 C. C. A. 528.

The differences between the complainant's patent and the prior art, we think, are no greater than are the differences between the patents of the

complainant and defendants. To these two patents we think is properly applicable under the proofs the rule in McCormick *v.* Talcott, 20 How. 402. — Standard *v.* Ramsay, 143 Fed. 972; 75 C. C. A. 158.

It is obvious that since the location of the valve in a distinct recess or chamber alone prevented the Low patent from completely anticipating complainant's, that any device in which the valve is located in a distinct recess or chamber, as in Low, cannot infringe the complainant's patent. — Chicago *v.* Cleveland, 159 Fed. 143; 86 C. C. A. 51.

§ 508. Intent.

The proposition that the application of this patent depend upon the individual intent of the operator, overlooks the essential nature of a process patent. The directions and specifications of such a patent are addressed to those engaged and skilled in the art. It professes to disclose a method of procedure, not the particular instrumentality employed. — Carnegie *v.* Cambria, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

But the owner of a patent is entitled to protection against the repetition of accidental infringements. — Thompson *v.* Bushnell, 96 Fed. 238; 37 C. C. A. 456.

If the thing done is wrongful, the lack of intention will not excuse. — Globe-Wernicke *v.* Macy, 119 Fed. 696; 56 C. C. A. 304.

2 Greenl. Ev. 270; Chatfield *v.* Wilson, 28 Vt. 49; Heath *v.* Unwin, 15 Sim. 552; Stead *v.* Anderson, 4 C. B. 806; Parker *v.* Hulme, 1 Fish. P. C. 44.

The position of both the defendant and his expert seems to be that though the defendant infringes, the infringement is unintentional. This is enough; it is not an excuse that it is less effective than complainant's machine. — Cimiotti *v.* Bowsky, 143 Fed. 508; 74 C. C. A. 617.

§ 509. License — Implied.

After a machine has been constructed by any person with the inventor's knowledge and consent before the application for a patent, every other person who either sells or uses that machine is within the protection of the section (4899) and needs no new consent or permission of the inventor. — Wade *v.* Metcalf, 129 U. S. 202; 39 L. Ed. 661; 9 S. Ct. 271.

§ 510. License — By Licensee.

The defendants first took a license from the patentee, and under it and under his directions erected substantially the same apparatus now used. Receiving what they regarded as additional light, they refused to continue payment of royalty, and put the complainant to his legal remedy. — Tilghman *v.* Proctor, 102 U. S. 707; 26 L. Ed. 279.

If the licensee's rights have been infringed by the owner, and third persons confederating with the owner, there is no reason why all the infringers should not be joined as defendants. — Waterman *v.* Shipman, 55 Fed. 982; 5 C. C. A. 371.

Perry *v.* Littlefield, 17 Blatchf. 272.

The defendant, while licensee, made a large quantity of electrical fixtures within and under the terms of the license. He terminated the license of his own accord, and thereafter installed the fixtures. *Held:* It was not the intention of the agreement that goods could be accumulated by the licensee

during the continuance of the license and, although not ordered before its voluntary cancellation, could be subsequently sold in competition with other licensees, and such sales made after cancellation were unauthorized. — Pelzer *v.* Binghamton, 95 Fed. 823; 37 C. C. A. 288.

The contract licensed defendant to use "lead presses containing any one or more of the devices described and claimed in said letters patent." It is argued that thereby defendant became liable for the use of any part of the patented press, even though such part was only a single element of a patented combination. This contention is without merit. — Western *v.* Robertson, 142 Fed. 471; 73 C. C. A. 587.

A licensee under the first patent who uses the mechanism therein secured cannot be held an infringer under the second patent. In order to hold him it is necessary to show that he uses the devices of the first patent plus the improvements of the second patent; not any and all improvements calculated to produce similar results, but the precise improvements described and claimed. — Wagner *v.* Wycoff, 151 Fed. 585; 81 C. C. A. 129.

(The licensee refused to pay license fees and threatened to reduce price, and refused to mark articles with licensed patent.)

In addition to an accounting an injunction is prayed to restrain appellee from further making, using, or selling stackers in violation of appellant's rights as stated, or except in strict compliance with the terms of the license. This is not a bill for the specific performance of a contract. The court is not asked to compel appellee to make and sell stackers under the license, and to see to it that appellee maintains the price, puts on the patent marks, and accurately reports its sales. So far as this bill is concerned, appellee may quit the stacker business any minute he sees fit. What is sought is an injunction against appellee's unlawful invasion of appellant's lawful patent monopoly. If appellee had not invaded, or if the monopoly is unlawful, appellant fails. If appellant had chosen to accept appellee's repudiation of the license, a bill to exclude appellee utterly from the domain of the patents would have lain. By declining to recognize the fact or the right of repudiation, appellant did not estop itself from asking to exclude appellee from that part of the domain which had not been granted, namely, the control of prices and methods. Stripped of all averments in relation to appellant's business built up on licenses, the bill states a good cause of action for infringement of the patents. These averments, as appellant rightly claims, show an aggravation of the injury resulting from the infringement, and constitute, therefore, an additional appeal for injunctive relief. That the bill properly invokes the aid of equity we have no doubt. — Indiana *v.* Case, 154 Fed. 365; 83 C. C. A. 343.

Eureka *v.* Bailey, 11 Wall. 488; Kinsman *v.* Parkhurst, 18 How. 289; Hardin *v.* Boyd, 113 U. S. 763; West. Un. *v.* Un. Pacific, 3 Fed. 423; McKay *v.* Smith, 29 Fed. 295; Hat Co. *v.* Porter, 34 Fed. 745; Ball *v.* Ball, 36 Fed. 309; Am. *v.* Crossman, 57 Fed. 1021; Am. *v.* Crossman, 61 Fed. 888; Heaton *v.* Eureka, 77 Fed. 294; Victor *v.* Fair, 123 Fed. 424; Rupp *v.* Elliott, 131 Fed. 730.

§ 511. License — Patentee.

That the inventor or licensor may infringe the rights of his grantee and be sued therefor in infringement. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

There is no reason or authority for the proposition that a licensee who has the exclusive right to manufacture and sell a patented article cannot maintain a suit in equity against the owner of a patent; if the latter is guilty of an

infringement by making or selling himself, to redress the wrong occasioned thereby, or that such a suit does not arise under the patent laws of the United States. — Waterman *v.* Shipman, 55 Fed. 982; 5 C. C. A. 371.

Littlefield v Perry, 21 Wall. 205.

§ 512. License — Territorial.

The sale of a patented article by an assignee within his territory carries the right to use it everywhere, notwithstanding the knowledge of both parties that a use outside the territory is intended. — Hobbie *v.* Jennison, 149 U. S. 355; 37 L. Ed. 766; 13 S. Ct. 879.

Adams *v.* Burks, 84 U. S. 453; Birdsall *v.* Shaliol, 112 U. S. 485; Wade *v.* Metcalf, 129 U. S. 202; Boesch *v.* Graff, 133 U. S. 697.

§ 513. License — Miscellaneous.

The purchase of a device and the license to use it does not extend to and operate as a license to construct thereon another and infringing device. — Vermont *v.* Gibson, 56 Fed. 143; 5 C. C. A. 451.

Infringement by the defendant was not denied, and the validity of the patent could not be disputed by one who undertook to justify his use of it under a license. — Platt *v.* Fire Extinguisher, 59 Fed. 897; 8 C. C. A. 357.

Kinsman *v.* Parkhurst, 18 How. 289; Brown *v.* Lapham, 27 Fed. 77.

An unconditional or unrestricted sale by the patentee, or by a licensee authorized to make such sale, of an article embodying the patented invention or discovery, passes the article without the limits of the monopoly, and authorizes the buyer to use or sell without restriction; but to the extent that the sale is subject to any restriction upon the use or future sale the article has not been released from the monopoly, but is within its limits, and, as against all who have notice of the restriction, it is subject to the control of whoever retains the monopoly. This results from the fact that the monopoly is a substantial property right conferred by law as an inducement or stimulus to useful invention or discovery, and that it rests with the owner to say what part of the property he will reserve to himself and what part he will transfer to others, and upon what terms he will make the transfer. — National *v.* Schlegel, 128 Fed. 733; 64 C. C. A. 594.

Bement *v.* National, 186 U. S. 70; Victor *v.* The Fair, 123 Fed. 424; Dickerson *v.* Tinling, 84 Fed. 192; Heaton *v.* Eureka, 77 Fed. 288; Cortelyou *v.* Lowe, 111 Fed. 1005; Edison *v.* Kaufman, 105 Fed. 960; Edison *v.* Pike, 116 Fed. 863; Fowle *v.* Park, 131 U. S. 88; Garst *v.* Harris, 177 Mass. 72.

Building additional machines without consent of licensor. For a most remarkable holding in the Ninth Circuit, Ross, J., see — Plotts *v.* Central, 143 Fed. 901; 75 C. C. A. 7.

It is familiar law that articles manufactured under the term of the patent are taken out of the limits of the monopoly and become part of the common property of the country. When they are sold by the patentee or his licensee, the royalty having been previously paid or secured, the patentee, having once received his royalty, cannot treat the seller or user as an infringer. — Goshen *v.* Single Tube, 166 Fed. 431; C. C. A.

Morgan *v.* Albany, 152 U. S. 425; National *v.* Schlegel, 128 Fed. 733.

§ 514. Machine.

A machine made up and complete before application for patent is not an infringement. (Which statement is to be qualified, I think by the elements

of independent invention and good faith.) — Troy *v.* Odiorne, 58 U. S. 73; 15 L. Ed. 37.

§ 515. Machine and Manufacture.

Right to use machine carries with it the right to manufacture. — Morgan *v.* Albany, 152 U. S. 425; 38 L. Ed. 500; 14 S. Ct. 627.

Title in the thing manufactured does not give the right to use the patented invention; no more does the patent right in the invention give title in the thing made in violation of the patent. — Belknap *v.* Schild, 161 U. S. 10; 16 L. Ed. 599; 16 S. Ct. 443.

If the apparatus used by the appellant is so far different from that of the appellee that it does not infringe, the process, which, in mechanics, is merely the exercise of the functions of the machine or apparatus, cannot be an infringement of any right secured by the patent. — American *v.* Cleveland, 158 Fed. 978; 86 C. C. A. 182.

§ 516. Notice.

In absence of marking articles "patented," notice is necessary. — Dunlap *v.* Schofield, 152 U. S. 244; 38 L. Ed. 426; 14 S. Ct. 576.

It is impossible to read the communications warning the complainant's customers against selling its harrows, with which the defendant seems to have flooded the country, without being led to believe that they were inspired by a purpose to intimidate the complainant's customers, and coerce the complainant, by injuring its business, into becoming a licensee of the defendant. In view of its failure to bring an infringement action, under circumstances which made an action practically compulsory, the defendant cannot shelter itself behind the theory that its circulars and letters were merely legitimate notices of its rights. We are satisfied that they were sent, not for the purpose of self-protection, but in execution of the defendant's threat to stop the complainant from building harrows by other means than legal remedies. — Adriance *v.* National, 121 Fed. 827; 58 C. C. A. 163.

Undoubtedly the owner of a patent is acting within his rights in notifying infringers of his claims, and threatening them with litigation if they continue to disregard them; nor does he transcend his rights when, the infringer being a manufacturer, he sends such notices to the manufacturer's customers, if he does so in good faith, believing his claims to be valid, and in an honest effort to protect them from invasion. — Adriance *v.* National, 121 Fed. 827; 58 C. C. A. 163.

§ 517. Prior Patent.

The question of infringement or non-infringement must be determined by the limitations placed upon this patent by the state of the art when it was issued. — Griswold *v.* Harker, 62 Fed. 389; 10 C. C. A. 435.

McCormick *v.* Talcott, 20 How. 402.

The question of infringement or non-infringement in this case, as in every case, must be determined under this rule by the limitations placed upon the patent by the state of the art when it was issued, and by the specifications and claims of the inventor. — Murphy *v.* Excelsior, 76 Fed. 965; 22 C. C. A. 658.

§ 518. Process — Additions.

The defendant does not use the process any the less because he uses something in addition to the process. — Clerk *v.* Tannage, 84 Fed. 643; 28 C. C. A. 501.

Quotg. Lelance *v.* Habermann, 53 Fed. 380.

Tilghman *v.* Proctor, 102 U. S. 730.

The addition of a step to a process which does not change the result does not avoid infringement. — Ford Co. *v.* Tannage, 84 Fed. 644; 28 C. C. A. 503.

§ 519. Process — Tests of.

The patentee does not claim to be the inventor of the constituents. The exclusive use of them singly is not secured to him. What is secured is their use when arranged in the process. Unless one of them is employed in making up the process, as an element of it, the patentee cannot prevent others from using it. As well might the patentee of a machine, every part of which is an old and known device, appropriate the exclusive use of each device, though employed singly, and not combined with others as a machine. — Mowry *v.* Whitney, 81 U. S. 620; 20 L. Ed. 860.

Unless it was shown that the process was followed to produce the defendant's article, or unless it is shown that the article could not be produced by any other process, the defendant's article cannot be identified as the product of the process. — Cochrane *v.* Badische, 111 U. S. 293; 28 L. Ed. 433; 4 S. Ct. 455.

It must be borne in mind that, in the practical determination of questions of alleged infringement, the problem is very different when we are dealing with a chemical compound than it is when we are dealing with a machine. Such observation as the eye can give to the machine at rest and in action, illuminated by a comparison of the co-ordination of its parts with that of like parts in other machines, will be ordinarily sufficient to determine its classification. Far different is it with a chemical compound. No mere observation by the eye, supplemented even by the taste and touch, can go very far towards a solution of the problem. The same mysterious forces through whose action and reaction the compound was produced must be availed of to disintegrate and disrupt, before there can be any assurance of what it is we have before us. Hence it is that so-called "tests" are devised by those skilled in the art and science of chemistry, which, in their opinion, as experts, will reveal the secrets of the composition sufficiently to make the answer to the question positive enough to support the judgement of a court.

An inventor takes certain starting materials, and subjects them to a process he has devised. The result is a product. If he sufficiently describes the starting materials and the process in his patent, he may claim the product, being new; but, if he simply defines what he claims as the "product of his process," he might find it an extremely difficult matter to prove infringement. "Every patent for a product or composition of matter must identify it so that it can be recognized, aside from the description of the process for making it, or else nothing can be held to infringe the patent which is not made by that process," Cochrane *v.* Badische, 111 U. S. 293. Now, there are many tests that may be applied to two bodies which are being compared in order to determine whether they are or are not identical. The number of these tests may be multiplied indefinitely, for the skill, the experience, the scientific ingenuity of the chemist, will ever devise new ones in the future, as they have

the old ones in the past. Some of these tests will be of great significance; some, almost crucial; others will be of but minor importance. Their relative value, no doubt, may change as science goes sweeping on from point to point; but it must be sound law, as it is reasonable common sense, to hold that the tests of prime importance in a suit for infringement are those which the patent itself prescribes. The inventor certainly may be assumed to know what it is that he has invented. If any one is able to describe the product of his inventive skill, it is himself. He surely knows the earmarks of the thing he seeks to patent, and when, out of the multitudinous qualities which his product may exhibit under varying conditions and in different relations, he has selected and set forth in his patent a chosen few, surely these should be accepted as the distinguishing earmarks, — the characteristic stigmata of the product his patent is to cover. It may be that, after it is found that the body under investigation responds to all the tests of a patent, science may yet be able to demonstrate by other tests that, nevertheless, it is not the new product therein patented; that the patentee had selected identifying tests broader than he was entitled to, and which would cover products not within the range of his discovery. But when the body under investigation fails to respond to the specific tests the patentee has himself selected, he certainly cannot fairly insist that it is identical with his product. — Matheson *v.* Campbell, 78 Fed. 910; 24 C. C. A. 284.

Complete identity is not necessary. As was stated by Mr. Justice Curtis in Winans *v.* Denmead, 15 How. 330:

"If the machine complained of were a copy, in form, of the machine described in the specification, of course, it would be at once seen to be an infringement. It could be nothing else. It is only ingenious diversities of form and proportion, presenting the appearance of something unlike the thing patented, which give rise to questions; and the property of inventors would be valueless, if it were enough for the defendant to say: 'Your improvement consisted in a change of form; you describe and claim but one form; I have not taken that, and so have not infringed.'"

This was said in a case where the original patent was for a cylindrical ore body in a railroad car, where the structure held to infringe was hexagonal. But it is equally applicable to inventions for processes. The patentee is entitled to claim, not only that which he precisely claims, but, where he claims for a combination or process embodying the use of certain elements, his claims will include such combinations and processes as adopt substantially the same means; where the variation is only such as common intelligence in that art would suggest. Incidental appliances in operating the substantial means invented would not prevent a second patented invention from infringing upon the first. The language of some of the Bradley claims is broad enough to admit the admixture of carbon, if his invention was a primary one, and the employment of carbon was a mere auxiliary of the current in effecting the reduction, according to the doctrine of Machine Co. *v.* Lancaster, 129 U. S. 263; Proctor *v.* Bennis, 36 Ch. Div. 740; McCormick *v.* Aultman, 69 Fed. 371; and kindred cases. — Cowles *v.* Lowrey, 79 Fed. 331; 24 C. C. A. 616.

Two processes cannot be said to be substantially alike where the successive steps which they involve are different, and where, as in this instance, several of the steps which are requisite to the one are wholly omitted from the other, identity of method cannot exist. — U. S. Glass *v.* Atlas, 90 Fed. 724; 33 C. C. A. 254.

§ 520. Process — Miscellaneous.

The defendants seeing the utility of the process, and believing that they can use a method somewhat similar without infringing, put a little lime into

the mixture, and find that it helps the operation, and that they do not have to use so high a degree of heat as would otherwise be necessary. Still, the degree of heat required is very high, at least a hundred degrees above the boiling point; and a strong boiler or vessel is used in order to restrain the water from rising into steam. Can a bolder case be conceived of an attempted evasion and a real infringement of a patent? — Tilghman *v.* Proctor, 102 U. S. 707; 26 L. Ed. 279.

A process is not infringed by the use of any number of its stages less than all of them. — Goodyear *v.* Davis, 102 U. S. 222; 26 L. Ed. 149.

Where the patent is for specific process, not being generic, it must be shown that the defendants used all the different steps of that process, or there could be no infringement. — Royer *v.* Coupe, 146 U. S. 524; 36 L. Ed. 1073; 13 S. Ct. 166.

It may be, as suggested, that one person may, and in ignorance of the patented method, make use of a reservoir merely as such (the essential feature of the process) and without any design to avail himself of the patented process; but such a fact would not deprive the discoverer of the process of the protection of his patent. Such a supposed case might present a question of fact for a court or jury, and if it were made to appear that the party charged with infringement had, as in this case, changed the instrumentalities used by him after a new method had been disclosed, and particularly if he had for the first time used such a special device necessary to that process, a jury might well refuse to believe and find that the defendant was only following the old methods of procedure, and not seeking to avail himself of the plaintiff's invention. — Carnegie *v.* Cambria, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

§ 521. Product.

A had a patent on a machine. B made a contract with C for a certain number of articles of the character made by such machine. C made the articles by A's machine. *Held:* that unless the contracts were merely colorable and evasive, B was not liable in purchasing the articles made by C upon a machine which infringed A's patent. — Keplinger *v.* De Young, 10 Wheat. 358; 6 L. Ed. 341.

If it was a patent for a process, it would not be infringed by selling the product, and no conditions should have been annexed to the exercise of the vendor's rights. The broad proposition that the vendor of a product which has been made in infringement of a patented process is an infringer, or liable to any extent through the patentee, is untenable and does not require discussion. The patentee's remedy is against the manufacturer. Welsbach *v.* Union, 101 Fed. 131; 41 C. C. A. 255.

Merrill *v.* Yeomans, 94 U. S. 518.

§ 522. Reissue.

An infringement cannot be sued for which took place prior to the granting of the reissue. — Stimpson *v.* Railroad, 4 How. 380; 11 L. Ed. 1020.

Where reissue contains claim void for expansion and also original claim the expanded claim does not invalidate the original claim. — Leggett *v.* Standard, 149 U. S. 287; 37 L. Ed. 737; 13 S. Ct. 902.

Gage *v.* Herring, 149 U. S. 640.

§ 523. Repairs — Rebuilding.

Complainant's patent covered a bale tie, consisting of a buckle and band, which they sold marked, "Licensed to use once only." Defendants bought as scrap iron the used buckles and bands, straightened and united them where the band had been cut, and sold them for use. *Held:* Infringement. — American *v.* Simmons, 106 U. S. 89; 27 L. Ed. 79; 1 S. Ct. 52.

Distinguishing Wilson *v.* Simpson, 9 How. 109.

It is not within the rule of right to make repairs to reconstruct the old device to the extent of making one substantially new. — Davis *v.* Edison, 60 Fed. 276; 8 C. C. A. 615.

Citg. and explaining Chaffee *v.* Belting Co. 22 How. 217; Adams *v.* Burks, 17 Wall. 453; Hobbie *v.* Jennison, 149 U. S. 355; Wilson *v.* Simpson, 9 How. 109; Cotton Tie *v.* Simmons, 106 U. S. 89.

The reconstruction of a destroyed or worn-out combination is an infringement. — Thomson-Houston *v.* Kelsey, 75 Fed. 1005; 22 C. C. A. 1.

Disting. Wilson *v.* Simpson, 9 How. 109.

Cotton *v.* Simmons, 106 U. S. 89; Davis *v.* Edison 60 Fed. 276.

The machine referred to in the bill was entirely dismantled, except its legs, and a new machine built thereon. — Pacific *v.* Alaska, 100 Fed. 462; 40 C. C. A. 494.

When the patented machine has passed outside the monopoly by sale and purchase, the patentee has no right to impose any restrictions on its use for his own benefit. He cannot forbid the further use of the machine because it is out of repair in consequence of the wearing out or breaking of some of its parts, and so oblige the purchaser to buy a new machine. The purchased machine has become the individual property of the purchaser, and is like any other piece of property which he owns. He may sell it, or he may use it so long as its usefulness lasts, and then throw it away, or dispose of it for junk. He may prolong its life and usefulness by repairs more or less extensive, so long as its original identity is not lost. He is only prohibited from constructing a substantially new machine. He cannot, under pretext of repairs, build another machine. — Goodyear *v.* Jackson, 112 Fed. 146; 50 C. C. A. 159.

Wilson *v.* Simpson, 9 How. 13; Adams *v.* Burks, 17 Wall. 453; Chaffee *v.* Belting, 22 How. 217; Mitchell *v.* Hawley, 16 Wall. 544; Hobbie *v.* Jennison, 149 U. S. 355; Cotton-Tie *v.* Simmons, 106 U. S. 89; Aikin *v.* Print, 2 Cliff. 435; Morgan *v.* Albany, 152 U. S. 425; Gottfried *v.* Brewing, 5 B. & A. 5; Davis *v.* Edison, 60 Fed. 276.

In approaching the question of infringement by the purchaser of a patented machine (infringement by repairing), it is important to bear in mind what the patentee sold and the purchaser bought. The patentee has parted with his machine and the monopoly that goes with it, and the purchaser has bought the machine with the right to use the invention until the machine is worn out. When the machine is worn out or substantially destroyed, his right to use the patented invention ceases; and when he rebuilds his machine, and thereby makes substantially a new machine, it becomes the subject of the patentee's monopoly, the same as in the case of any other person who unlawfully makes the patented machine. — Goodyear *v.* Jackson, 112 Fed. 146; 50 C. C. A. 159.

It was not seriously contended at the argument that the repair to a single tube would not infringe the claim. It is equally clear that replacing the entire

series is an infringement. Between these two extremes lies a debatableground, the precise limits of which cannot be determined in advance. Whether the bounds of legitimate repair have been exceeded must be determined upon the facts of each case as it is presented. The mere fact that the patentee is willing to replace the injured part and make the repair is not alone sufficient to vest in him a monopoly of this work. If the purchaser sees fit to make necessary repairs himself, or employs others for that purpose, he has a right to do so, even though it be shown that he has theretofore been guilty of infringement. The commission of an unlawful act in the past does not warrant the prohibition of lawful acts in the future. — Morrin *v.* White, 143 Fed. 519; 74 C. C. A. 466.

To return to use something injured or lost, or to substitute for something defaced or destroyed another thing substantially identical, is to repair. The right of general repairing has not been questioned; but what plaintiff in error has done is not to mend or better broken or other records, nor even to furnish new records identical with those originally offered by the Victor Company, but to place upon new disks such other sound records as are thought to command a market, and to induce users of the patented machine not to replace, but to increase their stock of recorded words and music. The right to repair is measured by the right of the owner of the patented article, and such owner, when doing what is above outlined, is no more repairing his machine than is one repairing a stereoptieon by changing the pictures therein. — Leeds *v.* Victor, 154 Fed. 58; 83 C. C. A. 170.

§ 524. Repairs — What Constitute.

We admit, for such is the rule in Wilson *v.* Rousseau, 4 How. that when the material of the combination ceases to exist, in whatever way that may occur, the right to renew it depends upon the right to make the invention. If the right to make does not exist, there is no right to build the combination. But it does not follow when one of the elements of the combination has become so much worn as to be inoperative, or has broken, that the machine no longer exists for the restoration to its original use by the owner, who has bought it to use. When the wearing or injury is partial, then repair is restoration, and not reconstruction. — Wilson *v.* Simpson, 9 How. 109; 13 L. Ed. 66.

Of course, when we speak of a right to restore a part of a deficient combination, we mean the part of one entirely original, and not of any other patented thing which has been introduced into it, to aid its intended performance. Nor is it meant that the right to replace extends to everything that may be patented. Between repairing and replacing there is a difference. — Wilson *v.* Simpson, 9 How. 109; 13 L. Ed. 66.

If the patented article can be repaired by means which merely keep it up to the performance of its duty, such is permissible; but if it is so broken or worn out as to require replacement it cannot be effected by repair. — Wilson *v.* Simpson, 9 How. 109; 13 L. Ed. 66.

Complainant's patent covered a bale tie, consisting of a buckle and band, which they sold marked, "Licensed to use once only." Defendants bought as scrap iron the used buckles and bands, straightened, and riveted them together where the band had been cut, and sold them for use. *Held:* Infringement. — American *v.* Simmons, 106 U. S. 89; 27 L. Ed. 79; 1 S. Ct. 52.

Distinguishing Wilson *v.* Simpson, 9 How. 109.

Discussed with cases. — Morgan *v.* Albany, 152 U. S. 425; 38 L. Ed. 500; 14 S. Ct. 627.

The right to repair a patented device is a right which goes with the device when it is sold; but that right does not include a right to rebuild the device in the sense of making it a new device. — Davis *v.* Edison, 60 Fed. 276; 8 C. C. A. 615.

Chaffee *v.* Belting Co. 22 How. 217; Adams *v.* Burks, 17 Wall. 453; Hobbie *v.* Jennison, 149 U. S. 353; Wilson *v.* Simpson, 9 How. 109; Cotton Tie *v.* Simmons, 106 U. S. 89.

The right to replace a broken or injured part by a new one, from any person who can supply the article, should be conceded by the owners of the patent. — Thomson-Houston *v.* Kelsey, 75 Fed. 1005; 22 C. C. A. 1.

The rule is well established that one who purchases a machine or mechanical contrivance consisting of several distinct parts, which, as a whole, is covered by a patent, has the right, by virtue of his purchase from the patentee, to repair a part of the machine or device which happens to be broken through accident, or which becomes so far worn as to render the machine inoperative, provided the machine as a whole, still retains its identity, and what is done in the way of rendering it operative does not amount to reconstruction, and provided, further, that the part so replaced is not separately covered by a patent. The sale of a patented article by the patentee frees it from the grasp of the monopoly, and the purchaser may thereafter exercise the same dominion over it which he exercises over his other property. The right to thus repair a patented device is incidental to ownership. The fact that it is patented does not lessen the owner's right to put it in order when it gets out of repair, unless, considered as a whole, it is worn out and useless. When a patented machine is accidentally destroyed, or when it is practically worn out, the owner thereof, under the guise of repairing it, cannot make a new machine. In such cases he must cast it aside and buy a new one from the patentee. — Shickle *v.* St. Louis, 77 Fed. 739; 23 C. C. A. 433.

Wilson *v.* Simpson, 9 How. 109; Chaffee *v.* Belting, 22 How. 217; Tie Co. *v.* Simmons, 106 U. S. 89; Farrington *v.* Board, Fed. Cas. 4,687; Gottfried *v.* Brewing Co. 8 Fed. 322; Aikin *v.* Print, 1 Fed. Cas. 113; Singer *v.* Springfield, 34 Fed. 393; Wallace *v.* Holmes, Fed. Cas. 17,100.

It is manifest that a broken or worn-out cam effected only a partial destruction of the patented combination composed of three separate groups of mechanism, and that the replacement of the old cam with a new one was not a substantial rebuilding of the combination. If the patented invention had been for this particular form of cam, or had been simply for an improved feed, and the whole invention had resided substantially in the cam, the case would have presented a different aspect. — Goodyear *v.* Jackson, 112 Fed. 146; 50 C. C. A. 159.

When the patent is for a single thing, like a knitting needle, for example, and not for a device or machine composed of several things or elements combined, it is obvious that the replacement of an old needle by a new one in a knitting machine is not repair, but a reproduction of the patented thing. — Goodyear *v.* Jackson, 112 Fed. 146; 50 C. C. A. 159.

Aikin *v.* Manchester, 2 Cliff. 435; Morgan *v.* Albany, 152 U. S. 425; Wilson *v.* Simpson, 9 How. 109.

A practical reconstruction of the patented machine, and not necessarily a literal reconstruction of the patented combination, is all that is required to constitute infringement by the purchaser. For example, where the patent is for an improved lamp, and the whole invention resides in the burner, but

the claim is for the combination of the burner and a chimney, in an ordinary suit for infringement it must be shown that the defendant made or used or sold the patented combination, namely, the burner and the chimney; while in a suit for infringement against the purchaser of the lamp it would only be necessary to prove that he replaced the old burner with a new one, because, manifestly, that would constitute a substantial reconstruction of the patented invention. If a person other than the purchaser should make or sell the burner with the intent and purpose of its use by another in combination with the chimney, it would be a clear case of contributory infringement. — Goodyear *v.* Jackson, 112 Fed. 146; 50 C. C. A. 159.

Wallace *v.* Holmes, 9 Blatchf. 65.

To show infringement in the case of an ordinary infringer, where the patented invention comprises several elements in combination, it is necessary to prove that the alleged infringing machine contains all the elements (or their equivalents) which make up the combination, although some of the elements may not be material, or of the essence of the invention. To show infringement by the purchaser (by repairing) in such a case, the same strictness of proof is not required, for the reason that it may not be necessary for him to make the immaterial or unessential elements of the patented combination, because they may not be worn out or destroyed in his machine when the work of reconstruction begins. — Goodyear *v.* Jackson, 112 Fed. 146; 50 C. C. A. 159.

The purchaser of a patented machine, in order to infringe, must make or reproduce, in substance, the whole patented invention. To prove infringement, in one case, it is only necessary to show a partial infringement in aid of an unlawful complete infringement, while in the other case a substantially full and complete infringement must be established. The rule that a person may be guilty of contributory infringement by making or selling a material element of the patented combination has no application to infringement by the purchaser of a machine embodying such patented combination. A purchaser stands in no different position from an ordinary infringer, except in the circumstance that he has bought a patented machine, and, consequently, his infringement does not consist in the construction of a wholly new machine, but in the reconstruction of such machine after it is worn out, or substantially destroyed. The essence of infringement is the same in both cases. — Goodyear *v.* Jackson, 112 Fed. 146; 50 C. C. A. 159.

If this be lawful for the owner, it is equally so for the mechanic who is employed to do the work; the latter cannot be held as an infringer for making repairs which the former has an undoubted right to make. — Morrin *v.* White, 143 Fed. 519; 74 C. C. A. 466.

§ 525. Tests — Anticipation Test.

If the hoe made by the tool Company infringes the patent of the appellant, it was an anticipation of the invention, and the patent is void, for the testimony leaves no doubt whatever in our minds that the Company made and sold its hoes long before the date of the invention patented. If it is not an anticipation, it is not an infringement. — Cook *v.* Sandusky, 28 L. Ed. 124; 4 S. Ct. 4.

That which infringes if later would anticipate if earlier. — Knapp *v.* Morss, 150 U. S. 221; 37 L. Ed. 1059; 14 S. Ct. 81.

Peters *v.* Active, 129 U. S. 530; Thatcher *v.* Burtis, 121 U. S. 286; Grant *v.* Walter, 148 U. S. 547; Gordon *v.* Warder, 150 U. S. 47.

"That which infringes if later anticipates if earlier." — Miller *v.* Eagle, 151 U. S. 186; 38 L. Ed. 121; 14 S. Ct. 310.

Peters *v.* Active Mfg. Co. 129 U. S. 530; Thatcher *v.* Burtis, 121 U. S. 286; Grant *v.* Walter, 148 U. S. 547; Gordon *v.* Warder, 150 U. S. 47; Knapp *v.* Morss, 150 U. S. 221.

That which infringes if later, anticipates if earlier. — Muller *v.* Lodge, 77 Fed. 621; 23 C. C. A. 357.

Peters *v.* Mfg. Co. 21 Fed. 319; Peters *v.* Mfg. Co. 129 U. S. 537; Knapp *v.* Morss, 150 U. S. 221; Miller *v.* Mfg. Co. 151 U. S. 186.

The device used by the appellant cannot be held to be an infringement of the appellee's patent unless it would have been held — if used earlier than the patent — to have been an anticipation of the same; and certainly it is clear, if it had been set up as in prior use against the Streat patent, as it did not contain an apron used in the manner set forth in said patent, that it would not have been decreed to have been an anticipation. — American *v.* Streat, 83 Fed. 700; 28 C. C. A. 18.

Peters *v.* Mfg. Co. 129 U. S. 530; Knapp *v.* Morss, 150 U. S. 221; Heating Co. *v.* Burtis, 121 U. S. 286; Grant *v.* Walter, 148 U. S. 547; Gordon *v.* Warder, 150 U. S. 47.

It is a well-established rule that "that which infringes, if later, would anticipate if earlier;" and, conversely, that a device cannot be held to be an infringement unless it would have been held, if earlier than the patent, to have been an anticipation thereof. — Peerless *v.* White, 118 Fed. 827; 55 C. C. A. 502.

Tobacco *v.* Streat, 83 Fed. 700.

Note: The ill-considered application of this rule may well result in a wrong decision, as happened in this case, and as is clearly shown in the dissenting opinion of Judge Acheson.

A device which, if existent before the making of a patented invention, would not anticipate it, cannot, if made after the issue of the patent, be said to infringe it. — Cleveland *v.* Chicago, 135 Fed. 783; 68 C. C. A. 485.

With such differences his would not constitute an infringement of theirs, and of necessity theirs do not constitute anticipation of his. — St. Louis *v.* American, 156 Fed. 574; 84 C. C. A. 340.

Kokomo *v.* Kitselman, 189 U. S. 8; Greene *v.* Buckley, 135 Fed. 520.

It must be admitted that the Portland structure and device (the device of defendant) could not be patented. The necessary corollary is that the one device is not an infringement of the other. — Portland *v.* Hermann, 160 Fed. 91; 87 C. C. A. 247.

§ 526. Tests — Device and Claims.

When the invention or inventions are embodied in a machine, the question of infringement is best determined by a comparison of the machine made by the respondent with the mechanism described in the complainant's patent or patents, where more than one is embraced in the same suit. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Blanchard *v.* Putnam, 8 Wall. 426.

Except when form is the essence of the invention, it has but little weight in the decision of such an issue, the correct rule being that, in determining

the question of infringement, not to judge about similarities or differences in the names of things, but to look at the machines or their several devices or their elements in the light of what they do or what office or function they perform, and how they perform it, and to find that one thing is substantially the same as another, if it performs substantially the same function in substantially the same way to obtain the same result; always bearing in mind that devices in a patented machine are different in the sense of the patent law when they perform different functions or in a different way, or produce a substantially different result. — Union *v.* Murphy, 97 U. S. 120; 24 L. Ed. 935.

Cahoon *v.* Ring, 1 Cliff. 620.

In determining infringement, we are entitled to look at the practical operation of the machines. If the device of respondents shows a substantially different mode of operation, even though the result of the operation of the machine remains the same, infringement is avoided. — Cimiotti *v.* American, 198 U. S. 399; 49 L. Ed. 1100; 25 S. Ct. 697.

Brooks *v.* Fiske, 15 How. 212; Union *v.* Battle Creek, 104 Fed. 337.

Infringement is to be determined by a consideration of the claims, and if their language is such that, upon a fair consideration of them, defendant's structure does not fall within their terms, infringement cannot be found. — Hoe *v.* Michle, 149 Fed. 213; 79 C. C. A. 171.

§ 527. Tests — Function.

An alleged infringing combination, which has no adaptation for accomplishing the essential functions which the combination patented was, on the face of the patent, intended to accomplish, cannot ordinarily be held to truly infringe. — Boston *v.* Bemis, 80 Fed. 287; 25 C. C. A. 420.

Long *v.* Mfg. Co. 75 Fed. 835.

A function not being patentable, the mere fact of the performance of this function by the new means operating in a new way, cannot serve constructively to make it an infringement of the means not used, where the invention is of the limited character shown in this patent. — Mann *v.* Hoffmann, 104 Fed. 245; 43 C. C. A. 514.

Where infringement would naturally or necessarily result from the ordinary use of a device, a defendant cannot escape liability for infringement by merely showing the possibility of a different use. The decisive question is whether the operation of the alleged infringing device when in use is the same, and produces the same results. — Davis *v.* Perry, 120 Fed. 941; 57 C. C. A. 231.

Snyder *v.* Bunnell, 29 Fed. 47; Westinghouse *v.* N. Y. 59 Fed. 597; Thomson-Houston *v.* Kelsey, 72 Fed. 1016.

Identity of result is, however, not a sufficient test of infringement. There must also be substantial identity of the means and manner of accomplishment. — Heekin *v.* Baker, 138 Fed. 63; 70 C. C. A. 559.

§ 528. Tests — Interchangeability.

Interchangeability test of. — Miller *v.* Eagle, 151 U. S. 186; 38 L. Ed. 121; 14 S. Ct. 310.

Prouty *v.* Ruggles, 41 U. S. 336; Brooks *v.* Fiske, 56 U. S. 212; Eames *v.* Godfrey, 68 U. S. 78.

Noninterchangeability of parts tends strongly to negative infringement. — Pittsburg *v.* Pittsburg, 109 Fed. 644; 48 C. C. A. 580.

Miller *v.* Mfg. Co. 151 U. S. 186.

Interchangeability is referred to in Miller *v.* Eagle, 151 U. S. 186 and other cases cited in the argument on behalf of the appellee, as an "important test in determining the question of infringement," and it is contended that interchangeability of parts and functions thus conceded does not meet the requirements for such test, upon the assumption that the interchange involves substantial reorganization of one and the other structure. This contention is without force, under our conclusion that these deviations are plain equivalents within the scope of the patent, and do not depart substantially from the invention. — Columbia *v.* Kokomo, 143 Fed. 116; 74 C. C. A. 310.

§ 529. Tests — Means and Result.

To constitute an infringement, the thing used by the defendant must be such as to substantially embody the patentee's mode of operation, and thereby to attain the same kind of result as was reached by his invention. It is not necessary that the defendant should employ the plaintiff's invention to as good an advantage as he employed it or that the result should be the same in degree: but it must be the same in kind. — Sewall *v.* Jones, 91 U. S. 171; 23 L. Ed. 275.

Winans *v.* Denmead, 15 How. 330.

We are not unaware of the principle that the mere fact that two machines produce the same effect does not establish that one is an infringement of the other. If it were so, it would operate as an admission that an inventor is entitled to patent his function. To be an infringement "the alleged infringer must have done something more than reached the same result. He must have reached it by substantially the same or similar means or the rule that the function of a machine cannot be patented, is of no practical value." — Bundy *v.* Detroit, 94 Fed. 524; 36 C. C. A. 375.

Westinghouse *v.* Boyden, 170 U. S. 569; Machine Co. *v.* Murphy, 97 U. S. 120; Elizabeth *v.* Pavement Co. 97 U. S. 126; Hoyt *v.* Horne, 145 U. S. 302.

The machines of complainant and defendants "lack the identity of means and identity of operation which must be combined with identity of result to constitute infringement." — U. S. Envelope *v.* Sherman, 122 Fed. 465; 58 C. C. A. 624.

Kokomo *v.* Kitselman, 189 U. S. 8.

§ 530. Tests — Utility and Use.

It is not necessary that the defendant's cars should employ the plaintiff's invention to as good an advantage as he employed it, or that the result should be precisely the same in degree. — Winans *v.* Denmead, 15 How. 330; 14 L. Ed. 717.

The diversity of inherent quality of two devices or manufactures may be considered in determining identity or diversity of invention. — Dobson *v.* Cubley, 149 U. S. 117; 37 L. Ed. 671; 13 S. Ct. 796.

§ 531. Tests — Miscellaneous.

If the defendants do not fix or fasten their device to the machine in the manner stated in the specification, either at all or substantially in the same manner as the patentee, or fix or fasten it only in a manner known and used

before the plaintiff's supposed invention, the defendants are not guilty of any violation or infringement of plaintiff's patent. — Carver *v.* Hyde, 16 Pet. 513; 10 L. Ed. 1051.

In the case of an American reissue upon an original also patented abroad, if it were assumed that manufacture were begun under the precise terms of the foreign patents and infringement were found, that would be conclusive that the reissue was for the same invention covered by the foreign patents which were founded upon the original American patent. — Commercial *v.* Fairbank, 135 U. S. 176; 34 L. Ed. 88; 10 S. Ct. 972.

The fact that the defendant himself subsequently made application for the patent, which upon the plaintiff's interference, was awarded to the latter, indicates quite clearly that the defendant did not consider it as accomplishing the purpose sought by his subsequent application. — DuBois *v.* Kirk, 158 U. S. 58; 39 L. Ed. 895; 15 S. Ct. 729.

If Rose had taken a patent for his umbrella and case combined, a different question would be presented. He did not do this, however, but took a separate patent for the case, because he desired and intended to obtain a monopoly in cases, not simply for the peculiar umbrella manufactured under his previous patent, but for all others to which it could be applied. The effort now made to read the patents together and to treat them substantially as one, covering the umbrella and case combined, is, of course, unjustifiable. The patent for the case must stand alone, as issued, and so considered it clearly does not cover any case from which either of its essential elements is omitted. — Rose *v.* Hirsh, 77 Fed. 469; 23 C. C. A. 246.

When experimental tests are necessary to distinguish one device from another, it is manifestly an impracticable, not to say dangerous, proposition that the making or using of either under a given patent may be declared to be an infringement of a different patent upon the other, would seem to apply with equal or greater force here. — Western Elec. *v.* Standard Co. 84 Fed. 654; 28 C. C. A. 512.

Following Thomson-Houston *v.* Western, 70 Fed. 69.

Comparison of infringing device with prior devices alleged to anticipate. — Dowagiac *v.* Minnesota, 118 Fed. 136; 55 C. C. A. 86.

A copy of the thing described in a patent, either without variation, or with such variations as are consistent with its being in substance the same thing, is for all the purposes of the patent law the same device as that described in the patent. — Lourie *v.* Lenhart, 130 Fed. 122; 64 C. C. A. 456.

Burr *v.* Duryee, 1 Wall. 531.

§ 532. Miscellaneous Infringement Rules.

The rights of property and exclusive use granted to a patentee does not extend to a foreign vessel lawfully entering one of our ports; and that the use of such improvement, in the construction, fitting out or equipment of such vessel while she is coming into or going out of a port of the United States, is not an infringement of the rights of an American patentee, provided it was placed upon her in a foreign port, and authorized by the laws of the country to which she belongs. — Brown *v.* Duchesne, 60 U. S. 183; 15 L. Ed. 595.

When infringement is admitted, the language is satisfied by assuming the smallest number consistent with the use of the word in plural. — Jones *v.* Morehead, 68 U. S. 155; 17 L. Ed. 662.

If, on the other hand, the Cawood machine was novel, as we think it was, if it was not anticipated by the Springfield, the conclusion is inevitable that neither the Michigan Southern nor the Bayonet vice is an infringement. — R. R. *v.* Turrill, 94 U. S. 695; 24 L. Ed. 238.

The use of a well (driven well) so constructed is, therefore, a continuing infringement, as every time water is drawn from it the patented process is necessarily used. — Beedle *v.* Bennett, 122 U. S. 71; 30 L. Ed. 1074; 7 S. Ct. 1090.

An inventor has no property right in his discovery which is exclusive except under his patent; and therefore the provisions of sec. 4899 U. S. R. S. is not unconstitutional as depriving the inventor of his property without compensation. — Dable *v.* Flint, 137 U. S. 41; 34 L. Ed. 618; 11 S. Ct. 8.

Gayler *v.* Wilder, 51 U. S. 477; Brown *v.* Duchesne, 60 U. S. 183; Marsh *v.* Nichols, 128 U. S. 605.

Purchasers from an assignee in bankruptcy cannot maintain a suit in equity against third persons claiming adverse interests, if at the time of the purchase from the assignee his right of action was, under the Bankruptcy Act, barred by the lapse of time. — Sessions *v.* Romadka, 145 U. S. 29; 36 L. Ed. 609; 12 S. Ct. 799.

Gifford *v.* Helms, 98 U. S. 248; Wisner *v.* Brown, 122 U. S. 214.

When the essential operation of the two devices is so different there is no equity in charging infringement upon the defendant by an apparently accidental adoption of an immaterial feature of the plaintiff's patent. — B. & S. Fastener *v.* Kraetzer, 150 U. S. 111; 37 L. Ed. 1019; 14 S. Ct. 48.

Where complainant declares on a certain claim or claims, the court will not consider the possible infringement of other claims. — Gordon *v.* Warder, 150 U. S. 47; 37 L. Ed. 992; 14 S. Ct. 32.

When a patent has been surrendered and reissued, and such reissue is held void, the patentee cannot sue upon the original. — Eby *v.* King, 158 U. S. 366; 39 L. Ed. 1018; 15 S. Ct. 972.

Moffitt *v.* Garr, 66 U. S. 273; Reedy *v.* Scott, 90 U. S. 352; Peck *v.* Collins, 103 U. S. 660; McMurray *v.* Mallory, 111 U. S. 97; Gage *v.* Herring, 107 U. S. 640.

If a patentee could, under any circumstances, sue to recover for the use of a patent before it was granted (as to which it was held in Gayler *v.* Wilder, 10 How. 477; Brown *v.* Duchesne, 19 How. 183; Marsh *v.* Nichols, 128 U. S. 612; Sargent *v.* Seagrave, 2 Curt. 553; and Rein *v.* Clayton, 37 Fed. 354 — that an inventor has no exclusive right before a patent has been issued) it certainly could not apply to a case where the patentee was not the inventor of the thing patented; where the device has been in public use for more than two years, and where the government had protested against any patent being issued for it. — Kirk *v.* U. S. 163 U. S. 49; 41 L. Ed. 66; 16 S. Ct. 911.

It is insisted that the court had no right to consider an earlier patent of the inventor of the patent in suit as anticipating the one in suit; and reference is made to Cantrell *v.* Wallick, 117 U. S. 689 for the proposition that:

"The defendant cannot excuse or defend himself against the charge of

infringement of the letters patent in suit, by saying that he infringed an earlier patent rather than the patent claimed in this case."

The proposition is neither to be found nor has it support in the case cited, and the contrary is well settled. — Barnes *v.* Walworth, 60 Fed. 605; 9 C. C. A. 154.

In the machine of the patent, the platen is operated by the check in the hand of the workman; in the defendants' machine it is operated by the clock-work previously wound up. This substantial difference seems to run through the whole and to take the defendants' machine out of the scope of all of these claims. — Bunday *v.* Columbian, 64 Fed. 851; 12 C. C. A. 442.

If, then, a patentee has the exclusive right to the use of his invention or discovery, during the term of his patent, it would seem to follow that any use by another, unauthorized by the patentee, would be an infringement of his monopoly. If, therefore, he can find a purchaser for a machine subject only to certain specified uses, any violation of the privileges granted would be an infringement, for which the remedies granted patentees would be appropriate. — Heaton *v.* Eureka, 77 Fed. 288; 25 C. C. A. 267.

Rubber Co. *v.* Goodyear, 9 Wall. 788; Burr *v.* Duryee, Fed. Cas. 2190; Mfg. Co. *v.* Owsly, 27 Fed. 100; Steam Cutter *v.* Sheldon, 5 Fish. 477; Rob. Pat. secs. 812-815, 1250.

A final decree holding a machine not to be infringement is conclusive with reference to the identical machine in the hands of a purchaser. — Norton *v.* San Jose, 79 Fed. 793; 25 C. C. A. 194.

Johnson *v.* Wharton, 152 U. S. 252; Last Chance *v.* Tyler, 157 U. S. 683; Railroad *v.* National, 102 U. S. 14; Stout *v.* Lye, 103 U. S. 66.

The adjustment was made after an interlocutory decree for an injunction, and for an accounting, on a bill in equity which related to the unauthorized use of a patented device in a single machine by the respondents below, who were not manufacturers, and who had indicated no disposition to make any use of the device except in that machine. It included a license covering the machine, and a release of all damages, profits and costs in the suit. Consequently, all controversy between the parties had ceased; and, if the adjustment had been properly pleaded, it is clear that the court below would have had no occasion to consider the case further, and a final decree against the respondents below, whether for an injunction or otherwise, would have been erroneous. In this respect the case would have been essentially different from those in which it had been held that infringers cannot deprive a patentee of the just fruits of his litigation, including an injunction, by ceasing to infringe of their own motion alone. — Marden *v.* Campbell, 79 Fed. 653; 25 C. C. A. 142.

See, Gamewell *v.* Municipal, 77 Fed. 490.

The fact that the owner of a patent has offered to sell licenses does not give anyone the right to make trial tests of his invention. — Clerk *v.* Tannage, 84 Fed. 643; 28 C. C. A. 501.

The fact that the defendants are satisfied to use the machine only in those operations wherein resides its chief practical value, and are content to refrain from employing it in what must be regarded as operations of an unusual or subordinate character, does not avail as a defence. — Heap *v.* Green, 91 Fed. 792; 34 C. C. A. 86.

For a remarkable holding as to what is and what is not irreparable injury to complainant or defendant, see Pacific *v.* Alaska, 100 Fed. 462; 40 C. C. A. 494.

How easy it was for Hall, who commenced work under him as an apprentice, and for years was engaged in the same shop upon Painters' devices, to absorb the inventive idea, and to produce the same results by some equivalent method. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

Machine Co. *v.* Lancaster, 129 U. S. 263; Sessions *v.* Romadka, 145 U. S. 29; McCormick *v.* Aultman, 69 Fed. 371.

The contract provided that the amount to be paid complainant should be determined by a court of competent jurisdiction. The action was for infringement. The court was asked to instruct the jury that there was no evidence showing infringement. *Held:* There is no escape from the conclusion that this instruction should have been given. What was done by the defendants was done under the agreement and with the full consent of the plaintiffs. — Kilburn *v.* Holmes, 121 Fed. 750; 58 C. C. A. 116.

That the fact that the charged infringement took place during the preceding six years need not be specially pleaded, either at law or in equity; and that the burden of proof is on the defendant, see Peters *v.* Hanger, 134 Fed. 586; 67 C. C. A. 386.

INJUNCTION.

Statutory Provision § 533
General Statement § 534
Appeals (*see* § 109)
  Comity § 535
  Contempt, General § 536 (*see* § 269)
  Contempt, Rule in Debs Case § 537
  Contempt, Reverse of Rule in Debs Case § 538
  Decision on Merits § 539
  Dismissing Bill § 540
  Prior Adjudication § 541
  Refusal to Grant § 542
  Sound Discretion § 543
  What Considered on § 544
  Miscellaneous Rulings § 545
Bond § 546
Corporations and Corporation Officers § 547 (*see* § 271)
Discontinuance or Non-Use § 548
Discretion of Court § 549
Expiration of Patent § 550
General Rules for Granting § 551
General Rules for Refusing § 552
Government § 553 (*see* § 428)
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§ 533. Statutory Provision.

The several courts vested with jurisdiction of cases arising under the patent laws shall have power to grant injunctions according to the course and principles of courts of equity, to prevent the violation of any right

secured by patent, on such terms as the court may deem reasonable; * * * — R. S. 4921. (See Jud. Code, Secs. 128, 129, 263, 264).

§ 534. General Statement.

One approaching for the first time the multitude of holdings upon the subject of preliminary injunctions is inclined to conclude the law is chaotic. Such, however, is not the case. If it is borne in mind that it is at this point that the court comes into the thick of the fight, where, more often perhaps than anywhere else, greed and overreaching is all too common; if it is borne in mind that the record on which a motion for a preliminary injunction is made and the record in opposition thereto, usually consist, not of sober proofs, but ex parte statements made when the blood of the combatants is over-heated; if it is borne in mind that each case presents its own peculiar problems — if these considerations are before one, it will be seen that the courts have, as a rule, pursued a very even course and kept the parties from each other's throats with much composure. The author would be presuming indeed to attempt, at this point, to state a general rule or to sum up the law on the subject. It is not the place for fixed rules; it is the place for the exercise of judicial discretion, unhampered by any hard-and-fast rules; and it is only by the exercise of that discretion, so unhampered, that industrial competition involving patents is kept from descending to guerrilla warfare.

§ 535. Appeals — Comity.

It has been decided in this court, and in the courts of appeals of the Second and Seventh circuits, that an adjudication of another circuit court than that whose action is being considered, finding the validity of the patent and infringement, is a sufficient ground, not only in the circuit court for an order granting a preliminary injunction, but also in the appellate court for affirming such an order. — Duplex *v.* Campbell, 69 Fed. 250; 16 C. C. A. 220.

Blount *v.* Societe, 53 Fed. 98; American *v.* National, 51 Fed. 229; Electric *v.* Edison, 61 Fed. 834.

Another court of co-ordinate jurisdiction was engaged in the same investigation and examination, and had issued its temporary injunction. Under these circumstances it seemed to the learned judge below that the status quo should be maintained. Decree affirmed. — U. S. Gramophone *v.* Seaman, 113 Fed. 745; 51 C. C. A. 419.

§ 536. Appeals — Contempt, General.

That after mandate of the appellate court instituting an injunction has been filed in the court below, jurisdiction to punish contempt thereafter arising rests with the circuit court, see — Dowagiac *v.* Minnesota, 124 Fed. 735; 61 C. C. A. 57.

Neither is the result to turn upon any question of conflicting fact, for it is not the province of a reviewing tribunal to weigh the facts upon a writ of error. — Bullock *v.* Westinghouse, 129 Fed. 105; 63 C. C. A. 607.

A contempt proceeding is classified as a misdemeanor and not as a felony. In re Acker, 66 Fed. 291. Misdemeanors are reviewable by this court upon writ of error by virtue of the broad appellate powers conferred by the act of Mar. 3, 1891, c. 517, 26 Stat. 826, establishing Circuit Courts of Appeal, and defining and regulating the appellate powers of United States courts. If, therefore, the imposition of the fine complained of "was a judgment in a criminal case," as it is defined to be in New Orleans *v.* Steamship, 20 Wall. 387, it was a judgment in a misdemeanor case; for contempts are universally

classified as misdemeanors, and not felonies. In re Acker, 66 Fed. 291. If a judgment in a misdemeanor case, it is reviewable upon writ of error to this court. This conclusion was reached in the Second Circuit in Gould *v.* Sessions, 67 Fed. 163. But in Nassau *v.* Sprague, 95 Fed. 415, and Christensen *v.* Westinghouse, 129 Fed. 96, writs of error were dismissed upon the authority of In re Debs, 158 U. S. 564. — Bullock *v.* Westinghouse, 129 Fed. 105; 63 C. C. A. 607.

§ 537. Appeals — Contempt — Rule of Debs Case.

An appeal does not lie from an order of contempt for violation of injunction, because if it be treated as interlocutory it can come here only on appeal from final decree; and if it be treated as an independent proceeding, it is in effect a judgment in a criminal case, and is reviewable only on a writ of error. — Sessions *v.* Gould, 63 Fed. 1001; 11 C. C. A. 550.

Hayes *v.* Fischer, 102 U. S. 121; Worden *v.* Searles, 121 U. S. 14; New Orleans *v.* New York, 20 Wall. 387; Ex parte Kearney, 7 Wheat. 39; Saltmarsh *v.* Tuthill, 12 How. 387; Kearney *v.* Denn, 15 Wall. 51; Knapp *v.* R. R. 20 Wall. 117; Kerr *v.* Clampitt, 95 U. S. 188.

An order in contempt for violation of injunction is reviewable on a writ of error, and not by appeal. — Gould *v.* Sessions, 67 Fed. 163; 14 C. C. A. 366.

New Orleans *v.* Steamship, 20 Wall. 387; Worden *v.* Searles, 121 U. S. 14.

An order imposing punishment for violation of a preliminary injunction, is not appealable until after final decree, see — Nassau *v.* Sprague, 95 Fed. 415; 37 C. C. A. 146.

Debs Case, 158 U. S. 564.

Although the contempt consist in the violation of an injunction granted by a court of equity, the proceeding for its punishment "is a new and distinct proceeding, and is quite independent of the equities of the case on which the decree is founded," and "an appeal is not an appropriate remedy for obtaining a review." — Bullock *v.* Westinghouse, 129 Fed. 105; 63 C. C. A. 607.

City of Frankfort *v.* Deposit, 127 Fed. 812; New Orleans *v.* Steamship, 20 Wall. 387; In re Chetwood, 165 U. S. 443.

Upon the authority of the Debs Case, we are constrained to hold that the order cannot be reviewed, except upon an appeal from the final decree in the cause. — Christensen *v.* Westinghouse, 129 Fed. 96; 63 C. C. A. 598.

Following In re Debs, 158 U. S. 564.

Gould *v.* Sessions, 67 Fed. 163; Nassau *v.* Sprague, 95 Fed. 415; Cary *v.* Acme, 108 Fed. 873; Ex parte Kearney, 7 Wheat. 38; New Orleans *v.* Steamship, 20 Wall. 387; Butler *v.* Fayerweather, 91 Fed. 458; Worden *v.* Searles, 121 U. S. 14.

In deciding that the defendant had violated the injunction, the court necessarily passed upon the question whether the defendant had sold the valves, and whether the valves were an infringement of the complainant's patent. Upon writ of error the court cannot review the questions of fact; its review is confined to the questions of law only. This is the rule when contempt proceedings are under review. — Christensen *v.* Westinghouse, 135 Fed. 774; 68 C. C. A. 476.

In re Debs, 158 U. S. 564; Besette *v.* Conkey, 194 U. S. 334.

§ 538. Appeals — Contempt — Rule of Bessette Case.

The rules of Bessette *v.* Conkey, 194 U. S. 324, are: (1) A finding of fact of disobedience to injunction order by a party to the suit is not open to review on habeas corpus. (2) Finding a person, not a party to the suit, guilty of contempt and imposing a fine is reviewable by writ of error.

In the present case, however, the fine payable to the United States was clearly punitive and in vindication of the authority of the court, and, we think, as such, it dominates the proceeding, and fixes its character. Considered in that aspect, the writ of error was justified and the Circuit Court of Appeals should have taken jurisdiction. — In re Christensen, 194 U. S. 458; 48 L. Ed. 1072; 24 S. Ct. 729.

Bessette *v.* Conkey, 194 U. S. 324; New Orleans *v.* N. Y. 20 Wall. 387; Hayes *v.* Fisher, 102 U. S. 121; Ex parte Debs, 159 U. S. 251; O'Neal *v.* U. S. 190 U. S. 36; Worden *v.* Searles, 121 U. S. 14.

The court below considered the law and the facts, and determined judicially whether or not the defendants should be punished for contempt. It decided that the defendants were not guilty. The question whether or not this decision was right is reviewable on appeal. — Minnesota *v.* Dowagiac, 126 Fed. 746; 61 C. C. A. 352.

Enoch Morgans *v.* Gibson, 122 Fed. 420.

The claim that a defendant in such circumstances must await the final result of the cause in which the injunction was granted before he can have the judgment inflicting fine or imprisonment reviewed upon the theory that the judgment is not final is absolutely unsupportable. If it be an independent and distinct proceeding from the residue of the case, it will be no more final after that case has reached a final decree than when the fine was imposed. To say that he may pay his fine or endure his imprisonment and review the legality of the matter at some indefinite time in the future is to deny, in effect, the right of review at all. — Bullock *v.* Westinghouse, 129 Fed. 105; 63 C. C. A. 607.

§ 539. Appeals — Decision on Merits.

Whether upon such an appeal the court will hear and determine the case on its merits is not here decided. — Davis *v.* Edison, 60 Fed. 276; 8 C. C. A. 615.

Distinguished in Thomson *v.* Kelsey, 75 Fed. 1005.

Blount *v.* Societe, 53 Fed. 98; American *v.* National, 51 Fed. 229; Consolidated *v.* Accumulator, 55 Fed. 485; Hart *v.* Buckner, 54 Fed. 925; Workingmen's Council *v.* New Orleans, 57 Fed. 85; Daniell Ch. Pr. 1462 (4 ed.); High Inj. sec. 1696; Curtis *v.* Wheel Co. 58 Fed. 784.

It follows, therefore, that if the court finds it essential to pass upon the merits of the case in order to determine the propriety of the injunction, and in no way reserves to the lower court a right to review or examine the grounds upon which it had originally proceeded, the decision of the court becomes the law of the case. — Bissell *v.* Goshen, 72 Fed. 545; 1 C. C. A. 25.

Overruling, Watch Co. *v.* Robbins, 52 Fed. 337.

Daniell Ch. 2, 1492; Newark *v.* Newark, 23 N. J. Eq. 380; 1 Hill & W. Code, Tenn. 3874; Mathis *v.* Meek, 1 Heisk. 534; Graham *v.* Merrill, 5 Cold. 631; Shinkle *v.* Covington, 83 Ky. 420; Maxwell *v.* Schwartz, 57 N. W. 141; Schlender *v.* Corey, 30 Minn. 501; Ryerson *v.* Eldred, 18 Mich. 12; Perrin *v.* Lepper, 72 Mich. 541; Richmond *v.* Atwood, 52 Fed. 10; Marden *v.* Mfg. Co. 67 Fed. 809; Construction *v.* Young, 59 Fed. 721; Mfg. Co. *v.* Griswold, 67 Fed. 1017; Electric *v.* Edison, 59 Fed. 501; American *v.* National, 51 Fed. 229; Curtis *v.* Wheel, 58 Fed. 784, Union *v.* Johnson, 61 Fed. 940; Consolidated *v.* Accumulator, 55 Fed. 485;

Green *v.* Mills, 69 Fed. 852; Jones *v.* Munger, 50 Fed. 785; Electric *v.* Edison, 61 Fed. 834; Andrews *v.* Pipe, 61 Fed. 782; Piedmont *v.* Pacific, 58 Fed. 226.

Every application to a circuit court for an injunction or temporary restraining order should be considered on its merits, and the ruling or opinion of another court upon any question involved should be given only its just and reasonable weight according to the circumstances. The statute gives the right of appeal; the Supreme Court has determined that the review, so far as may be, shall extend to the merits; and it is not consistent to say that the decision of an inferior court must be pronounced on one basis and reviewed on another. — Stover *v.* Mast, 89 Fed. 333; 32 C. C. A. 231.

Shortly after its organization, this court had occasion to enunciate the proposition that where there was an appeal from an order granting a preliminary injunction, the court below having followed an adjudication at circuit sustaining the patent after contest upon pleading and proof, such adjudication is to have the same weight which it should have before the circuit court. "Appeals from orders," we said "are not to be confounded with appeals from final decrees, and the rule which we have thus stated will not prevent our review of the adjudication itself, whenever it and the record upon which it was made shall be presented upon appeal. The tendency of any different rule would be to produce confusion, and convert the review of the interlocutory order into a review of the final adjudication upon which it was founded." — Consolidated *v.* Hays, 100 Fed. 984; 41 C. C. A. 142.

American *v.* National, 51 Fed. 229.

That the appellate court may, in a proper case, consider the validity of the patent in suit upon an appeal from a preliminary injunction order, see Stearns-Roger *v.* Brown, 114 Fed. 939; 52 C. C. A. 559.

§ 540. Appeals — Dismissing Bill.

If an injunction is granted by an interlocutory order and the order is taken on appeal to the circuit court of appeals, and that court is of the opinion that the patent is, on its face, absolutely void, it would be a waste of time and an unnecessary continuance of litigation to simply enter an order setting aside the injunction and remanding the case for further proceedings. The direct and obvious way is to order a dismissal of the case, and thus end the litigation. — Ex Parte National, 201 U. S. 156; 26 S. Ct. 404.

That the court may consider the entire subject matter of a litigation and make final disposition on an appeal from an injunction order, see Rubens *v.* Wheatfield, 93 Fed. 677; 35 C. C. A. 537.

The case is one in which it is apparent that the complainant cannot ultimately prevail, and following the practice sanctioned by Mast *v.* Stover. 177 U. S. 485, the bill should be dismissed. — Brill *v.* Peckham, 108 Fed. 267; 47 C. C. A. 315.

§ 541. Appeals — Prior Adjudication.

The appellate court is to examine the interlocutory decision of the circuit court in the light of the affidavits, and of the history of the patent, and the adjudications thereon, which were presented to that court. The adjudication upon which the motion for preliminary injunction was based, not being the subject of the appeal, it is to have the same weight which it should have before the circuit court. — American *v.* National, 51 Fed. 229; 2 C. C. A. 165.

While the circuit court, upon a motion for an injunction, might deem itself constrained, contrary to its own judgment, to adopt the rulings of another circuit court, upon questions of law made at a final hearing, this court is at liberty to re-examine such rulings, dispose of the questions of law conformably to its own convictions and accord to the former adjudications such weight as in its own judgment it was entitled to upon the motion. In the absence of some controlling reason for disregarding it, the former adjudication should have the same weight in this court which it has as the foundation for a preliminary injunction before the circuit court. — American *v.* National, 51 Fed. 229; 2 C. C. A. 165.

Purifier Co. *v.* Christian, 3 Ban. & A. 42.

The vital question in this case is presented with approximate accuracy upon the face of the patent, and does not depend upon controverted questions of fact. This court has, therefore, been at liberty, in accordance with its statement of the weight to be given to a prior adjudication upon an appealed order for a preliminary injunction (American *v.* National, 51 Fed. 229) to re-examine the former adjudication, and dispose of the question in accordance with its own convictions. — Curtis *v.* Overman W. Co. 58 Fed. 784; 7 C. C. A. 493.

In Davis *v.* Edison, 60 Fed. 276, this court suggested that, on an appeal of this class, it properly would not cut down the appellant to the mere question whether the court below had acted within the limits of its discretion. Nevertheless, this court, in the determination of the question of the allowance of a temporary injunction in favor of a patentee, is governed by the same general rules as the circuit court, and must, with necessary limitations, put itself in the place of that court. This observation applies to the extent of requiring us to give their proper effect to prior adjudications establishing the validity of the patent in suit, or determining its construction. The force of such adjudications in connection with applications for temporary injunctions in patent causes has been uniformly stated in substantially the same terms, but nowhere better than by the circuit court of appeals for the seventh circuit in Electric *v.* Edison, 61 Fed. 83: "It may be difficult to formulate a rule that will comprehend all the conditions which could be presented, but we think it safe to say that in general, when the validity of a patent has been sustained by prior adjudication upon final hearing, and after bona fide and strenuous contest, the matter of its validity upon motion for preliminary injunction is no longer at issue, all defense, except that of infringement, being reserved to the final hearing, subject however, to the single exception that, where a new defense is interposed, the evidence to support it must be so cogent and persuasive as to impress the court with the conviction that, if it had been presented and considered in the former case, it would probably have availed to a contrary conclusion." — Bresnahan *v.* Tripp, 72 Fed. 920; 19 C. C. A. 237.

The adjudication upon which the motion for preliminary injunction was based, not being the subject of appeal, is to have the same weight which it should have before the circuit court, in the absence of some controlling reason for disregarding it. — Consolidated *v.* Littauer, 84 Fed. 164; 28 C. C. A. 133.

American *v.* National, 51 Fed. 229.

Upon an appeal fron an order granting an injunction, the Circuit Court of Appeals is at liberty to re-examine the decision of another circuit court, which ruling, the court granting the injunction felt constrained to follow, and

dispose of the questions of law, conformably to its own convictions. — Thomson-Houston *v.* Western, 158 Fed. 813 (2d case); 86 C. C. A. 73.

§ 542. Appeals — Refusal to Grant.

It is to be noted that the act relative to appeals has been twice amended, and that since the last amendment (Act June 6, 1900, 31 Stat. 660) no appeal lies from an order refusing or dissolving an injunction. Many decisions, rendered while the law distinctly allowed appeals from orders refusing or dissolving injunctions, are now without force or effect.

It will be noted that after this second amendment (Chap. 803, Act June 6, 1900) the section remained with no provision authorizing an appeal from an order refusing or dissolving an injunction. — Westinghouse *v.* Christensen, 104 Fed. 622; 44 C. C. A. 92.

This was an appeal by the complainant from so much of an interlocutory decree in the court below, entered after hearing on bill, answer, and proofs, as refused an injunction asked for by it. The circuit courts of appeals in two circuits have decided that this act abrogated the provisions of law giving us jurisdiction in appeals of this character. — National *v.* Automatic, 105 Fed. 670; 44 C. C. A. 664.

Wire Co. *v.* Boyce, 104 Fed. 172; Westinghouse *v.* Christensen, 104 Fed. 622.

That an appeal from an order refusing a preliminary injunction, does not lie in view of the act of 1900, see Western *v.* Williams-Abbott, 108 Fed. 952; 48 C. C. A. 159.

Wire Co. *v.* Boyce, 104 Fed. 172; Westinghouse *v.* Christensen, 104 Fed. 622.

That an appeal from an order denying a motion for a preliminary injunction does not lie, see American *v.* Vaught, 108 Fed. 571; 47 C. C. A. 496.

Wire Co. *v.* Boyce, 104 Fed. 172; Westinghouse *v.* Christensen, 104 Fed. 622.

Under Act Cong. June 6, 1900 (31 Stat. 660) this court no longer can entertain an appeal from an interlocutory decree refusing to dissolve an injunction. — Berliner *v.* Seaman, 113 Fed. 750; 51 C. C. A. 440.

Westinghouse *v.* Christensen, 104 Fed. 622; Wire Co. *v.* Boyce, 104 Fed. 173; National *v.* Automatic, 105 Fed. 670; Heinze *v.* Mining Co. 107 Fed. 165; Rowan *v.* Ide, 107 Fed. 161.

That a party defendant not brought within the terms of a preliminary injunction has no right of appeal, see Stearns-Roger *v.* Brown, 114 Fed. 939; 52 C. C. A. 559.

§ 543. Appeals — Sound Discretion.

By no action of the court below could it enable this court finally to determine all the questions between the parties to the action, because it is not within the proper province of this court to do so on an appeal from an order granting a preliminary injunction. We are to consider the correctness of the order from the same standpoint as that occupied by the court granting it, and if we find, after a consideration of the grounds presented to that court for its action, that its legal discretion to grant or withhold the order was not improvidently exercised, we should not disturb its action. — Duplex *v.* Campbell 69 Fed. 250; 16 C. C. A. 220.

Blount *v.* Societe, 53 Fed. 98.

That on such appeal the question to be considered is whether the injunction was improvidently granted, see U. S. Gramophone *v.* Seaman, 113 Fed. 745; 51 C. C. A. 419.

Welsbach *v.* Cosmopolitan, 104 Fed. 84; Ritter *v.* Ulman, 78 Fed. 222.

It is enough to say that appellants failed to show that the provisional order was improvidently entered; and, inasmuch as the case will probably be before us again on its final hearing, no further reasons for our judgment need be given. — Bartholomew *v.* Union, 113 Fed. 289; 51 C. C. A. 250.

The law has placed upon these courts the duty to exercise this discretion. It has imposed upon them the responsibility of its exercise wisely, and has left them much latitude for action within the rules which should guide them; and if there has been no violation of those rules, an appellate court ought not to interfere with the results of the exercise of their discretion. — Stearns-Roger *v.* Brown, 114 Fed. 939; 52 C. C. A. 559.

The case is now in the hands of the learned judge below, who heard it upon its merits, and who states in his opinion granting the preliminary injunction that his purpose is to look into the subject anew, and form an individual judgment of his own. We are entitled to the benefit of his views upon the serious question whether or not the defendants' machines infringe the patent in suit, and upon the merits of the case generally under the plenary proofs. We therefore will confine ourselves to the single question whether or not the court erred in granting the preliminary injunction. — American *v.* Cimiotti, 118 Fed. 838; 55 C. C. A. 513.

We can see no abuse of discretion in the action of the court below. — Rahley *v.* Columbia, 122 Fed. 623; 58 C. C. A. 639.

Southern Pacific *v.* Earl, 82 Fed. 690.

The record of the case shows that the Circuit Court proceeded in the case with much deliberation and great care. While a preliminary injunction is to be cautiously used by a court of equity, it should not be withheld where, in the exercise of a sound judgement, it is necessary to prevent injustice. — Continuous *v.* Schmertz, 153 Fed. 577; 82 C. C. A. 587.

§ 544. Appeals — What Considered on.

We know of no reason why to save a protracted litigation, the court may not order the bill to be dismissed. Ordinarily, if the case involve a question of fact, we think the parties are entitled to be put to their evidence. — Mast *v.* Stover, 177 U. S. 485; 44 L. Ed. 856; 20 S. Ct. 708.

Gardt *v.* Brown, 113 Ill. 475; Green *v.* Mills, 69 Fed. 852; Knoxville *v.* Africa, 77 Fed. 501.

It will be noticed that the appeal is allowed from an interlocutory order or decree granting or continuing an injunction, that it must be taken within 30 days, that it is given precedence in the appellate court, that the other proceedings in the lower court are not to be stayed, and that the lower court may require an additional bond. Obviously that which is contemplated is a review of the interlocutory order, and of that only. It was not intended that the cause as a whole should be transferred to the appellate court prior to the final decree. The case, except for the hearing on the appeal from the interlocutory order, is to proceed in the lower court as though no such appeal had been taken, unless otherwise specially ordered. — Ex Parte National, 201 U. S. 156; 26 S. Ct. 404.

We have held at the present term that on an appeal under the seventh section of the Act of March, 1891, from an interlocutory order granting an injunction, this court, even with the consent of the parties, could not properly pronounce any final judgment or decree on the merits of the controversy in respect to the validity of the patent involved, and its infringement, inasmuch as these questions remained in the lower court for final adjudication, in the exercise of its original jurisdiction. But while this court, on appeals like the present, may not properly pass upon the merits of the controversies involved in the litigation, it may incidentally consider the questions relating to the validity and infringement of the patent, as well as all other facts bearing upon the propriety of sustaining or dissolving the injunction awarded. — Blount *v.* Societe, 53 Fed. 98; 3 C. C. A. 455.

Watch Co. *v.* Robbins, 52 Fed. 337.

It is only when the determination of the question whether the injunction was erroneous so requires us to look into the whole case on its merits that we shall feel disposed to follow the course pursued in Richmond *v.* Atwood, 52 Fed. 10. — Gamewell *v.* Municipal, 61 Fed. 208; 9 C. C. A. 450.

There would seem to be some divergence of opinion in the circuit courts of appeals upon the question of the extent to which this court should go in review of an exercise of discretion in the court below in granting a preliminary injunction. Jones *v.* Munger, 50 Fed. 785; Watch Co. *v.* Robbins, 52 Fed. 337; Blount *v.* Societe, 53 Fed. 98; Consolidated *v.* Accumulator, 55 Fed. 485; American *v.* National, 51 Fed. 229; Davis *v.* Edison, 60 Fed. 276. — Electric *v.* Edison, 61 Fed. 834; 10 C. C. A. 106.

Where a preliminary injunction is granted upon a prima facie showing and without the determination of the merits, this court will ordinarily, on an appeal, consider only the question as to whether, on the prima facie case made, there has been an abuse of discretion. Such preliminary injunctions are ordinarily intended only to operate pendente lite, or until a hearing on the writs can be had. They are granted upon a mere summary showing upon affidavits. Their issuance is not a matter of right, and rests in the sound discretion of the judge. — Bissell *v.* Goshen, 72 Fed. 545; 19 C. C. A. 25.

Blount *v.* Societe, 53 Fed. 98; Duplex *v.* Campbell, 69 Fed. 250; Thompson *v.* Nelson, 71 Fed. 339.

It is well settled that on appeals like this, this court will ordinarily look into the case merely to see whether the discretion of the court below in issuing or withholding the order of preliminary injunction has been abused; and that only in exceptional cases, in which a controlling question of law may be as fully and fairly considered as upon a final hearing, and the court has no doubt upon it, will it finally dispose of the injunction and the case on a hearing like this. — Thomson-Houston *v.* Ohio, 80 Fed. 712; 26 C. C. A. 107.

Duplex *v.* Campbell, 69 Fed. 250; Mayor *v.* Africa, 77 Fed. 501.

The preliminary question arises whether upon this appeal the court should undertake to examine, and in a sense review, collaterally the consideration of a Connecticut cause or should confine itself to the enquiry whether, from the standpoint of the court below, the order was properly granted. In American *v.* National, 51 Fed. 229, we have laid down the rule that while the circuit court might deem itself constrained to adopt the rulings of another circuit, this court is at liberty to reëxamine the entire question; and we adhere to the views which were then expressed. — Thomson-Houston *v.* Hoosick, 82 Fed. 461; 27 C. C. A. 419.

The decision of the judge who made the order will not be reversed unless it appears, after a consideration of all the evidence upon which this action is based, that his legal discretion was improvidently exercised. — Southern *v.* Earl, 82 Fed. 690; 27 C. C. A. 185.

Duplex *v.* Campbell, 69 Fed. 253; Bissell *v.* Goshen, 72 Fed. 570; Blount *v.* Societe, 53 Fed. 98.

The function of the court of appeals, in hearings like this, is such that it may properly affirm an order refusing a preliminary injunction in one case and an order granting it in another on substantially the same evidence, because it is easy to conceive a case presented upon a preliminary hearing such an evenly balanced controversy, that the court above would affirm the action of the court below, whether one way or the other, when that action involves the exercise not of exact judicial judgment but merely judicial discretion. — Societe *v.* Allen, 90 Fed. 815; 33 C. C. A. 282.

The law is well settled that upon such an appeal the decision of the judge who made the order will not be reversed unless it appears, after a consideration of all of the evidence upon which the action was based, that his legal discretion to grant or withhold the order was improvidently exercised. — Pacific *v.* Alaska, 100 Fed. 462; 40 C. C. A. 494.

Blount *v.* Societe, 53 Fed. 98; Jensen *v.* Norton, 64 Fed. 662; Southern *v.* Earl, 82 Fed. 690; Thompson *v.* Nelson, 71 Fed. 339; Duplex *v.* Campbell, 69 Fed. 252.

Note: It is evident that under the amendment to the court of appeals act, an appellate court would not consider the question of improvidence in refusing an injunction as above stated.

In determining whether in a given case, the circuit court errs in refusing an injunction pending the litigation, it is to be remembered that such an injunction in no case is a matter of strict right. The application for it is addressed to the sound discretion of the Court. It may be granted or refused unconditionally or upon terms; and upon appeal ordinarily the question is simply whether the court acted improvidently. Only when clearly erroneous will the order be reversed. — Welsbach *v.* Cosmopolitan, 104 Fed. 83; 43 C. C. A. 418.

Ritter *v.* Ulman, 78 Fed. 222.

We have repeatedly held that an order granting an injunction will not be reversed on appeal unless it clearly appears that the Court below has fallen into a misapprehension respecting the facts or law of the case in a matter vital to the issue. — Leow *v.* German American, 107 Fed. 949; 47 C. C. A. 94.

Duplex *v.* Campbell, 69 Fed. 250; Thompson *v.* Nelson 71 Fed. 339; Proctor *v.* Globe, 92 Fed. 357.

Counsel invoke the conceded rule that, where it is not clear that the defendant is guilty of infringement, and the question is grave and difficult, a temporary injunction should not be granted on ex parte affidavits. Sprague *v.* Nassau, 95 Fed. 821; Hatch *v.* Electric, 100 Fed. 975. But while this rule prevails in all its force in the trial court, it is met in the appellate court by another of great cogency, — by the rule that where the court below has considered a question, and made a finding on conflicting evidence, its conclusion is presumptively correct, and it ought not to be disturbed unless an obvious error has intervened in the application of the law, or some serious mistake has been made in the consideration of the facts. — Stearns-Roger *v.* Brown, 114 Fed. 939; 52 C. C. A. 559.

Kinlock *v.* Western, 113 Fed. 659; National *v.* Interchangeable, 106 Fed. 693; Mann *v.* Bank, 86 Fed. 51; Tilghman *v.* Proctor, 125 U. S. 136; Kimberly *v.* Arms, 129 U. S. 512; Furrer *v.* Ferris, 145 U. S. 132; Warren *v.* Burt, 58 Fed. 101; Plow *v.* Carson, 72 Fed. 387; Trust Co. *v.* McClure, 78 Fed. 209; Exploration *v.* Adams, 104 Fed. 404.

In view of the fact that the question of infringement cannot be authoritatively determined upon this appeal, and also because testimony taken under examination and cross-examination is much more satisfactory and far more reliable than the ex parte affidavits which this record contains, and because the affidavits might lead to one conclusion and the testimony to another, this court declines to enter upon a consideration and determination of the question of infringement upon this appeal. — Stearns-Roger *v.* Brown, 114 Fed. 939; 52 C. C. A. 559.

The correctness of the order must be considered under the facts and circumstances of the case as presented below, and "from the same standpoint as that occupied by the court granting it," and, if its legal discretion "was not improvidently exercised, we should not disturb its action." — Austin *v.* American, 121 Fed. 76; 57 C. C. A. 330.

Duplex *v.* Campbell, 69 Fed. 250; Stearns-Roger *v.* Brown, 114 Fed. 939.

The order will be reversed only when clearly erroneous. The fact of infringement must be clearly established beyond reasonable doubt. — Austin *v.* American, 121 Fed. 76; 57 C. C. A. 330.

Welsbach *v.* Cosmopolitan, 104 Fed. 83; Standard *v.* Crane, 56 Fed. 718; Menasha *v.* Dodge, 85 Fed. 971; McDowell *v.* Kurtz, 77 Fed. 206; Blakey *v.* National, 95 Fed. 136.

The only question for review on this appeal is whether the discretion of the trial court was improvidently exercised. — Austin *v.* American, 121 Fed. 76; 57 C. C. A. 330.

Welsbach *v.* Cosmopolitan, 104 Fed. 83; U. S. Grainophone *v.* Seaman, 114 Fed. 745; Stearns-Roger *v.* Brown, 114 Fed. 939.

The motion for rehearing having been argued upon new proofs, and having been denied, two new orders were entered, the one continuing the injunction, the other suspending its operation pending appeal. In these circumstances, a new state of facts having been presented and the rights of the parties having been determined anew thereunder, the practical effect was the same as though the court had originally vacated the order instead of suspending it. — Armat *v.* Edison, 125 Fed. 939; 60 C. C. A. 380.

We do not feel disposed to modify such order, nor to discuss the issues presented here on ex parte affidavits in an opinion which might constrain the judge to whom at final hearing the same issues may be differently presented. — United *v.* Silver, 128 Fed. 925; 63 C. C. A. 110.

That the record on appeal on motion for a preliminary injunction should contain all of the affidavits and papers used in the hearing below, see Staples *v.* Lord, 148 Fed. 15; 78 C. C. A. 106.

There are many questions arising on a motion for a preliminary injunction which cannot be satisfactorily determined until the proofs are taken, and this court has consistently refused to decide doubtful questions depending upon disputed facts upon appeals from such orders. — Thomson-Houston *v.* Western, 158 Fed. 813; 86 C. C. A. 73.

§ 545. Appeals — Miscellaneous Rulings.

Where a plaintiff has an adjudication that he is entitled to an injunction, he has rights which cannot be abridged or stayed by language which is not more clear and unambiguous than that contained in sec. 7 of the Act of Mar. 3, 1891, Chap. 517, and the applicant therefore has not an absolute right to a supersedeas of the injunction. — Re Haberman, 147 U. S. 525; 37 L. Ed. 266; 13 S. Ct. 527.

We think the term "interlocutory order or decree," was used in its broadest sense, and that the purpose of Congress was to confer the right of appeal from any decree or order granting an injunction at any stage of the proceeding, whether technically preliminary, interlocutory or final. — Richmond *v.* Atwood, 52 Fed. 10; 2 C. C. A. 596.

Jones *v.* Munger, 50 Fed. 785.

It seems to us evident that it was intended to remove the restriction and extend the right to all that class of interlocutory orders or decrees which interfere with the possession of property, or operate in restraint of a party's business. — Richmond *v.* Atwood, 52 Fed. 10; 2 C. C. A. 596.

The appeal given by the seventh section of the act of Mar. 3, 1891, is a privilege or option and in no way affects or diminishes the right to appeal from the final decree. — Marden *v.* Campbell, 67 Fed. 809; 15 C. C. A. 26.

. As, ordinarily, questions arising under the statutes relating to patents for inventions can best be determined on a final hearing, we ought not to encourage delays in the regular progress of a bill in equity pending proceedings of the character we are now considering. — Bresnahan *v.* Tripp, 72 Fed. 920; 19 C. C. A. 237.

If an appeal is allowed from an interlocutory order or decree granting an injunction, the injunction will continue in force pending the appeal, unless stayed by order of the court granting the appeal. The granting of a supersedeas rests in the judicial discretion of the court, and its discretion to grant or refuse a supersedeas will not be controlled by mandamus. — Bissell *v.* Goshen, 72 Fed. 545; 19 C. C. A. 25.

In re Haberman, 147 U. S. 525; Overruling Societe *v.* Blount, 51 Fed. 610.

We do not think, in the present status of this suit, no final decree having yet been announced, that we are called upon to determine the effect of this affirmance should the case be again appealed after the account of profits and damages has been stated and confirmed. The mandate will simply recite that the court finds no error in the decree awarding an injunction. — Goshen *v.* Bissell, 72 Fed. 67; 19 C. C. A. 13.

Watch Co. *v.* Robbins, 64 Fed. 384.

Although the injunction order appealed from is not a preliminary injunction intended to operate only until a hearing upon the merits, it is nevertheless an "interlocutory decree," inasmuch as the decree was not final in an appealable sense. This appeal was taken within 30 days. The cause is therefore one which is entitled to take "precedence" upon the calendar of this court. — Star *v.* General, 129 Fed. 102; 63 C. C. A. 604.

These three appeals arose out of the bill in equity. The circuit court issued an interlocutory injunction, and number 738 is an appeal therefrom. In the meantime the circuit court had entered judgment for complainant on final

hearing. In view of our conclusions as to the final decree, this appeal is now a moot case, and should be disposed of with a judgment declaring that the interlocutory order has been superseded. — Howard *v.* Gibbs, 157 Fed. 676; 85 C. C. A. 348.

§ 546. Bond.

Where the complainant is not manufacturing under the patents sued on, and its injury is confined to its naked rights with no consequential injury to its business and where an injunction against defendant would break up its business and throw several hundred men out of employment, its loss would be out of proportion to complainant's loss from infringement, the defendant should be permitted to give adequate bond. — Duplex *v.* Campbell, 69 Fed. 250; 16 C. C. A. 220.

It would seem that where the question of infringement is doubtful, the court may require a bond in lieu of a restraining order. — Seiler *v.* Fuller, 102 Fed. 344; 42 C. C. A. 386.

That the Court may order the giving of a bond as an alternative measure, see Loew *v.* German-American, 107 Fed. 949; 47 C. C. A. 94.

It seems that the preliminary injunction was improvidently granted by the circuit court, the defendants below being able to respond in damages, there being no threatened irreparable injury, no estoppel, no sufficient acquiescence, and no unfair competition in trade. Defendants should have been required to give bond for an accounting, and the temporary injunction refused. — American *v.* Phœnix, 113 Fed. 629; 51 C. C. A. 339.

Note: Why, under the most radical construction of any known rule, a bond should be required in this case is past finding out.

The condition for security imposed upon the complainants and the privilege accorded to the defendants to dissolve the injunction by giving counter security show a cautious exercise by the court of its legal discretion. — American *v.* Cimiotti, 118 Fed. 838; 55 C. C. A. 513.

That when the question on appeal shows grave doubt of novelty, the court may order a bond in lieu of injunction, see Co-operating *v.* Hallock, 128 Fed. 596; 64 C. C. A. 104.

That inequitable conduct on the part of a defendant will deprive him of the privilege to ask that a bond be required instead of an injunction, see Elite *v.* Dececo, 150 Fed. 581; 80 C. C. A. 567.

§ 547. Corporations and Corporation Officers.

Some of the defendants further contend that, even if the defendant corporation should be enjoined in this case, no injunction should issue against the other defendants, its officers. Entirely apart from the question of the liability of an officer in a corporation, for damages caused by infringement permitted by him, on behalf of the corporation, there can be no doubt that in a case like this the officers of the corporation may be enjoined from further infringement. — Hart *v.* Anchor, 92 Fed. 657; 34 C. C. A. 606.

That a public corporation, having due notice of the prospective infringement, and having taken a bond for its protection, may be enjoined pendente lite, see, Pelzer *v.* Binghamton, 95 Fed. 823; 37 C. C. A. 288.

§ 548. Discontinuance or Non-Use.

The fact that defendants have gone out of business or are not infringing within the circuit is no reason why an injunction should not be made permanent. — Braddock *v.* Macbeth, 64 Fed. 118; 12 C. C. A. 70.

Appellees claim that, pending suit, they have ceased to make the transmitter complained of; but they do not exhibit what further changes they have made, they give no assurances for the future, and throughout this litigation they have denied appellant's rights. There is no reason why an injunction should not issue. — Stromberg-Carlson *v.* American, 127 Fed. 704; 62 C. C. A. 460.

The pleas do not state a complete bar to the suit. Conceding all their averments to be true, the court may retain the case in order to do exact equity between the parties. If the case were at final hearing upon the precise facts now developed, the court might, it is true, feel warranted in suspending the injunction, but it would not be compelled to do so. The probability is that it would follow the practice, so frequently adopted, where the defendant admits past infringement and is shown to be in a position where he can at any time resume, namely, issue the injunction. The argument in such circumstances is very simple. If the defendant be honest in his protestations, an injunction will do him no harm; if he be dishonest, the court should place a strong hand upon him in limine. — General *v.* New England, 128 Fed. 738; 63 C. C. A. 448.

Chemical *v.* Vice, 14 Blatchf. 179; Wollensak *v.* Reiher, 28 Fed. 427; Celluloid *v.* Arlington, 34 Fed. 324; Sawyer *v.* Turner, 55 Fed. 979; Electric *v.* Henzel, 48 Fed. 375.

It is immaterial that pending the litigation there has been no further infringement. Whether there has been or not is only a matter for consideration if an accounting for damages shall be ordered. They have never put upon the record their purpose not to duplicate the device which they did make, nor contradicted the evidence that they intended to make and sell such devices. The assertion of a right to make devices complained of as an infringement, in the absence of a very express denial of a purpose to exercise the right claimed, justifies the presumption that further infringement is to be apprehended if that device shall prove to be an infringement. Cayuta *v.* Kennedy, 127 Fed. 355; Westinghouse *v.* Press, 127 Fed. 822; Potter *v.* Crowell, Fed. Cas. 11,323. The case is distinguishable from that of Globe-Wernicke *v.* Brown, 121 Fed. 97 in the fact that an intention to continue to make and sell devices complained of was avowed before suit was brought, and is not disavowed upon the record. — Johnson *v.* Foos, 141 Fed. 73; 72 C. C. A. 105.

It was suggested at the oral argument that an unused patent is not entitled to the protection given by the extraordinary remedy of an injunction. This contention was not made in defendant's brief. While this question has not been directly passed upon, so far as we are informed, in any considered decision of the Supreme Court, yet the weight of authority is in favor of complainant. — Continental *v.* Eastern, 150 Fed. 741; 80 C. C. A. 407.

Fuller *v.* Berger, 120 Fed. 274; Bement *v.* National, 186 U. S. 70; Heaton *v.* Eureka, 77 Fed. 288; Crown *v.* Aluminum, 108 Fed. 845; Broodnax *v.* Central, 4 Fed. 214; Consolidated *v.* Coombs, 39 Fed. 803; Campbell *v.* Manhattan, 49 Fed. 930.

Note: Decision affirmed, Continental *v.* Eastern, 210 U. S. 405. See § 574.

Does the allegation in the answer that defendant does not intend to infringe any more prevent the granting of injunctive relief? When after some infringement and after conduct disclosing danger of a continued or renewed infringement a patentee finds it necessary to incur the expense of bringing a bill to protect his rights, he is entitled to all the remedies which the law affords him, and among them is final adjudication of his rights and a permanent and effective injunction against further infringement, and he should not be driven from the court to which he has rightfully resorted with a mere promise by the offender of better conduct in the future. — Deere *v.* Dowagiac, 153 Fed. 177; 82 C. C. A. 351.

When the validity of complainant's patent is denied, the right to infringe asserted, the possession of a large quantity of infringing machines admitted, and no satisfactory evidence adduced of cessation to infringe for any considerable time before the beginning of the suit, is the danger as threatening as to warrant injunctive relief? Considering the likelihood that an infringement once practised will be repeated as long as the wrong doer believes he is right (as from the pleadings in this case the defendant appears to believe) we think the patentee is entitled to a more effective remedy than a mere promise of this kind. — Deere *v.* Dowagiac, 153 Fed. 177; 82 C. C. A. 351.

Celluloid *v.* Arlington, 34 Fed. 324; White *v.* Walbridge, 46 Fed. 979; Matthews *v.* National, 71 Fed. 518; N. Y. *v.* Chemical, 93 Fed. 827.

§ 549. Discretion of Court.

They are granted upon a mere summary showing upon affidavits. Their issuance is not a matter of right, and rests in the sound discretion of the judge. — Bissell *v.* Goshen, 72 Fed. 545; 19 C. C. A. 25.

Shinkle *v.* Louisville, 62 Fed. 690; Blount *v.* Societe, 53 Fed. 98; Dest. Fed. Prac. 233; 1 High Inj. 7; 2 High Inj. 938, 939, 1026.

The granting of a provisional injunction rests in the sound discretion of the trial court, and it is not necessary that the court should, before granting it, be satisfied from the evidence before it that the plaintiff will certainly prevail upon the final hearing of the cause. — Southern *v.* Earl, 82 Fed. 690; 27 C. C. A. 185.

Georgia *v.* Brailsford, 2 Dall. 402; Blount *v.* Societe, 53 Fed. 98.

§ 550. Expiration of Patent.

Pending the appeal and before argument of the cause in this court, the letters patent in suit expired, and with that expiration the interlocutory injunction appealed from terminated. There is, therefore, nothing remaining for a judgment of this court to act upon. In this condition of the case, the court will no further consider whether the injunction was or was not properly granted, but will dismiss the appeal. — Gamewell *v.* Municipal, 61 Fed. 208; 9 C. C. A. 450.

An appeal from an interlocutory order granting an injunction should be dismissed where, during the pendency of the appeal the patent expired and the injunction ceased to be operative. — Lockwood *v.* Wicks, 75 Fed. 118; 21 C. C. A. 257.

Following, Gamewell *v.* Municipal, 61 Fed. 208.

Little *v.* Burrows, 134 U. S. 547; Mfg. Co. *v.* Wright, 141 U. S. 696; Mills *v.* Green, 159 U. S. 651; Gold *v.* Brown, 74 Fed. 120.

That the expiration of a patent after preliminary injunction was granted and pending appeal from such order, dismisses the appeal, see National *v.* Robertson, 104 Fed. 552; 44 C. C. A. 29.

Gamewell *v.* Municipal, 61 Fed. 208.

The patent had only 4 months and 5 days to run. The circuit court decided in favor of the complainant, and, we think rightly. The bill prayed that a "provisional or preliminary injunction be issued," and upon the facts charged such relief might have been granted within the life of the patent. — Chinnock *v.* Paterson, 112 Fed. 531; 50 C. C. A. 384.

Ross *v.* City, 63 Fed. 466; Lake Shore *v.* National, 110 U. S. 229; Clark *v.* Wooster, 119 U. S. 322; Beedle *v.* Bennett, 122 U. S. 71.

The court below awarded a perpetual injunction, but, the complainant having waived any right it might have had to an account, no accounting was ordered. The patent expired after argument on appeal. Thus the injunction became inoperative, and nothing was left for a judgment of this court to act upon. — Chapin *v.* Friedberger, 158 Fed. 409; 85 C. C. A. 519.

Hatch *v.* Reardon, 204 U. S. 160; Mills *v.* Green, 159 U. S. 651; Gamewell *v.* Municipal, 61 Fed. 208; Lockwood *v.* Wicks, 75 Fed. 118; American *v.* Vail, Fed. Cas. 308.

This patent expires June 23 (opinion Apr. 8). While, probably the complainant cannot materially suffer by the continuance of the use of the device for the few months remaining until the expiration of the patent, for us to compel the respondent corporation to reorganize its looms in any essential particulars, or even to stop them for the minimum period of time in which such reorganization could be effected, might impose a penalty in excess of the probable value of the invention covered by the claim in suit. What we have already said is sufficient to show that the invention carries only a minimum of what is patentable. In this connection we refer to the practical rules applied by the circuit court in Westinghouse *v.* Burton, 70 Fed. 619, affd. 77 Fed. 301. We also refer to the authorities relied on in the opinion of the circuit court in that litigation. It is true that case related only to a preliminary injunction, as well as did the cases cited. Nevertheless the underlying substantial rule applies here as well as there. Injustice is not to be accomplished by equity either on an interlocutory proceeding or a final one. The complainant may, perhaps, be fully compensated if it is made sure that it will receive whatever damages it may have sustained, if any, or a reasonable royalty, or the equivalent thereof, representing the value of the patented improvement. Therefore it may be that the circuit court should make an alternative provision, so that the respondent corporation might at its option be relieved from an injunction if it compensates the complainant for profits, damages, and royalty, or the equivalent thereof, so far as the complainant may be justly entitled to all or any of them, or if it satisfies the court that it will so compensate the complainant by giving security therefor or otherwise. — Draper *v.* American, 161 Fed. 728; 88 C. C. A. 588.

§ 551. General Rules for Granting.

In Standard *v.* Crane, 56 Fed. 718, this court declared the doctrine which must prevail in this circuit respecting the allowance of preliminary injunctions in patent cases. We there said that to authorize a court, in advance of a decree upon the merits, to allow an injunction, not only must the infringement be without reasonable doubt, but the rights of the patentee must be clear; and, failing prior adjudication in favor of the validity of the patent, there must be shown such continued public acquiescence in the exclusive

right asserted as raises a presumption of validity not arising from the letters patent alone; and that, if the controversy between the parties be substantial, and not colorable merely, courts of equity are not disposed to adjudicate upon the rights of parties otherwise than according to the approved usages of chancery. — Williams *v.* Breitling, 77 Fed. 285; 23 C. C. A. 171.

Ertel *v.* Stahl, 65 Fed. 519.

The principle upon which all injunctions are granted in patent causes, preliminary and final, is that an action at law does not give a complete remedy to the complainant whose property is invaded. The infringement of a patent is a constantly recurring grievance, which cannot be adequately prevented but by an injunction. "It is quite plain that, if no other remedy could be given in cases of patents and copyrights than an action at law for damages, the inventor or author might be ruined by the necessity of perpetual litigation without ever being able to have a final establishment of his rights." Story, Eq. Jur. sec. 931. A decree for damages and profits in an equity cause would fall short of adequate redress to the patentee. He is entitled to an injunction as well as to an accounting of damages and profits. Indeed, the accounting is but incidental to the relief by injunction and it is the right to this relief which alone gives a court of equity jurisdiction. "A recovery does not vest the infringer with the right to continue the use, as the consequence of it may be an injunction restraining the defendant from the further use of it." Suffolk Co. *v.* Hayden, 3 Wall. 315. In Penna. *v.* Libby, L. R. 3 Eq. 308, a suit upon a patent against a defendant who was merely a user, the vice chancellor, in awarding an injunction and an account, said: "I cannot in the decree do less than give the plaintiff his full right, and I cannot bargain for him what he may choose or may not choose to do." — Allington *v.* Booth, 78 Fed. 878; 24 C. C. A. 378.

The respondent, while under the injunction, is ordinarily a constant loser, and never regains his losses unless the complainant has given a bond. Therefore in this class of cases the courts usually hold that unless the patent is supported by public acquiescence or prior adjudication, or some other peculiar condition, the complainant's rights must be free from doubt, to entitle him to a preliminary injunction. — Wilson *v.* Consolidated, 88 Fed. 286; 31 C. C. A. 533..

Rob. Pat. sec. 1173; North *v.* Kershaw, Fed. Cas. 10,311; Standard *v.* Crane, 56 Fed. 718; Williams *v.* Mfg. Co. 77 Fed. 285.

A continuing trespass is always good ground for the issue of an injunction in the absence of countervailing considerations, because a multiplicity of suits for damages is never an adequate remedy for the loss which constantly repeated trespasses entail. — Stearns-Roger *v.* Brown, 114 Fed. 939; 52 C. C. A. 559.

Mfg. Co. *v.* Booth, 78 Fed. 878.

§ 552. General Rules for Refusing.

It is a cardinal principle of equity jurisprudence that a preliminary injunction shall not issue in a doubtful case. Unless the court be convinced with reasonable certainty that the complainant must succeed at final hearing the writ should be denied. — Hall *v.* General, 153 Fed. 907; 82 C. C. A. 653.

Union *v.* Philadelphia, 75 Fed. 1004.

For full list of cases covering this question, see dissenting opinion of Aldrich, J. in Continental *v.* Eastern, 150 Fed. 741; 80 C. C. A. 407.

Note: See Continental *v.* Eastern, 210 U. S. 405, § 574.

There was no showing that the patents had ever been admitted to be valid by the defendant, or held valid by any court of competent jurisdiction, or that their validity had been generally acquiesced in by the public. Without a showing of one or the other of these facts, no preliminary injunction ought to be granted in a patent case. — St. Louis *v.* Sanitary, 161 Fed. 725; 88 C. C. A. 585.

§ 553. Government.

But no injunction can be issued against officers of a state to restrain or control the use of property already in the possession of the state, or money in its treasury when the suit is commenced, or to compel the state to perform its obligations, or where the state has otherwise such an interest in the object of the suit as to be a necessary party. — Belknap *v.* Schild, 161 U. S. 10; 16 L. Ed. 599; 16 S. Ct. 443.

Louisiana *v.* Jurmel, 107 U. S. 711; Elliott *v.* Wiltz, 107 U. S. 720; Cunningham *v.* Railroad, 109 U. S. 446; Hagood *v.* Southern, 117 U. S. 52; In re Ayers, 123 U. S. 443; North Carolina *v.* Temple, 134 U. S. 22; McGahey *v.* Va. 135 U. S. 662.

In a suit to which the state is neither formally nor really a party, its officers, though acting by its order and for its benefit, may be restrained by injunction, when the remedy at law is inadequate, from doing positive acts for which they are personally and individually liable, taking or injuring the plaintiff's property contrary to a plain official duty requiring no exercise of discretion and in violation of the Constitution or laws of the United States.

But no injunction can be issued against officers of a state, to restrain or control the use of property already in the possession of the state. — Belknap *v.* Schild, 161 U. S. 10; 16 L. Ed. 599; 16 S. Ct. 443.

Harlan and Field dissenting.

Osborn *v.* Bank, 22 U. S. 738; Louisiana *v.* McComb, 92 U. S. 531; Allen *v.* Baltimore, 114 U. S. 311; Pennoyer *v.* McConnaughy, 140 U. S. 1; Elliott *v.* Wiltz, 107 U. S. 711; Cunningham *v.* Mason, 109 U. S. 446; Hagood *v.* Southern, 117 U. S. 52; Re Ayers, 123 U. S. 443; N. C. *v.* Temple, 134 U. S. 22; McGahey *v.* Va. 135 U. S. 662.

Unless expressly permitted by act of Congress, no injunction can be granted against the United States. — Belknap *v.* Schild, 161 U. S. 10; 16 L. Ed. 599; 16 S. Ct. 443.

U. S. *v.* McLemore, 45 U. S. 286; Hill *v.* U. S. 50 U. S. 386; Case *v.* Terrell, 78 U. S. 199.

The courts should not use their writs of injunction so as to retard and embarrass the government in the prosecution of work, the product of which is absolutely essential to the public welfare and the national defense. — Dashiell *v.* Grosvenor, 66 Fed. 334; 13 C. C. A. 593.

§ 554. Grounds for Granting — Acquiescence.

It is well settled that, for the purpose of laying the foundation for a preliminary injunction, it may be shown that the patentee, or those succeeding to his rights, have made, used, and sold the patented article or device for years, during which no other person or persons have assumed to make or sell the same. When all persons, other than the owner of the patent, have for several years refrained from making, using or selling the patented article for the reason that it is patented, when it would be for their interest to adopt it, such acquiescence raises a fair presumption of its validity, sufficient to warrant the issuance of a preliminary injunction to restrain its infringement. So, too, if the patentee has long licensed the use of his invention, which no

one has, for periods varying from two to eight years, assumed to use or sell without such license, there is such acquiescence as lays the foundation for a preliminary injunction. — Blount *v.* Societe, 53 Fed. 98; 3 C. C. A. 455.

Sargent *v.* Seagrave, 2 Curt. 557; Dougherty *v.* West, 2 Fish. P. C. 559; Machine Co. *v.* Williams, 2 Fish. P. C. 138.

While acquiescence, even of a qualified or doubtful nature, may give aid to a patent on a final hearing, yet when relied on to support a temporary injunction, it must be clear in its character and extent. — Wilson *v.* Consolidated, 88 Fed. 286; 31 C. C. A. 533.

Three years before the patent issued, Adam took a license to make heaters according to Folger's specifications. He built the heaters in accordance with the specifications furnished by Folger. His use of the patent imprint ("Victor") and his present contention that, after the withdrawal of the license, he altered the construction so as to avoid the claims, are strong concessions of the patent's validity. So far as Adam is concerned, his actions evidence a sufficient acquiescence. — Adam *v.* Folger, 120 Fed. 260; 56 C. C. A. 540.

Blount *v.* Societe, 53 Fed. 98; White *v.* Surdam, 41 Fed. 790; Steam Gauge *v.* Ham, 28 Fed. 618; Burr *v.* Kimbark, 28 Fed. 574.

Defendant took a license before the patent issued to make the invention and to use the trademark "Victor." He changed the construction, but continued to sell the device under the trademark. *Held:* Without deciding how far, if at all, the use and sale of the Victor heater before the patent was issued should be taken as evidence of acquiescence in the validity of the patent (see Sargent *v.* Seagrave, 2 Curt. 553; Wilson *v.* Store Service, 88 Fed. 286; McDowell *v.* Kurtz, 77 Fed. 206; Corser *v.* Overall Co. 59 Fed. 781; White *v.* Hunter, 47 Fed. 819) we are of opinion on this branch of the case that the temporary injunction was not improvidently issued. The purpose of showing adjudication against others or acquiescence by the public is not to foreclose the question of validity, but to aid the presumption which the patent raises to a point where the court is satisfied that the probabilities of a final decree in the complainant's favor are so strong that the defendant should be excluded at once from practising the alleged invention. — Adam *v.* Folger, 120 Fed. 260; 56 C. C. A. 540.

§ 555. Grounds for Granting — Conduct of Defendant.

The defendant was formerly largely interested under the patent, as promotor, licensee and officer of the licensed company. His prior relations to the patent presented a strong equity in favor of the complainants, if it did not estop him from denying its validity under the authorities. — Blount *v.* Societe, 53 Fed. 99; 53 C. C. A. 98.

Faulks *v.* Kemp, 3 Fed. 898; Onderdonk *v.* Fanning, 4 Fed. 148; Purifier Co. *v.* Guilder, 9 Fed. 155; Telegraph Co. *v.* Himmer, 19 Fed. 322; Parker *v.* McKee, 24 Fed. 808; Alabastine Co. *v.* Payne, 27 Fed. 559; Steam Gauge Co. *v.* Ham, 28 Fed. 618; Burr *v.* Kimbark, 28 Fed. 574.

The appellant discloses no particular equities which ought to induce the withholding the injunction. It has been the deliberate user of a large number of valves, and has preferred to run the risk of an injunction rather than to displace its present equipment. — Westinghouse *v.* Great Northern, 88 Fed. 258; 31 C. C. A. 525.

We are not prepared to say that, even in the absence of any direct evidence at all, as to the infringement, a court might not, on a motion for a preliminary injunction, infer infringement from the disingenuousness of

defendant's witnesses and their reluctance to disclose all the facts. The ordinary rule is that one who has knowledge peculiarly within his own control, and refuses to divulge it, cannot complain if the court puts the most unfavorable construction upon his silence, and infers that a disclosure would have shown the facts to be as claimed by the opposite party. — Societe *v.* Allen, 90 Fed. 815; 33 C. C. A. 282.

§ 556. Grounds for Granting -- Damages Insufficient Remedy.

The rules which control applications for preliminary injunctions in patent causes are so well settled and familiar that it would seem to be quite useless to recapitulate them, much less to cite from text writers or judicial utterances in exposition of them. We are aware of none which disentitle a complainant to the remedy of a preliminary injunction against the infringement of his patent by a defendant who is a user of the infringing article when the facts are such that he would be entitled to it if the defendant were a manufacturer or a seller. — Arlington *v.* Booth, 78 Fed. 878; 24 C. C. A. 378.

It does not lie with the infringer to say that the owner of the patent will be fully compensated by a money recovery, and ought to be satisfied thereby. It is for the latter to say whether he prefers an injunction, or a money recovery, or both; and, at his option, he is at liberty, at final hearing, to waive an account, and insist upon his injunction. — Arlington *v.* Booth, 78 Fed. 878; 24 C. C. A. 378.

The places of business of complainant and defendant were in California and Alaska, the alleged infringement being in Alaska. *Held:* It would obviously be a matter of great difficulty for the complainant, under the most favorable circumstances, to show the damage sustained by it by the unlawful use of the infringing machine, especially where, the record shows, no royalty had been established by the complainant, and where the complainant had always refused to sell any machine made under it or to permit the use thereof by any person. — Pacific *v.* Alaska, 100 Fed. 462; 40 C. C. A. 494.

Note: Exactly how this rule could apply to this case is something of a curiosity. If there were no license fee and no previous sales, it is very difficult to see how evidence of damages or profits could possibly be proved elsewhere than at the home of the complainant where the suit is brought.

§ 557. Grounds for Granting — Infringement.

The case presented to us is one in which the complainant had a valid title to a valid patent, which the defendants to the suit have confessedly infringed. Under such circumstances, the showing must be a very strong one that would justify an appellate court in reversing an order granting a temporary injunction. — Pacific *v.* Alaska, 100 Fed. 462; 40 C. C. A. 494.

To authorize a writ, the right must be clear, and the fact of infringement reasonably certain. — Seiler *v.* Fuller, 102 Fed. 344; 42 C. C. A. 386.

Standard *v.* Crane, 56 Fed. 718; Mast *v.* Stover, 177 U. S. 485.

It will not do to say that no harm could result from the restraining order because the injunction merely went to the use of the infringing machines, and that the defendants could not be harmed if their machines did not infringe. Courts do not issue their writs of injunction because no harm can result from them. They issue them to preserve rights which are shown to have been invaded. It would not be just to put upon the defendants the hazard of being in contempt of court for disobedience to its orders, if they honestly claimed their machine did not infringe, when it might thereafter be deter-

mined that it did infringe, and when the courts had not considered or determined the question of infringement. — Seiler *v.* Fuller, 102 Fed. 344; 42 C. C. A. 386.

§ 558. Grounds for Granting — Laches Excusable.

It is no defense to a suit for an injunction and an accounting on account of the continuing trespasses of an infringer that the latter has been trespassing on the rights of the patentee with impunity for years. — Ide *v.* Trorlicht, 115 Fed. 137; 53 C. C. A. 341.

Menendez *v.* Holt, 128 U. S. 514; McLean *v.* Fleming, 96 U. S. 245; Price *v.* Steel Co. 46 Fed. 107; New York *v.* Buffalo, 18 Fed. 638; Gilmore *v.* Anderson, 38 Fed. 846; Brush *v.* Electric, 45 Fed. 241; Taylor *v.* Spindle Co. 75 Fed. 301; Bragg *v.* Hartford, 56 Fed. 292.

Note: This may be good law in the Eighth Circuit, but it requires serious qualification in other circuits.

§ 559. Grounds for Granting — Nature of Act.

It is not essential that there shall have been any actual infringement, in order to entitle a complainant to an injunction. The selling and offering for sale with the intent and purpose to bring about an infringement are enough to entitle complainant to an injunction to prevent the threatened injury. — Rupp *v.* Elliott, 131 Fed. 730; 65 C. C. A. 544.

Thomson-Houston *v.* Kelsey, 75 Fed. 1005; Thomson-Houston *v.* Ohio, 80 Fed. 712; Wallace *v.* Holmes, 29 Fed. Cas. 79.

§ 560. Grounds for Granting — Prima Facie Right.

There is the general "prima facie" presumption of the novelty and utility of the invention and that the patentee is the first and true inventor, which arises from the letters patent granted by the government. — Blount *v.* Societe, 53 Fed. 98; 3 C. C. A. 455.

Railroad *v.* Stimpson, 14 Pet. 448; Seymour *v.* Osborne, 11 Wall. 516; Smith *v.* Dental Co. 93 U. S. 486; Lehnbenter *v.* Holthaus, 105 U. S. 94.

§ 561. Grounds for Granting — Prior Adjudication.

An interlocutory decree granting an injunction in another case is a good foundation on which to base an application for a preliminary injunction in any other court. — Blount *v.* Societe, 53 Fed. 98; 3 C. C. A. 455.

Potter *v.* Fuller, 2 Fish. P. C. 251.

The patent had been sustained in a prior suit, and in a prior suit against the corporation of which this defendant was the actual successor, an injunction had been granted. Although a new defense (the expiration of a foreign patent) had been interposed on leave and the case reopened, it was still in the discretion of the trial court whether such new defense should be ground for discontinuing the injunction until the case could be heard on the merits. — Consolidated *v.* Accumulator, 55 Fed. 485; 5 C. C. A. 202.

Of course such prior adjudication does not conclude the question of right, even as to the defenses passed upon, except as between the parties and privies. Such a judgment is not within the principle of res adjudicata. — Electric *v.* Edison. 61 Fed. 834; 10 C. C. A. 106.

When the patent has been strenuously contested, and its validity determined by a competent tribunal, we think a strong presumption arises in favor

of the patent, which imposes upon the contestant the burden of attack. — Electric *v.* Edison, 61 Fed. 834; 10 C. C. A. 106.

When the validity of a patent has been sustained by prior adjudication, and especially after a long, arduous and expensive litigation, the only question open upon motion for a preliminary injunction in a subsequent suit against another defendant, is the question of infringement, the consideration of other defenses being postponed until final hearing; the only exception to the rule being where new evidence is of such a conclusive character that, if it had been introduced in the former case, it probably would have led to a different conclusion. And in such case the burden is upon the defendant to establish this, and every reasonable doubt must be resolved against him. — Electric *v.* Edison, 61 Fed. 834; 10 C. C. A. 106.

Edison *v.* Beacon, 54 Fed. 678; Edison *v.* Columbia, 56 Fed. 496.

Where the validity of a patent has been sustained by prior adjudication, and especially after a long, arduous and expensive litigation, the patentee may rightfully rest upon his patented right confirmed to him by the solemn adjudication of a competent judicial tribunal. He who attacks that right must overcome the legal presumption of right in the patentee. The strength of that presumption is variant, depending upon the circumstances surrounding the adjudication relied upon to support it. It is stronger when rested upon a final hearing than upon a motion for a preliminary injunction. Its potential force is intensified by an affirmance by an appellate tribunal of the adjudication in favor of the patent. The extent of the burden of overcoming the presumption is, therefore, measured by the degree of effective force imputed to the presumption. Where anticipation of invention has been asserted and determined to be unfounded, the presumption would be much stronger against cumulative evidence to prove anticipation by the one whose claim had been repudiated, than where anticipation is asserted in behalf of some other supposed inventor, whose claim was not in contention in the case adjudicated; and yet, in the latter instance, in addition to the presumption attaching to the patent itself, there would arise a further presumption more or less strong, and depending upon the circumstances, that, as the issue was the validity of the patent because of anticipation, bona fide contestants, earnestly striving to undermine the patent, would have asserted the defense, if known to them, and deemed substantial. It may be difficult to formulate a rule that will comprehend all the conditions which could be presented, but, we think it safe to say that in general, when the validity of a patent has been sustained by prior adjudication upon final hearing, and after bona fide and strenuous contest, the matter of its validity upon motion for preliminary injunction is no longer at issue, all defense, except that of infringement, being reserved to the final hearing; subject, however, to the single exception that, where a new defense is interposed, the evidence to support it must be so cogent and persuasive as to impress the court with the conviction that, if it had been presented and considered in the former case, it would probably have availed to a contrary conclusion. In the consideration of such new defense of anticipation, regard should be had to the rule that such a defense is an affirmative one; that the burden of proof is upon him who asserts it; and that the grant of letters patent is prima facie evidence that the patentee is the first inventor of the device described therein, and of its novelty. — Electric *v.* Edison, 61 Fed. 834; 10 C. C. A. 106.

Coffin *v.* Ogden, 18 Wall 120; Smith *v.* Vulcanite Co. 93 U. S. 486; Lehnbeuter *v.* Holthaus, 105 U. S. 94; Cantrell *v.* Wallick, 117 U. S. 689; Barbed Wire Patent, 143 U. S. 275.

The decision of another circuit is entitled to the same consideration in this court as it had in the court below. — Duplex *v.* Campbell, 69 Fed. 250; 16 C. C. A. 220.

American *v.* National, 51 Fed. 229.

Whether this court will apply the rule in favor of the decisions of the various circuit courts, or will limit it to adjudications of the appellate courts, as was apparently done by the third circuit in National *v.* American, 53 Fed. 367, quaere. — Bresnahan *v.* Tripp, 72 Fed. 920; 19 C. C. A. 237.

The second patent was sustained as valid after a full hearing on the merits, before so good and experienced patent judge as Judge Townsend. This certainly justified the court below in assuming the validity of the patent on a motion for a preliminary injunction. — Thomson-Houston *v.* Ohio, 80 Fed. 712; 26 C. C. A. 107.

Thomson-Houston *v.* Winchester, 71 Fed. 192.

We think the prior adjudication should be regarded as a finality until sufficient reason for departing from it shall have been made to plainly appear, and that the appellee should not, upon a motion to dissolve a preliminary injunction, be deprived of the advantage it holds as the owner of a patent adjudged by a court of appeals to be valid, upon anything less than thoroughly convincing proofs. — Adams *v.* Tannage, 81 Fed. 178; 26 C. C. A. 326.

The former adjudication was entitled to great weight upon the application for the preliminary injunction, and justified although it did not necessarily control, the decision. — Thomson-Houston *v.* Hoosick, 82 Fed. 461; 27 C. C. A. 419.

In the case of Russell *v.* Place, 94 U. S. 606, it was held that a judgment establishing the validity of the patent containing two claims, but not disclosing whether the judgment was based upon one or both of such claims, would not, in the absence of extensive evidence indicating the precise ground of the judgment, constitute an estoppel in a subsequent action between the same parties, in which the validity of the same patent was involved. In that case the question related to a certainty required in the records in order for a judgment to be given the effect of an estoppel; but in our opinion it is necessary that the same certainty should be made to appear in relation to the issues actually adjudicated, where a prior judgment is offered as the basis for the issuance of a preliminary injunction, in cases of this character. — Southern *v.* Earl, 82 Fed. 690; 27 C. C. A. 185.

Coburn *v.* Clark, 15 Fed. 807; Sewing Machine *v.* Williams, Fed. Cas. 5847.

The owner of a patent who has been fully sustained should not be deprived of his injunctive right except upon thoroughly convincing additional proof. — Ford Co. *v.* Tannage Pat. 84 Fed. 644; 28 C. C. A. 503.

Coming to the rules applicable under these circumstances, it cannot be denied that a preliminary injunction may properly issue in a patent suit where the validity of the patent is clear, although it has not been sustained by a prior adjudication or public acquiescence. Of course, there must in every instance be an equitable necessity for relief by injunction. — Wilson *v.* Consolidated, 88 Fed. 286; 31 C. C. A. 533.

Davis *v.* Edison, 60 Fed. 276.

The rule as to prior litigation is that it requires "a bona fide and strenuous contest," resulting in favor of the patent. — Wilson *v.* Consolidated, 88 Fed. 286; 31 C. C. A. 533.

Electric *v.* Edison, 61 Fed. 834; Bresnahan *v.* Leveler Co. 72 Fed. 920.

With reference to a prior judgment or general acquiescence, it is clear, on principle, that there must be the same freedom from doubt in behalf of a party applying for a temporary injunction, as if the question was one of validity alone. A court would be no more justified in granting such an injunction on a doubtful case of prior adjudication than it would be on a doubtful case of validity. Neither can a doubtful case of a prior judgment be assisted by a doubtful case of acquiescence, and vice versa. It is plain, on principle, that the complainant's right must be clear, either as to the validity of the patent or on the question of a prior judgment, or on the question of acquiescence. — Wilson *v.* Consolidated, 88 Fed. 286; 31 C. C. A. 533.

Ordinarily a prior determination on final hearing, after a bona fide and strenuous contest, is sufficient to justify an injunction, even against a new defendant. — Hatch *v.* Electric, 100 Fed. 975; 41 C. C. A. 133.

Beach *v.* Hobbs, 92 Fed. 146; Wilson *v.* Store Service Co. 88 Fed. 286.

The prior adjudication has been secured by complainant on testimony which has been sifted by cross-examination, and it would seem that he should be entitled to cross-examination of defendant's experts before being deprived of the advantage of his previous decree. Especially so in view of the ease with which ex parte affidavits of experts exploiting any theory desired may apparently be obtained. — Consolidated *v.* Hays, 100 Fed. 984; 41 C. C. A. 142.

Curtis *v.* Wheel Co. 58 Fed. 784.

Prior hearings had occurred, resulting in an injunction against an alleged infringement by the defendant pending final hearing. The instant case appeared, therefore, as a second attempt to use a device which might evade the patent, while adopting an equivalent means. The presumptions which run with the patent are thus well fortified by circumstances to entitle the owner to injunctional relief. — Austin *v.* American, 121 Fed. 76; 57 C. C. A. 330.

Electric *v.* Edison, 61 Fed. 834.

That where a patent has been adjudicated and sustained by a circuit court of appeals, the only question to be considered as a defense is non-infringement, see Cohn *v.* Stephenson, 142 Fed. 467; 73 C. C. A. 583.

Philadelphia *v.* Edison, 65 Fed. 551; Tannage *v.* Adams, 77 Fed. 191; Adams *v.* Tannage, 81 Fed. 178.

Facts: No answer was made to the motion except the question of priority. Both parties had been in interference and an appeal to the Circuit Court of Appeals, D. C. had been decided in complainant's favor. *Held:* That an injunction pendente lite may issue if patentable invention appears on the face of the patent, and the presumptions arising from the grant have been reinforced by the decision of a competent court upholding the invention, upon issues duly raised and fairly litigated. The opinion filed below rightly recognizes the interference proceedings and decision therein by the Circuit Court of Appeals, D. C. as within the meaning of the doctrine above stated. — Scott *v.* Laas, 150 Fed. 764; 80 C. C. A. 500.

The patent was before this court in a prior suit and held valid. Upon such a state of facts, the propriety of issuing preliminary injunction is well settled in this circuit; and it is equally well settled that appeal from such preliminary injunction brings up only the propriety of the action of the circuit court. The whole cause is not to be re-opened. That is a matter for consideration when the new cause comes to a final hearing. — Consolidated *v.* Diamond, 157 Fed. 677; 85 C. C. A. 349.

American *v.* National, 51 Fed. 229; Consolidated *v.* Littauer, 84 Fed. 165.

In the present case the right to a preliminary injunction according to the course and principles of equity was made clearly to appear by the bill. There had been a conclusive and final adjudication of complainant's title to the patent and of its validity by the Supreme Court of the United States after a lengthy and spirited contest on the merits of the case (Carnegie *v.* Cambria, 185 U. S. 403), and there was a clear and unequivocal charge of infringement. In such cases a preliminary injunction, on the motion of complainants, and in the absence of new evidence of a controlling character, is granted quite as a matter of course. We may therefore confidently conclude that the case made by the bill well warranted the grant of a preliminary injunction, and that one probably would have been granted, had a motion to that effect been made. (And notwithstanding the fact that the patent would expire inside of three months). — Carnegie *v.* Colorado, 165 Fed. 195; C. C. A.

Electric *v.* Edison, 61 Fed. 834; New York *v.* Jackson, 91 Fed. 422.

§ 562. Grounds for Granting — Sufficiency — General.

The patent having been issued fifteen months before the bill was filed, and having nearly sixteen years to run, and the bill alleging that the public have generally acquiesced in the validity of the patent, and that the invention has been put in practice by the plaintiff, and has been of great utility, it was not necessary to show a recovery at law to warrant jurisdiction in equity for an injunction and account. — McCoy *v.* Nelson, 121 U. S. 484; 30 L. Ed. 1017; 7 S. Ct. 1000.

Root *v.* Railway, 105 U. S. 189.

Plaintiff is none the less entitled to his injunction by the fact that defendant is able to accomplish the same result by another and different method. — DuBois *v.* Kirk, 158 U. S. 58; 39 L. Ed. 895; 15 S. Ct. 729.

The object and purpose of a preliminary injunction is to preserve the existing state of things until the rights of the parties can be fairly and fully investigated and determined upon strictly legal proofs, and according to the course and principles of courts of equity. The prerequisites to the allowance and issuance of such an injunction are that the party applying for the same must generally present a clear title, or one free from reasonable doubt, and set forth acts done or threatened by the defendant, which will seriously or irreparably injure his rights under such title, unless restrained. The legal discretion of the judge or court in acting upon applications for provisional injunction is largely controlled by the consideration that the injury to the moving party, arising from a refusal of the writ, is certain and great, while the damage to the party complained of, by the issuance of the injunction, is slight or inconsiderable. — Blount *v.* Societe, 53 Fed. 98; 3 C. C. A. 455.

Great Western *v.* Birmingham, 2 Phil. Ch. 602: Glassott *v.* Lang, 3 Mylne & C. 455; Shrewsbury *v.* Railroad, 1 Sim. (N. S.) 410; Georgia *v.* Braiseford, 2 Dall. 402.

To warrant a writ of preliminary injunction, not only must the infringement be without reasonable doubt, but the rights of the patentee must be clear.

Failing prior adjudication in favor of the validity of the patent, there must be shown such continued public acquiescence in the exclusive right asserted as raises a presumption of validity, a presumption not arising from the letters patent unless accompanied by public acquiescence. The object of the provisional remedy is preventive, largely; and it will not be granted if it is more likely to produce, than to prevent, possible mischief. — Standard Elevator Co. *v.* Crane, 56 Fed. 718; 6 C. C. A. 100.

In the Missouri case the court held that "complainants must show a clear right in support of a preliminary writ, and a defense which puts a case in doubt is sufficient to defeat the application." This is the rule which governs all applications where the patent has not undergone prior judicial investigation and been sustained; but in cases similar to the one before us, the general rule is that where the validity of the patent has been sustained by prior adjudication, and especially after a long, arduous and expensive litigation, the only question open, on motion for a preliminary injunction, in a subsequent suit, against another defendant, is the question of infringement, the consideration of the other defenses being postponed until final hearing. The only exception to this general rule seems to be where the new evidence is of such a conclusive character that if it had been introduced in the former case, it would probably have led to a different conclusion. The burden is on the defendant to establish this, and every reasonable doubt must be resolved against him. — Philadelphia *v.* Edison, 65 Fed. 551; 13 C. C. A. 40. Edison *v.* Beacon, 54 Fed. 678; Barbed Wire Patent, 143 U. S. 275.

The second stated objection to the interlocutory decree is "that the patent has never been sustained by a court, nor sufficiently acquiesced in by the public." To this it is enough to say that, until the defendants began to infringe, the plaintiff had no occasion to apply to the courts to protect his patent, and that, if public acquiescence need be shown to entitle the owner of a valid patent to a preliminary injunction against clear infringement, such acquiescence satisfactorily appears here in the facts stated in the opinion of the court below. It is shown, indeed, that a large number of the plaintiff's rings were not marked "Patented;" but a sufficiently large number of them were so marked to give general notice that the ring was patented. There was ample proof of public acquiescence. — McDowell *v.* Kurtz, 77 Fed. 206; 23 C. C. A. 119.

Whenever it is manifest to the court that, upon the case made, an injunction will be granted at final hearing to the complainant, one should be awarded to him preliminarily, in the absence of facts presenting special equitable considerations to induce the court, in the exercise of judicial discretion, to withhold it. Under such circumstances there is no reason why the complainant should not have his remedy immediately. Why should a court of equity permit a wrong, indisputable and wanton, to go unredressed longer than necessary? The object of a preliminary injunction is to preserve property rights pending the final determination of the suit. — Allington *v.* Booth, 78 Fed. 878; 24 C. C. A. 378.

It is now objected that a preliminary injunction ought not to be allowed while a demurrer is pending. Ordinarily, this is true, but there are exceptions to the rule. In a case where, on examining the bill and the demurrer, the court is not satisfied that the demurrer will, on the argument of it, be sustained, and where, on the proofs submitted, allegations of fraud pleaded in the bill are clearly proven, the court has, within reasonable bounds, a discretionary power to preserve the existing status of affairs by a preliminary injunction to prevent the carrying out of the fraud until the demurrer is

argued and disposed of. Any other rule would open a wide door to the grossest injustice. Prima facie, the complainant's patents, in the case in hand, are valid, and since the demurrer admits, for the purposes of the argument of it, the fraud pleaded in the bill, we should not disturb the order for an injunction pendente lite unless we are satisfied that there is reasonable doubt as to the sufficiency of the bill in other respects than in the "formal defects" found by the court below, or unless, on an independent examination of the facts, we are satisfied no fraud has been shown.— Chester *v.* Tindel-Morris, 165 Fed. 899; C. C. A.

The only specific objections to the bill are that it fails to allege (1) that the subject-matter of the patent was not abandoned, (2) that its subject-matter was not patented in any foreign country more than two years prior to the application, and (3) that its subject-matter was not patented in any foreign country more than seven months (in the case of one of the patents) or more than twelve months (in the case of the other two) before the application in this country was filed. These were the "formal defects" which were cured by amendments, and we think that, in view of the fraud which seems on the present ex parte proofs to be established, those defects were properly regarded as not sufficient to defeat the application for a preliminary injunction. — Chester *v.* Tindel-Morris, 165 Fed. 899; C. C. A.

That where the bill shows distinct, palpable fraud on the part of the defendant and the showing is not successfully controverted by the proofs, even if the patent has not been adjudicated, an injunction should issue, see Chester *v.* Tindel-Morris, 165 Fed. 899; C. C. A.

§ 563. Grounds for Refusing — Acquiescence not Established.

The extent of the sale of a patented invention might characterize the degree of public acquiescence. The mere manufacture and placing upon the market for sale does not indicate acquiescence by the public. — Ertel *v.* Stahl, 65 Fed. 519; 13 C. C. A. 31.

That while a prior litigation which has been determined has force and effect on a motion for a preliminary injunction, it would appear that the recital in a bill of numerous pending suits is without effect as establishing acquiescence, see Wilson *v.* Consolidated, 88 Fed. 286; 31 C. C. A. 533.

Three other patents, covering details of construction, are held by the complainant, — a circumstance which may have a bearing on the alleged acquiescence by the public, the taking out of licenses, etc., since it may be that some one or more of the other patents was the inducing cause to acceptance of license. — Aquarama *v.* Old Mill, 115 Fed. 806; 53 C. C. A. 376.

We apprehend that the Circuit Court fell into error in relying upon acquiescence of the public in the validity of the patent in suit as the ground on which to grant an injunction. In as much as the complainant owned and used the Wright patent, it would seem that acquiescence may have been in deference to it rather than the patent in suit. The Wright patent had stronger claims for recognition than the other, and we think it very unsafe to rely upon public acquiescence shown by this record. It should be added that public acquiescence, though sometimes, in doubtful cases, a matter of consideration, is not available to maintain a patent palpably void. — American *v.* Wyeth, 139 Fed. 389; 71 C. C. A. 485.

The Union Co. and the Hall Co. were rivals in business, the former advocating and installing the so-called normal safety system and the latter

the normal danger system. Every consideration, not only of honesty in competition but of self interest also, would induce the Union Co. to expedite its own system, which it thoroughly understood and in the efficiency of which it had implicit confidence. To assert that its course, which was the natural one for honorable men to adopt, was due solely to the Wilson (Hall Co.'s) patents, is, we think, carrying the doctrine of acquiescence beyond the limits set by former adjudications. — Hall *v.* General, 153 Fed. 907; 82 C. C. A. 653.

The railroads are the complainant's only customers and for many years the Hall Co.'s only competitor was the Union Co. In a technical sense, therefore, there was no public acquiescence. It is not the case of a patented device going into long continued general use in circumstances which compel the conviction that infringements would have occurred were it not for a settled conviction on the part of those who might profit by infringing that the patent is valid. — Hall *v.* General, 153 Fed. 907; 82 C. C. A. 653.

§ 564. Grounds for Refusing — Conflicting Proofs.

Assuming, for the purpose of a preliminary injunction, that the patent is valid, as the court rightfully did (Elec. Mfg. Co. *v.* Edison, 61 Fed. 834) it still remained that, to warrant a preliminary injunction, the fact of infringement should be made out beyond reasonable doubt (Standard Elev. Co. *v.* Crane, 56 Fed. 718). There is here so much of doubt with respect to the proper construction of the claims of the patent and of their infringement that it is needful to have an investigation into the prior art to determine the exact limitation of the claims, and to have "the search-light of an intelligent cross-examination" to determine conclusively the fact of infringement. — Menasha *v.* Dodge, 85 Fed. 971; 29 C. C. A. 505.

While the remedy is a valuable one, it is also a dangerous one; and when applied improvidently may work irreparable mischief. It should never be applied when the complainant's case is doubtful, — except indeed where the object is merely to preserve the status quo, — as when alleged rights are menaced. — Whippany *v.* United, 87 Fed. 215; 30 C. C. A. 615.

Brush *v.* Electric, 64 Fed. 775; Machine Co. *v.* Adams, Fed. Cas. 752; Standard *v.* Crane, 56 Fed. 718.

No description of evidence is so unreliable as ex parte affidavits, and disputed questions can never be safely decided upon it. — Whippany *v.* United, 87 Fed. 215; 30 C. C. A. 615.

That where the ex parte proofs are at absolute variance; that where a license which would estop the defendant is averred by complainant and flatly contradicted by the defendant; that where such license is produced, but is unsigned by any of the parties; and where every allegation is met with absolute contradiction, the court should refuse a preliminary injunction, see Aquarama *v.* Old Mill, 115 Fed. 806; 53 C. C. A. 376.

The preliminary proofs relating thereto are very conflicting. The defendant is a mere user. No irreparable injury, or, indeed, any special injury, to the complainant from the defendant's use is alleged or shown. Under the circumstances, then, we think the court should have forborne to act until full proofs were before it. — Jefferson *v.* Westinghouse, 134 Fed. 392; 67 C. C. A. 189.

This is a question of too much difficulty to be decided upon the ex parte opinions of experts. The depositions deal with an abstruse and recondite

subject, and present conflicting theories, which cannot safely be accepted without the searching elucidation which a cross-examination of the experts may afford. The experts are in flat contradiction upon the question of infringement, and, in view of the large importance of the controversy, the rights of the parties should be reserved for decision until final hearing. — Westinghouse *v.* Montgomery, 139 Fed. 868; 71 C. C. A. 582.

The circuit judge in granting the injunction inserted the following: "nothing in this injunctional order shall prevent, or is intended to prevent or enjoin, the defendant from handling, using or selling rubber tires and rims covered by the Grant patent, manufactured by the Goodyear Tire & Rubber Company, having a right to manufacture, use, and sell such tires under a judicial decree in a litigation in the federal courts in the district of Indiana, heretofore pending between the complainants and such parties, wherein it has been judicially determined that said Grant patent is invalid and void."

Held: It would seem that the rights of all can be best preserved by affirming the order, at the same time directing the circuit court (upon the filing of a new bond or the extension of an old one) to suspend the operation of the injunction until final disposition of the cause. The record at final hearing will be so comprehensive as to present every question, and when it reaches this court upon appeal a review of them can be secured by the Supreme Court either by a certification or certiorari. — Consolidated *v.* Diamond, 157 Fed. 677; 85 C. C. A. 349.

Note: The decision of the Supreme Court upon the certification of this case to it, should be watched for a further determination and modification of the rule laid down in Kessler *v.* Eldred.

§ 565. Grounds for Refusing — Damages Adequate Relief.

It would be most unwise to imperil, and presumably wholly to ruin, the large capital and interests involved in the business of the appellants, by arresting the enterprise in advance of a final decree, when the damages which the appellee may sustain can be compensated in money. — Standard Elevator Co. *v.* Crane, 56 Fed. 718; 6 C. C. A. 100.

It is by no means the duty of a court of equity to cause an infringer, who is a user, to suffer a pecuniary calamity, which ruins him, and is far out of proportion to the benefit which the owner of the patent would otherwise be entitled to receive. — Edison *v.* Mt. Morris, 58 Fed. 572; 7 C. C. A. 375.

§ 566. Grounds for Refusing — Infringement not Clear.

The injunction in this case ought not to have been granted, unless, on the facts proven, the respondent had clearly taken the complainant's device. The rule is thus applied to cover the issue of infringement as well as that of the validity of the patent. — Hatch *v.* Electric, 100 Fed. 975; 41 C. C. A. 133.

Blakey *v.* Mfg. Co. 95 Fed. 136; Walk. Pat. sec. 676; Rob. Pat. sec. 1173.

It is quite manifest that there is presented a substantial question as to infringement, which can be settled only upon construction of the patents, and that requires a presentation of the state of the art and a history of the invention in the Patent Office. The case would seem to be one in which preliminary injunction should not be granted without proof of prior adjudication. — Reed *v.* Smith, 107 Fed. 719; 46 C. C. A. 601.

§ 567. Grounds for Refusing — Insufficiency — General.

In Standard *v.* Crane, 56 Fed. 718, we declared the principles which should govern in granting injunctions in patent cases pendente lite. We are

satisfied that this case falls within the principles therein asserted. We do not deem it proper here and now to say more than this; that the fact of infringement is not clear from doubt. The issuance of the patent for the device of the appellant raises a certain presumption that it does not infringe the prior patent of the appellee. That presumption has not, for the purpose of an injunction before decree, been overcome to such extent that we can say the fact of infringement is not doubtful. There has been no adjudication sustaining the validity of the patent in suit. The public acquiescence asserted we regard of doubtful character; as referred to the particular device alleged to be here infringed, neither clearly stated nor well sustained by proof. If, however, the fact were otherwise respecting the question of public acquiescence, and the validity of the patent may be said to be conclusively established, we shall regard the question of infringement to rest in such doubt that, within the principles governing the granting of preliminary injunctions, we think the restraining order here ought not to have issued. The pecuniary ability of the appellant to respond in damages, if they shall ultimately be adjudged infringers, is not impugned. — Ertel *v.* Stahl, 65 Fed. 517; 13 C. C. A. 29.

There is a prayer for an injunction presented in the bill before us. It is important, however, to determine whether there are sufficient facts presented in the bill to warrant the court in granting this prayer. There are no allegations showing that the patent rights of appellants have been long recognized by the public; no allegations showing that its validity had ever been determined in an action at law. There are no allegations showing grounds for a discovery. In fact, it does not appear but that every important question presented in the bill could be tried as well at law as in equity. In the case of Gutta Percha *v.* Goodyear, 3 Saw. 542, Judge Sawyer thus presents this matter, in considering the bill in that case: "There is no allegation that the matter has ever been litigated before and decided in favor of complainant, and no allegation in the bill that the right of complainant has been submitted to or recognized by the public. The bill, as an injunction bill, is defective in this particular." In the case of Hockholzer *v.* Eager, 2 Saw. 361, the court, while acknowledging that it is not always necessary that the bill for an injunction should show that there had been a trial at law, testing the rights of the patentee, and the validity of his patent, said: "Something more than a grant of letters patent must be shown, — something which, in the absence of a trial at law, may take its place in establishing the validity of the patent." We think the view taken in these cases is in accordance with the general view entertained in courts of equity in regard to bills in equity, in patent causes, asking for an injunction. — Walk. Pat. 660; Story Eq. Jur. 934. — Germain *v.* Wilgus, 67 Fed. 597; 14 C. C. A. 561.

Note: Doubtful holding.

The motion for an injunction was heard within eight days after the filing of the bill, before any answer could properly be required, and before answer filed. The validity of the patent, as well as the attack upon it, rests wholly upon ex parte testimony, which, we observed in Standard *v.* Crane, 56 Fed. 718, to be not wholly reliable. We are not satisfied that the attack upon the patent is pretentious merely, or that it is offered or tendered in bad faith. It may fail to be sustained, but it is not manifestly without foundation, and so ineffective to secure the appellee an opportunity to present his defense according to the usual procedure in like cases. This patent has never passed judicial scrutiny. It was but recently issued, some four months prior to the hearing upon the motion for injunction. If public acquiescence could be inferred, under any circumstances, within that brief period, it certainly does not exist in this case, for there are at least three different infringements

complained of, and acquiescence is shown by one party only. — Williams *v.* Breitling, 77 Fed. 285; 23 C. C. A. 171.

Ertel *v.* Stahl, 65 Fed. 519.

The implication here that a temporary injunction may be the sole object of a bill is not true. Such relief is granted only as incidental and auxiliary to the final relief prayed, which, of course, may be only an injunction. The appellee therefore, has no right to rest upon the preliminary order and the decree pro confesso. — Antisdel *v.* Chicago, 89 Fed. 308; 32 C. C. A. 216.

A preliminary injunction should never be awarded where the right is doubtful, or the wrong uncertain, and that the infringement here charged has not been established. — Blakey *v.* National, 95 Fed. 136; 37 C. C. A. 27.

American *v.* Elizabeth, 4 Fish. Pat. Cas. 189; Consolidated *v.* Accumulator, 55 Fed. 485; Van Camp *v.* Cruikshanks, 90 Fed. 814; Williams *v.* McNeely, 56 Fed. 265.

The patent sued upon is a very recent one, and there is no such proof of long continued acquiescence by the public as would raise a prima facie case in the patentee's favor. Under such circumstances, it is the practice in this court to refuse preliminary injunction when there has been no adjudication sustaining the patents, if there appears to be any fair question as to the invention, anticipation, construction, or infringement. — Reed *v.* Smith, 107 Fed. 719; 46 C. C. A. 601.

Dickerson *v.* Machine, 35 Fed. 143.

The patents have never been litigated, and there is no proof of public acquiescence. The affidavits and exhibits raise such a serious question as to infringement that, under the rule already stated, we think the application for a preliminary injunction should have been refused. — Newhall *v.* McCabe, 125 Fed. 919; 60 C. C. A. 629.

The bill was filed within one year after the issuance of the patents in suit, they have never been litigated, and there is no proof of public acquiescence. Injunction refused. — Newhall *v.* McCabe, 125 Fed. 919; 60 C. C. A. 629.

First. The five patents in suit relate to a difficult, complex and abstruse subject. Because of its complicated character, the court should have the benefit of the opinions of those skilled in the art tested and clarified by cross-examination.

Second. The patents have never been adjudicated or judicially construed.

Third. The defendants assert that the patents are invalid for lack of novelty and invention and that the claims of three of the patents are not infringed.

Fourth. We think the complainants have failed to prove a case of acquiescence. There has been no long continued public acquiescence.

Fifth. We are not convinced that the complainants will suffer irreparable damage. That the defendants are amply responsible is conceded.

Sixth. We think the record presents too many elements of doubt to warrant the issuing of a preliminary injunction. — Hall *v.* General, 153 Fed. 907; 82 C. C. A. 653.

The patent is a very recent one — issued only a few weeks before the motion is made. It had never been adjudicated. The decision in interference was not the equivalent of adjudication as to patentability and infringement; and sufficient time has not elapsed to present proof of general

acquiescence. Validity and infringement are vigorously disputed, and we think both questions should be left for determination at final hearing. — Hildreth *v.* Norton, 159 Fed. 428; 86 C. C. A. 408.

Hall *v.* General, 153 Fed. 907; Newhall *v.* McCabe, 125 Fed. 919.

§ 568. Grounds for Refusing — Laches.

When there was a delay of seventeen years nearly and no explanation was made, such laches would disentitle complainant to a preliminary injunction. — Keyes *v.* Eureka, 158 U. S. 150; 39 L. Ed. 929; 15 S. Ct. 772.

McLaughlin *v.* Peoples, 21 Fed. 574; American *v.* Chicago, 41 Fed. 522; Keyes *v* Pueblo, 31 Fed. 560; Root *v.* Railway, 105 U. S. 189; Clark *v.* Wooster, 119 U. S. 322; Lane *v.* Locke, 150 U. S. 193.

It has never been held that mere laches, unaccompanied by circumstances which amount to an equitable estoppel, shut out a party from all relief in a court of equity. Knowledge of and long continued acquiescence by a complainant in an infringement may, in special cases, be fatal on a motion for preliminary injunction, but will not, on a final hearing, prevent the court from granting such relief as may be just and equitable. This is the general rule which is recognized in the authorities. — Taylor *v.* Sawyer, 75 Fed. 301; 22 C. C. A. 203.

Kittle *v.* Hall, 29 Fed. 508; McLean *v.* Fleming, 96 U. S. 245; Menendez *v.* Holt, 128 U. S. 514; Price *v.* Steel, 46 Fed. 107; N. Y. *v.* Buffalo, 18 Fed. 638; Gilmore *v.* Anderson, 38 Fed. 846; Brush *v.* Electric, 45 Fed. 241.

One who, with full knowledge of a patentee's claim of infringement, and against his protest, continues to trespass, cannot, on the ground of the estoppel or laches of the patentee, successfully defend a suit for infringement brought, or a motion for a preliminary injunction made within a reasonable time. Repeated wilful trespasses establish no right to their continuance. And mere delay by a patentee to bring his suit or to apply for his preliminary injunction for any reasonable length of time after an infringer is informed of his trespass, unaccompanied with such acts of the patentee and such facts and circumstances as amount to an equitable estoppel, will not deprive him either on the ground of laches or estoppel, of his right to a temporary injunction or to a recovery. Moreover, delay in prosecuting other infringers during the time while the validity of the patent is in litigation does not constitute laches. — Stearns-Roger *v.* Brown, 114 Fed. 939; 52 C. C. A. 559.

American *v.* Southern, 34 Fed. 795; Edison *v.* Sawyer, 53 Fed. 592; Green *v.* Barney, 19 Fed. 420; Norton *v.* Can Co. 57 Fed. 929.

Defendant did not put its tool on the market until in the spring or summer of 1899. Within a month or so thereafter complainants began litigation with infringers, and has continued to litigate ever since. They were under no obligation to sue everyone at the same time. — Timolat *v.* Franklin, 122 Fed. 69; 58 C. C. A. 405.

American *v.* National, 90 Fed. 824; Edison *v.* Mt. Morris, 57 Fed. 644.

§ 569. Grounds for Refusing — License.

The defendant set up as its main plea, a license. While there was some question as to whether certain modifications and conditions of the license contract might, on final adjudication, be held not to excuse the acts complained of, the court held that the fact of such license, creating a serious doubt as to the right of complainant to recover, should bar the granting of a preliminary injunction. — American *v.* Talking Machine, 98 Fed. 729; 39 C. C. A. 245.

That an injunction will not lie against a vendee who obtains a license upon notice of infringement; but that such licensing does not excuse the vendor, see Johnson *v.* Foos, 141 Fed. 73; 72 C. C. A. 105.

§ 570. Grounds for Refusing — Prior Adjudication Insufficient.

In the absence of prior adjudication or public acquiescence, a preliminary injunction should not be granted unless the rights of the patentee be clear and the infringement without reasonable doubt. — Electric *v.* Edison, 61 Fed. 834; 10 C. C. A. 106.

Standard *v.* Crane, 56 Fed. 718.

That where an injunction has been granted following the decision of the circuit court in another circuit, and thereafter the circuit court of appeals has reversed the decision followed, even if the reversal was not on the merits, it is sufficient to warrant the vacating of the injunction, see Prieth *v.* Campbell, 80 Fed. 539; 35 C. C. A. 624.

Note: This seems to me an extreme rule, if it is to be taken as a general rule; because it is perfectly evident that a case might be reversed on grounds wholly unconnected with the question of merit and thus deprive the inventor of an adjudication of great value.

Upon an application for preliminary injunction, it would be a most exceptional case which would warrant the court in expanding the claim beyond the limits fixed in an exhaustive opinion at final hearing. — Dodge *v.* Fulton, 92 Fed. 995; 35 C. C. A. 140.

That even where a claim has been previously adjudicated, if its construction with reference to the infringement complained of is in doubt, the injunction should be refused, see Sprague *v.* Nassau, 95 Fed. 821; 37 C. C. A. 286.

That where a prior adjudication is set up as grounds for preliminary injunction and there are facts involved in the issue other than those determined by the prior adjudication, such facts must be clearly shown, see Hatch *v.* Electric, 100 Fed. 975; 41 C. C. A. 133.

Complainant relies upon a decision of the Patent Office in an interference proceeding, in which eight different applicants were involved, of whom only Shaw and Asher took testimony. That decision, however, only settled the question of priority as between Shaw and Asher, and is not such an adjudication as the practice calls for, where there is substantial question as to construction and infringement. — Reed *v.* Smith, 107 Fed. 719; 46 C. C. A. 601.

Dickerson *v.* Machine Co. 35 Fed. 143; Ironclad *v.* Vollrath, 52 Fed. 142; Rogers *v.* Mergenthaler, 58 Fed. 693.

§ 571. Grounds for Refusing — Title in Doubt.

It is sufficient to say, therefore, without passing on any of these questions, that the uncertainty as to said agreements, and the contradictory character of the affidavits, leave the question of license in such serious doubt that we think no injunction should issue except after an opportunity has been given to resolve said doubt upon final hearing. — Armat *v.* Edison, 125 Fed. 939; 60 C. C. A. 380.

It is a fundamental principle that injunctions ought not to issue unless the right alleged to be invaded or threatened is clear. — St. Louis *v.* Sanitary, 161 Fed. 725; 86 C. C. A. 585.

Truly *v.* Wanzer, 5 How. 141.

§ 572. Grounds for Refusing — Validity Contested.

The validity of the patent is strongly assailed, its infringement is vigorously denied. We think it clearly within the ruling of Standard *v.* Crane, 56 Fed. 718 and Ertel *v.* Stahl (herewith decided), 65 Fed. 517. — Ertel *v.* Stahl, 65 Fed. 519; 13 C. C. A. 31.

Where the validity of the patent and the infringement are denied, and defendant sets up valid defenses, there should be strong proof of acquiescence to warrant the issuing of an injunction. — American *v.* Phoenix, 113 Fed. 629; 51 C. C. A. 339.

Smith *v.* Britannia, 92 Fed. 1003; Fastener *v.* Fastener, 94 Fed. 523.

§ 573. Modification.

Many users of electric plants had put in their plants prior to the adjudication of the Edison patent, and when it was confidently believed it was invalid. On proper presentation of their case and their willingness to purchase the Edison lamps the court would modify the injunction as to them, to enable them to continue in business. — Edison Electric *v.* Sawyer-Man, 53 Fed. 592; 3 C. C. A. 605.

Note: It seems to me this holding is most questionable. The remedy for the hardship lay farther back. So long as the damage clearly was not irreparable, the relief under a reasonable bond would have been not only proper but a better tempering of the case to equity than the manufacture of a quasi excuse on the ground that these innocent persons did not respect the prima facie of the patent which the law gives it. Almost as well might the court say, "the patent means nothing until we have passed upon it; and if we have to uphold it, we will temper our judgment to him who has relied upon our theory."

The defendants, in desiring to obtain an unlimited future capacity of ownership of the patented lamps, for the purpose of extending their competitive power, are asking too much. We perceive no controlling equity which cause us to compel the Illuminating Company, which owns an equitable title to the lamp patent, to sell lamps to a competitor for the purpose of enabling it to utilize the unused portion of its plant, and extend its business into unoccupied territory, and thus permit it to deprive the owner of all the material benefit of the patent during the comparatively brief residue of its life. — Edison *v.* Mt. Morris, 58 Fed. 572; 7 C. C. A. 375.

The affirmance in this court of a preliminary order or an interlocutory decree granting an injunction does not operate to deprive the circuit court of the power, inherent in it, temporarily to suspend such injunction, upon sufficient cause shown, after proper notice, whenever the ends of justice call for the exercise of such power. — Edison *v.* U. S. 59 Fed. 501; 8 C. C. A. 200.

It is thus manifest that the defendant is enjoined from making the tubes for any purpose whatever, and that the repair of a single tube is within the prohibition of the injunction. In this respect we think the decree is too broad and sweeping. The theory of the rule invoked by the complainant is that the patentee of a combination cannot be deprived of his gains and profits by the conversion of an old and defunct machine under the guise

of repairs. If a new machine be needed the patentee is entitled to furnish it, but on the other hand, the purchaser of a patented machine is entitled to make necessary repairs and to replace worn out parts, not separately patented, so long as the identity of the licensed machine is not destroyed. If this be lawful for the owner, it is equally so for the mechanic who is employed to do the work; the latter cannot be held as an infringer for making repairs which the former has an undoubted right to make. — Morrin *v.* White, 143 Fed. 519; 74 C. C. A. 466.

That an injunction is properly limited according to the specific terms of Kessler *v.* Eldred, 206 U. S. 285; but that it must not be extended to defeat the rights of patentees, see Consolidated *v.* Diamond, 162 Fed. 892; 89 C. C. A. 582.

§ 574. Non-User.

The facts were that complainant owned and held the patent in suit, but did not use it, apparently because, from manufacturing reasons it was desirable to use other apparatus already in use. It was contended by defendant that such nonuser, under the broad and general provision of the constitution, prevented the complainant from invoking equitable relief, and that whatever relief it had was by action at law. *Held:* but granting all this, it is certainly disputable that the nonuse was unreasonable, or that the rights of the public were involved. There was no question of a diminished supply or of increase of prices and can it be said, as a matter of law, that a nonuse was unreasonable which had for its motive the saving of the expense that would have been involved by changing the equipment of a factory from one set of machines to another? And even if the old machines could have been altered, the expense would have been considerable. As to the suggestion that competitors were excluded from the use of the new patent, we answer that such exclusion may be said to have been of the very essence of the right conferred by the patent, as it is the privilege of any owner of property to use or not use it, without question of motive. We have seen that it has been the judgment of Congress from the beginning that the sciences and useful arts could be best advanced by giving an exclusive right to an inventor. It is manifest, as is said in Walker on Patents, sec. 106, that Congress has not "overlooked the subject of nonuser of patented inventions." And another fact may be mentioned. In some foreign countries the right granted to an inventor is affected by nonuse. This policy, we must assume, Congress has not been ignorant of nor of its effects. It has, nevertheless, selected another policy; it has continued that policy through many years. We may assume that experience has demonstrated its wisdom and beneficial effect upon the arts and sciences. From the character of the right of the patentee we may judge of his remedies. It hardly needs to be pointed out that the right can only retain its attribute of exclusiveness by a prevention of its violation. Anything but prevention takes away the privilege which the law confers upon the patentee.

In a number of the circuit courts of appeals, it has been decided that, as a consequence of the exclusive right of the patentee, he is entitled to an injunction against an infringer, even though he does not use the patented device. Edison *v.* Mt. Morris, 58 Fed. 572; Heaton *v.* Eureka, 77 Fed. 294; Crown *v.* Aluminum, 108 Fed. 845; Fuller *v.* Berger, 120 Fed. 274; Lamson *v.* Hillman, 123 Fed. 416; Victor *v.* The Fair, 123 Fed. 425; U. S. *v.* Griffin, 126 Fed. 364; Rupp *v.* Elliott, 131 Fed. 730; Railway *v.* Monroe, 147 Fed. 241; Jewell *v.* Jackson, 140 Fed. 340; U. S. *v.* Bradley, 149 Fed. 222; Rubber *v.* Milwaukee, 154 Fed. 358; Indiana *v.* Case, 154 Fed. 365.

Cases holding that, as incident to the right, he is entitled to an injunction, though he has not used the invention, are Carr *v.* Rice, Fed. Cas. 2440;

Wintermute *v.* Redington, Fed. Cas. 17,896; Ransom *v.* N. Y. Fed. Cas. 11,573; Pitts *v.* Wemple, Fed. Cas. 20, 194; Whitney *v.* Emmet, Fed. Cas. 17,585; Broadnax *v.* Central, 4 Fed. 214; Re Broasnahan, 18 Fed. 62; Consolidated *v.* Coombs, 39 Fed. 803; Wirt *v.* Hicks, 46 Fed. 71; Campbell *v.* Manhattan, 49 Fed. 930; Edison *v.* Mt. Morris, 57 Fed. 462; Masseth *v.* Johnston, 59 Fed. 613; Bonsack *v.* Smith, 70 Fed. 383; Columbia *v.* Freeman, 71 Fed. 302; Wyckoff *v.* Wagner, 88 Fed. 515; White *v.* Peerless, 111 Fed. 190; Brodrick *v.* Mayhew, 131 Fed. 92; National *v.* Daab, 136 Fed. 891; Hoe *v.* Michle, 141 Fed. 115; Hartman *v.* Park, 145 Fed. 358.

Counsel for petitioner cites counter cases, which he contends are more direct authority: Isaacs *v.* Cooper, Fed. Cas. 7,096; Ogle *v.* Ege, Fed. Cas. 10,462; Motte *v.* Bennett, Fed. Cas. 9,884; Sullivan *v.* Redfield, Fed. Cas. 13,597; Magic *v.* Douglas, Fed. Cas. 8,948; Hoe *v.* Knapp, 27 Fed. 212; Germain *v.* Wilgus, 67 Fed. 600; Campbell *v.* Duplex, 86 Fed. 531; 1 Rob. Pat. sec. 43; Curt. Pat. sec. 320, 1st ed., sec. 406, 3 ed. — Continental *v.* Eastern, 210 U. S. 405; 51 L. Ed. 992; 28 S. Ct. 748.

As the patentees have never made any use of their alleged invention, nor attempted to do so, nor permitted its use by others, nor given any explanation of the non-user, or any reason for it; I doubt whether the case submitted is not one of a mere legal right, and whether the complainant should not be left to its remedy at common law, if entitled to any relief at all. — Mem. of Putnam, C. J. in N. Y. *v.* Hollingsworth, 56 Fed. 224; 5 C. C. A. 490.

See Sup. Ct. decision supra.

§ 575. Patent Office Decisions.

An interference proceeding cannot be invoked against strangers on the question of a preliminary injunction. Judge Lacombe, who carefully reviewed the decisions in this regard, came to the just conclusion that the only adjudication which can support such an injunction is a judicial one. — Wilson *v.* Consolidated, 88 Fed. 286; 31 C. C. A. 533.

Walk. Pat. sec. 674; Dickerson *v.* Machine Co. 35 Fed. 143.

The decision in interference was not the equivalent of an adjudication as to patentability and infringement. — Hildreth *v.* Norton, 159 Fed. 428; 86 C. C. A. 408.

§ 576. Powers and Scope.

Federal courts vested with jurisdiction in such cases have power, in their discretion, to grant injunctions to prevent the violation of any right secured by a patent, as in other cases of equity cognizance. — Parks *v.* Booth, 102 U. S. 96; 26 L. Ed. 54.

Jurisdiction and power to grant, history and general statement. — Root *v.* Railway, 105 U. S. 189; 26 L. Ed. 975.

The complainant was thus compelled not only to go into another jurisdiction to try points at issue below, but also to go into the jurisdiction of a law court in which he could not avail himself of his equities. Under these circumstances the court below enjoined him. It is a familiar principle that when a court of equity has taken jurisdiction of a controversy and has all the parties before it, it proceeds to give full relief, and it can enjoin any proceedings in any other court touching the matters in controversy before it. — Berliner *v.* Seaman, 113 Fed. 750; 51 C. C. A. 440.

The injunction forbids "the making, using, or selling of any apparatus embodying the inventions recited or specified" in the claims of the patents.

The monopoly of a patent extends to the making or selling, as well as the using, of the patented device within the United States. — Bullock *v.* Westinghouse, 129 Fed. 105; 63 C. C. A. 607.

Adams *v.* Burks, 17 Wall. 453; Heaton *v.* Eureka, 77 Fed. 288; Dorsey *v.* Bradley, 12 Blatchf. 202.

§ 577. Violation of — Contempt.

Process of contempt is a severe remedy and should not be resorted to where there is fair ground of doubt as to the wrongfulness of the defendant's conduct. — California *v.* Molitor, 113 U. S. 609; 28 L. Ed. 1106; 5 S. Ct. 618.

The power of the court to direct the payment of a part or all of the fine to the complainant in an application for contempt, as a compensation for his time and outlay in prosecuting the application, has been also recognized in the circuit courts especially in this circuit; and in practice is a power which ought to be exercised when the expenses and trouble to which the complainant has been subjected justify its exercise. — Cary *v.* Acme, 108 Fed. 873; 48 C. C. A. 118.

In re Muller, 7 Blatchf. 23; Macauley *v.* Machine, 9 Fed. 698; in re Tift, 11 Fed 463; in re North Bloomfield, 27 Fed. 795; Wells Fargo *v.* Oregon, 19 Fed. 20.

The articles sold in supposed violation of the temporary injunction had been made before the injunction was granted, and pending the injunction were shipped to Canada and there sold. There had been, therefore, no violation of the injunction, because there had been no making or selling or using of the patented device after the allowance of the injunction, within the limits of the United States. But it is elementary that neither the making, selling, nor using of one element of a combination is infringement. — Bullock *v.* Westinghouse, 129 Fed. 105; 63 C. C. A. 607.

Prouty *v.* Ruggles, 16 Pet. 336; Corn Planter Patent, 23 Wall. 181; Rowell *v.* Lindsay, 113 U. S. 97.

The wilful violation of an injunction by a party to the cause is a contempt of court constituting a specific criminal offense. Crosby case, 3 Wilson, 188; Ex parte Kearney, 7 Wheat. 38; New Orleans *v.* Steamship, 20 Wall. 387; Hayes *v.* Fischer, 102 U. S. 121. It is immaterial to consider the distinction sometimes noticed between criminal and civil contempts, inasmuch as both kinds involve the vindication of the authority of the court, whether the remedy incidentally inure to the benefit of a party or not. Cyc. Law & P. 6 et seq. The proceeding to punish for a contempt is in the nature of a criminal proceeding, whether the result be partially remediable or not, and the same rules prevail which govern in the trial of indictments, the defendant being entitled to any reasonable doubt. Accumulator *v.* Consolidated, 53 Fed. 793; In re Acker, 66 Fed. 291; Howell *v.* State, 10 Lea, 544; 4 Enc. Pl. & Pr. 768 et seq.; U. S. *v.* Jose, 63 Fed. 951. — Bullock *v.* Westinghouse, 129 Fed. 105; 63 C. C. A. 607.

Proceedings of contempt are of two classes: Those prosecuted to preserve the power and vindicate the dignity of the courts by punishing the contemnor, and those prosecuted to compel observance and redress the violation of orders or decrees made in behalf of a party to an action pending before the court. The former are punitive and essentially criminal in their nature, and the government, the courts, and the people are interested in their prosecution. The latter are civil, remedial, and coercive in their nature, and the parties chiefly interested in their conduct and prosecution are the individuals whose private rights and remedies they are necessary to redress.

The intentional violation of an injunction by a party to the cause is an act in defiance of the authority of the court and in derogation of the rights of the adverse party, and a prosecution for contempt in such case may partake of both punitive and remedial character. — Christensen *v.* Westinghouse, 135 Fed. 774; 68 C. C. A. 476.

§ 578. Violation of — Miscellaneous Rules.

The fines were, in fact, measured by the damages the plaintiff had sustained and the expenses he had incurred. They were incidents of his claims in the suit. His right to them was, if it existed at all, founded on his right to the injunction, and that was founded on the validity of the patent. — Worden *v.* Searles, 121 U. S. 14; 30 L. Ed. 853; 7 S. Ct. 814.

Distinguishing: Ex parte Kerney, 20 U. S. 39; New Orleans *v.* Steamship, 87 U. S. 387.

The sale was made in Canada of articles then in Canada to a Canadian manufacturer to be used in the ordinary course of business, and, so far as known, no one of the articles was thereafter used in the United States. Inasmuch as the articles were made before the injunction, the manufacturer was not in contempt of the court's order; and as no preliminary arrangements for the sale were made in the United States the sale did not come within the prohibition. — Gould *v.* Sessions, 67 Fed. 163; 14 C. C. A. 366.

The defendant, after knowledge that the injunction had been issued, did not cease the publication of its former advertisement, which exhibited the "split fastener," or the circulation of postal cards having the picture of the same device. It says that before the injunction was issued it had previously made a contract with several periodicals for a year's advertising, that the advertisement as prepared included a picture of the split fastener, and therefore, that the printed publication was not the act of the defendants; but it did not change or take steps to alter the advertisement, and it continued to circulate the old postal cards. An additional defense is that the injunction prohibited selling the fastener, but did not prohibit offering it for sale. These advertisements and postal cards showed a careless disregard of the spirit of the order. If they had stood alone, the acts would very likely not have been visited with punishment, but coupled with the sales of the new fasteners, they indicated an intent which was not consistent with innocence. — Cary *v.* Acme, 108 Fed. 873; 48 C. C. A. 118.

Nor is the power of the court over its own process, as between the parties, necessarily controlled by the rule of noninterference with press publications as to disputed rights and claims of different parties as to the scope of its decisions. It is probably true that, in a case of honest disagreement or misunderstanding as to the true import of a decision, or in an extreme case of abuse or misuse of process for the purpose of impairing or destroying rights sought to be established by the court through its decision, the court may proceed summarily in reference thereto. Such power, however, would be exercised with reluctance, and ordinarily only in an extreme case. — Hobbs *v.* Gooding, 113 Fed. 615; 51 C. C. A. 335.

In this case the defendant had been guilty of a previous violation of the injunction order, but escaped on a lame excuse. The second violation was two-fold, and the only reply defendant made was to raise technical objection to notice &c. The circuit court fined the defendant in all $5,000, one-half to the government and one-half to the complainant. On appeal, the court *held:* If the fines in the present case had been imposed solely in favor of

the government, the question whether they were reasonable or excessive in amount would be so largely one of discretion for the court below that we should not feel justified in disturbing them. We think that when the fine is imposed by way of indemnity to the aggrieved party, it should not exceed his actual loss incurred by the violation of the injunction, including the expenses of the proceedings necessitated in presenting the offense to the judgment of the court. We are also of opinion that when the fine is not limited to the taxable costs it should not exceed in amount the loss and expenses established by the evidence before the court. It follows that, although so much of the orders as directs the payment of half of the fine to the clerk for the use of the United States should be affirmed, that part which directs the payment of half to the complainant should be reversed, with instructions to the court below to take evidence and order payment to the complainant of such sum only as may be found to be a sufficient indemnity. — Christensen *v.* Westinghouse, 135 Fed. 774; 68 C. C. A. 476.

The service of a copy of an injunction upon the solicitors for the defendant in an equity suit ordinarily affords sufficient notice to the defendant, and should be deemed equivalent to actual notice to the defendant of the contents. It is the duty of the solicitor promptly to inform his client of the contents of the document, and the presumption is that he has done so. If it should appear that he has not done so, the court would doubtless acquit the defendant of any intentional misconduct in a proceeding to punish him for violating the order. In this case there was the additional presumption that a letter properly addressed and mailed reached its destination at the proper time and was duly received by the person to whom it was addressed. This is a presumption of fact resting on the consideration that the post office is a public agent charged with the duty of transmitting letters, and that what ordinarily results from the transmission of a letter through the post office probably resulted in the given case; it is deduced from the known course of business, and the presumption that the officers of the postal system have discharged their duty. -- Christensen *v.* Westinghouse, 135 Fed. 774; 68 C. C. A. 476.

Rosenthal *v.* Walker. 111 U. S. 185; Kimberly *v.* Arms, 129 U. S. 512; Henderson *v.* Carbondale, 140 U. S. 26; Schutz *v.* Jordan, 141 U. S. 213.

That a person not actually in the employ of or acting as agent of a defendant, and having no official notice of the injunction, but actually possessing such knowledge and acting in collusion with defendant, may be punished for contempt, see Hamilton *v.* Diamond, 137 Fed. 417; 69 C. C. A. 532.

§ 579. Miscellaneous Injunction Decisions.

The right of a complainant to an injunction, on cause shown, is not abridged by the fact that he has entered into a combination with others to create a monopoly under his patents. — Edison Electric *v.* Sawyer-Man. 53 Fed. 592; 3 C. C. A. 605.

The fact that a contracting company had undertaken to build certain devices for a licensee under the patent, and had also offered to furnish similar devices, as part of another contract with another company, not a licensee under the patent, does not constitute a threat of infringement sufficient to justify a preliminary injunction. — Johnson *v.* Union, 55 Fed. 487; 5 C. C. A. 204.

We are clearly of the opinion that the court below, in refusing to modify its order, and exempt from the writ of injunction the articles made by the

company which as defendant in another suit upon this patent had given bond to these complainants, and which had sold these articles to this defendant, acted in accordance with the established practice, and in the observance of that rule of comity which has always prevailed in the courts of the United States in like cases. — Philadelphia *v.* Edison, 65 Fed. 551; 13 C. C. A. 40.

Sessions *v.* Gould, 49 Fed. 855; Electrical *v.* Julien, 47 Fed. 892; Cary *v.* Spring, 27 Fed. 299; Coburn *v.* Clark, 15 Fed. 804; Siebert *v.* Michigan, 34 Fed. 33; Ladd *v.* Cameron, 25 Fed. 37.

It was earnestly urged to our consideration that unusual conditions existed here, which should be persuasive to the allowance of the injunction in this cause. The argument was with respect to the bicycle. Every part of its construction is fugitive and changeable from year to year, and with respect to the lamp in question, while its usefulness at the present was strongly asserted, it was, nevertheless, urged that it was likely during the present year to be superseded by an electric lamp which would render the appellants' lamp useless. If the argument be well founded in fact, it would be a strong attack upon this lamp as a useful invention, within the meaning of the patent law; and, if it be true that the lamp in question is likely to be specially superseded, — since there is here no attack upon the financial ability of the alleged infringer to respond in damages, while, on the contrary, it has been shown affirmatively that it is abundantly responsible, — there would seem to be no necessity for the injunction, since the inventor, if his lamp is to have such brief existence, could be fully compensated, and would be aided by the active exertions of the infringer in placing the lamp on the market during the short term of its life. It is true the inventor claims that, by reason of the appearance of this infringing lamp, he reduced the price of his own lamp, to maintain it upon the market, and to undersell the infringing lamp. That, however, was a voluntary, and possible ill-advised, act on his part, since, if his patent should be sustained, he could recover damages measured by the market price of the lamp as he had established it, and not by the price which an infringer may receive for it. — Williams *v.* Breitling, 77 Fed. 285; 23 C. C. A. 171.

A settlement before final decree does not entitle the complainant to an injunction. The bill should be dismissed. — Marden *v.* Campbell, 79 Fed. 653; 25 C. C. A. 142.

See, Gamewell *v.* Municipal, 77 Fed. 490.

The act of August 13, 1888, does not apply to suits for the infringement of patents, or other actions of which the circuit court has exclusive jurisdiction. — Southern *v.* Earl, 82 Fed. 690; 27 C. C. A. 185.

In re Hohorst, 150 U. S. 659; In re Keasbey, 160 U. S. 231.

We refer to them (the record and proceedings in the court below) only because we do not wish to leave any presumption that we impliedly approve that parties should proceed with a voluminous hearing on a mere motion for an ad interim injunction at a time when a final hearing may be accomplished almost as speedily. — Wilson *v.* Consolidated, 88 Fed. 286; 31 C. C. A. 533.

The bill with the prayer for preliminary injunction was filed and defendant required to show cause why an injunction should not issue on the return day. On the return day defendant answered and filed affidavits. Complainant did not move for injunction but afterwards moved the court for a show cause order returnable in one week. *Held:* Manifestly being unprepared at that time to proceed, and clearly it was not entitled at that time, as the pleadings

and proofs stood, to an injunction. Application was also made to the court at that time for an injunction or restraining order pending the hearing of the new motion. Motion denied. — Seiler *v.* Fuller, 102 Fed. 344; 42 C. C. A. 386.

Complainant held a license under the patent not exclusive, but an exclusive license to the trade name applied to the patented article. He brought action to restrain defendant from using such trade name, not being in position to restrain defendant under the patent since he held a license right thereunder. It was held that, notwithstanding complainant held such exclusive license to the trade name of the article, since said trade name had become the common designation of the patented article, he could not exclude the defendant from the use of the same. — Johnson *v.* Seaman, 108 Fed. 951; 48 C. C. A. 158.

Our attention is directed to the great loss the appellant will sustain, and to the public inconvenience which, it is claimed, will be experienced, if the injunction is allowed to go into effect. Injunction allowed. — Lanyon *v.* Brown, 115 Fed. 150; 53 C. C. A. 354.

Curry, as patentee, is estopped to deny the validity of the claims; and as a mere employee, that he "may be enjoined whenever this is necessary to protect the holder of the patent against future infringements, is universally conceded." — Regent *v.* Penn, 121 Fed. 80; 57 C. C. A. 334.

Rob. Pat. sec. 912.

Defendant sells perforated music rolls, adapted for complainant's instruments, and also several other varieties, not covered by complainant's patent. The injunction restrains defendant from directly or indirectly vending to others to be used music rolls adapted and intended to be used in mechanical and musical instruments purchased from the complainant herein under patent license to be used only with music rolls made and sold by said complainant. — Æolian Co. *v.* Juelg Co. 155 Fed. 119; 86 C. C. A. 205.

INTERFERENCES.

The Statute § 580
General Statement § 581
Actions to Compel Issue of Patent § 582
Appeals § 583 (*see* § 109)
Conclusiveness § 584
Miscellaneous § 585
See — Actions § 25; *Adjudication* § 30; *Appeals* § 114; *Commissioner of Patents* § 258; *Estoppel* § 383; *Injunction* § 575; *Interfering Patents* § 586; *Patent Office* § 783; *Priority* § 810; *Protests* § 848; *Public Use Proceedings* § 859; *Reduction to Practice* § 860; *Res Judicata* § 895

§ 580. The Statute.

Sections 482 and 4909 relate to appeals in interferences, and sec. 4905 provides the method of taking proofs. The only provision necessary to quote is the following:

Whenever an application is made for a patent which, in the opinion of the Commissioner, would interfere with any pending application, or with any unexpired patent, he shall give notice thereof to the applicants, or applicant and patentee, as the case may be, and shall direct the primary examiner to proceed to determine the question of priority of invention. And the Commissioner may issue a patent to the party who is adjudged the prior inventor, unless the adverse party appeals from the decision of the primary examiner,

or of the board of examiners-in-chief, as the case may be, within such time, not less than twenty days, as the Commissioner shall prescribe. — R. S. 4904.

§ 581. General Statement.

The law, practice, and procedure in interferences is a distinct and separate branch of the patent law. The Court of Appeals, D. C. is the court of last resort in interference matters; but since a Patent Office adjudication is not final except between the parties or parties in privity, interference adjudications amount to little more than side lights which may or may not illumine the subject. No branch of the patent law is more beset with technicalities, more objectionable on account of the power it gives to a powerful litigant to exhaust a weak one, or more in need of reform to meet the changed conditions of industrial life than that of interferences.

§ 582. Actions to Compel Issue of Patent.

Where action is brought to compel issue of patent under R. S. sec. 4915, the court will not only determine prior rights but will also adjudicate the patentability of the invention. — Hill *v.* Wooster, 132 U. S. 693; 33 L. Ed. 502; 10 S. Ct. 228.

In an action under sec. 4915 U. S. R. S. by a defeated party in an interference, when the question decided in the patent office is one between contesting parties as to priority of invention, the decision there made must be accepted as controlling upon that question of fact in any subsequent suit between the same parties, unless the contrary is established by testimony which in character and amount carries thorough conviction. — Standard *v.* Peters, 77 Fed. 630; 23 C. C. A. 367.

Morgan *v.* Daniels, 153 U. S. 124.

§ 583. Appeals.

That an appeal from a decision of a primary examiner upon a motion to dissolve an interference in which it was held that the party had the right to make a claim is not allowable, and that the patent office rule so providing is not in contravention of the statutes, see Lowry *v.* Allen, 203 U. S. 476; 51 L. Ed. 281; 27 S. Ct. 141.

§ 584. Conclusiveness.

Decision of Patent Office on priority is controlling in a subsequent suit between same parties, in the absence of other thoroughly convincing testimony. — Morgan *v.* Daniels, 153 U. S. 120; 38 L. Ed. 657; 14 S. Ct. 772.

It is contended that it was too late for the complainant to raise the question, in the court below, whether the invention of one of the parties was put in issue in the interference and that he is thereby estopped. We do not concur in this view. The interference issue is drawn up by the patent office examiners, and the interference is declared, before either party has access to the specifications of the other, and the claims made with respect to the issue are submitted before the specifications are disclosed. Subsequently, perhaps, the question might be raised, but we do not think that a failure to raise it in the patent office, prevents its being brought to the attention of the court in a proceeding like this by independent bill. — Christie *v.* Seybold, 55 Fed. 69; 5 C. C. A. 33.

Hill *v.* Wooster, 132 U. S. 693.

Complainant withdrew from the contest and permitted — indeed assisted — contestant to make out his case, and took a license under contestant's patent. We regard it an admission of contestant's priority. — Shoemaker *v.* Merrow, 61 Fed. 945; 10 C. C. A. 181.

No alleged interference, on the merits of which the patent office finally passed, and to which the Messrs. Cowles were parties, was declared until after the issuing of the process patent in suit, and cannot of itself control the scope, construction or validity of the claims in question. 2 Rob. Pat. 588. These interference proceedings can at most only serve to disclose the understanding of the patent office and of the parties to such interference at the time as to the validity and scope of these claims. They are not conclusive in any sense upon the rights of the appellant. — Elec. *v.* Carborundum, 102 Fed. 618; 42 C. C. A. 537.

This action was brought to cancel an agreement of license from defendant to complainant on the ground that the claims had been put in interference and judgment rendered against them and in favor of the other interferent. Demurrer was interposed on the ground that the suit was unseasonably brought; that the adjudication by the examiner of interferences was not final. *Held:* That the judgment was not final. — Westinghouse *v.* Hein, 159 Fed. 936; 87 C. C. A. 142.

§ 585. Miscellaneous.

If the inventions were practically one and the same the patent office was in error in dividing the invention, and as it adjudged that plaintiff was the prior inventor, he was the one entitled to the patent. — DuBois *v.* Kirk 158 U. S. 58; 39 L. Ed. 895; 15 S. Ct. 729.

It will hardly be contended, if Lobel had appeared upon the adjourned day, that his cross-examination could not have proceeded legally. If on that day, he had announced his refusal to be cross-examined, there would have been ample time to procure an order compelling his attendance before the time for taking the testimony had expired. It was not, however, until counsel on the other side had consented to four adjournments that they were informed that Lobel declined to be cross-examined further. It was then too late to proceed within the assigned time, as but two days remained. Thus, if Lobel's contention be sustained, he has, by persistently securing adjournments for his own convenience, deprived Cossey of a substantial right, the exercise of which he postponed for the accommodation of and at the request of Lobel. Contempt order affirmed. — Lobel *v.* Cossey, 157 Fed. 664; 85 C. C. A. 142.

The times for taking testimony had been fixed and the junior party had delayed until near the close of his time limit and then called a witness, examined him, and asked for adjournments which carried the time past the time limit and into the period allotted to the senior party. The witness refused to appear for cross-examination on the ground of expiration of time for taking his testimony. On motion to punish him for contempt for refusal to obey a subpœna issued by the circuit court, *held:* We are of the opinion that Cossey had an undoubted right to cross-examine Lobel which right became vested during the continuance of the time fixed by the Commissioner of patents, and that the circuit court had jurisdiction to enforce the right notwithstanding the fact that the time had expired when the authority of the court was invoked. — Lobel *v.* Cossey, 157 Fed. 664; 85 C. C. A. 142.

INTERFERING PATENTS.

Statutory Provision § 586
Rulings § 587
See — Priority § 808; *Protests* § 848; *Public Use Proceedings* § 859; *Reduction to Practice* § 860

§ 586. Statutory Provision.

Whenever there are interfering patents, any person interested in any one of them, or in the working of the invention claimed under either of them, may have relief against the interfering patentee, and all parties interested under him, by suit in equity against the owners of the interfering patent; and the court, on notice to adverse parties, and other due proceedings had according to the course of equity, may adjudge and declare either of the patents void in whole or in part, or inoperative, or invalid in any particular part of the United States, according to the interest of the parties in the patent or the invention patented. But no such judgment or adjudication shall affect the right of any person except the parties to the suit and those deriving title under them subsequent to the rendition of such judgment. — R. S. 4918.

§ 587. Rulings.

On an issue made directly between two patents under section 4918, R. S., or otherwise, the complainant below would be required to prove earlier invention in his behalf beyond reasonable doubt. (The complainant's patent having been filed later.) — Brooks *v.* Sacks, 31 Fed. 403; 26 C. C. A. 456.

Morgan *v.* Daniels, 153 U. S. 120.

It is said that section 4918 was intended to subserve the single purpose of enabling parties to obtain an adjudication of priority of invention covered by interfering patents, with the consequent authority to declare the patent of the later inventor void. Consequently, it is urged, the court has no authority to enquire whether the supposed invention which is the subject of the controversy is patentable or not. It appears from the opinion of the learned judge who decided the case in the court below, found in the record, that this construction of the statute was there accepted, upon the authority of certain cases cited in the opinion, without any original consideration of the question by him; but we are unable to agree that the court is so rigidly tied down as such a construction of the statute would imply. On the contrary, we think the court is bound to determine whether, upon identifying the subject matter of the interfering patents, the invention therein stated is patentable. If it is not, and the court should go on and pronounce a decree of nullity against one of the patents, it would do so at the instance of one who has no right to protect, and consequently no standing on which to assail his adversary. The parties would not stand on equal ground in such a litigation, and the power of the court would be perverted to the determination of an unprofitable inquest as to who was the first discoverer of a nullity. The outcome would be that, while one pretender would be dislodged, the other would occupy the field unscathed. We think that if, upon inspection of the patents, or in the course of the investigation it must make in order to determine the nature of the alleged invention, the court should see that the patents are void for lack of patentable subject-matter, it ought not to proceed to an inquiry as to who first discovered the thing which the court finds to be null, and decree thereon, but should dismiss the bill. Manifestly, it is necessary that the court should know what the invention is which supports the patents, not generally, what the patents are about, but what is the particular discovery for which each of the patents was granted. — Palmer *v.* Lozier, 90 Fed. 732; 33 C. C. A. 255.

Foster *v.* Lindsay, 3 Dill. 126, Fed. Cas. No. 4976; Pentlarge *v.* Pentlarge, 19 Fed. 817; Lockwood *v.* Cleveland, 20 Fed. 164; Sawyer *v.* Massey, 24 Fed. 144; American *v.* Ligowski, 31 Fed. 466; Electric *v.* Brush, 44 Fed. 602.

That the general rule as to demurrers in patent causes applies to actions brought under sec. 4918 R. S., see Simplex *v.* Wands, 115 Fed. 517; 53 C. C. A. 171.

That the Patent Office records and file wrappers may be considered in determining the question of interference between two patents, see Simplex *v.* Wands, 115 Fed. 517; 53 C. C. A. 171.

Sutter *v.* Robinson, 119 U. S. 530; Sargent *v.* Lock Co. 114 U. S. 63; Brill *v.* Car. Co. 90 Fed. 666.

The court is not limited to the language of the claims and specifications, but may take into consideration certain extraneous facts. For example, it may have recourse to the testimony of experts to ascertain the meaning of technical words or phrases, or to ascertain the difference between or the identity of the devices, or to obtain a better understanding of a drawing or model or the character and operation of the devices; and generally, a court may avail itself of the testimony of experts to acquire a knowledge of all the facts pertaining to an art to which a given patent belongs, and a full understanding of the progress that had been made therein at the time the patent was issued. The adjudged cases afford many illustrations of the fact that proof of the state of the art has an important bearing upon equivalency and construction of claims. — Simplex *v.* Wands, 115 Fed. 517; 53 C. C. A. 171.

Winans *v.* Railroad, 21 How. 88; McCormick *v.* Talcott, 20 How. 402; Machine Co. *v.* Lancaster, 129 U. S. 263; Miller *v.* Mfg. Co. 151 U. S. 186; National *v.* Interchangeable, 106 Fed. 693; Railway *v.* Godehard, 59 Fed. 776; McClain *v.* Ortmayer, 141 U. S. 419; Walk. Pat. sec. 184.

On a bill filed under sec. 4918 R. S., the first question to be determined is whether the patents involved are interfering patents, since the right to relief is grounded on the fact of interference; that patents do not interfere, within the meaning of the patent law, unless the claims of the respective patents, or some of them, cover the same mechanical device or combination; that it is the claim of the patent, and the claim only, when properly construed, which determines the thing patented; and that it may happen that the structure described in one patent will infringe the claims of another patent, although the patents are not interfering patents, within the meaning of the statute. — Simplex *v.* Wands, 115 Fed. 517; 53 C. C. A. 171.

Gold *v.* U. S. Fed. Cas. 5,508; Mfg. Co. *v.* Craig, 49 Fed. 370.

INVENTION.

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§ 588. Statutory Provisions.

Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof, not known or used by others in this country, *before his invention or discovery thereof*, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, *or more than two years prior to his application*, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceedings had, obtained a patent therefor. — R. S. 4886.

On the filing of any such application and the payment of the fees required by law, the Commissioner of Patents shall cause an examination to be made of the alleged new invention or discovery; and if on such examination it shall appear that the claimant is justly entitled to a patent under the law, and that the same is sufficiently useful and important, the Commissioner shall issue a patent therefor. — R. S. 4893.

These two sections stand as created by the act of July 8, 1870, with the exception of the two clauses in sec. 4886 printed in italics, which were added by the act of Mar. 3, 1897, and which went into effect Jan. 1, 1898.

§ 589. General Statement.

This title covers the great, main, central subject of the law of patents. Under it are treated many subjects, such as novelty, patentability and mechanical skill, which are commonly made the subject of separate discussion. Some discussion of the several classes of patentable inventions will be found under the titles *Art*, *Machine*, *Manufacture*, *Composition of Matter*, *Improvement*, *Process*, *Product;* and the subject of patentable designs is separately treated under the title *Designs*.

Attempted definitions of invention, novelty, patentability, will be found under the following sections; but they are of little value. There are, however, two practical, useful statements of the Supreme Court, one made very early in the history of the law, and the other in connection with the most elaborate opinion ever written by that court — an opinion which occupies an entire volume. These statements are:

The end to be accomplished is not the subject of a patent. The invention consists in the new and useful means of obtaining it. — Carver *v.* Hyde, 16 Pet. 513; 10 L. Ed. 105.

When the question is, whether a thing can be done or not, it is always easy to find persons ready to show how not to do it. If one succeeds, that is enough, no matter how many others may fail. — Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

As has been so well stated by one of our best writers, it is neither the means to an end nor the end itself which constitutes invention, but the idea of means; and to this may be added, to bring the statement within the Telephone Case rule, that patentable invention — invention that is both novel and useful under the statute — must consist of an idea of means expressed in terms of matter novel in itself and capable of producing a useful result. The means may be old and the result new, in which case the idea of means resides in the new adaptation. The combination may be new and the result old, in which case the idea of means resides in the new combination.

These are simple rules, but they are effective. The question of invention can never be bounded by fixed rules. The courts will always differ and dis-

sent, as in the Telephone Cases; and often a question will arise, as in the Westinghouse Case (Westinghouse *v.* Boyden, 170 U. S. 537) where the court required three arguments of the case before it could be decided, which will seem to baffle the greatest minds, and the decision of which will meet with the same dissent with the bar as it did with the bench. The difficulty in determining patentable invention, if such there be, arises, on the one hand, when we attempt to dignify an act as such which seems hopelessly intermixed with a multitude of minor improvements, and on the other, when we encounter a basic or generic discovery the bounds of which we know not how to set.

§ 590. Abandonment.

The knowledge of the improvement was as completely lost as if it had never been discovered. The public could derive no benefit from it, until it was discovered by another inventor. And if the patentee made his discovery by his own efforts, without any knowledge of the old device, he invented an improvement that was then new, and at the time unknown. — Gayler *v.* Wilder, 10 How. 477; 13 L. Ed. 504.

Unsuccessful and abandoned experiments do not affect the validity of a subsequent patent. — Deering *v.* Winona, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

Brown *v.* Guild, 90 U. S. 181; Coffin *v.* Ogden, 85 U. S. 120.

There is a degree of credit due to one who explores out of the way or hidden places, and brings to the light and to the uses of civilization, as "abandoned experiments" the discoveries of others, whose genius was itself a disqualification for the achievement of practical success; but it is certainly no part of the patent law to foster attempts to appropriate and monopolize things of common-place character and of familiar use, on the ground that, although frequently employed even in patented devices, they have not been claimed as inventions, and their uses and benefits exploited. The obvious need not be explained. — Fuller-Warren *v.* Michigan, 86 Fed. 463; 30 C. C. A. 193.

Note: For full list of cases on this subject see *Abandonment.*

§ 591. Adaptation — Arrangement or Grouping.

Mere order and arrangement of spacings in a blank book for a specified use cannot, upon the most liberal construction of the patent laws, be held to involve any invention. — Munson *v.* Mayor, 124 U. S. 601; 31 L. Ed. 586; 8 S. Ct. 622.

The different arrangement of these groupings as they appear in the patent sued on is not invention, but is a mere matter of mechanical judgement, "the natural outgrowth of the development of mechanical skill as distinguished from invention." — Florsheim *v.* Schilling, 137 U. S. 64; 34 L. Ed. 574; 11 S. Ct. 20.

Burt *v.* Evory, 133 U. S. 349, and authorities there cited; Brown *v.* Piper, 91 U. S. 37.

In view of the state of the art, it required no invention to make a single die to cut dough on a flat surface into any particular desired shape. — Butler *v.* Steckel, 137 U. S. 21; 34 L. Ed. 582; 11 S. Ct. 25.

Smith *v.* Nichols, 88 U. S. 112; Dunbar *v.* Meyers, 94 U. S. 187; Pomace *v.* Ferguson, 119 U. S. 335; Peters *v.* Active, 130 U. S. 626; Watson *v.* Cincinnati, 132 U. S. 161.

That putting a part in a secure place and out of the way may involve invention, see Standard *v.* Computing, 126 Fed. 639; 61 C. C. A. 541.
Star *v.* General, 111 Fed. 398.

Patentability cannot be decreed to every little shift that a woman may make in the arrangement of her garments, or the location of the means through which such arrangements are effected. — Kleinart *v.* Stein, 133 Fed. 228; 66 C. C. A. 282.

Mere adjustability of parts does not constitute invention. — Smyth *v.* Sheridan, 149 Fed. 208; 79 C. C. A. 166.
Peters *v.* Hanson, 129 U. S. 541; Doig *v.* Morgan, 122 Fed. 460; Sipp *v.* Atwood, 142 Fed. 149.

That mere positioning, color arrangement of common devices, like catalog cards and card markers, or similar arrangement resulting in mere convenience with no new function, is not patentable, see Gunn *v.* Bridgeport, 152 Fed. 434; 81 C. C. A. 576.
Hollister *v.* Benedict, 113 U. S. 72; Aron *v.* Manhattan, 132 U. S. 84.

Where adjustability is desired, such means as a series of holes in the supporting rod of a carrier, any one of which may be engaged by a bolt on the main machine would at once suggest itself to a skilled mechanic. Such means have been used in the agricultural implement art long prior to the date of the patent. In our judgment, " he produced no new result, or any improved method of producing the old result." — Rose *v.* Dowden, 157 Fed. 681; 85 C. C. A. 449.
Voigtmann *v.* Weis, 148 Fed. 848; Smith *v.* Nichols, 21 Wall. 112.

That a mere location or arrangement of parts, except in cases where such location or arrangement produces a distinctively novel result, is not patentable, see Cutler-Hammer *v.* Automatic, 159 Fed. 447; 86 C. C. A. 477.

But the structure on which invention is predicated here is unquestionably new, there being a readjustment of materials, by which new and highly useful results are brought about. — Edison *v.* Novelty, 167 Fed. 977; C. C. A.
Rainear *v.* Western, 159 Fed. 431.

§ 592. Adaptation — Strengthening or Increasing Weight.

The patented device was a door knob made of a metallic shank fitting dovetail into a porcelain or clay knob. The elements were all old, and the improvement was claimed upon the new material from which the knob was made. *Held:* It may afford evidence of judgement and skill in the selection and adaptation of the materials in the manufacture, but nothing more. — Hotchkiss *v.* Greenwood, 11 How. 248; 13 L. Ed. 683.

A mere enlargement of a machine to adapt it to heavier use, or the mere strengthening of parts for such use is not invention. — Woodbury *v.* Keith, 101 U. S. 479; 25 L. Ed. 939.

An improved shawl strap having a rigid cross-bar to give rigidity to the package, in view of the art did not involve invention. — Crouch *v.* Roemer, 103 U. S. 797; 26 L. Ed. 426.

It is not invention to merely improve a device so that it is stronger or more durable. — Peters *v.* Hanson, 129 U. S. 541; 32 L. Ed. 743; 9 S. Ct. 393.

A mere reinforcement of a garment by the addition of a piece of cloth is not a patentable invention. — Patent *v.* Glover, 141 U. S. 560; 35 L. Ed. 858; 12 S. Ct. 79.

Hollister *v.* Benedict, 113 U. S. 58; Thompson *v.* Boisselier, 114 U. S. 11; Howe *v.* National, 134 U. S. 388; McClain *v.* Ortmayer, 141 U. S. 419.

Did increasing the weight of the hand wheel in this class of machines, in order to correct the tendency of smaller wheels to reverse, involve patentable novelty? We do not think so. The use of hand wheels for straight levers was old, and, whether the wheels were light or heavy, they alike performed the service of rotary levers. — American *v.* Pennock, 164 U. S. 26; 41 L. Ed. 337; 17 S. Ct. 1.

Merely adapting shape and casting in one piece is not invention. — Bothe *v.* Paddock, 50 Fed. 536; 1 C. C. A. 575.

A change due merely to the increased strength of parts does not constitute invention. — Vulcan *v.* Smith, 62 Fed. 444; 10 C. C. A. 493.

The strengthening of the spring, and the increase of rigidity with which it was attached to the rockers and base, may have involved invention, but it so nearly resembles a mere increase in the physical strength of an already suggested means of performing a known function that it is certainly not a pioneer or primary invention, or one the scope of which the courts would be inclined to enlarge beyond what is exactly shown in the patent. It is not a patent in the construction of which any liberal doctrine of equivalents will be applied. — Thomas *v.* Rocker Spring Co. 77 Fed. 420; 23 C. C. A. 211.

Mere strengthening of a structure does not constitute invention. — Thomasson *v.* Bumpass, 78 Fed. 491; 24 C. C. A. 180.

Superiority due mainly to increased weight and strength are not elements of invention. — Frazer *v.* Gates, 85 Fed. 441; 29 C. C. A. 261.

All that is claimed by the patentee as new is the projecting end bars, and the extension laterally outward beyond the side-rails of the woven wire fabric for the purpose described. We are not inclined to think that this device involved invention, within the meaning of the patent law, or that it would not have easily occurred to an ordinary skillful mechanic. — Newark *v.* Ryan, 102 Fed. 693; 42 C. C. A. 594.

§ 593. Adaptation — Miscellaneous Cases.

The subdivision and packing of articles of commerce in small parcels for convenience of handling and retail sale and the packing of these small parcels into boxes or sacks or tying them together in bundles for convenience of storage and transportation, is as common and well known as any fact connected with trade, and is not patentable. — King *v.* Gallun, 109 U. S. 99; 27 L. Ed. 870; 3 S. Ct. 202.

Hotchkiss *v.* Greenwood, 11 How. 248; Phillips *v.* Page, 24 How. 167; Brown *v.* Piper, 91 U. S. 43; Terhune *v.* Phillips, 99 U. S. 592; Atlantic *v.* Brady, 107 U. S. 192; Slawson *v.* R. R. 107 U. S. 649; Smith *v.* Goodyear, 93 U. S. 486.

We do not think the alleged invention (that of employing rotary cutters of a certain character for truing the edge of a shoe sole) is a combination of previous devices rearranged with connections and adaptations so adjusted as to produce a novel and valuable use under the cases cited. — Busell *v.* Stevens, 137 U. S. 423; 34 L. Ed. 719; 11 S. Ct. 150.

LeRoy *v.* Tatham, 55 U. S. 156; Bean *v.* Smallwood, 2 Story, 408.

It is not invention to convert a heavy and unwieldy device into a light, quick acting, easily applied fastening. — Hay *v.* Heath, 71 Fed. 411; 18 C. C. A. 157.

It would seem that angular relations or constructions distinguishable only mathematically are not patentable. — Frazer *v.* Gates, 85 Fed. 441; 29 C. C. A. 261.

Caverly *v.* Deere, 66 Fed. 305.

It would be obviously absurd to attribute patentability to changes in the relative location of chambers, unless a distinctly new and useful result was produced. — Bates *v.* Excelsior, 89 Fed. 498; 32 C. C. A. 267.

Selection among known means, though increasing the degree of efficiency, did not rise to the dignity of independent invention. — Wisconsin *v.* American, 125 Fed. 761; 60 C. C. A. 529.

Mast *v.* Stover, 177 U. S. 485; Lumber Co. *v.* Perkins, 80 Fed. 528; Kelly *v.* Clow, 89 Fed. 297.

That a cigar band, narrower at one end than at the other, is not novel in the patent sense, see Regensburg *v.* Portuondo, 142 Fed. 160; 73 C. C. A. 378.

§ 594. Aggregation — Co-Action Wanting.

The second claim of the reissue, like the single claim of the original patent for the use in succession, or, in the patentee's phrase, "the series" of the two pairs of old dies, the one pair to shape the arms of the bolt, and the other to give those arms the requisite curve, does not show any patentable invention. The two pairs of dies were not combined in one machine, and did not co-operate to one result. Each pair was used by itself and might be used so at any distance of time or place from the other; and if the two were used at the same place and in immediate succession of time, the result of the action of each was separate and distinct and was in no way influenced by the action of the other. This was no combination that would sustain a patent. — Beecher *v.* Atwater, 114 U. S. 523; 29 L. Ed. 232; 5 S. Ct. 1007.

Hailes *v.* Van Wormer, 20 Wall. 353; Pickering *v.* McCullough, 104 U. S. 310; Stephenson *v.* R. R. 114 U. S. 149.

Unless the combination accomplishes some new result, the mere multiplicity of elements does not make it patentable, so long as each element performs some old and well known function. — Richards *v.* Chase, 158 U. S. 299; 39 L. Ed. 991; 15 S. Ct. 831.

It is the immediate mechanical result of the device or combination which is pertinent. In the patent in suit, only when in use can the combination be complete (according to complainant's expert) and every use involves a reconstruction and dissolution of the combination. If there has ever been granted a patent for such a combination of mechanical elements, designed to expend their force among themselves, and to effect or affect nothing

beyond, it has not come to our knowledge; but whether, if granted, it could be upheld, need not now be considered. — Hay *v.* Heath, 71 Fed. 411; 18 C. C. A. 157.

§ 595. Aggregation — Distinguished from Combination.

This argument (mere aggregation) would be sound if the combination claimed was an obvious one for attaining the advantages proposed, one which would occur to any mechanic skilled in the art. But it is plain from the evidence, and from the very fact that it was not sooner adopted and used, that it did not for years occur in this light to even the most skilled persons. It may have been under their very eyes, they may almost be said to have stumbled over it; but they certainly failed to see it, to estimate its value and to bring it into notice. Who was the first to see it, to understand its value, to give it shape and form, to bring it into notice and urge the adoption is a question to which we shall shortly give our attention. At this point we are constrained to say that we cannot yield our assent to the argument, that the combination of the different parts or elements for attaining the object in view was so obvious as to merit no title to invention. Now that it has succeeded, it may seem very plain to anyone, that he could have done it as well. This is often the case with inventions of the greatest merit. It may be laid down as a general rule, though perhaps not an invariable one, that if a new combination and arrangement of known elements produce a new and beneficial result, never attained before, it is evidence of invention. It was certainly a new and useful result to make a loom produce 50 yards a day, when it never before produced more than 40; and we think that the combination of elements by which this was effected, even if those elements were separately known before, was invention sufficient to form the basis of a patent. — Loom Co. *v.* Higgins, 105 U. S. 580; 26 L. Ed. 1177.

There is no co-operative action of these distinct claims which produces a unitary result. Each one acts separately and independently of the other. It has been repeatedly held that a mere aggregation of old elements in a new relation is not the subject of a patent. — Mott *v.* Standard, 53 Fed. 819; 4 C. C. A. 28.

Reckendorfer *v.* Faber, 92 U. S. 347; Pickering *v.* McCullough, 104 U. S. 310; Hendy *v.* Iron Works, 127 U. S. 370; Hailes *v.* Van Wormer, 20 Wall. 353; Union *v.* Keith, 139 U. S. 539; Royer *v.* Roth, 132 U. S. 210.

Is this invention a mere aggregation or is it a patentable combination? What is the distinction between mere aggregation and a patentable combination? A combination of well-known separate elements, each of which when combined operates separately, and in its old way, and in which no new result is produced which cannot be assigned to the independent action of one or the other, of the separate elements, is an aggregation of parts, merely, and is not patentable. But if to adapt the several elements to each other in order to effect their co-operation in one organization, demands the use of means without the range of ordinary mechanical skill, then the invention of such means to effect the mutual arrangement of parts would be patentable. The parts need not act simultaneously, if they act unitedly to produce a common result. It is sufficient if all the devices co-operate with respect to the work to be done, and in furtherance thereof, although each device may perform its own particular function only. — Standard *v.* Southern, 54 Fed. 521; 4 C. C. A. 491.

Hailes *v.* Van Wormer, 20 Wall. 353; Reckendorfer *v.* Faber, 92 U. S. 357; Pickering *v.* McCullough, 104 U. S. 318.

It is a commonly accepted rule of the law of patents that the inventive idea is not ordinarily present in the conception of a combination which

merely brings together two or more functions, to be availed of independently of each other. The mechanism which accomplishes such a result and no more is ordinarily spoken of as a mere aggregation. — Osgood *v.* Metropolitan, 75 Fed. 670; 21 C. C. A. 491.

Hailes *v.* Van Wormer, 20 Wall. 353; Reckendorfer *v.* Faber, 92 U. S. 347; Brinkerhoff *v.* Aloe, 146 U. S. 515; Palmer *v.* Corning, 156 U. S. 342; Richards *v.* Elevator, 158 U. S. 299.

§ 596. Aggregation — Not Invention.

The law requires more than a change of form, or juxtaposition of facts, or of the external arrangement of things, or of the order in which they are used, to give patentability. — Reckendorfer *v.* Faber, 92 U. S. 347; 23 L. Ed. 719.

Hailes *v.* Van Wormer, 20 Wall. 353.

All the elements of the combination are old, and each operates only in the old way. Beyond the separate and well known results produced by them severally, no one of them contributes to the combined result any new feature; no one of them adds to the combination anything more than its separate independent effect; no one of them gives any additional efficiency to the others, or changes in any way the mode or result of its action. In a patentable combination of old elements, all the constituents must so enter into it, as that each qualifies every other; to draw an illustration from another branch of the law, they must be joint tenants of the domain of the invention, seized each of every part, per my et per tout, and not mere tenants in common, with separate interests and estates. It must form either a new machine of a distinct character and function, or produce a result due to the joint and co-operating action of all the elements, and which is not the mere adding together of separate contributions. Otherwise, it is only a mechanical juxtaposition, and not a vital union. — Pickering *v.* McCullough, 104 U. S. 310; 26 L. Ed. 749.

Hailes *v.* Van Wormer, 87 U. S. 368; Reckendorfer *v.* Faber, 92 U. S. 357.

In view of these facts, which are either matters of common knowledge or well established by the evidence, the only field of invention left for the patent to cover was the application by the old and familiar arrangement of shafts and cog-wheels, of the power of an auxiliary engine to a capstan instead of a windlass. A capstan differs from a windlass in this respect only that its barrel or shaft is vertical, while that of the windlass is usually horizontal. It is plain, therefore, that no such ingenuity as merited the issue of a patent was required for this improvement, but only the ordinary judgement and skill of a trained mechanic. — Morris *v.* McMillin, 112 U. S. 244; 28 L. Ed. 702; 5 S. Ct. 218.

Atlantic *v.* Brady, 107 U. S. 192; Penna. *v.* Locomotive, 110 U. S. 490; Hailes *v.* Van Wormer, 20 Wall. 353; Phillips *v.* Detroit, 111 U. S. 604; Hotchkiss *v.* Greenwood, 11 How. 248; Phillips *v.* Paige, 24 How. 164; Smith *v.* Nichols, 21 Wall. 112; Dunbar *v.* Meyers, 94 U. S. 187; Heald *v.* Rice, 104 U. S. 737.

There is no specific quality of the result which cannot be definitely assigned to the independent action of a single element. There is, therefore, no patentable novelty in the aggregation of the several elements, considered in itself. — Thatcher *v.* Burtis, 121 U. S. 286; 30 L. Ed. 942; 7 S. Ct. 1034.

Hailes *v.* Van Wormer, 87 U. S. 353; Heald *v.* Rice, 104 U. S. 737; Penna. *v.* Locomotive, 110 U. S. 490; Morris *v.* McMillin, 112 U. S. 244; Hollister *v.* Benedict, 113 U. S. 59; Thompson *v.* Boisselier, 114 U. S. 1; Beecher *v.* Atwater, 114 U. S. 523; Gardner *v.* Herz, 118 U. S. 180.

The aggregation of old elements, some found in one patent and some in another, but all performing like functions in well-known inventions having the same object with no substantial difference but that of configuration is not invention. — Busell *v.* Stevens, 137 U. S. 423; 34 L. Ed. 719; 11 S. Ct. 150.

Florsheim *v.* Schilling, 137 U. S. 64.

A mere aggregation of old elements in a new relation is not the subject of a patent. — Union *v.* Keith, 139 U. S. 530; 35 L. Ed. 261; 11 S. Ct. 621.

Reckendorfer *v.* Faber, 92 U. S. 347; Pickering *v.* McCullough, 104 U. S. 310; Stephenson *v.* Brooklyn, 114 U. S. 149; Hendy *v.* Golden, 127 U. S. 370; Hailes *v.* Van Wormer, 87 U. S. 353.

Mere aggregation of old elements is not invention. — Adams *v.* Bellaire, 141 U. S. 539; 35 L. Ed. 849; 12 S. Ct. 66.

Hailes *v.* Van Wormer, 87 U. S. 353; Pickering *v.* McCullough, 104 U. S. 310.

A mere aggregation of functions or a mere difference in degree, a carrying forward of an old idea, a result, perhaps somewhat more perfect than had theretofore been attained, but not rising to the dignity of invention, has been repeatedly held to be invalid. — Wright *v.* Yuengling, 155 U. S. 47; 39 L. Ed. 64; 15 S. Ct. 1.

Stimpson *v.* Woodman, 77 U. S. 117; Smith *v.* Nichols, 88 U. S. 112; Guidet *v.* Brooklyn, 105 U. S. 550; Hall *v.* Macneale, 107 U. S. 90.

Mere aggregation of old devices, performing no new function, is not invention. — Wilson *v.* Ansonia, 54 Fed. 495; 4 C. C. A. 484.

Dunbar *v.* Meyers, 94 U. S. 187; Holland *v.* Shipley, 127 U. S. 398; Schlict *v.* Sherwood, 36 Fed. 591.

In this case there is no joint operation or effect in the construction of a railway car and the oil tank combined which is in any manner due from the simultaneous or successive action of the two combined. It is a mere aggregation of old elements, producing no new results by the combination. — Standard *v.* Southern, 54 Fed. 521; 4 C. C. A. 491.

The invalidity of the claim rests upon the fact that the separate sets of devices are an aggregation which do not combine with each other, and each of which works out an independent and separate result, which is not due to any co-operating action. — Bagley *v.* Empire, 58 Fed. 212; 7 C. C. A. 191.

Pickering *v.* McCullough, 104 U. S. 310.

A mere aggregation of old elements performing no new function, and accomplishing no new results, presents no patentable novelty. — Muller *v.* Lodge, 77 Fed. 621; 23 C. C. A. 357.

Hailes *v.* Van Wormer, 20 Wall. 353; Lock *v.* Mosler, 127 U. S. 354; Knapp *v.* Morss, 150 U. S. 221.

That the adaptation of known mechanical devices to attain a desired end in engineering, although the end attained may be highly useful, in the absence of a novel function, is mere aggregation or engineering skill, see Dodge *v.* New York, 150 Fed. 738; 80 C. C. A. 404.

Dunbar *v.* Eastern, 81 Fed. 201; New Departure *v.* Bevin, 73 Fed. 469.

Can a monopoly be properly granted for coupling without modification a motor that will run any kind of a machine, to a machine that will run with any kind of a motor? The answer to the question thus stated is found

in Blake *v.* San Francisco, 113 U. S. 682; Royer *v.* Roth, 182 U. S. 201. The result was a distinct step in advance. But it was the inevitable result of attaching to each other the unchanged appliances. — National *v.* Powers, 160 Fed. 460; 87 C. C. A. 444.

§ 597. Aggregation — Old Elements, Old Result.

The combination of old elements to produce an old result, where the combination was a mere adaptation of well known mechanical means for producing similar results is not valid. — Stimpson *v.* Woodman, 77 U. S. 117; 19 L. Ed. 866.

Where a combination of old devices produces a new result, such combination is doubtless patentable; but when the combination is not only of old elements, but of old results, and no new function is evolved from such combination, it falls within the rulings of this court. (Cited below.) — Office *v.* Fenton, 174 U. S. 492; 43 L. Ed. 1058; 19 S. Ct. 641.

Hailes *v.* Van Wormer, 20 Wall. 353; Reckendorfer *v.* Faber, 92 U. S. 347; Phillips *v.* Detroit, 111 U. S. 604; Brinkerhoff *v.* Aloe, 146 U. S. 515; Palmer *v.* Corning, 156 U. S. 342; Richards *v.* Elevator Co. 158 U. S. 299.

All the elements of this combination were old, and the absence from it of a single essential element was fatal to the claim of infringement. — Buffington's *v.* Eustis, 65 Fed. 804; 13 C. C. A. 143.

Hailes *v.* Van Wormer, 20 Wall. 353; Bragg *v.* Fitch, 121 U. S. 478.

To combine old parts in such manner as to produce a new result by their harmonious co-operation may be patentable; but it is equally true that where the combination is not only of old parts, but of old results, without the addition of any new and distinct function, the combination is not patentable. — Goodyear *v.* Rubber, 116 Fed. 363; 53 C. C. A. 583.

Hailes *v.* Van Wormer, 20 Wall. 353; Pickering *v.* McCullough, 104 U. S. 310; Florsheim *v.* Schilling, 137 U. S. 64; Knapp *v.* Morss, 150 U. S 221; Office *v.* Fenton, 174 U. S. 492; Stearns *v.* Russell, 85 Fed. 218; Overweight *v.* Vogt, 102 Fed. 957; Brinkerhoff *v.* Aloe, 146 U. S. 515; Reckendorfer *v.* Faber, 92 U. S. 347; Muller *v.* Lodge, 77 Fed. 621.

§ 598. Beneficial Uses and Scope of.

The inventor of a machine is entitled to the benefit of all the uses to which it can be put, no matter whether he has conceived the idea of the use or not. — Roberts *v.* Ryer, 91 U. S. 150; 23 L. Ed. 267.

It is, of course, true that a mistaken description, or even misconception, of the operation of a device which is itself fitly described and claimed, does not vitiate a patent. — Temple *v.* Goss, 58 Fed. 196; 7 C. C. A. 174.

Western *v.* Sperry, 58 Fed. 186.

When the language of both application and grant is so positively and directly declaratory of what was asked and granted as we find in this case, we consider that it would be going beyond a safe rule to extend the operation and protection of the patent further. If appellant has originally made application for an "improvement in a locking device for safes, jails, and other similar structures," which he now insists upon claiming that his invention covers, the public would have had notice of his claim, but the language conveyed no such idea. If we should declare that a peculiarity in a locking device for a jail cage was an improvement in a burglar-proof safe, we should be construing a patent in a manner different from the plain import

of its terms, and thereby doing an injustice to the public. — Gerard *v* Diebold, 61 Fed. 209; 9 C. C. A. 451.

White *v*. Dunbar, 119 U. S. 47; Keystone *v*. Phœnix, 95 U. S. 274; Vance *v*. Campbell, 1 Black, 427; Burns *v*. Meyer, 100 U. S. 671; Railroad *v*. Mellon, 104 U. S. 112; McClain *v*. Ortmayer, 141 U. S. 419.

Note: This rule, in derogation of the older rule that the inventor is entitled to all the uses to which his invention may be put, is one which must be applied with care.

The rule is clear that ordinarily a patentee who is first to make an invention is entitled to his claim for all the uses and all the advantages which belong to it, so far as the new application does not itself involve further invention. — Reece *v*. Globe, 61 Fed. 958; 10 C. C. A. 194.

Roberts *v*. Ryer, 91 U. S. 150; Stow *v*. Chicago, 104 U. S. 547; Miller *v*. Mfg. Co. 151 U. S. 186; Electric *v*. LaRue, 139 U. S. 601.

It is contended that the patentee did not contemplate or foresee what is now claimed. Be this as it may, admitting it to be true that he did not realize the full extent of his discovery, still he would be entitled to all the necessary and legitimate results attained by his invention, including even such as were unexpected. — Thomson-Houston *v*. National, 65 Fed. 427; 12 C. C. A. 671.

Wells *v*. Jacques, 5 O. G. 364; Eames *v*. Andrews, 122 U. S. 40; Brown *v*. D. C. 130 U. S. 87; Stow *v*. Chicago, 104 U. S. 457; Gandy *v*. Belting Co. 143 U. S. 587.

If the idea was not present to his mind, but is an afterthought perceived from subsequent experience or scientific inspection or analysis, it is obvious that there was no invention in thus by accident, as it were, supplying the means of a function not contemplated. — Wells *v*. Curtis, 66 Fed. 318; 13 C. C. A. 494.

That an inventor is entitled to all the uses to which his invention may be put, see, Dueber *v*. Robbins, 75 Fed. 17; 21 C. C. A. 198.

An inventor is entitled to all the uses of which his invention is capable, whether he then knew of all such uses or not. It is not necessary that he shall state all the beneficial results, effects, uses, or advantages of the mechanism which he has devised. — Muller *v*. Lodge, 77 Fed. 621; 23 C. C. A. 357.

Goshen *v*. Bissell, 72 Fed. 67.

A man may, under certain circumstances, be protected in building stronger than he knows. And in this sense it is broad enough to cover the idea that, if the momentum element which was described, or at least illustrated by the drawings, becomes, in practical operation, a more potent and efficient element than was understood, still the patent should not be rendered invalid for that reason. — Parsons *v*. Seelye, 100 Fed. 455; 40 C. C. A. 486.

Wright *v*. Clinton, 67 Fed. 790.

A patentee is entitled to all of the advantages of his invention. — Dowagiac *v*. Superior, 115 Fed. 886; 53 C. C. A. 36.

Goshen *v*. Bissell, 72 Fed. 67; Stearns *v*. Russell, 85 Fed. 218; Palmer *v*. Lozier, 90 Fed. 732; National *v*. Interchangeable, 106 Fed. 693.

Whether the inventor knew or not the full measure of the beneficial functions of his structure, he is entitled to all the uses of his invention. — Goodyear *v*. Rubber, 116 Fed. 363; 53 C. C. A. 583.

Goshen *v.* Bissell, 72 Fed. 67; Dowagiac *v.* Superior, 115 Fed. 886; Wells *v.* Curtis, 66 Fed. 318.

If the patent gave reason to suppose that the inventor may probably have contemplated that his device was capable of other uses, and made adequate provision therefor, his invention should be regarded as covering them, whether he mentioned them or not, or whether he contemplated any other use or not. — Canda *v.* Michigan, 124 Fed. 486; 61 C. C. A. 194.

Goshen *v.* Bissell, 72 Fed. 67; Stillwell-Bierce *v.* Eufaula, 117 Fed. 410.

Possibly he valued no other two-phased alternating current motors, or he conceived that there were no others, so that naturally the practical application which he had in mind was limited accordingly. Nevertheless he is entitled to the advantage of the well-settled rule by virtue of which an inventor who has patented his invention is entitled to all the uses to which it may be applied of the class to which he himself practically applied it. — Westinghouse *v.* Stanley, 133 Fed. 167; 68 C. C. A. 523.

The object that the inventor seemed to have chiefly in mind was to avoid the useless converting of energy into heat by the constant and rapid changing of poles of the transformer apparatus then in use. As things have turned out, this has not proven the chief actual advantage. Now though these advantages be different from the one chiefly in the patentee's mind, the invention will not on that account fail, if there be in the concept an actual advantage, and the structure embodying it evinces patentable invention; for a patentee is entitled, not only to what he specifically sees, but to what has been brought about by his invention, even though not at the time actually seen. — Kuhlman *v.* General, 147 Fed. 709; 78 C. C. A. 97.

It is true that a patentee is entitled to all the beneficial uses of his real invention whether stated or not. But the fact that this patentee, while enumerating in his specifications some 12 advantages resulting from the improved construction, has not even hinted at or suggested any resulting capacity for vertical removal of the plunger, is very persuasive that this element, instead of being " the aim and purpose of the invention " of the patentee, is rather the discovery of his expert. — Bates *v.* Force, 149 Fed. 220; 79 C. C. A. 178.

These patents are for a structure, and the patentees are clearly entitled to the benefit of all the advantages which that structure possesses over prior structures intended to accomplish a similar purpose. This is not a case of preferred structure, but only of the use to which the structure shown in the drawings and covered by the claims may be put. It would, indeed, be an unjust and novel doctrine to hold that a patentee is to be deprived of the benefits which may characterize the use for which the patented structure was mainly designed. — Warren *v.* Blake, 163 Fed. 263; C. C. A.

But the failure of a patentee to realize all the benefits and possibilities of his invention is not fatal. The after-discovery of unsuspected usefulness in a disclosed apparatus, far from detracting from its value, may serve to enhance it. — Westmoreland *v.* Hogan, 167 Fed. 327; C. C. A.

§ 599. Carrying Forward.

A mere carrying forward or new or more extended application of the original thought, a change only in form, proportions or degree, doing substantially

the same thing in the same way by substantially the same means with better results is not invention. — Roberts *v.* Ryer, 91 U. S. 150; 23 L. Ed. 267.

Smith *v.* Nichols, 21 Wall. 112.

Distinguishing, Roberts *v.* Harnden, 2 Cliff. 500.

A mere carrying forward of the original idea, or the substitution of other elements, producing better results, is not invention. — Dunbar *v.* Meyers, 94 U. S. 187; 24 L. Ed. 34.

Smith *v.* Nichols, 21 Wall. 115.

A mere carrying forward, or new or more extended application of the original thought, a change only in form, proportions, or degree, the substitution of equivalents doing substantially the same thing in the same way, by substantially the same means with better results, is not invention. — Gibbon *v.* Loewer, 79 Fed. 325; 24 C. C. A. 612.

Smith *v.* Nichols, 21 Wall. 112; Trimmer *v.* Stevens, 137 U. S. 432; Ansonia *v.* Electrical, 144 U. S. 11.

Lynch carried forward the old idea by a mechanical change in one of the elements which produced better results. Such a change is not patentable. — Galvin *v.* City, 115 Fed. 511; 53 C. C. A. 165.

Guidet *v.* Brooklyn, 105 U. S. 550; Rob. Pat. sec. 238; Reckendorfer *v.* Faber, 92 U. S. 347.

The mere carrying forward a new or more extended application of the original thought, is not such invention as will sustain a patent. Smith *v.* Nichols, 21 Wall. 112; Soehner *v.* Favorite, 84 Fed. 182; American *v.* Wyeth, 139 Fed. 389; Schreiber *v.* Grimm, 72 Fed. 671; Dunbar *v.* Meyers, 94 U. S. 187; Goodyear *v.* Rubber, 116 Fed. 363; Burnham *v.* Union, 110 Fed. 765; Overweight *v.* Vogt, 102 Fed. 957; Campbell *v.* Duplex, 101 Fed. 282.

There is a recognized exception to this rule, or rather counterpart of it, when in the new combination a new mode of operation is effected which produces an original result. Dowagiac *v.* Superior, 115 Fed. 886. — Bullock *v.* General, 149 Fed. 409; 79 C. C. A. 229.

§ 600. Change of Form — Same Function.

An invention consisting of a change of form without change of principle is not invention. — Evans *v.* Eaton, 7 Wheat. 356; 5 L. Ed. 472.

A change of form of a machine without a change of mode of operation, is not patentable. A change of mechanical structure is not patentable unless it produces a new and entirely different result. — Mast *v.* Rude, 53 Fed. 120; 3 C. C. A. 477.

Winans *v.* Denmead, 15 How. 330; Sargent *v.* Larned, 2 Curt. 340; Mabie *v.* Haskell, 2 Cliff. 510; Aiken *v.* Dolan, 3 Fish. P. C. 204.

Under ordinary circumstances, the removal of surplus material or needless parts of a physical structure, without changing the relation, connection, or operation of the essential elements, cannot be invention. — Ferguson *v.* Roos, 71 Fed. 416; 18 C. C. A. 162.

To change the degree of a thing, or of one of its features, is not patentable invention. Guidet *v.* Brooklyn, 105 U. S. 550; Walk. Pat. (3d Ed.) sec. 31. And so of any change in the "form of embodiment," of mere degree or quality of action, without changing the function of any element, or adding a new

element, although it may greatly improve the old combination. 1 Rob. Pat. sec. 237. — Baldwin *v.* Kresl, 76 Fed. 823; 22 C. C. A. 593.

It was not invention to put one (a tire) on a smaller wheel. The question of size is mostly one of degree. — Hickory *v.* Frazier, 100 Fed. 99; 40 C. C. A. 296.

Watson *v.* Railway, 132 U. S. 161; French *v.* Carter, 137 U. S. 239; Road Machine *v.* Pennock, 164 U. S. 26; International *v.* Gaylord, 140 U. S. 55; Adams *v.* Stamping Co. 141 U. S. 539.

Mere variations in the forms of means, not affecting the manner in which the functions are performed, are not material. — Eames *v.* Worcester, 123 Fed. 67; 60 C. C. A. 37.

Bundy *v.* Detroit, 94 Fed. 524.

That a mere change in curvature or contour, involving no new function, is not patentable, see Bradley *v.* Eccles, 126 Fed. 945; 61 C. C. A. 669.

If the mere narrowing of the ends of the belt be patentable, as to which we do not express an opinion, the defendant's device is not within the patent, for its ends are not in any real or functional sense narrowed at all. — Mills *v.* Russell, 144 Fed. 700; 75 C. C. A. 516.

§ 601. Change of Form — Mere Change.

A patent cannot be granted for a mere change of form. — Winans *v.* Denmead, 15 How. 330; 14 L. Ed. 717.

A mere change of size or form, as the change of thread or mesh in netting, is not invention. — Dalton *v.* Jennings, 93 U. S. 271; 23 L. Ed. 925.

Our conclusion is that the absolute length and size of the valve opening was a matter of judgement, in view of the state of the art shown, and that there was no invention in making its length and size greater or less in a reed board of a given width, or when the reed board was made wider or narrower or had more or less sets of reeds in it, either full or partial. — Esty *v.* Burdett, 109 U. S. 633; 27 L. Ed. 1058; 3 S. Ct. 531.

The complainant was the first to employ the combination claimed; but the change was only a change of form, and not patentable. — Mosler *v.* Mosler, 127 U. S. 354; 32 L. Ed. 182; 8 S. Ct. 1148.

Hailes *v.* Van Wormer, 87 U. S. 353; Reckendorfer *v.* Faber, 92 U. S. 347; Pickering *v.* McCullough, 104 U. S. 310.

Change of form is not invention. — Belding *v.* Challenge, 152 U. S. 100; 38 L. Ed. 370; 14 S. Ct. 492.

Roberts *v.* Ryer, 91 U. S. 150.

A mere change in form, as in the vamp of a rubber overshoe, so as to produce a gore-shaped extension above the foxing line, could not require anything beyond the range of ordinary skill of the calling. — Williams *v.* Goodyear, 54 Fed. 498; 4 C. C. A. 485.

Burt *v.* Evory, 133 U. S. 349.

Mere increase of depth, without the discharge of any novel and additional function, is not invention. — Benjamin *v.* Chambers, 59 Fed. 151; 8 C. C. A. 61.

A mere change in curvature without specifically defining the degree thereof is not patentable. — Davis *v.* Parkman, 71 Fed. 691; 18 C. C. A. 398.

The substitution of a curvilinear for a straight line is not invention. — Long *v.* Pope, 75 Fed. 835; 21 C. C. A. 533.

Winans *v.* Denmead, 15 How. 330.

Mere change of form, portability or lightness are not invention. — Olmsted *v.* Andrews Co. 77 Fed. 835; 23 C. C. A. 488.

McCleary *v.* Baker, 63 Fed. 841.

A change of form although producing better results is not patentable. — Birmingham *v.* Gates, 78 Fed. 350; 24 C. C. A. 132.

Smith *v.* Nichols, 21 Wall. 119.

It is a mere change of form and size and that is not invention. — Warren *v.* Rosenblatt, 80 Fed. 540; 25 C. C. A. 625.

Smith *v.* Nichols, 21 Wall. 112.

He did nothing but adapt the old extinguisher to a lighter constructed after the old designs; and this does not, in our opinion, in view of the well trodden previous art, amount to invention. — Kessler *v.* Inks, 108 Fed. 412; 47 C. C. A. 442.

The mere change of size or form of a simple structure, or of an element in a combination, made for the purpose of accommodating it to its work within the sphere of its contemplated uses, does not amount to invention. — Eames *v.* Worcester, 123 Fed. 67; 60 C. C. A. 37.

For an extreme holding that a change of form and also a change of material (cast iron to steel) is not invention, see Harder *v.* United States, 160 Fed. 463.

§ 602. Change of Form — When Patentable.

When form was the essence of the invention — a peculiar shaped car body where its strength was due to the form was held to be patentable. — Winans *v.* Denmead 15 How. 330; 14 L. Ed. 717.

To change the form of an existing machine, and by means of such change to introduce and employ other mechanical principles or natural powers, or, as it is termed, a new mode of operation, and thus attain a new and useful result, is the subject of a patent. — Winans *v.* Denmead, 15 How. 330; 14 L. Ed. 717.

Where form is the essence of the invention, it is necessarily material; and, if the same object can be attained by a machine different in form where that form is inseparable from the successful operation of the instrument, there is no infringement. — Werner *v.* King, 96 U. S. 218; 24 L. Ed. 613.

Winans *v.* Denmead, 15 How. 330.

Possibly an exact form of construction, possessing a distinct advantage over other forms, may be patentable; but a form that is merely tentative and varying with each case is not. — Western *v.* Standard, 84 Fed. 654; 28 C. C. A. 512.

Caverly *v.* Deere, 66 Fed. 305.

There are cases where the form of a device is the principle of the invention. There are other cases wherein the state of the prior art and the specific terms of the specifications and drawings leave no doubt of the intention of the applicant to restrict his claim to the specific form of the device or element he points out. In such cases claims of patents are sometimes limited to the specific forms of the devices pointed out by letters or numbers in the claims or specifications. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Weir *v.* Morden, 125 U. S. 98; Railroad Co. *v.* Kearney, 158 U. S. 461; Crawford *v.* Heysinger, 123 U. S. 589; McCormick *v.* Aultman, 58 Fed. 773; Newton *v.* Mfg. Co., 119 U. S. 373; Bragg *v.* Fitch, 121 U. S. 478; Dryfoos *v.* Wiese, 124 U. S. 32; Hendy *v.* Iron Works, 127 U. S. 370.

The question is, was there enough in the recesses and projections, as there used, to suggest the conception of the bands and grooves of the patent in suit? We think not, and conclude that these modifications of form and arrangement were new and valuable improvements, and involved sufficient inventive thought to sustain a patent. — American *v.* Driggs-Seabury, 114 Fed. 936; 52 C. C. A. 556.

The fact that this result was accomplished by a single change does not detract from its patentability. — Hutter *v.* De Q. Bottle, 128 Fed. 283; 62 C. C. A. 652.

§ 603. Combinations — Co-Action of Elements.

The appellant contends that this is not a patentable combination. We do not think the contention supportable. All the parts of the device co-operate to produce one result, and it is easily distinguishable from that denied in Reckendorfer *v.* Faber, 92 U. S. 347 and Adams *v.* Stamping Co. 141 U. S. 539. In the former case the pencil and rubber performed different and independent things. In the latter, the hinge attachment to the lantern was a substitute for a detachable fastening, and went no further. — Butte City *v.* Pacific, 60 Fed. 90; 8 C. C. A. 484.

Invention is that which brings out of the realms of the mind something that never existed before. It may consist in the combination of old elements, the invention being in the combination. To make it so there must be a joint action or operation of the elements, — i. e. the elements must co-operate or act jointly to produce the result or object of the combination, — or else the assembled elements is a mere aggregation, and is not patentable. It is not necessary, however, that their action should be simultaneous. — San Francisco *v.* Keating, 68 Fed. 351; 15 C. C. A. 476.

Standard *v.* Southern, 48 Fed. 110; Engraving *v.* Hoke, 30 Fed. 444; Blessing *v* Copper, 34 Fed. 753; Root *v.* Sontag, 47 Fed. 309; Mfg. Co. *v.* Brill, 54 Fed. 383; National *v.* American, 53 Fed. 371; 3 Rob. Pat. 1016.

No combination of elements that so operate can be regarded as a mere aggregation, for each one has a direct influence upon the action of each of the others, the result necessarily being the product of the combination itself, and not a mere aggregate of several units, each the complete product of one of the combined elements. — Von Schmidt *v.* Bowers, 80 Fed. 121; 25 C. C. A. 323.

Hailes *v.* Van Wormer, 20 Wall. 353; Royer *v.* Roth, 132 U. S. 201; Reckendorfer *v.* Faber, 92 U. S. 347; Beecher *v.* Atwater, 114 U. S. 524.

Nor are the claims in question subject to the objection urged that it is "a mere collocation or aggregation of old elements," as it is plain that the

several elements are brought into co-operation and thus "perform additional functions and accomplish additional results." — Milwaukee *v.* Brunswick-Balke, 126 Fed. 171; 61 C. C. A. 175.

Rob. Pat. sec. 155.

It is not necessary to a valid combination that all the parts shall co-operate at the same time. It is enough that, in the normal and progressive use of the machine, they do so at some time. — Sanders *v.* Hancock, 128 Fed. 424; 63 C. C. A. 166.

To constitute a combination it is essential that there should be some joint operation performed by the elements, producing a result due to their joint and co-operating action, while in an aggregation there is a mere adding together of separate contributions, each operating independently of the other. — American *v.* Helmstetter, 142 Fed. 978; 74 C. C. A. 240.

Hailes *v.* Van Wormer, 20 Wall. 353; Reckendorfer *v.* Faber, 92 U. S. 347; Pickering *v.* McCullough, 104 U. S. 310.

It is true that these elements do not act synchronously, but this is not necessary, simultaneous action being frequently absent from patentable combinations. — International *v.* Dey, 142 Fed. 736; 74 C. C. A. 68.

National *v.* American, 53 Fed. 367; Heath *v.* Hay, 67 Fed. 246; Furbush *v.* Cook, 2 Fish. P. C. 668.

The elements of the claims, considered separately or in different environments, were, speaking generally, all old. The question here is was the combination old? That the claim covers a combination, and not a mere aggregation, we have no doubt, even though the operations of the separate elements do not synchronize. — United *v.* Beattie, 149 Fed. 736; 79 C. C. A. 442.

Furbush *v.* Cook, 2 Fish. Pat. Cas. 668; Heath *v.* Hay, 67 Fed. 246; International *v.* Dey, 142 Fed. 736.

The argument that the straightening press does not act simultaneously with the other devices included in the combination, if true, is not enough to defeat a patent. If that device is so arranged with the other devices made elements in the combination so that each part co-operates to produce a single, practical and beneficial result, it is not important that the final result shall have been produced by a simultaneous or successive action of the combined elements. — National *v.* Aiken, 163 Fed. 254; C. C. A.

Sanders *v.* Hancock, 128 Fed. 424; Stilwell-Bierce *v.* Eufaula, 117 Fed. 410; Furbush *v.* Cook, 2 Fish. 688.

Note: The last clause must be read in the disjunctive sense. The action must be either simultaneous *or* successive.

If, however, the adaptation of old and separate elements, so that they co-act with each other in a unitary organization, involves the exercise of something more than the skill of an ordinary mechanic, the result may be patentable, if a more beneficial result is effected than by the separate operation of the parts. So if a new combination and arrangement of old elements produces a new and beneficial result, as to greatly increase the productive efficiency of a machine, it is evidence of invention. — National *v.* Aiken, 163 Fed. 254; C. C. A.

Thatcher *v.* Burtis, 121 U. S. 286; Overweight *v.* Vogt, 102 Fed. 957; St. Louis *v.* American, 156 Fed. 574; Muller *v.* Tool Co. 77 Fed. 621; Star *v.* General, 111 Fed. 398; Loom Co. *v.* Higgins, 105 U. S. 589.

It is true that the elements of the combination do not act simultaneously; but that is immaterial, since they are nevertheless so arranged that the action of each is necessary and contributes to the general result. — Maimen *v.* Union, 165 Fed. 440; C. C. A.

The fact that the completed nipple is developed by successive steps in the same machine does not prevent the organized mechanism, which produces the result, from being considered a combination. — Manville *v.* Excelsior, 167 Fed. 538; C. C. A.

Furbush *v.* Cook, Fed. Cas. 4931; National *v.* American, 53 Fed. 367.

A construction of the claims requiring such simultaneous action would relegate even such a marvelously organized machine as the Mergenthaler linotype to the unprotected and defenseless class of aggregations. — Manville *v.* Excelsior, 167 Fed. 538; C. C. A.

Mergenthaler *v.* Press, 57 Fed. 505.

§ 604. Combinations — Entirety.

A combination is an entirety; if one of the elements is given up, the thing claimed disappears. — Vance *v.* Campbell, 66 U. S. 427; 17 L. Ed. 168.

Argument to show that an invention consisting of a combination of three ingredients which are old is not the same as that of a combination of four old ingredients is quite unnecessary, as the negative of the proposition is as well settled in the patent law as it is in mathematics. — Gill *v.* Wells, 89 U. S. 1; 22 L. Ed. 699.

A combination is always an entirety. In such cases the patentee cannot abandon a part and claim the rest, nor can he be permitted to prove that a part is useless and therefore immaterial. — Schumacher *v.* Cornell, 96 U. S. 549; 24 L. Ed. 676.

Vance *v.* Campbell, 1 Black, 427.

None of the elements or devices of the patented machine are new, and the invention itself consists in a combination of old devices. Such a combination is an entirety, though more than one combination may be included in the same patent. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

Gill *v.* Wells, 22 Wall. 2–24.

If a useful and new unitary result appears as the product of the interaction of the elements, though all be old, the union is a true combination; and, if unpatentable, it is for want of invention. — Regent *v.* Penn, 121 Fed. 80; 57 C. C. A. 334.

Parks *v.* Booth, 102 U. S. 96; Johnson *v.* R. Co. 33 Fed. 499; National *v.* American, 53 Fed. 367.

§ 605. Combinations — Limitation.

Four propositions were decided in the case of Vance *v.* Campbell, 1 Black, 428; (1) That a patentee, in a suit for an infringement of an invention consisting of a combination of old ingredients, cannot in his proofs abandon a part of such combination and maintain his claim to the rest, for the reason that unless the patented combination is maintained, the whole of the invention falls. (2) That the patentee in such a suit cannot be allowed to prove that any part of the combination is immaterial or useless. (3) That the combination is an entirety, and that if one of the ingredients be given up the thing claimed disappears, which is an obvious truth, as the invention

in such a case consists simply in the combination. (4) That the clause which provides that the suit shall not be defeated where the patentee claims more than he has invented, in case he shall disclaim such part, applies only when the part invented can be clearly distinguished from that improperly claimed, which shows that the clause cannot apply to a patent granted for an invention consisting of a combination of old ingredients. — Gill *v.* Wells, 89 U. S. 1; 22 L. Ed. 699.

Case *v.* Brown, 2 Wall. 320; Burr *v.* Duryee, 1 Wall. 566.

That a combination will be strictly limited to its elements, see Knapp *v.* Morss, 150 U. S. 221; 37 L. Ed. 1059; 14 S. Ct. 81.

It is material to observe that the invention claimed is the combination of certain described elements. This amounts to a disclaimer of anything new in the elements, so far as this patent is concerned. — Wells *v.* Curtis, 66 Fed. 318; 13 C. C. A. 494.

Corn Planter Pat. 23 Wall. 181; Miller *v.* Brass Co. 104 U. S. 350; Rowell *v.* Lindsay, 113 U. S. 97.

His claim is for the combination of three parts. His claim, then, is for an entirety. He cannot abandon a part, and claim the rest. He must stand by his claim as he has made it. If more or less then the whole of his ingredients are used by another, such party is not an infringer, because he has not used the invention or discovery patented. Shumacher *v.* Cornell, 96 U. S. 549. When a patent is for a combination only, none of the separate elements of which the combination is composed are included in the monopoly. Rowell *v.* Lindsay, 113 U. S. 101. Or, as expressed by Mr. Justice Bradley in the Corn Planter Patent (Brown *v.* Guild) 23 Wall. 181:

"When a patentee, after describing a machine, claims as his invention a certain combination of elements, or a certain device or part of the machine, this is an implied declaration, as conclusive, so far as that patent is concerned, as if it were expressed, that the specific combination or thing claimed is the only part which the patentee regards as new."

See, also, Voss *v.* Fisher, 113 U. S. 213. — Carter *v.* Hanes, 78 Fed. 346; 24 C. C. A. 128.

The patent should not be limited to the particular form of devices described but it should be limited to cover a combination of these elements or their known equivalents, at the date of the patent. — Beach *v.* Hobbs, 92 Fed. 146; 34 C. C. A. 248.

Winans *v.* Denmead, 15 How. 330; Machine Co. *v.* Lancaster, 129 U. S. 263; Tilghman *v.* Proctor, 102 U. S. 707; Proctor *v.* Bennis, 36 Ch. Div. 740.

§ 606. Combinations — Necessary Elements.

One who has made a combination of three elements, all necessary to operation, cannot by making a claim for two of them forestall another who has so combined these two elements that they perform the same function as the three elements. — National *v.* Hedden, 148 U. S. 482; 37 L. Ed. 529; 13 S. Ct. 680.

The magnetic current itself, is not a part of the device, any more than is water an element of a water-wheel. In the one, the water is the power and in the other the electric current, and the devices are contrived for the purpose of controlling and applying the power. — Western *v.* Sperry, 58 Fed. 186; 7 C. C. A. 164.

The specification contains no suggestion that this particular arrangement of parts may be dispensed with; and when a patentee has there carefully and specifically pointed out the details of a structure, which details, as he shows, discharge a stated function, it is not for the courts to declare them immaterial. — Philadelphia *v.* Weeks, 61 Fed. 405; 9 C. C. A. 555.

A mechanical connection would not be indispensable, unless there was a necessity for it, or unless a mechanical connection created a difference in the means by which the result was accomplished, which, in view of the narrowness of the invention, was a radical difference. — Westinghouse *v.* N. Y. 63 Fed. 962; 11 C. C. A. 528.

Where an alternative construction is shown, dispensing with one element made essential to the principal construction such element cannot be claimed as essential in itself. — Wells *v.* Curtis, 66 Fed. 318; 13 C. C. A. 494.

Trimmer *v.* Stevens, 137 U. S. 423.

If the broader of two claims is valid, the narrower for the same combination with limitations which include some additional minor improvements, is also valid. — Schenck *v.* Singer, 77 Fed. 841; 23 C. C. A. 494.

It is difficult to understand why, if the drawings should be considered as controlling the "scroll shaped or convoluted plate," which they also depict, ought not to be regarded as a material feature, and this plate, it is admitted, the appellees do not use. — Boynton *v.* Norris, 87 Fed. 225; 30 C. C. A. 617.

Note: The attempt here was to introduce an element into a claim to make the case by reading in a minor element shown and described as a preferred form but not made an element of the claim itself, and the court held it could not be so read in.

Each element of the combination set forth in this claim is distinct in its character, and clearly and specifically described, and there is nothing in its structure to make it an exception to the general rule, that every part of the combination claimed is conclusively presumed to be material, so that if one of its elements is omitted, the thing claimed does not exist. — Spear *v.* Kelsey, 158 Fed. 622; 85 C. C. A. 444.

§ 607. Combinations — New Result.

Improvements in an apparatus may be valid, if new and if they accomplish a new and useful result, even though all the elements of the same are old, provided the combination or arrangement of the elements is new and of such a character as to involve invention. — Fuller *v.* Yentzer, 94 U. S. 299; 24 L. Ed. 107.

Dissenting: Waite, Strong, Miller, Bradley.

The combination of old and well known elements so as to produce a useful machine which is new is patentable. — Wicke *v.* Ostrum, 103 U. S. 461; 26 L. Ed. 409.

A combination is patentable only when the essential elements of which it is composed produce by their joint action a new and useful result, or an old result in a cheaper or otherwise more advantageous way. — Stephenson *v.* Brooklyn, 114 U. S. 149; 29 L. Ed. 58; 5 S. Ct. 777.

Hailes *v.* Van Wormer, 87 U. S. 353; Reckendorfer *v.* Faber, 92 U. S. 347; Pickering *v.* McCullough, 104 U. S. 310.

To sustain a patent on a combination of old devices it is well settled that a new result must be obtained which is due to the joint and co-operating action of all the old elements. Either this must be accomplished or a new machine of distinct character and function must be constructed.— Brinkerhoff *v.* Aloe, 146 U. S. 515; 36 L. Ed. 1068; 13 S. Ct. 221.

Pickering *v.* McCullough, 104 U. S. 310; Hailes *v.* Van Wormer, 87 U. S. 353; Double Pointed *v.* Two Rivers, 9 Biss. 258; Metropolitan *v.* Young, 14 Blatchf. 46.

The use of cast lines of type, as the unit of composition, instead of individual type, is an improvement in the art of unsurpassed value. Not only, then, are the combinations novel, but the result is entirely new and highly beneficial. In our judgment these inventions are fundamental, coming within the principle of the ruling in Morley *v.* Lancaster, 129 U. S. 263. We find nothing in the prior art to limit these claims, or to deprive the patentee of a liberal construction thereof. — Rogers *v.* Mergenthaler, 64 Fed. 799; 12 C. C. A. 422.

The argument that the claim is void for lack of novelty if construed to cover a stiff sectional brush, because such brushes were old, loses sight of the distinction, which we have endeavored to point out, that it is not the brush alone which gives patentability to the claim, but the novel motion of the brush. It would be better to hold the patent invalid at the outset than to destroy it by the illiberal construction for which the appellant contends. Few patents can survive if such criticisms are allowed to prevail. — Cimiotti *v.* American, 115 Fed. 498; 53 C. C. A. 230.

§ 608. Combinations — Old Elements, New Results.

The combination must be new; and if productive of new and useful results, and not a mere aggregation of results, it might be the subject of a patent, though all the parts were used before. — Dane *v.* Chicago, 131 U. S. cxxvi, app.; 23 L. Ed. 82.

If a combination of old elements, as such, produces no new and useful results, there can be no doubt but that the combination is unpatentable. — Palmer *v.* Corning, 156 U. S. 342; 39 L. Ed. 445; 15 S. Ct. 381.

Hailes *v.* Van Wormer, 87 U. S. 350; Reekendorfer *v.* Faber. 92 U. S. 347; Pickering *v.* McCullough, 104 U. S. 310; Thatcher *v.* Burtis, 121 U. S. 286.

The mere fact that the patented invention is but a combination of old ingredients or materials is not a tenable objection to the patent, since it is a general rule that a patentable invention may consist entirely in a new combination or arrangement of old and well-known ingredients or elements, provided a new and useful result is thereby attained. — Thomson *v.* Citizens Nat. Bk., 53 Fed. 250; 3 C. C. A. 518.

Seymour *v.* Osborne, 11 Wall. 516; Rees *v.* Gould, 15 Wall. 187.

If it were essential to a valid patent for any combination whatever that the mode of action of every element included in the combination should be changed by each of the others, it would have been impossible to sustain several combination patents which have in fact been upheld, as, indeed, it would be difficult to conceive of any mechanical combination which would be both possible and patentable. A screw or a lever can act only in one way, yet a screw and a lever may so act in combination as to produce, in consequence of their combination, a single, new and useful result. Moreover, there is no intimation in the opinion in Pickering *v.* McCullough of a purpose

to overrule the earlier decisions with which (upon the view taken of it by counsel) it would appear to conflict, nor has it in later cases (which, of course, are to be followed) prevented the Supreme Court from declaring the law of this subject in accordance with our misunderstanding of it. — National *v.* American, 53 Fed. 367; 3 C. C. A. 559.

Explaining Pickering *v.* McCullough, 104 U. S. 310.

Blake *v.* Robertson, 94 U. S. 728; Parks *v.* Booth, 102 U. S. 96; Loom Co. *v.* Higgins, 105 U. S. 580; Clough *v.* Barker, 106 U. S. 166; Railway *v.* National, 110 U. S. 229; Lock Co. *v.* Sargent, 117 U. S. 536.

But the mere fact that the patentee's invention is but the combination of old ingredients or materials is no answer to the patent, for it is a general rule that a patentable invention may consist entirely in a new combination or arrangement of old or well known ingredients or elements, provided a new and useful result is thereby attained. — Griswold *v.* Harker, 62 Fed. 389; 10 C. C. A. 435.

Thomson *v.* Bank, 53 Fed. 250; Seymour *v.* Osborne, 11 Wall. 516; Gould *v.* Rees, 15 Wall. 187.

Drawings and a model have been submitted showing how easy it is to unite the C. patent with the W. patent. In our view this is but wisdom after the fact. The combination shown in the drawings and model submitted is a combination suggested by the patent in suit, and which but for the patent in suit, would seem much more difficult than it now does. More than this, it involved patentable invention to see that a union of the elements of the W. patent with those of the C. patent would have a beneficial result. — Columbus *v.* Robbins, 64 Fed. 384; 12 C. C. A. 174.

The elaborate effort of the defendant to show that the different elements of the Hook machine existed in scattered form in mechanism relating to arts remote from that of a continuous cigarette rod was superfluous. It is admitted by the complainant that each element per se was old, and it is practically admitted by the defendant that the combination of the several elements was new. — Bonsack *v.* Elliott, 69 Fed. 335; 16 C. C. A. 250.

If there is anything new or patentable in the construction described by Murphy, it is not in any of the elements he has used, but in the novelty of their combination. His patent must stand, if it can be maintained at all, on the principle that a new combination or arrangement of old or well known ingredients, by which a new and useful result is attained, may be a patentable invention. — Murphy *v.* Excelsior, 76 Fed. 965; 22 C. C. A. 658.

Griswold *v.* Harker, 62 Fed. 389; Thomson *v.* Bank, 53 Fed. 250; Seymour *v.* Osborne, 11 Wall. 516; Gould *v.* Rees, 15 Wall. 187.

In Hoffman *v.* Young, 2 Fed. 74, the claim in a combination patent was sustained on the ground that it presented evidence of invention, because a new result had been produced, though it was conceded the case was near the border line of nonpatentability. In National *v.* American, 53 Fed. 369, this court decided that the invention there in suit achieved by the inventor was absolutely and entirely new, and had not by any means been previously attained. In each of these cases, cited by counsel for the appellee, the production of a new result is made the test of patentability. On the other hand, numerous authorities may be found in which patents for combinations in machinery and in compositions have been held void for want of invention. We refer to a few only: Vinton *v.* Hamilton, 104 U. S. 485; Heald *v.* Rice, 104 U. S. 737; Heating Co. *v.* Burtis, 121 U. S. 286. In Aron *v.* Railroad Co., 132 U. S. 84, a patentee had made use of devices of earlier patents. All that

he did was to adapt them to the special purpose to which he contemplated their application, by making modifications which did not require invention, but only the exercise of ordinary mechanical skill. This was held insufficient to sustain a patent. — Green *v.* American, 78 Fed. 119; 24 C. C. A. 41.

It is insisted that novelty of the combination can only be destroyed by showing that all of its elements have been used together before, and in the same relation to each other. The contrary is well established. — Kelly *v.* Clow, 89 Fed. 297; 32 C. C. A. 205.

Thompson *v.* Boisselier, 114 U. S. 1; Hill *v.* Wooster, 132 U. S. 693; Burt *v.* Evory, 133 U. S. 349; Pickering *v.* McCullough, 104 U. S. 310; Florsheim *v.* Schilling, 137 U. S. 634; Adams *v.* Stamping Co. 141 U. S. 539; Deere *v.* Plow-Works, 56 Fed. 841; Lumber Co. *v.* Perkins, 80 Fed. 528.

Every element of the combination in controversy was unquestionably old, but there was nothing in the prior art to suggest a rotary brush working in the environment shown in the Sutton patent. There was nowhere a rotary brush making a " part " on a keen edged stretcher bar and brushing the fur down and out of reach of the cutting knives during the moment necessary for the removal of the stiff hairs. It is the presence of this element in the combination which produces the new result and entitles its originator to protection. — Cimiotti *v.* American, 115 Fed. 498; 53 C. C. A. 230.

Loom Co. *v.* Higgins, 105 U. S. 580; Topliff *v.* Topliff, 145 U. S. 156; Hobbs *v.* Beach, 180 U. S. 383.

Even if it be conceded that the individual elements composing the combination are to be found in the prior art, yet to make the selection of these parts from the prior art, and to combine them so as to produce a clutch which is at the same time simple, compact, effective and useful, required more than ordinary mechanical skill. — Fairbanks *v.* Stickney, 123 Fed. 79; 59 C. C. A. 209.

It is not of consequence that the elements of each claim may be old, for the claims are for a combination, and if the combination be new, or if by a new mode of organization new or better results are obtained, the patent may be sustained. — Dunn *v.* Standard, 163 Fed. 521; C. C. A.

Davis *v.* Perry, 120 Fed. 941; Brown *v.* Huntington, 134 Fed. 735; Hobbs *v.* Gooding, 111 Fed. 403; Decece *v.* Gilchrist, 125 Fed. 293; Western *v.* North, 135 Fed. 80; Sanders *v.* Hancock, 128 Fed. 424; Stilwell *v.* Eufaula, 117 Fed. 410.

That the fact that all of the elements of a combination may be found in the prior art, and apparently in combination in the claims of prior patents, does not anticipate unless when read in connection with the specification of the patent in suit the structure and function of the invention appears, see — Warren *v.* Blake, 163 Fed. 263; C. C. A.

§ 609. Combinations — Old Elements, Old Result.

None of the separate elements of which the combination is composed are claimed as the invention of the patentee, therefore none of them standing alone are included in the monopoly of the patent. — Rowell *v.* Lindsay, 113 U. S. 97; 28 L. Ed. 906; 5 S. Ct. 507.

Corn Planter Pat. 23 Wall. 224; Merrill *v.* Youmans, 94 U. S. 573; Water *v.* Desper, 101 U. S. 332; Miller *v.* Brass Co 104 U. S. 350.

The mere adaptation of an old device to a new combination, involving no functional change, is not invention. — Royer *v.* Roth, 132 U. S. 201; 33 L. Ed. 322; 10 S. Ct. 58.

Double Pointed *v.* Two Rivers, 109 U. S. 117; Pomice *v.* Ferguson, 119 U. S. 335; Thatcher *v.* Burtis, 121 U. S. 286; Dreyfus *v.* Searle, 124 U. S. 60; Hendy *v.* Golden, 127 U. S. 370.

The combination of old devices into a new article, without producing any new mode of operation is not invention. — Florsheim *v.* Schilling, 137 U. S. 64; 34 L. Ed. 574; 11 S. Ct. 20.

Burt *v.* Evory, 133 U. S. 349; Hailes *v.* Van Wormer, 87 U. S. 353; Reckendorfer *v.* Faber, 92 U. S. 347; Double Pointed *v.* Two Rivers, 109 U. S. 117; Bussey *v.* Excelsior, 110 U. S. 131; Phillips *v.* Detroit, 111 U. S. 604; Stephenson *v.* Brooklyn, 114 U. S. 149; Beecher *v.* Atwater, 114 U. S. 523; Thatcher *v.* Burtis, 121 U. S. 286; Hendy *v.* Golden, 127 U. S. 370.

A new combination of old elements, by which an old result is attained in a more economical and efficient way may be protected by a patent. — Ide *v.* Trorlicht, 115 Fed. 137; 53 C. C. A. 341.

National *v.* Interchangeable, 106 Fed. 693; Seymour *v.* Osborne, 11 Wall. 516; Rees *v.* Gould, 15 Wall. 187; Thomson *v.* Bank, 53 Fed. 250.

His device may not have been a great improvement, but it was certainly a marked advance in the art, and, in view of the numerous less successful attempts to take the step he took which were rewarded with patents by the government, and in view of the evident inability of those inventors and of the proprietors of mere mechanical skill to reach the point to which Collins attained, the title of inventor ought not to be denied him. His invention is one of those intermediate steps in the gradual progress of a useful art toward perfection which are evidenced by the great majority of patented inventions, and it falls within the familiar rules that a new combination of old elements by which an old result is attained in a more facile, economical, and efficient way may be protected by a patent. — Anderson *v.* Collins, 122 Fed. 451; 58 C. C. A. 669.

National *v.* Interchangeable, 106 Fed. 693; Seymour *v.* Osborne, 11 Wall. 516; Rees *v.* Gould, 15 Wall. 187; Thomson *v.* Bank, 53 Fed. 250; Ide *v.* Trorlicht, 115 Fed. 137.

§ 610. Combinations — Presumptions.

A claim for a combination carries with it an implication that the separate elements are old. — Westinghouse *v.* Edison, 63 Fed. 588; 11 C. C. A. 342.

Corn Planter Pat. 23 Wall. 181.

When a combination is claimed, there arises an implied concession that the elements are old and not separately patentable. — Hay *v.* Heath, 71 Fed. 411; 18 C. C. A. 157.

The claim under consideration being, as finally amended in the patent office, "for a combination," it would seem clear that we may hold that the devices entering into such combination are old and common property. — Birmingham *v.* Gates, 78 Fed. 350; 24 C. C. A. 132.

Corn Planter Patent, 23 Wall. 181.

The invention claimed is a combination of the elements. This implies that all the rest is old, or, at least, that the patentee does not so far as this patent is concerned, claim the elements separately. — St. Louis *v.* National, 87 Fed. 885; 31 C. C. A. 265.

Corn Planter Pat. 23 Wall. 181.

§ 611. Combinations — Sub-Combinations.

Undoubtedly a patentee may claim and obtain a patent for an entire combination or process, and also for such parts of the combination or process as are new and useful, or he may claim and obtain a patent for both. — Railroad *v.* DuBois, 79 U. S. 47; 20 L. Ed. 265.

A sub-combination may be the subject of a claim for an improvement, and such sub-combination in combination with the machine or apparatus may be the subject of a claim. — Parks *v.* Booth, 102 U. S. 96; 26 L. Ed. 54.

Many subcombinations, although new, are not useful, except to perform their appropriate functions in the machine of which they are a part. The description in the patent of the whole machine, and of the means or mode by which the subcombination is brought into co-operative relation with the other parts, usually indicates how the subcombination may effect a useful result. When this is so, the combination need not be operative alone, because (to use the language of Mr. Walker) "utility is justly ascribed to things which have their use in co-operating with other things to perform a useful work." — Thomson-Houston *v.* Black River, 135 Fed. 759; 68 C. C. A. 461.

Taylor *v.* Sawyer, 75 Fed. 301; Loom Co. *v.* Higgins, 105 U. S. 585; Thomson-Houston *v.* Elmira, 71 Fed. 396.

§ 612. Combinations — Miscellaneous Rulings.

Cases arise where a patentee, having invented a new and useful combination consisting of several ingredients, which, in combination, compose an organized machine, also claims to have invented new and useful combinations of fewer numbers of the ingredients and, in such cases, the law is well settled that, if the several combinations are new and useful and will severally produce new and useful results, the inventor is entitled to a patent for the several combinations, provided that he complies with the requirement of the Patent Act and files in the Patent Office a written description of each of the alleged new and useful combinations and of the manner of making, constructing and using the same.

He may give the description of the several combinations in one specification and, in that event, he can secure the full benefit of the exclusive right to each of the several inventions, by separate claims referring back to the description in the specification. — Gill *v.* Wells, 89 U. S. 1; 22 L. Ed. 699.

The object of the patented combination was the accomplishment of a particular result. But this result or idea is not monopolized by the patent. The thing patented is the particular means devised by the inventor by which the result is attained, leaving it open to any other inventor to accomplish the same result by other means. To constitute identity of invention, and therefore infringement, not only must the result attained be the same, but in case the means used for its attainment is a combination of known elements, the elements combined in both cases must be the same, and combined in the same way, so that each element shall perform the same function, provided, however, that the differences alleged are not merely colorable, according to the rule forbidding the use of known equivalents. — Electric *v.* Hall, 114 U. S. 87; 29 L. Ed. 96; 5 S. Ct. 1069.

Prouty *v.* Ruggles, 16 Pet. 336; Silsby *v.* Foote, 14 How. 217; McCormick *v.* Talcott, 20 How. 402; Vance *v.* Campbell, 1 Black, 427; Eames *v.* Godfrey, 1 Wall. 78; Dunbar *v.* Myers, 94 U. S. 187; Fuller *v.* Yentzer, 94 U. S. 288; Imhauser *v.* Buerk, 101 U. S. 647; Gage *v.* Herring, 107 U. S. 640; Seymour *v.* Osborne, 11 Wall. 516; Gould *v.* Rees, 15 Wall. 194; Gill *v.* Wells, 22 Wall. 1; McMurray *v.* Mallory, 111 U. S. 97; Fay *v.* Cordesman, 109 U. S. 408.

The most that can be said of the invention of the patent in suit, is that it shows on the part of the inventor great industry in acquiring a thorough knowledge of what others had done in a rapid and improved mode by the various devices perfected by patents for that purpose, good, judgement in selecting and combining the best of them with no little mechanical skill in their application; but it presents no discoverable trace of original thought. Buscll *v.* Stevens, 137 U. S. 423; 34 L. Ed. 719; 11 S. Ct. 150.

A grating which performed no mechanical function in the combination claimed in an improvement in the construction and operation of prisons cannot be considered as a part of a patentable mechanical combination. — Fond Du Lac *v.* May, 137 U. S. 395; 34 L. Ed. 714; 11 S. Ct. 98.

Brown *v.* Davis, 116 U. S. 237; Forncrook *v.* Root, 127 U. S. 176.

It is true that the combination of known devices in such manner as to produce results new in kind or character is patentable; yet when patents for the combination of known devices in such manner as to produce results new and better in degree only than others previously produced are brought before the courts, they are held to be non-patentable. — Ashton *v.* Coale, 52 Fed. 314; 3 C. C. A. 98.

The constituent elements of the claims in suit are proved and conceded to be all old. As combined, they are without essential change of individual structure or function, and they effect by their co-operation, no distinctly new result. In the specification of the patent, the only novelty claimed is in features of construction. The one feature insisted upon in argument is the diverging and adjustable arms, and it is the adjustability on which chief reliance seems to be placed. But there is no novelty in that, nor in the means of producing it. — Deere *v.* Case, 56 Fed. 841; 6 C. C. A. 157.

Florsheim *v.* Schilling, 137 U. S. 64; Burt *v.* Evory, 133 U. S. 349; Pickering *v.* McCullough, 104 U. S. 310; Hill *v.* Wooster, 132 U. S. 693; Thompson *v.* Boisselier, 114 U. S. 1.

In determining whether a new combination of old elements constitutes invention, the most important and controlling considerations are, the intrinsic novelty and utility of the concrete invention. — Kelly *v.* Clow, 89 Fed. 297; 32 C. C. A. 205.

A plausible and persuasive argument may be made that this combination falls under either class of cases (Atlantic Works *v.* Brady, 107 U. S. 192 or Loom Co. *v.* Higgins, 105 U. S. 580) that it might have been and was produced by the skill of the trained mechanic or by the intuitive genius of the inventor. The patent which describes it, however, raises a presumption in favor of its novelty and its patentability. It was a new combination. No such separate yet uniform grouping of corresponding annunciators and answering jacks with a multiple switchboard had ever been made or used before Seeley conceived and described it. That combination was not a pioneer; perhaps it was not a great invention. But it discharged the functions of the multiple switchboard, its annunciators, and switches more speedily and efficiently than they had ever been performed without it, and a new combination of old elements by which an old result is attained in a more facile, economical, and efficient way may be protected by a patent. — Kinloch *v.* Western, 113 Fed. 659; 51 C. C. A. 369.

National *v.* Interchangeable, 106 Fed. 693; Seymour *v.* Osborne, 11 Wall. 516; Gould *v.* Rees, 15 Wall. 187; Thomson *v.* Bank, 53 Fed. 250.

The addition of the drill-rest does not defeat the claim; for assuming that it is not of itself sufficient to support a patent, the uniting it with a combina-

tion which is patentable cannot render the new combination invalid. Combined with the new device, the conjoint mechanical effect is new. — Eames *v.* Worcester, 123 Fed. 67; 60 C. C. A. 37.

If it be true that the elements which make up the combination had never, before the date of that patent, been placed in precisely the same relation to each other as he placed them, yet it is by no means certain that the construction of his machine called for the exercise of the inventive faculty. — Wilson *v.* Townley, 125 Fed. 491; 60 C. C. A. 327.

Convinced, as we are, that the plaintiff has supplied features that have brought success, where others who had preceded him failed, we are inclined to scan narrowly the means by which it has been obtained. The mechanical elements combined are no doubt old, and so, to a certain extent, may be the result accomplished. But nowhere do we find the same combination employed to produce it, and the efficiency attained is so much in advance of what had gone before as of itself to suggest, if it does not prove, the exercise of inventive skill. — Boyer *v.* Keller, 127 Fed. 130; 62 C. C. A. 244.

Sessions *v.* Romadka, 145 U. S. 29; Hobbs *v.* Beach, 180 U. S. 383; Taylor *v.* Sawyer, 75 Fed. 301; Stevenson *v.* McFassell, 90 Fed. 707; National *v.* Interchangeable, 106 Fed. 693.

The invention is not a generic one, far from it. Every element of the claims, considered separately and in different environment, was old, but Yawman was the first to assemble them in the combinations in controversy. By so doing he made an advance, which, though it did not go far, entitled him to protection. — Yawman *v.* Vetter, 159 Fed. 443; 86 C. C. A. 473.

Hobbs *v.* Beach, 180 U. S. 383; Magowan *v.* Packing Co. 141 U. S. 332; Davis *v.* Perry, 120 Fed. 941; Hutter *v.* Stopper Co. 128 Fed. 283.

§ 613. Date of Completion.

A patent relates back, where the question of novelty is in issue, to the date of the invention, and not to the time of the application for its issue. — Klein *v.* Russell, 86 U. S. 433; 22 L. Ed. 116.

In the absence of other evidence, the invention of the patent is presumed to be identical with that disclosed by the application. — Drewson *v.* Hartje, 131 Fed. 734; 65 C. C. A. 548.

Loom Co. *v.* Higgins, 105 U. S. 580.

The following opinion by Judge Holt is so complete a monograph upon this subject that it must be given well-nigh in full.

This is a bill in equity under 4920 R. S. for infringement. The only defense is priority of invention. Under sec. 4920 the defendant contends, first, that Watson was the original and first inventor of the thing patented, and, second, that Thomas unjustly obtained his patent for that which was in fact invented by Watson, who was using reasonable diligence in adapting and perfecting the same. The first defense turns upon the respective dates of the Thomas and Watson inventions, and the second defense raises a question of fact as to Watson's diligence in adapting and perfecting his invention. Thomas filed his application Dec. 17, 1896, and his patent issued July 26, 1904. Watson conceived his invention, illustrated it by a drawing, and disclosed it to others as early as Jan. 10, 1896. He reduced his invention to practice by the building of a machine in Apr., 1897. He filed his application Mar. 11, 1898, and his patent issued Sept. 26, 1899. It may be noted, first, that Thomas' application antedates Watson's reduction

to practice by 4 months, and Watson's application by 15 months; and second, that Watson's conception antedates Thomas' application by 11 months. The main controversy with respect to the Thomas invention is whether the date of his invention is the date of his application, Dec. 17, 1896, and the main controversy with respect to the Watson invention is whether the date of his invention is the date of his conception, Jan. 10, 1896.

Under a rule of the Patent Office, the filing of an allowable application is a constructive reduction to practice. In accordance with this rule, the date of the Thomas invention was fixed as of Dec. 17, 1896, the date of his application; and the burden of proof was thrown upon Watson to establish the fact of reasonable diligence from the date of his prior conception, Jan. 10, 1896, to the time Thomas filed his application. Upon this issue of diligence on the part of Watson, the Examiner of Interferences and the Commissioner of Patents, and the Court of Appeals, D. C., found against Watson, and adjudged Thomas the prior inventor, and accordingly a patent was issued to Thomas under sec. 4904. As a result of the interference proceedings, there are two outstanding patents for the same invention issued to independent inventors.

The decision in interference proceedings is not conclusive on the question of priority of invention. The same question may arise in subsequent suits instituted under secs. 4915, 4918 and 4920, R. S. In the present suit, the question of priority is raised under paragraphs 2 and 4 of sec. 4920. In order to determine the question of priority under these paragraphs, we must ascertain the respective dates of the Thomas and Watson inventions. If we find the date of the Thomas invention is prior to the date of the Watson invention, then Thomas is the original and first inventor, unless Watson was using reasonable diligence in adapting and perfecting his invention from the time of his conception. On the other hand, if we find that the date of the Watson invention is prior to the date of the Thomas invention, then Watson is the original and first inventor. No question of diligence arises regarding the Thomas invention, because the complainant does not undertake to carry the date of the Thomas invention back of his application, while in the case of Watson it is sought to carry the date of invention back to his conception.

In patented inventions there are several distinct stages of the invention. Some patented inventions comprise only three stages, namely, conception (evidenced by drawings, disclosures, or models), application, patent; while other patented inventions comprise four stages, namely, conception, reduction to practice, application, patent.

The date of the first class of patented inventions must be either (1) the date of the patent, or (2) the date of the application, or (3) the date of the conception; while the date of the second class must be either (1) the date of the patent, or (2) the date of the application, or (3) the date of the reduction to practice, or (4) the date of the conception.

When two patents for the same invention have been issued to independent inventors, we understand the rule to be that the dates of their respective inventions are, (1) the dates of the patents; (2) the dates of the applications, provided the application sufficiently describes the invention; (3) the dates of actual reduction to practice; (4) the dates of conception; with this qualification, that, if either patentee seeks to carry the date of his invention back to the date of his conception, he must show reasonable diligence in adapting and perfecting his invention, either by actual reduction to practice or by filing his application.

Applying this rule, it appears that Thomas' application of Dec. 17, 1896, carries the date of his invention back of Watson's application, Mar. 11, 1898, and back of Watson's conception, Jan. 10, 1896. It follows, therefore, that Watson, in order to establish an earlier date than Thomas, must show that

between the date of his conception, Jan. 10, 1896, and the date of his actual reduction to practice, Apr., 1897, he was " using reasonable diligence in adapting and perfecting " his invention.

The defendant contends that the courts have adopted another and a different rule for determining the dates of inventions under the patent laws, and that rule is as follows: Inventions are divided into two classes, simple and complicated. Simple inventions may be completed by drawings or disclosure which sufficiently describe the invention, while complicated inventions require for their completion actual reduction to practice. With respect to this theory of the defendant, it is sufficient to say that it is novel and plainly unsound. No such distinction between inventions is found in the statutes, or has ever been recognized by the courts in any adjudicated cases. It may be further observed that any such artificial distinction would lead to hopeless confusion and great injustice.

In the present case the question of priority of invention involves two fundamental inquiries: First, is the date of the patented invention as early as the date of the application? In other words, can Thomas carry back the date of his invention to the date of his application? Second, is the date of a patented invention as early as the date of conception? In other words, can Watson carry back the date of his invention to the date of his drawing and disclosure?

First. With respect to the first proposition it may be said that the law is well settled that the date of a patented invention is at least as early as the date of the application, provided it sufficiently describes the invention to enable those skilled in the art to understand it; and we have found no decision in which this rule is questioned. (Quoting and reviewing Walk. Pat. 4th ed. § 70; Kearney *v.* Railroad, 32 Fed. 320; National *v.* Brown, 36 Fed. 317; Prindle *v.* Brown, 155 Fed. 531; Bates *v.* Coe, 98 U. S. 31; Barnes *v.* Walworth, 51 Fed. 88, affd. 60 Fed. 605; Barbed Wire Case, 143 U. S. 275; Miller *v.* Eagle, 151 U. S. 186; Westinghouse *v.* Chartiers, 43 Fed. 582.)

The rule of the Patent Office that the filing of an allowable application is constructive reduction to practice is only the expression in another form of the rule that the application for a patented invention, if it sufficiently describes the invention, is conclusive evidence that the invention was made at least as early as that date. (Quoting and reviewing Lorraine *v.* Thurmond, 51 O. G. 1781; Agawam *v.* Jordan, 7 Wall. 583; Seymour *v.* Osborne, 11 Wall. 516; Clark *v.* Willimantic, 140 U. S. 481; Woodcock *v.* Parker, Fed. Cas. 1813; Bedford *v.* Hunt, Fed. Cas. 1217; Reed *v.* Cutter, Fed. Cas. 11,645; Washburn *v.* Gould, Fed. Cas. 17,214; White *v.* Allen, Fed. Cas. 17,535; Winans *v.* New York, Fed. Cas. 17,864.)

At the same time we have the equally well settled rule that an invention need not be perfected and adapted to use, or reduced to practice, in order to obtain a valid patent, since no such condition is contained in the statute. Wheeler *v.* Clipper, Fed. Cas. 17,493; Telephone Cases, 126 U. S. 1.

The cases which hold that a rejected application is not sufficient to establish priority of invention under the statutes have no bearing on the question of the legal effect of a complete and allowable application which will result or has resulted in the granting of a patent. Corn Planter Pat. 23 Wall. 181; Lyman *v.* Lalor, Fed. Cas. 8632; Northwestern *v.* Philadelphia, Fed. Cas. 10,337.

Second. We have now to consider the question whether Watson can carry the date of his invention back to the time of his conception, Jan. 10, 1896. This question must be viewed from two standpoints: First, can it be said that Watson's conception, drawings and disclosure to others, of themselves, or without regard to his subsequent acts, can constitute a complete invention within the meaning of the patent laws? Second, can Watson as a patentee carry back the date of his invention to the time of his conception?

(1) The law appears to be well established that a conception evidenced by disclosure, drawings, and even a model, confers no rights upon an inventor unless followed by some other act, such as actual reduction to practice, or filing an application for a patent. A conception of this character is not a complete invention under the patent laws. If it did constitute an invention under the statutes, then an inventor might stop with his drawings and disclosure, and hold the field for all time against a subsequent inventor who had reduced his invention to practice, or who had obtained a patent. The law will not permit this. An inventor must not stop with this stage of his invention, but he must proceed with reasonable diligence to perfect his invention, either by actual reduction to practice, or by filing his application for a patent. (Quoting and reviewing Detroit *v.* Renehard, 9 Fed. 293; Reeves *v.* Keystone, Fed. Cas. 11,660; Pennsylvania *v.* Simpson, 29 Fed. 288; Winans *v.* New York, Fed. Cas. 17,864; Electric *v.* Hall, 6 Fed. 603; Draper v. Potomska, Fed. Cas. 4072; Ellithorp *v.* Robertson, Fed. Cas. 4408.)

(2) The next question we have to consider is whether Watson as a patentee can carry back the date of his invention to the date of his conception; that is, to his drawing and disclosure of Jan. 10, 1896. We understand the true rule to be that a patentee who undertakes to carry back the date of his invention to his drawings and disclosure must show reasonable diligence in adapting and perfecting his invention, either by actual reduction to practice or by filing his application. This rule is supported by the great weight of authority, and we have found no cases which directly hold that this is not the law, though there are some cases in which a patentee has been permitted to carry back his invention to his drawings and disclosure, where the question of diligence was not raised or passed upon. Loom Co. *v.* Higgins, 105 U. S. 580; Dodge *v.* Porter, 98 Fed. 624; Westinghouse *v.* Stanley, 133 Fed. 167. No sound reason has been advanced why the doctrine of diligence should not apply to a patentee as well as an inventor who has not secured a patent. On the other hand, any such distinction in favor of patentees is not in harmony with the patent laws. We have seen that an invention in the sense of the patent law signifies a completed invention, and that the earliest date of an invention is the time of its completion. We have also seen that an invention may be completed either by actual reduction to practice or by filing a complete and allowable application in conformity with the statutes.

This general principle, however, is subject to this qualification: (Here follows a discussion of the acts of July 4, 1836, sec. 15; Feb. 21, 1793, sec. 6; and a review of the cases bearing thereon: Reed *v.* Cutter, supra; Loom Co. *v.* Higgins, supra; Odell *v.* Stout, 22 Fed. 159; Reeves *v.* Keystone, supra; Christie *v.* Seybold, 55 Fed. 69; Merrow *v.* Shoemaker, 59 Fed. 120; Detroit *v.* Renchard, supra; Pennsylvania *v.* Simpson, supra; Electric *v.* Hall, supra; Morgan *v.* Daniels, 153 U. S. 120). — Automatic *v.* Pneumatic, 166 Fed. 288; C. C. A.

§ 614. Definitions of.

The invention itself is an intellectual process or operation; and like all other expressions of thought, can in many cases scarcely be made known, except by speech. The invention may be consummated and perfect and may be susceptible of complete description in words, a month or even a year before it can be embodied in a visible form, machine or composition of matter. — Railroad *v.* Stimpson, 14 Pet. 448; 10 L. Ed. 535.

The complainant alleges that he has invented a new and useful improvement in the construction of jails. Now a jail can hardly come under the denomination of a "machine;" nor, though made by hands, can it well be classed with "manufactures;" nor, although compounded of matter can it be termed a "composition of matter" in the meaning of the Patent Act.

"But if the subject matter be neither a machine nor a manufacture nor a composition of matter," then, says Curtis Pat. 91, "it must be an art, for there can be no valid patent except it be for a thing made or for the art or process of making a thing." Now, without attempting to define the term "art" with logical accuracy, we take as examples of it, some things which, in their concrete form, exhibit what we all concede to come within a correct definition, such as the art of printing, that of telegraphy, or that of photography. The art of tanning might also come within the category, because it requires various processes and manipulations. The difficulty still exists however, under which category of the Patent Act an improvement in the construction of jails is to be classed or whether under any. — Jacobs *v.* Baker, 74 U. S. 295; 19 L. Ed. 200.

A patentable invention is a mental result. It must be new and shown to be of practical utility. Everything within the domain of the conception belongs to him who conceived it. The machine, process or product is but the material reflex and embodiment. — Smith *v.* Nichols, 88 U. S. 112; 22 L. Ed. 566.

Reviewed at length by Justice Brown in McClain *v.* Ortmayer, 141 U. S. 419; 35 L. Ed. 800; 12 S. Ct. 76.

A discovery which adds to our knowledge and makes a substantial advance in the useful arts is invention. — Magowan *v.* N. Y. 141 U. S. 332; 35 L. Ed. 781; 12 S. Ct. 62.

Atlantic *v.* Brady, 107 U. S. 192; Hollister *v.* Benedict, 113 U. S. 59.

Specifications and claims are necessary, but inventions consist in things, not in words. — Thomson-Houston *v.* Western, 72 Fed. 530; 19 C. C. A. 1.

It is not mere novelty. — Tiemann *v.* Kraatz, 85 Fed. 437; 29 C. C. A. 257.
Thompson *v.* Boisselier, 114 U. S. 11; Gardner *v.* Herz, 118 U. S. 191.

As I look at it, the life germ of any creation is not so much the mechanical form in which it finally becomes embodied, as the flash of inspiration, out of the darkness in which it lay concealed, first revealed its possibility. The possibility of a thing once seen, it is of no great moment that a ready mechanical means of bringing it into form is at hand; nor that the mechanical means used are similar to those employed before in the allied arts; nor that any mind would have seen the adaptability, mechanically, of what already existed to what was now, for the first time, about to exist. Invention is not, in my judgment, confined to the concrete mechanical form into which an idea ultimately evolves. Invention is the idea itself, the burst of new thought, the discovery; and patentable invention is the conjunction of these two appropriate and efficient mechanical means. Confessedly, an old idea, carried out mechanically in a new form, is patentable invention. To my mind, a new idea, carried out mechanically in an old form, ought equally to be regarded as patentable invention. To hold otherwise is to dethrone the head and enthrone the hands — to leave genuine genius unrecompensed, while placing the crown on mechanical skill. (Grosscup, J. concurring unwillingly in view of Kokomo *v.* Kitselman, 189 U. S. 8.) — Brown *v.* Crane, 133 Fed. 235; 66 C. C. A. 676.

Whether, in a given case, there has been the exercise of the inventive faculty, within the meaning of the patent laws, is always a delicate and sometimes difficult question addressed to the sound judgment of the court. It is difficult, perhaps impossible, to describe general rules for the exercise

of this judicial function. It demands careful consideration of the prior art and the essential and distinguishing feature of the device or combination, as to which invention is alleged, and appreciation of the practical working of the mental faculties. But it must often happen, and is unavoidable, that what is evidence of inventive genius to one mind, may only suggest the exercise of mechanical skill to another equally sincere and intelligent. — Buchanan *v.* Perkins, 135 Fed. 90; 67 C. C. A. 564.

It is said that from time immemorial eye shades have been made by cutting visors from papers and tying them on with strings. If this was a matter of common knowledge, so much more the marked was the intuitive flash that finally came to Mahony's mind, and to his alone. We think there was invention of the "happy thought" kind. — Mahony *v.* Malcom, 143 Fed. 124; 74 C. C. A. 318.

Williams *v.* American, 86 Fed. 641; Eastman *v.* Mayor, 134 Fed. 844; Regent *v.* Penn, 121 Fed. 80.

§ 615. Dividing or Uniting Parts.

It is not invention to make the frame of a machine integral rather than to bolt two sections together when both perform the same service. — Bagley *v.* Empire, 58 Fed. 212; 7 C. C. A. 191.

It does not involve invention to cast a part of a machine in two pieces which before was cast in one piece. — Birmingham *v.* Gates, 78 Fed. 350; 24 C. C. A. 132.

It could not involve any invention to make a complete door frame in two parts. All that was necessary to be done by the carpenter was to make a complete frame, and then divide the jamb longitudinally into two sections by the saw. — Roehr *v.* Bliss, 102 Fed. 692; 42 C. C. A. 593.

The conclusion from all the cases must be that the mere making in one piece of a device formerly made in two parts mechanically attached is not invention. The exception to the general rule must depend upon special facts indicating the presence of inventive faculty in a degree greater than the mere mechanical knowledge exhibited by so simple an improvement. Much stress has been laid upon the alleged large use and sale of this improved socket. The evidence upon this point is not very forceful in respect to this particular invention. The sales were chiefly of a structure which included track plate and socket, or these in combination with a caster, the track plate and caster being the subject of other patents; and it is not made plain that any more of the alleged success of the sale of the track plate socket was due to the socket than to the track plate. However this may be, we do not think the question of patentability is doubtful, and it is only when the patentability of a device is doubtful that the general use of the patented article may turn the scale. — Standard *v.* Caster, 113 Fed. 162; 51 C. C. A. 109.

McClain *v.* Ortmayer, 141 U. S. 419; Duer *v.* Lock, 149 U. S. 216; Krementz *v.* Cottle, 143 U. S. 556; Howard *v.* Stove, 150 U. S. 164; Mfg. Co. *v.* Holtzer, 67 Fed. 907.

All that this claim requires is that there shall be air-passages and that they shall be screened. Since this is so, there surely is no invention in merely reducing the number of air-passages from two to one. — Murray *v.* Continental, 149 Fed. 989; 79 C. C. A. 499.

There is no invention in making two parts of one thing, or one of two, when by such change no different result is attained. — D'Arcy *v.* Staples, 161 Fed. 733; 88 C. C. A. 606.

Bundy *v.* Detroit, 94 Fed. 524; Eames *v.* Worcester, 127 Fed. 67; General *v.* Yost, 139 Fed. 568; Standard *v.* Caster, 113 Fed. 162; Howard *v.* Detroit, 150 U. S. 164.

§ 616. Double or Analogous Use — Analogous Use Non-Patentable.

The application of a patented device to another use, where such new application does not involve the exercise of the inventive faculty, is as much an infringement as though the machine were an exact copy of the old. — Western *v.* LaRue, 139 U. S. 601; 35 L. Ed. 294; 1 S. Ct. 670.

Winans *v.* Denmead, 56 U. S. 330; Sewell *v.* Jones, 91 U. S. 171; Howe *v.* Abbott, 2 Story, 190; Walton *v.* Potter, 1 Web. P. C. 585.

Mere analogous use is not patentable. — Grant *v.* Walter, 148 U. S. 547; 37 L. Ed. 552; 13 S. Ct. 699.

Brown *v.* Piper, 91 U. S. 37; Pennsylvania *v.* Safety Truck, 110 U. S. 491; Miller *v.* Force, 116 U. S. 22; Dreyfus *v.* Searle, 124 U. S. 60.

The adaptation of an old device to an analogous purpose in the same art is mere double use. — Griswold *v.* Wagner, 68 Fed. 494; 15 C. C. A. 525.

Potts *v.* Creager, 155 U. S. 597; Brown *v.* Piper, 91 U. S. 27; Penna. *v.* Locomotive, 110 U. S. 490; Atlantic *v.* Brady, 107 U. S. 192; Tucker *v.* Spalding, 13 Wall. 453.

Complainants seek to eliminate the Elston patent from the case by the suggestion that the workmen who make mattresses for beds, do not make seats for railroad cars (the Elston patent was for a seat for railroad car). That circumstance, however, is immaterial when an old contrivance is applied in an old way to an analogous subject, without any novelty in the mode of applying such a contrivance to the new purpose. — Rogers *v.* Fitch, 81 Fed. 959; 27 C. C. A. 23.

Penna. *v.* Locomotive, 110 U. S. 497; Aron *v.* Railway, 132 U. S. 89; Briggs *v.* Ice Co. 60 Fed. 87.

The form of his stay was old, the material was old, and in bringing them together in the particular form described in the patent, he did not develop in either any new characteristics or capacity. — Janowitz *v.* Levison, 82 Fed. 63; 27 C. C. A. 61.

It is true as already stated, that nearly all, if not all, the elements of Grosselin's combination were so common in the practical arts that their use anywhere must be regarded as analogous to previous uses; and especially is this true of the cone pulleys. But this does not wholly settle the matter. The statements of the rule in Potts *v.* Creager, 155 U. S. p. 606, show that the rule is not rigid but that it merely lays the basis of presumptions which ordinarily are against patentability. — Heap *v.* Tremont, 82 Fed. 449; 27 C. C. A. 316.

National *v.* Boston, 156 U. S. 502; Watson *v.* Stevens, 51 Fed. 757; Osgood *v.* Metropolitan, 75 Fed. 670; Mfg. Co. *v.* Holtzer, 67 Fed. 907.

That the mere transfer of a device from one field to an analogous use, without change of function is not patentable, see Cushman *v.* Goddard, 95 Fed. 664; 37 C. C. A. 221.

Penna. *v.* Locomotive, 110 U. S. 490; Heap *v.* Tremont, 82 Fed. 449.

The prior art showed both the ordinary atomizer and the especially designed atomizer for the use of pigments, the latter being especially designed to throw a much finer stream. The Fry patent required, for ceramic work, an ordinary atomizer, and the specially designed pigment atomizer would not do the work. It was held that the mere transfer of an ordinary atomizer to do the work which the existing pigment atomizer would not perform, was not invention. — Fry *v.* Rookwood, 101 Fed. 723; 41 C. C. A. 634.

The object is the old object, and the result is simply the old result of insulation, which is to prevent discharges at an injurious place. We cannot perceive that the effect of the insulation in an arc-rupturing device was anything more than the old effect, which has always accompanied insulation, and which was accomplished by the old mechanical means, although it was used to prevent lateral discharges in connection with an arc-rupturing device. — Thomson-Houston *v.* Nassau, 107 Fed. 277; 46 C. C. A. 263.

The only difference is that Bemis claimed his combination "in a transplanting machine," while the existing combinations appeared in seed planters. Granting that Bemis made a new and useful improvement in transplanters, the substitution of a known part of a seed planter for the corresponding part of a transplanter, with the required and self-suggesting changes, did not, in our judgment, involve the exercise of the inventive faculty. — Seiler *v.* Fuller, 121 Fed. 85; 57 C. C. A. 339.

In view of the fact that Gendron showed that his invention was designed to be used in vehicle manufacture in joining hollow seamless malleable castings "to whiffletrees, axles, and other similar bodies," we cannot ascribe to the transfer of the process to joining hollow seamless malleable spoke sockets to spokes the dignity of invention. — Bettendorf *v.* Little, 123 Fed. 433; 59 C. C. A. 473.

Lovell *v.* Cary, 147 U. S. 623; Potts *v.* Creager, 155 U. S. 597; Mast *v.* Stover, 177 U. S. 485; Johnson *v.* Toledo, 119 Fed. 885.

Whether houses and incubators are or are not in the same class is unimportant. The patent in suit deals with the problem of ventilating an incubator; the two earlier patents, with the problem of ventilating a house or a room; and we are clearly of the opinion that the devising of systems of ventilation belongs to a single art, whether such systems are to be applied to a hospital, a sewer, a ship's hold, a cold-storage box, an incubator, or any other structure where circulation of air is sought to be secured. — Jones *v.* Cyphers, 126 Fed. 753; 62 C. C. A. 21.

It is possible that the inventor was the first to conceive that windows thus constructed would be a valuable adjunct to fire-proof buildings. If so, it is the previousness of his conception that constitutes the merit of his so-called invention; for the mechanical embodiment of that conception is old. But it does not follow that a conception is patentable merely because it is first in time. Concept alone is not patentable. Concept must be accompanied by mechanical embodiment; and as the law now stands, the mechanical embodiment, to make the invention patentable, must itself be unanticipated. — Voightmann *v.* Perkinson, 138 Fed. 56; 70 C. C. A. 482.

As no adaptation beyond known equivalents was made or needed, and as the transfer was from the very same art, the claims must be void. — Covel *v.* Rich, 142 Fed. 468; 73 C. C. A. 584.

Potts *v.* Creager, 155 U. S. 597; Mast *v.* Stover, 177 U. S. 485; Stearns *v.* Russell, 85 Fed. 229; Chisholm *v.* Johnson, 115 Fed. 625.

The new and analogous use to which the old and familiar process was put (winnowing coffee after it had been roasted and slightly crushed) does not amount to invention. — Baker *v.* Duncombe, 146 Fed. 744; 77 C. C. A. 234.

Slawson *v.* Grand, 107 U. S. 649; Grant *v.* Walter, 148 U. S. 547; Knapp *v.* Morss, 150 U. S. 221; Aron *v.* Manhattan, 132 U. S. 84.

§ 617. Double or Analogous Use — Double Use Non-Patentable.

If what it actually did is in its nature the same as sawing, and its structure and action suggested to the mind of an ordinary skilled mechanic this double use to which it could be put without material change, it is not invention. — Tucker *v.* Spalding, 80 U. S. 453; 20 L. Ed. 515.

A double use is not patentable, nor does its cheapness make it so. — Reckendorfer *v.* Faber, 92 U. S. 347; 23 L. Ed. 719.

Curtis, sec. 56, 73.

The employment of old mechanism producing the same mechanical effect, the only advantage being an increased degree of security or safety is not invention. — Fond du Lac *v.* May, 137 U. S. 395; 34 L. Ed. 714; 11 S. Ct. 98.

Tucker *v.* Spalding, 80 U. S. 453; Corn Planter Patent, 90 U. S. 181; Brown *v.* Piper, 91 U. S. 37; Dunbar *v.* Meyers, 94 U. S. 187; Vinton *v.* Hamilton, 104 U. S. 485; Heald *v.* Rice, 104 U. S. 737; Hall *v.* Macneale, 107 U. S. 90; Thompson *v.* Boisselier, 114 U. S. 1; Stephenson *v.* Brooklyn, 114 U. S. 149; Aron *v.* Manhattan, 132 U. S. 84; Watson *v.* Cincinnati, 132 U. S. 161; Hill *v.* Wooster, 132 U. S. 693; Burt *v.* Evory, 133 U. S. 349; St. Germain *v.* Brunswick, 135 U. S. 227.

The public cannot be deprived of an old process because some one has discovered that it is capable of producing a better result or has a wider range of use than was before known. — Lovell *v.* Cary, 147 U. S. 623; 37 L. Ed. 307; 13 S. Ct. 472.

Smith *v.* Nichols, 88 U. S. 112; Roberts *v.* Ryer, 91 U. S. 150.

The mere carrying forward of an old process to perform an analogous use not invention. — Lovell *v.* Cary, 147 U. S. 623; 37 L. Ed. 307; 13 S. Ct. 472.

The combination of old elements which perform no new function and accomplish no new results does not involve patentable novelty. — Knapp *v.* Morss, 150 U. S. 221; 37 L. Ed. 1059; 14 S. Ct. 81.

Mosler *v.* Mosler, 127 U. S. 361; Hailes *v.* Van Wormer, 87 U. S. 353; Reckendorfer *v.* Faber, 92 U. S. 347; Pickering *v.* McCullough, 104 U. S. 310; Peters *v.* Hanson, 129 U. S. 541.

Dissented to. Brown and Shiras. While change was not radical it was still invention.

Loom Co. *v.* Higgins, 105 U. S. 580; Washburn *v.* Beat Em All, 143 U. S. 275; Gandy *v.* Main, 143 U. S. 587; Topliff *v.* Topliff, 145 U. S. 156.

For the leading cases on this subject (quoted under § 671) see Potts *v.* Creager, 155 U. S. 597; 39 L. Ed. 275; 15 S. Ct. 194.

He invented no new device, he used it for no new purpose; he applied it to no new machine. All he did was to apply it to a new purpose in a machine where it had not before been used for that purpose. In our opinion this transfer does not rise to the dignity of invention. — Mast *v.* Stover, 177 U. S. 485; 44 L. Ed. 856; 20 S. Ct. 708.

Potts *v.* Creager, 155 U. S. 597.

§ 618. Double or Analogous Use — Double Use Patentable.

The distinction between a double use, as the result of mere mechanical skill, and a new use created by the inventive faculty is strikingly illustrated in the case of Colgate *v.* Western, 15 Blatchf. 365. — Busell *v.* Stevens, 137 U. S. 423; 34 L. Ed. 719; 11 S. Ct. 150.

As a broad invention it has nothing which was not fully described in the prior systems except a single receiver in lieu of two. It is apparent that, when a single receiving instrument was desired in the place of two, the change could easily have been made by any person skilled in the art.

Therefore I felt at liberty to proceed in this case on my own convictions, on my understanding of the tendency and practical effect of the decisions of the Supreme Court during the last few years which have sustained so many decrees in the circuit courts holding patents invalid for want of patentable novelty, and reversed so many in which the patents have not been held invalid for that reason, and especially the tendency and practical effect of the series of cases concerning "double use," so called, beginning with Penna. *v.* Locomotive, 110 U. S. 490 and ending with Knapp *v.* Morss, 150 U. S. 221 and of the rule in Gordon *v.* Warder, 150 U. S. 47. But, apparently the trend of this court, as shown in Folding Bed Co. *v.* Osgood, 58 Fed. 583 and Herrick *v.* Leveller Co. 60 Fed. 80, precludes me from following my own views, as above expressed. (Dissenting opinion of Putnam, C. J.). — Gamewell *v.* Municipal, 61 Fed. 948; 10 C. C. A. 184.

This was an action for infringement of a tanning process. Respondent set up as anticipatory a similar process for dyeing. *Held:* In dyeing and printing on fabrics and in the treatment of wools, the end finally accomplished is not at all analogous to that of manufactured leather. The same ingredients may be used to reach the one result as the other but they are not used for a like purpose. They do not affect the different materials in the same way, and the product evolved in the one case is wholly unlike the change effected in the other. The fact that hides are substituted for fabrics or wool, and that the thing produced is leather, and not dyed fabric or treated wool distinguishes the two processes. The art of dyeing and of leather making are wholly unallied, and therefore the doctrine of double use has no pertinency. — Tannage *v.* Zahn, 70 Fed. 1003; 17 C. C. A. 552.

Potts *v.* Creager, 155 U. S. 606.

§ 619. Duplication.

Mere duplication is not invention. — Topliff *v.* Topliff, 145 U. S. 156; 36 L. Ed. 658; 12 S. Ct. 825.

Dunbar *v.* Meyers, 94 U. S. 187; Slawson *v.* Grand, 107 U. S. 649.

Note: Further cases bearing on this subject will be found under *Aggregation, Adaptation, Mechanical Skill* and *Novelty.*

§ 620. Evidence of — Acquiescence.

In view of the Moore patent and of the state of the art, the patent in suit is an extremely narrow one; but in view of the favor with which it has been received by the trade, and the long acquiescence shown, we are not prepared to hold that there was no invention in so reorganizing the fastener of the prior art as to produce for the first time a device such as that described. — Acme *v.* Cary, 101 Fed. 269; 41 C. C. A. 338.

Here was an invention which, if it was an invention, was of such a character that, notwithstanding the parties are at issue in regard to the extent

of its practical value, it promised and accomplished great pecuniary advantage. Yet it must be conceded, as is apparent from the general tone of the whole record, and from the way in which the case has been developed before us, that the patent was long acquiesced in. It is also certain from the testimony in the case that an interference was declared between Ferraris and Tesla, and decided in favor of the latter. While, of course, such decisions are not formally operative as between other parties, as we have shown in Wilson *v.* Consolidated, 88 Fed. 286, especially when, as in the present case, courts are not advised what the nature of the contest was, or even whether it was a real one, yet such issues, when determined, necessarily contribute, with other adjudications, to make up the body of expert and legal opinion which goes to show that the patent has been approved and acquiesced in by those who understand its relations to the art. Although such general judgment cannot be measured by the law, yet it must be conceded that it has its weight, especially with regard to the state of the art at a period some years remote. In some cases, after a long lapse of time, it is the most reliable test in reference thereto; and, in any event, it affords material support to the patentee on issues of fact of the kind at bar, relating to occurrences as to which so many years have gone by. — Westinghouse *v.* Stanley, 133 Fed. 167; 68 C. C. A. 523.

Never until this cause was instituted, so far as we are informed, was the validity of the patent disputed. During all that period of 10 years there seems to have been a public acquiescence in its validity. With these facts before us, we think we are not justified in holding the first claim of the patent invalid. — Wolff *v.* Du Pont, 134 Fed. 862; 67 C. C. A. 488.

Although the letters patent issued more than 14 years before the filing of this bill, no practical use was ever made of the alleged invention covered by the claim now in issue. Consequently the patent lacks the support coming from public acquiescence which is often of great value, not only in giving support to an alleged invention, but also in justifying a breadth of construction of the patent itself, so that the complainant is subject to the scrutiny and the limitations of the class observed in our opinion in U. S. Hog *v.* North, 158 Fed. 818, and in the cases there cited, and in Deering *v.* Harvester, 155 U. S. 286. — Boston *v.* Pennsylvania, 164 Fed. 557; C. C. A.

§ 621. Evidence of — Attempted Evasion.

Indeed, its great usefulness and ingenuity are especially illustrated by the cumbersome efforts of the respondent to accomplish the results of the patented device by its alleged infringing machine. — Heap *v.* Tremont, 82 Fed. 449; 27 C. C. A. 316.

§ 622. Evidence of — Commercial Success.

The argument drawn from commercial success is not always to be relied on. Other causes, such as the enterprise of the vendors and the lavish expenditures in advertising may cooperate to promote a large demand. But when the other facts in the case leave the question of invention in doubt, the fact that the device has gone into general use and has displaced other devices which had previously been employed for analogous uses is sufficient to turn the scale in favor of the existence of invention. — Krementz *v.* Cottle, 148 U. S. 556; 37 L. Ed. 558; 13 S. Ct. 719.

Quoting from Con. B. S. Co. *v.* Detroit, 47 Fed. 894.

Loom Co. *v.* Higgins, 105 U. S. 580; Con. S. V. Co. *v.* Crosby, 113 U. S. 157; Magowan *v.* N. Y. 141 U. S. 332; Washburn *v.* Beat Em All, 143 U. S. 275; Gandy *v.* Main, 143 U. S. 587; Topliff *v.* Topliff, 145 U. S. 156.

The shredders failed to properly prepare the cane for the mill. The Krajewski machine succeeds. — Krajewski *v.* Pharr, 105 Fed. 514; 44 C. C. A. 572.

In Re Barbed Wire Patent, 143 U. S. 275; Schroeder *v.* Brammer, 98 Fed. 880; Dudley *v.* Munger, 1 C. C. A. 158; Consolidated *v.* Crosby, 113 U. S. 157; Smith *v.* Vulcanite, 93 U. S. 486; Magowan *v.* Packing Co., 141 U. S. 332–343; Potts *v.* Creager, 155 U. S. 597.

The fact that the device was at once successful, and that, to a large extent, it practically displaced all lifting jacks in previous use, must be regarded as a circumstance of decided significance. Such circumstance clearly discloses the meritoriousness of the device. And it is well settled that, when the question of patentable novelty is fairly open to doubt, the practical success of the device, with the fact that it displaced similar devices in previous use, is sufficient to turn the scale in favor of the invention. — Kalamazoo *v.* Duff, 113 Fed. 264; 51 C. C. A. 221.

Smith *v.* Vulcanite, 93 U. S. 486; Magowan *v.* Packing Co. 141 U. S. 333; National *v.* Interchangeable, 106 Fed. 693; Hallock *v.* Davison, 107 Fed. 482; Barbed Wire Pat. 143 U. S. 275; Topliff *v.* Topliff, 145 U. S. 156; Krementz *v.* Cottle, 146 U. S. 556; Consolidated *v.* Detroit, 47 Fed. 894; Mfg. Co. *v.* Adams, 151 U. S. 139.

If there is any doubt upon the question of patentability, the practical and commercial results of the improvement must resolve such doubt in its favor. (p. 498.)

It is at most merely the use of an old device for a new and analogous purpose, without the necessity of any adaptation in order to discharge the old function in the new device. Its confessed commercial success, therefore, cannot be accepted as evidence of invention. (p. 501.) — Westinghouse *v.* Union, 117 Fed. 495; 55 C. C. A. 230.

Note: It is true, these two conflicting statements, seemingly so, refer to two different patents; but it is perhaps as good an illustration how a so-called rule of law becomes a " wax nose " as can be found.

The testimony shows that the public by large purchases appreciated Hoyt's device; and while this fact is not controlling, it is entitled to consideration, when commercial success is not shown to be due to other causes. — Dowagiac *v.* Minnesota, 118 Fed. 136; 55 C. C. A. 86.

Gandy *v.* Belting, 143 U. S. 587; Lane *v.* Welds, 99 Fed. 286; Dowagiac *v.* Superior, 115 Fed. 886.

Commercial success is not an infallible standard by which to test the merit of an invention. Such success is often due to mere business ability in manufacturing, exploiting, and advertising; but given a large demand for a particular thing, a market already created, and an invention which it is free to use, the fact that it is not used strongly demonstrates its inadequacy. — Ideal *v.* Crown, 131 Fed. 244; 65 C. C. A. 436.

The hard-headed men of trade do not place themselves in a position where they must accept the alternative of an infringement suit or the payment of license fees for the use of an article when an equally good article may be had for nothing. It should be and is the desire of the court in approaching the consideration of a patent for a structure which has thus won a position of unchallenged supremacy in the commercial world, to endeavor to sustain rather than defeat the patent. — Consolidated *v.* Firestone, 151 Fed. 237; 80 C. C. A. 589.

Even if appellee's commercial success with a ventilated armature core was due to Reist's teachings, rather than to the skill of appellee's mechanics in working out indispensable features that were not disclosed by Reist, that fact "would only be influential in resolving a doubt" — it would not also serve to inject a doubt into an otherwise clear case. — National *v.* General, 159 Fed. 934; 87 C. C. A. 462.

§ 623. Evidence of — Commercial Success — When Not.

The appellants rely on the fact that the patented machine was the first successful one, and on the fact that it had great commercial success. The decisions touching the effect of these propositions are so numerous and modern that they need not be referred to specifically, but they limit the application of them to doubtful cases turning on questions of utility or patentable invention. They have no pertinency in cases which turn on the construction of the patent. — DeLoriea *v.* Whitney, 63 Fed. 611; 11 C. C. A. 355.

The rule of commercial success determining invention is applied only in cases of doubtful invention, and not where there is palpable want of any inventive art. — Olmsted *v.* Andrews, 77 Fed. 835; 23 C. C. A. 488.

There is too much evidence in this record as to consent decrees against rival makers of tires to predicate much upon the mere fact that the Grant tire has met with a large sale. The general use of a patented article is only evidence of value when the novelty or utility of the article is a matter of great doubt, and its evidential value in even such cases is nothing when it can be attributed to something other than novelty. — Goodyear *v.* Rubber, 116 Fed. 363; 53 C. C. A. 583.

Watch Co. *v.* Robbins, 75 Fed. 17; Lane *v.* Welds, 99 Fed. 286; McClain *v.* Ortmayer, 141 U. S. 419.

In considering the question of the patentable character of the machine in question, we must not be misled by the fact that its use has been attended with commercial success in the way of a large, better, and cheaper product; for, in the steady advance incident to progress in manufacturing, many non-patentable processes and methods have proved most original and exceedingly profitable, and it must be remembered that everything novel and useful is not therefore necessarily patentable. — Daylight *v.* American, 142 Fed. 454; 73 C. C. A. 570.

That mere evidence of large sales without proof that the same was due to the improvement is not proof of novelty, see Fielding *v.* Crouse, 154 Fed. 377; 83 C. C. A. 331.

The commercial success of the article manufactured under the complainant's patent is also pointed out as indicating invention. But this is only one element to be considered, and then only when patentability is doubtful. Moreover, it is not entirely clear that this commercial success is not in some measure due to the machines used by the complainants and their licensees for attaching the binder. — Locklin *v.* Buck, 159 Fed. 434; 86 C. C. A. 414.

§ 624. Evidence of — Efficiency.

That a combination making a superior and cheaper article is itself a patentable invention, we are unable to agree with. — Florsheim *v.* Schilling, 137 U. S. 64; 34 L. Ed. 574; 11 S. Ct. 20.

Pickering *v.* McCullough, 104 U. S. 310.

Large capacity of device is persuasive but by no means conclusive proof of invention. — National *v.* Hedden, 148 U. S. 482; 37 L. Ed. 529; 13 S. Ct. 680.

A glance at the patent and the invention itself, and the fact that the defendant used and paid royalty for the use of it for years, and now infringes, sufficiently establish utility. — Thomson *v.* Citizens Nat. Bk., 53 Fed. 250; 3 C. C. A. 518.

The patent was a notable step in advance, — a marked improvement; and, to those who made it, we think the quality of inventors ought not to be denied. — Griswold *v.* Harker, 62 Fed. 389; 10 C. C. A. 435.

Thomson *v.* Bank, 53 Fed. 250; Loom Co. *v.* Higgins, 105 U. S. 580; Consolidated *v.* Crosby, 113 U. S. 157; Magowan *v.* Packing Co. 141 U. S. 332; Barbed Wire Case, 143 U. S. 275.

It is argued that there must be invention in complainant's machine from the fact that it produces more per diem than any that preceded it. But the increased speed is due, not to the introduction of a new element into his combination, or to a new combination of known elements; it is attributable only to the superior strength and firmness. It requires no reasoning to prove that if the prior machines were constructed with equal strength and rigidity, they will run at the same speed and accomplish the same result with complainant's machine. — Vulcan *v.* Smith, 62 Fed. 444; 10 C. C. A. 493.

The protection of the statute is granted for things invented, not for things produced. The qualities claimed belong, as we think, to the domain of mechanical skill and not to the domain of the inventive faculty. It is excellence of workmanship, superiority and lightness of material, structural changes of form and proportion which produce the claimed result. — Olmsted *v.* Andrews Co. 77 Fed. 835; 23 C. C. A. 488.

When the increase of speed is so great as it appears to be in this instance, and that, too, in a part where increase of speed (efficiency being preserved) is of such practical importance, we are disposed to consider the changes in parts and arrangement of parts as showing meritorious invention. This capacity for high speed is not an afterthought, for at the beginning of the specification, is found a statement that the machine has been contrived with reference to running at a very high speed. — Willcox *v.* Merrow, 93 Fed. 206; 35 C. C. A. 269.

It is an improvement because it saves time. How much time is thus saved is not entirely clear. But whether it were greater or less, the majority of the court are of the opinion that the device employed to effect it is a simple and obvious mechanical contrivance, quite within the intelligence of the ordinary skilled workman to produce, and that it does not disclose patentable invention. — Doig *v.* Morgan, 122 Fed. 460; 59 C. C. A. 616.

Consolidated *v.* Barnard, 43 Fed. 527; Office Specialty *v.* Globe, 77 Fed. 465; Aron *v.* Manhattan, 132 U. S. 84.

While the mere assembling in a new organization of parts of old structures to perform the same function in their new place that they did in the old is not invention, yet where they are so taken and are organized in a new and useful manner, so as to produce a more beneficial result, there may be invention; and when the combination displays the exercise of intuitive skill and genius beyond that possessed and exercised by those well skilled in the practice of their art, and the discovery is of something new and useful, invention should be recognized. — Western *v.* North, 135 Fed. 79; 67 C. C. A. 553.

Not only is there a judicious selection by the inventor of the mechanism employed, but there is a discriminating adaptation of it to the work to be performed, which suggests something more than the mere skill of the ordinary mechanic, and partakes rather of the inventive insight and discovery which it is the design of the patent law to foster and protect. — American *v.* Mills, 149 Fed. 743; 79 C. C. A. 449.

In a very considerable sense, and from the very nature of things, every patent so far as the fact of invention is concerned, is to stand, if it stands at all, upon its own inherent merit, and therefore a given situation is not much aided by authorities otherwise than by the relative measure of merit ascertained under somewhat unsatisfactory methods of comparison; but if the ingenious barbed wire twist, which "turned a failure into a success" was invention, surely what Houghton accomplished through a successful substitution of metal parts for wood and by way of an ingenious adaptation of hard-tempered wire and sheet metal parts, so assembled as to be easily adjustable to old and new machines alike, ought to be accepted as invention. — Houghton *v.* Whitin, 153 Fed. 740; 83 C. C. A. 84.

Notwithstanding the fact that the vertical strip is new, the invention after all, resides in a broader sense, in the conception of the combination, and in the exceedingly practical and meritorious adaptation of the various metal parts in a complete mechanical appliance capable of doing the work and of successfully meeting the requirements of an existing necessity. — Houghton *v.* Whitin, 153 Fed. 740; 83 C. C. A. 84.

That a machine shall produce an original result is not necessary to patentability. If the new arrangement increases the effectiveness of the old by increased product or by lessening the expense, the fact affords evidence of invention. — National *v.* Aiken, 163 Fed. 254; C. C. A.

Loom Co. *v.* Higgins, 105 U. S. 589; Star *v.* General, 111 Fed. 398.

§ 625. Evidence of — Extensive Litigation.

The extent of this litigation attests at least the utility of the process supposed to be described in the patent, as it shows and measures the extent of the public demand for its use. — Eames *v.* Andrews, 122 U. S. 40 (Driven Well Pat.); 30 L. Ed. 1064; 7 S. Ct. 1073.

Another volume of 500 pages has been added to the library which has accumulated during the last ten years through the efforts of many defendants who seem determined to use what they, in effect, assert to be a useless device. The indomitable persistency with which these people have fought for the right to use the Grant patent is more persuasive evidence of its merits than the opinions of experts. — Consolidated *v.* Diamond, 162 Fed. 892; 89 C. C. A. 582.

§ 626. Evidence of — Extensive Use.

We do not say, the single fact that a device has gone into general use and has displaced other devices which had previously been employed for analogous uses establishes invention. It may, however, always be considered; and when the other facts in the case leave the question in doubt, it is sufficient to turn the scale. — Smith *v.* Goodyear, 93 U. S. 486; 23 L. Ed. 952.

This was a problem of the reconciliation of antagonisms, which so often occur in mechanics and without which practically successful results are not attained. — Consolidated *v.* Crosby, 113 U. S. 157; 28 L. Ed. 939; 5 S. Ct. 513.

The testimony is very full and clear that, as a process, it was not known or used before in the art; that it worked a valuable and important change in that art, in the particulars set forth in the specification; that it went at once extensively into use in Europe and the United States; and that it was recognized as a new and valuable invention in published works on the subject, immediately after it was made known. — New Process *v.* Maus, 122 U. S. 413; 30 L. Ed. 1193; 7 S. Ct. 1304.

The fact that an article sold generally on the market at from 15 to 20 per cent. more than other similar articles although it cost 10 per cent. less to produce it, is evidence of novelty. — Magowan *v.* N. Y. 141 U. S. 332; 35 L. Ed. 781; 12 S. Ct. 62.

Where an article went at once into such extensive public use as almost to supersede all others; that fact was pregnant evidence of novelty, value, and usefulness. — Magowan *v.* N. Y. 141 U. S. 332; 35 L. Ed. 781; 12 S. Ct. 62.
Smith *v.* Goodyear, 93 U. S. 486; Webster *v.* Higgins, 105 U. S. 580.

The fact that the salient feature of an invention has gone into general use is evidence that that feature was novel. — Hoyt *v.* Horne, 145 U. S. 302; 36 L. Ed. 713; 12 S. Ct. 922.

While the question of patentable novelty in this device is by no means free from doubt, we are inclined, in view of the extensive use to which these springs have been put by manufacturers of wagons, to resolve the doubt in favor of the patentees. — Topliff *v.* Topliff, 145 U. S. 156; 36 L. Ed. 658; 12 S. Ct. 825.

Taylor seems to have been the first to invent a practical trunk fastener to take the place of the old fashioned strap and buckle, and that, improved upon, as it undoubtedly has been, it has completely taken the place of the earlier devices, we should be inclined to resolve the doubt in favor of the patentee. — Sessions *v.* Romadka, 145 U. S. 29; 36 L. Ed. 609; 12 S. Ct. 799.

General use evidence of. — Keystone *v.* Adams, 151 U. S. 139; 38 L. Ed. 103; 14 S. Ct. 295.

The strongest evidence that the invention is a useful one is the fact that more than one-half of all the articles to which it is particularly applicable, are made under it and embody the combination of elements which is set forth in its specifications. Nor is it any answer that the companies using it have a monopoly of the business. They would use ordinary business discretion, and would be guided by the demands of the public. — Columbus *v.* Robbins, 64 Fed. 384; 12 C. C. A. 174.

Yet these are the facts that various crude and unsatisfactory expedients had been used by many persons for the purpose of accomplishing what Davis accomplished by his simple expedient, that this occurred to none of them, and that after it had been suggested by him it came into general use. The basis of the claim seems feeble, and, if it had nothing in its behalf except what we can find as a matter of first impression, we might reject it. Yet the presumptions arising in its favor from the findings of the patent office and the circuit court, in connection with those coming from the facts we have stated, prevent us from reversing the decree below. — Davis *v.* Parkman, 71 Fed. 961; 18 C. C. A. 398.
Watson *v.* Stevens, 51 Fed. 757.

The fact that this device may have gone into general use, and may have displaced other devices previously used for the same or analogous purposes, might be sufficient to turn the scale in favor of patentability, if the question were doubtful; but it is not sufficient in this case, when the court is clearly satisfied that there was no invention, in view of what was old and well known. — Codman *v.* Amia, 74 Fed. 634; 20 C. C. A. 566.

If this invention had been put in early use, and so continued with a long public acquiescence, it might, perhaps, have safely received therefrom a practical construction more favorable to the complainants. But in view of the rapidity with which mechanical improvements advance in this age, it would establish a very dangerous precedent to give a mere paper patent, which has lain dormant for years, a breadth not contemplated on its face, by reason of some new function discovered long after its issue, and after the function had been availed of in practice by others. — Long *v.* Pope, 75 Fed. 835; 21 C. C. A. 533.

The fact that a device has had large use when sold in combination with another patented device does not argue novelty when the extended use is due to the novelty of the device used in conjunction with it. — Dueber *v.* Robbins, 75 Fed. 17; 21 C. C. A. 198.

Extensive use is only an element to be considered in a case where patentability and invention are doubtful. Where, as here, the extended use can be attributed to something other than the mere novelty of the device it loses its evidential force. — Dueber *v.* Robbins, 75 Fed. 17; 21 C. C. A. 198.

In view of the prior state of the art thus exhibited, it seems now to have been a very simple thing to do what was done by the patentees. It was only necessary for them to take the Levitt frame, change the location of the brace, perhaps enlarge the diameter of its arms, remove the metallic loop, and insert in the cross brace the short shaft shown in the patent to Brill. But the record in this case affords extrinsic evidence of a most convincing kind that what was done by the patentees was not an obvious thing, and that the change of organization was not one which the skilled mechanics of the particular art could have suggested and introduced without the exercise of inventive faculty. This evidence is supplied, not only by the many patents for improvements, which fell short of producing the simple, compact, less expensive, and more efficient bearings of the patent, but by the sterility, during 20 years, of the great army of mechanics employed by the various sewing machine manufacturers. The complainant itself, from 1865 to 1879, used the overhung stud, and for several years of that period its machines contained cross braces readily adaptable to the office of the patented brace. It employed a vast number of skilled workmen. Yet to none of them did the suggestion occur which is embodied in the new organization of the patentees. The simple change made by the patentees has proved so valuable that the complainant has adopted it in more than 9,000,000 sewing machines. The sewing machine company whose president is the defendant in this suit has also adopted it. No one can examine the bearings of the patent, even cursorily, and compare them with those previously in use, without recognizing the meritorious improvements which they embody. We agree with the court below that these improvements were invention, and not merely the exercise of mechanical skill and adaptation. — Schenck *v.* Singer, 77 Fed. 841; 23 C. C. A. 494

Whether it was an obvious thing or not is a question of fact; and if it should appear upon the introduction of the patented article, it commended

itself to the public, and was accepted as supplying what had long been wanted, and obtained an extensive sale and use, these facts might be decisive. According to bill of complainant, the invention has been introduced in public use, articles have been largely introduced embodying the invention and it has made practically successful the use of asbestos fire-proof cloth for the purposes suggested in the patent. — Beer *v.* Walbridge, 100 Fed. 465; 40 C. C. A. 496.

Krementz *v.* Cottle, 148 U. S. 556.

About thirty millions of such bottle stoppers were put upon the market by the complainant company alone during the last year, and the fact that, until the Painter patents were issued, no other bottle stoppers of like character or based upon like principles, were ever sold, is of itself strong evidence of the individuality of the Painter devices. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

Within three years after the issuance of the patent, 90 per cent. of the existing bowling alleys have had the new style of returnways. In the face of this evidence, we cannot hold that his improvement is devoid of patentable invention. — Brunswick *v.* Thum, 111 Fed. 904; 50 C. C. A. 61.

The combination had great utility. It went into immediate and general use. While this fact is insufficient in itself to sustain a patent where the machine or combination is clearly without novelty, yet where the question of novelty is fairly open under the law, the fact that a patented device or combination has displaced others which had previously been used to perform its function and has gone into immediate and general use, is pregnant and persuasive evidence that it involved invention. — Kinloch *v.* Western, 113 Fed. 659; 51 C. C. A. 369.

National *v.* Interchangeable, 106 Fed. 693; Smith *v.* Vulcanite, 93 U. S. 486; Loom Co. *v.* Higgins, 105 U. S. 580; Mfg. Co. *v.* Adams, 151 U. S. 139; Magowan *v.* Packing, 141 U. S. 332; Graphophone *v.* Leeds, 87 Fed. 873; Topliff *v.* Topliff, 145 U. S. 156.

That a vital demand, a successful meeting of that demand, and extensive use is sufficient to establish invention over a prior unsuccessful device, see Dececo *v.* Gilchrist, 125 Fed. 293; 60 C. C. A. 207.

It is urged that the great commercial success which has attended the introduction of the patented cap is persuasive that it supplied a long felt want, and which previous inventors had not been able to meet, and is therefore evidence of its patentable novelty. Such an argument is always legitimate, but in this case has not the usual force, first, because the caps put upon the market seem to have been made according to the earlier patent; and, secondly because the success is largely attributable to the machine used for fastening the caps on the bottles, and which enables it to be done with great rapidity and efficiency. — Crown *v.* Standard, 136 Fed. 841; 69 C. C. A. 200.

The disk produced by the patented process responds to the test of success when others have failed. But in addition to the inventive success, there is also a commercial success. And this success is not subject to the criticism that is due to extensive advertising, or the attractive manner of placing the articles before the public, or "the energy with which they were forced upon the market." McClain *v.* Ortmayer, 141 U. S. 428. Nor is the disk merely such an element of a device that its sales may be ascribed to the popularity of the elements thereof, or of the entire organism. Doig *v.* Morgan, 122 Fed. 460. The patentable novelty of the process of the patent is not only indicated

by larger sales, but also by the unassailable evidence of that most sincere form of flattering recognition, namely, imitation and appropriation by rival manufacturers. In short, it has so far supplanted other methods previously used that apparently all disk records are now made by said process. The validity of the patent is thus established by commercial success, resultant solely from inventive success, and such extensive public use as to supersede disks made by other processes, which is "pregnant evidence of its novelty, value and usefulness." — American *v.* Universal, 151 Fed. 595; 81 C. C. A. 139.

Magowan *v.* N. Y., 141 U. S. 332.

The industry of manufacturing mats and the like out of wild marsh grass or sedge is due, we think, rather to the commercial ability and financial resources at the command of appellant than to Lowry's conception of making binder twine from common products. But, if appellant's assertion were to be taken as true, it would only be influential in resolving a doubt. It would not also serve to inject a doubt into an otherwise clear case. — American *v.* Choate, 159 Fed. 140; 86 C. C. A. 330.

Apart from the presumption of novelty that always attends the grant of a patent, the law is that where it is shown that a patented device has gone into general use, and has superseded prior devices having the same purpose, it is sufficient evidence of invention in a doubtful case. — Morton *v.* Llewellyn, 164 Fed. 693; C. C. A.

Barbed Wire Pat. 143 U. S. 275; Keystone *v.* Adams, 151 U. S. 139; Irwin *v.* Hasselman, 97 Fed. 964; Wilkins *v.* Webb, 89 Fed. 982; National *v.* Interchangeable, 106 Fed. 693.

§ 627. Evidence of — Extensive Use — When Not.

The fact that plaintiffs had been able to overcome a prejudice against machine made articles, and established a trade is not in itself evidence of invention. — Butler *v.* Steckel, 137 U. S. 21; 34 L. Ed. 582; 11 S. Ct. 25.

The application of the rule of evidence of novelty, the success and general use of the invention, should be applied with caution to a limited class of cases. — Consolidated *v.* Holtzer, 67 Fed. 907; 15 C. C. A. 63.

Olin *v.* Timkin, 155 U. S. 141; De Loriea *v.* Whitney, 63 Fed. 611.

We think the sudden and peculiar demand for some material of this kind (fibre chamois) in the sheet form in which it was put upon the market in 1894 explains its great sale, rather than any marked improvement in its mode of manufacture. — American *v.* Port Huron, 72 Fed. 516; 18 C. C. A. 670.

From aught that appears, it may have come from his superior construction, or the other claims of the patent, and especially from the fact that he omitted all adjusting devices. — Kenney *v.* Bent, 97 Fed. 337; 38 C. C. A. 205.

Public use, so far as any is shown, may have relation to other elements of their device than those covered by Claim 1; and as it relates to a discriminate use rather than to use by manufacturers and other persons engaged in the art, it can, in no event, be that kind of public use which the courts regard as of especial value in patent suits. — Nutter *v.* Brown, 98 Fed. 892; 39 C. C. A. 332.

DeLoriea *v.* Whitney, 63 Fed. 611; Mfg. Co. *v.* Holtzer, 67 Fed. 907; Bates *v.* Keith, 84 Fed. 1014.

Extensive use does not of itself conclusively establish either novelty or utility; but if, upon technical grounds, the matter is doubtful, it is persuasive evidence of those qualities, unless it appears that such commercial success was due to other causes. — Dowagiac *v.* Superior, 115 Fed. 886; 53 C. C. A. 36.

Gandy *v.* Belting Co. 143 U. S. 587; Lane *v.* Welds, 99 Fed. 286.

That the large demand for and use of a device, in and of itself without other evidence of invention, is not evidence sufficient to sustain invention; especially so when the demand may have arisen from other conditions, see Burns *v.* Mills, 143 Fed. 325; 74 C. C. A. 525.

§ 628. Evidence of — Obvious Demand.

It appears from the record that prior to the granting of the patent in suit there had been manufactured by complainants what was known as the four-section track scale, which might be varied in length from 24 to 22 feet; that there was a large and growing demand for a longer scale; and, while the complainants had one upon the market, it was not satisfactory, though, with the aid of experts and skilled mechanics, they had been endeavoring to make it so. Under these circumstances we are unable to conclude that the result so long and unsuccessfully sought for was apparent, and did not need more than mechanical skill to construct. — Standard *v.* Fairbanks, 125 Fed. 4; 60 C. C. A. 91.

He was satisfied that such a machine would meet with a market and he constructed one. As soon as the want was apparent, he supplied that obvious want by what confessedly amounted only to the ordinary skill of a mechanic. — Fay *v.* Mason, 127 Fed. 325; 62 C. C. A. 159.

Hollister *v.* Benedict, 113 U. S. 59.

Note: The evidence showed that the inventor made extended inquiry as to an existing demand for the machine. He found such demand general. Extended inquiry among the several manufacturers of laundry machinery showed that no one had in any way met the demand. Fay met it, and as soon as he met it others began to infringe. This decision seems a perversion of the rule.

§ 629. Evidence of — Patent Prima Facie.

Letters patent are prima facie evidence of invention and of the regularity of their issuance. — Railroad *v.* Stimpson, 14 Pet. 448; 10 L. Ed. 535.

The act of 1790 made the patent prima facie evidence of invention. The act of 1793 repealed it. With the organization of the Patent Office under the act of 1836 the prima facie was restored and has since remained. — Corning *v.* Burden, 15 How. 252; 14 L. Ed. 683.

Letters patent, when introduced in evidence, are prima facie evidence of invention. — Blanchard *v.* Putnam, 75 U. S. 420; 19 L. Ed. 433.

Curt. Pat. sec. 118; Pitts *v.* Hall, 2 Blatchf. 229; Cahoon *v.* Ring, 1 Cliff. 625.

Letters patent are prima facie evidence of invention, unless sufficient evidence appears to overcome the presumption. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

R. R. *v.* Stimpson, 14 Pet. 458; Curt. Pat. 4 ed. sec. 472.

The action of the commissioner of patents in granting a patent is not conclusive either as to novelty, utility or prior use. — Reckendorfer *v.* Faber, 92 U. S. 347; 23 L. Ed. 719.

Hotchkiss *v.* Greenwood, 11 How. 248; Stimpson *v.* Woodman, 10 Wall. 117; Hailes *v.* Van Wormer, 20 Wall. 353; Rubber *v.* Howard, 20 Wall. 498; Smith *v.* Nichols, 21 Wall. 115; Hicks *v.* Kelsey, 18 Wall. 670; Seymour *v.* Osborne, 11 Wall. 516.

The patent is prima facie evidence of the novelty of the invention. — Smith *v.* Goodyear, 93 U. S. 486; 23 L. Ed. 952.

In a suit where no proof was adduced to prove want of novelty, the defense relying upon an interference adjudication in their favor, *Held:* that in the absence of any proof the decree will be affirmed. — Garratt *v.* Siebert, 98 U. S. 75; 25 L. Ed. 84.

Power to grant patents is conferred upon the commissioner; and when that power has been duly exercised, it is, of itself, when introduced in evidence in cases like the present, prima facie evidence that the patentee is the original and first inventor of that which is therein described as his invention. Proof may be introduced by the respondent to overcome the presumption but in the absence of such proof, the prima facie presumption is sufficient to enable the party instituting the suit to recover for the alleged violation of his rights. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

Blanchard *v.* Putnam, 8 Wall. 420; Seymour *v.* Osborne, 11 Wall. 538.

The letters patent are prima facie evidence of invention. — Parks *v.* Booth, 102 U. S. 96; 26 L. Ed. 54.

Are prima facie evidence of their novelty and utility. — Lehnbeuter *v.* Holthaus, 105 U. S. 94; 26 L. Ed. 939.

Whitney *v.* Mowry, 4 Fish. 207.

The patent issued by the Commissioner to the defendant as assignee is only prima facie evidence that the assignor was the inventor of the improvement patented. — Kennedy *v.* Hazelton, 128 U. S. 667; 32 L. Ed. 576; 9 S. Ct. 202.

Patent prima facie evidence of. — Gandy *v.* Main, 143 U. S. 587; 36 L. Ed. 272; 12 S. Ct. 598.

Lehnbeuter *v.* Holthaus, 105 U. S. 94.

There is no doubt that the letters patent are prima facie evidence that the device was patentable. Still, we are always required, with this presumption in mind, to examine the question of invention *vel non* upon its merits in each particular case. — Palmer *v.* Corning, 156 U. S. 342; 39 L. Ed. 445; 15 S. Ct. 381.

When both applications were pending at the same time, and no interference was declared, the issue of the subsequent patent is evidence that it was distinguishable from the former patent. — Boyd *v.* Janesville, 158 U. S. 260; 39 L. Ed. 973; 15 S. Ct. 831.

American *v.* Elizabeth, 4 Fish. P. C. 189; Burns *v.* Meyer, 100 U. S. 671.

The patent was prima facie evidence of its own validity, and the burden of proof was upon the defendant to establish its want of novelty. — Singer *v.* Brill, 54 Fed. 380; 4 C. C. A. 374.

Cantrell *v.* Wallick, 117 U. S. 690; Smith *v.* Goodyear, 93 U. S. 486; Lehnbeuter *v.* Holthaus, 105 U. S. 94.

If a machine has not been constructed and put into practical use, it may be difficult to determine whether it ever can be; but notwithstanding this, the grant of the patent makes a prima facie case in this particular, and the court may not be able to find in the record proofs to overcome this presumption. When such is the fact, and when, also, the device is of such a character, or relates to such special and peculiar subject matter, that it does not come within the range of common experience or judicial knowledge, the prima facie showing must stand. — Packard *v.* Lacing, 70 Fed. 66; 16 C. C. A. 639.

The presumption referred to is sometimes defined to mean that the patent itself is prima facie evidence of novelty and of invention, but the presumption is probably a mere rule of evidence, which casts the burden of proof upon the alleged infringer. This presumption cannot usurp the province of the court to declare what constitutes novelty. The court should give due consideration to the action of the patent office, but should not permit that action to control its deliberate judgment when it is manifest there is no invention. — Warren *v.* Rosenblatt, 80 Fed. 540; 25 C. C. A. 625.

Hollister *v.* Mfg. Co. 113 U. S. 59.

The patent is prima facie evidence that the invention it protects was not in public use or on sale for more than two years prior to the time of the application on which it was based, and that it was not proved to be abandoned. On the other hand, the application for the patent within two years after the invention was made, was presumptive evidence of an intention not to dedicate it to the public, and the issue of the patent was prima facie proof that it had not been abandoned. — Mast *v.* Dempster, 82 Fed. 327; 27 C. C. A. 191. But see 177 U. S. 485.

The line of demarkation between invention and mechanical skill is not well defined, and is often, especially in this age of improvement, difficult to follow. In case of doubt the law has wisely required the consideration of certain facts outside the question of invention or mechanical skill to resolve the doubt. The patent itself is, in a restricted sense, prima facie evidence of novelty and invention. — Streator *v.* Wire-glass, 97 Fed. 950; 38 C. C. A. 573.

Warren *v.* Rosenblatt, 80 Fed. 540.

A patent carries with it the presumption of novelty, and the trained experts of the patent office have decided that what was done arose to the dignity of an invention. — Beer *v.* Walbridge, 100 Fed. 465; 40 C. C. A. 496.

The patent itself is prima facie evidence of the novelty of his combination, and if that issue was doubtful this presumption would entitle it to a construction which would sustain, in preference to one which would destroy, the grant it evidences.— National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

That while the letters patent are evidence prima facie of invention the presumption is cancelled by the fact that the patentee signed as a witness the prior application of another for the same invention, see Barr *v.* Chicago, 110 Fed. 972; 49 C. C. A. 194.

There is in every case a prima facie presumption in favor of the validity of every patent issued by the Patent Office. Due heed and consideration must always be given by the court or jury to this presumption, but the real

question in all cases is whether or not the evidence in the case is or is not sufficient to overcome the prima facie presumption which the patent affords. — Los Angeles *v.* Æolian, 143 Fed. 880; 75 C. C. A. 88.

Hays *v.* Sulsor, 1 Fish. P. C. 532. Corning *v.* Burden, 15 How. 252; Reckendorfer *v.* Faber, 92 U. S. 347; Bates *v.* Coe, 98 U. S. 31; Lehnbeuter *v.* Holthaus, 105 U. S. 94; Miller *v.* Eagle, 151 U. S. 186; Boyd *v.* Janesville, 158 U. S. 260; Ransome *v.* Hyatt, 69 Fed. 148; Wilgus *v.* Germain, 72 Fed. 773.

The grant of a patent is presumptive evidence that the patentee is entitled to the monopoly fairly covered by his claims. He who asserts to the contrary must prove his assertions. — American *v.* DeGrasse, 157 Fed. 660; 87 C. C. A. 260.

The presumption that he believed himself to be the inventor of the pavement for which he was given a patent must be our starting point in determining whether his patent is defeated by anticipation. That somebody had, in fact, made the same composition before he did does not necessarily defeat his patent. In one sense he would not be the first inventor in such case. But in the sense of the patent statute, he is the first inventor who, by his own thought, makes an article or material and first perfects and adapts his discovery to actual use, although someone may have previously made a similar article without putting it to practical use or given his discovery to the public in any way. — Warren *v.* City, 166 Fed. 309; C. C. A.

Gayler *v.* Wilder, 10 How. 477; Seymour *v.* Osborne, 11 Wall. 517; Albright *v.* Celluloid, Fed. Cas. 147; Bullock *v.* Jones, Fed. Cas. 2132; Agawam *v.* Jordan, 7 Wall. 583; Whiteley *v.* Swayne, 7 Wall. 685; Deering *v.* Winona, 155 U. S. 286; Corn Planter Pat. 23 Wall. 181; Smith *v.* Goodyear, 93 U. S. 486; Gamewell *v.* Municipal, 61 Fed. 948.

§ 630. Evidence of — Patent Office Action.

It is significant that the application was some four years in being allowed, that it was three times rejected, and that it was finally allowed by an examiner who had not previously dealt with the application. — Richmond *v.* Atwood, 48 Fed. 910; 1 C. C. A. 144.

The action of the patent office, taken in connection with other matters, is evidence of novelty. — Davis *v.* Parkman, 71 Fed. 961; 18 C. C. A. 398.

Watson *v.* Stevens, 51 Fed. 757.

In view of the fact that the examiners-in-chief seem not to have had the remotest conception of what the specifications showed, or of what Fulton claimed, the presumption in this case of patentability arising from the allowance of the application by the patent office is of no practical value. — Rogers *v.* Fitch, 81 Fed. 959; 27 C. C. A. 23.

The record shows that the complainant's application was seven times rejected on references to prior patents, and was finally granted on an amendment to the claim, with expressed reluctance. — Smidth *v.* Bonneville, 114 Fed. 262; 52 C. C. A. 148.

The officials of the Patent Office, with the prior art before them so found, and granted a patent. This action on their part creates a presumption of patentable novelty, which presumption can be overcome only by clear proof that they were mistaken, and that the combination lacks patentable novelty. — Fairbanks *v.* Stickney, 123 Fed. 79; 59 C. C. A. 209.

Cantrell *v.* Wallick, 117 U. S. 689; Coffin *v.* Ogden, 18 Wall. 120; Streator *v.* Wire, 97 Fed. 950; Fraim *v.* Keen, 25 Fed. 820; Osborne *v.* Glazier, 31 Fed. 402.

There is the presumption arising from the granting of the patent, which, in this case, was issued, as the proceedings in the Patent Office show, after full and critical examination, and this after rejections and references to previous patents of a character very similar to those we have in the present record — indeed some of them are the same. — Canda *v.* Michigan, 124 Fed. 486; 61 C. C. A. 194.

We do not agree with the contention that the fact that the file wrapper discloses the patent to have been granted as first applied for, without any references, adds any force to the presumption of novelty. On the contrary, we think the force of that presumption is much diminished, if not destroyed, by the lack of any reference by the examiner to, or consideration of, the "Clark" patents. — American *v.* Sample, 130 Fed. 145; 64 C. C. A. 497.

If the patent relates to something of temporary interest, and the object sought is of little importance, and offers but slight chance of profitable use, it may receive but little attention in the Patent Office, and the presumption therefore is slight; but where the problem sought to be solved by the patent is of such importance that the solution of it promises great pecuniary returns, and the testimony shows that all the claims of the patent were subject to critical analysis by trained experts in that office, resulting in amendments and disclaimers designed to distinguish it from everything in the prior art, and the subject appears to have been thoroughly threshed out, the presumption in favor of novelty is greater than in those cases where the patent may have passed by inadvertence. — Imperial *v.* Crown, 139 Fed. 312; 71 C. C. A. 442.

Note: The first part of this holding (Brawley, J.) will hardly square with the experience of those who have done patent soliciting. To say that the thoroughness with which the examiners examine an application varies with the importance of the invention from a commercial point of view is wide of the mark.

Although it is true that the patentee encountered great difficulty in the Patent Office, his claims being rejected over and over again, yet we are unable to see that the proceedings there require a construction of the claim which will enable the defendant to escape the charge of infringement. — Good Form *v.* White, 160 Fed. 661.

§ 631. Evidence of — Prior Failures.

The very fact that the attempt which had been made to secure uniformity of product seems to have been abandoned after the Jones invention came into popular notice is strong evidence tending to show that the patent contains something which was of great value to manufacturers of steel, and which entitled Jones to the reward due to a successful inventor. — Carnegie *v.* Cambria, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

The probative force of this fact (that the evil which the complainant's invention remedied had been apparent for years), added to the presumption arising from the letters patent, satisfies us of the novelty and patentability of the invention. If the display of the expected skill of the calling or the exercise of the ordinary faculties of reasoning had been sufficient to discover and put in practice this improvement, some bookkeeper would have displayed that skill or exercised those faculties, and thus obtained this result long ago. These were not sufficient. It required something more to attain this result; it required the exercise of "that intuitive faculty of the mind, put forth in the search for new results or new methods, which creates what had not before existed, or brings to light what lies hidden." This faculty the complainant exercised, and the result is this invention, — an invention, it is

true, that now seems so simple that we marvel that it did not before occur to every bookkeeper. — Thomson *v.* Citizens Nat. Bk., 53 Fed. 250; 3 C. C. A. 518.

Loom Co. *v.* Higgins, 105 U. S. 580; Consolidated *v.* Crosby, 113 U. S. 157; Magowan *v.* Packing Co., 141 U. S. 332; Barbed Wire Pat., 143 U. S. 275.

Distinguishing Hollister *v.* Mfg. Co., 113 U. S. 59.

Various expedients for switching with such conductors have been resorted to by experts in the art. The fact that they overlooked devices like the patented device, and resorted to clumsy and inconvenient means, cannot be ignored. It was not a great invention,but that it was an invention requiring a degree of ingenuity somewhat beyond the ordinary skill of the calling we are unable to doubt. — Thomson-Houston *v.* Elmira, 71 Fed. 396; 18 C. C. A. 145.

Inventors of known repute and genius who have studied the subject, and who greatly desired to promote incandescent lighting, failed, and the patentee succeeded because he adopted the means which apparently had not occurred to them. — Maitland *v.* Goetz, 86 Fed. 124; 29 C. C. A. 607.

The fact that his combination had not suggested itself to any mechanic skilled in the art during 12 years of diligent search and effort for improvement; the facility and rapidity with which it took the place of old devices and went into immediate and extensive use as soon as it was disclosed, — all these facts converge upon the mind with compelling force to prove that the compelling and striking improvement he made was the production, not of the skill of the mechanic, but of the intuitive genius of the inventor. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Thomson *v.* Bank, 53 Fed. 250; Griswold *v.* Harker, 62 Fed. 389; Loom Co. *v.* Higgins, 105 U. S. 580; Consolidated *v.* Crosby, 113 U. S. 157; Magowan *v.* Packing Co., 141 U. S. 332; In re Barbed Wire Patent, 143 U. S. 275.

It is a novel contention that admitted failures during the preliminary stage of experiments should be adduced as evidence of want of utility in the perfected invention. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

It aided to make a successful machine; and the fact that Cushman failed to accomplish that result notwithstanding his ingenuity, weighs strongly in favor of the patentability of complainant's box form, simple as it is. — Hobbs *v.* Gooding, 111 Fed. 403; 49 C. C. A. 414.

Watson *v.* Stevens, 51 Fed. 757.

It is a fact entitled to serious consideration in determining whether Anderson's improvement was so obvious as to be one which would occur to a mechanic skilled in the art that Van Depeole, with . is conceded skill, did not attain the desired end. His change seems simple enough now, but it was the first to combine comprehension of the problem to be solved with practical arrangement of parts for its solution. This entitles his advance to the merit of invention. — Star *v.* General, 111 Fed. 398; 49 C. C. A. 409.

The fact that, in such circumstances, no one accomplished it, is cogent evidence that the later inventions of Tesla were beyond the compass of the ordinary skill of the profession and beyond the line which divides the products of such skill from invention. — Dayton *v.* Westinghouse, 118 Fed. 562; 55 C. C. A. 390.

Dowagiac *v.* Superior, 115 Fed. 886.

It is shown, however, that not only the skilled workmen, but those who were giving this art special study and exploring for improvements in rotary disk plows for several years, had not perceived this one, although the need of it was always pressing. This is no new suggestion, but it has no special relevancy when a series of improvements has culminated in one which contributes so decisively to the utility of a machine which others have been long trying to make operative. — Sanders *v.* Hancock, 128 Fed. 424; 63 C. C. A. 166.

We have been unable to find in the prior art any single device, or any sufficiently definite suggestions derivable from the various devices, which sustain the contention of defendants that the patented improvement is merely the result of mechanical skill. The reasons for the conclusion that the patented device involved invention sufficiently appear from a comparison of its construction, adapted to attain the objects stated in the specification and the practical results thereby secured, with the impracticality or insufficiency of the devices of the prior art. The failure of defendants to avail themselves of said earlier devices or improve them, and their bodily appropriation of the patented construction, is most persuasive upon the question of invention. — General *v.* Wagner, 130 Fed. 772; 66 C. C. A. 82.

The fact of discovery is often ascertained by results, and while it may be difficult to put our finger upon any precise thing in Painter's device, and say that Painter invented that, we find in the results a substantial addition to our stock of knowledge — a mode of application of simple forces embodied in an instrumentality so simple that our wonder is that it was not done before. Its very simplicity tends to raise a doubt whether the inventive faculty was needed to produce the results which seem so obvious that we are prone to think that any mechanic starting where Painter did, and with the knowledge of previous inventions which he had, could by mere mechanical skill accomplish what he did. The fact that no mechanic did accomplish it, although many inventors were eagerly trying to do so, and the world was eagerly awaiting a simple and cheap bottle-stopper device, if not conclusive proof, is very persuasive evidence, that something more than mechanical skill was required; that it demanded inventive genius or faculty to bridge the chasm which separated the bungling, imperfect, inoperative devices of previous inventors, and the simple, economical, and, for its purpose, perfect device which Painter gave to the world. If the subject-matter was of little importance and of merely transient interest, we might say that mechanical skill did not accomplish it, because it did not make the effort; but if it was a matter of enduring importance, and promised great profit if the problem was successfully solved, it is safe to assume that there was great likelihood of some mechanic applying his skill, if success could have been readily achieved by merely mechanical means. — Imperial *v.* Crown, 139 Fed. 312; 71 C. C. A. 442.

Crown *v.* Aluminum, 108 Fed. 863; Farmers' *v.* Spruks, 127 Fed. 691.

Twelve earlier patents are shown in the record, none responds in any way to the claims in suit. If, after the inventor had proven the advantages of his improvement, the skilled mechanic might reasonably have been expected to produce the device in suit by combining the teachings of the prior patentees, it is remarkable that the seven patentees during the succeeding 15 years should have reverted to the old type. — Mahony *v.* Malcom, 143 Fed. 124; 74 C. C. A. 318.

That the construction of a machine capable of producing such a fabric was not obvious appears from the 31 prior patents introduced by defendants, no one of which showed a solution of the problem, and from the inability of

defendants' experts to construct from the prior art any practical device or to satisfactorily indicate how the prior structures could be so adapted without radical and substantial modifications, involving the exercise of invention. — Scott *v.* Fisher, 145 Fed. 915; 76 C. C. A. 447.

The fact that some manufacturers did not know how to do it, and that successful results might not always have been obtained, even when the formulas were followed, does not prove that it could not be done. — National *v.* New England, 151 Fed. 19; 80 C. C. A. 485.

Indeed its inventive character is evidenced by the alleged anticipatory uses in the respondent's works. The combined use of a pneumatic hammer with a sieve was some years before there tried and abandoned. The evidence of exact practice is not such as to establish an anticipatory use, for it is contradictory as to how the hammer was applied, but the highly significant fact is that, even with the thought of a possible combination of pneumatic hammer and sieve suggested to men skilled in that art, they were not able to mechanically place the two in successful operative relation. But Arrott did just what they failed to do. He contributed to an important industry a device, labor-saving, effective, and which, in relieving to a degree labor under fierce heat conditions, rose to the plane of the humane. And it was these results which the respondent failed to secure that made Arrott's work invention, and theirs a fruitless and abandoned experiment. — Mott *v.* Standard, 159 Fed. 135; 86 C. C. A. 325.

That these defects were appreciated, and that an earnest effort was made to remedy them for more than ten years prior to the patent, is shown by the record. Though belonging to a limited field and dealing with subordinate improvements, we are of the opinion that the features added by Davies produced an advance in the art which required a higher grade of ability than can be attributed to the skill of the calling. — Good Form *v.* White, 160 Fed. 661.

Frost *v.* Cohn, 119 Fed. 505; Young *v.* Wolfe, 120 Fed. 956; Parramore *v.* Taylor, 114 Fed. 97.

It is always hazardous to assert the obviousness of a device which no one, with the whole art before him, up to that time has conceived. Nor were the benefits of the patented structure to be reasoned out, unaided. To deny to its successful solution the merit of invention upon the contrary idea is to declare that these efforts were needless, and that there was already disclosed in the art an easy and obvious way out, which ought to have been, but somehow was not, seen. — Edison *v.* Novelty, 167 Fed. 977; C. C. A.

In so highly advanced as the pump art, where all the elements which into the construction may be said to be old, it is impossible, in many cases, as an abstract proposition, to draw the line between invention and the skill of the designer. There is, however, strong evidence of invention, where we have presented the circumstances such as exist with respect to the patents in suit, namely, a demand for a more efficient pump, the failure of previous efforts to meet the demand, the immediate success of the patented device, and its great utility. Again, it may be said that these patents belong to the class which the patent law was designed to protect, inasmuch as they cover a device which is new and useful, and which immediately met a public want. — Warren *v.* Blake, 163 Fed. 263; C. C. A.

§ 632. Evidence of — Simplicity.

The greater simplicity of the Boyden patent certainly entitled it to a favorable consideration. — Westinghouse *v.* Boyden, 170 U. S. 537; 42 L. Ed. 1136; 18 S. Ct. 707.

It is easy after the event to see how simple an act turned failure into success; but prior to the time of Shuman no mechanical skill had solved the problem, and, if we may credit the testimony of this record, those engaged in the art were diligently at work to accomplish that which only Shuman effected. He has given to the world a new, useful, and valuable product. He succeeded where others failed. — Streator *v.* Wire Glass, 97 Fed. 950; 38 C. C. A. 573.

Barbed Wire Patent, 143 U. S. 275.

The fact that a new combination or device may be simple and obvious to the ordinary understanding, when once produced in concrete form, is not necessarily proof that invention was not involved. This is almost commonplace in the jurisprudence of the patent law. It is also true that admitted benefits resulting from the combination or device, and widely extended adoption, are facts relevant to the novelty and usefulness of the alleged invention. — Buchanan *v.* Perkins, 135 Fed. 90; 67 C. C. A. 564.

It may be conceded that the device is on the border line between invention and mechanical skill. But, because of its simplicity, efficiency and cheapness and the persistency with which the defendant insists upon using it, we are inclined to resolve the doubt in favor of the patent. — Yawman *v.* Vetter, 159 Fed. 443; 86 C. C. A. 473.

§ 633. Evidence of — Turning Failure into Success.

It is true that many valuable inventions seem simple when accomplished, and yet are entitled to protection. The books abound in cases showing inventions involving only small departure from former means, yet making the difference between a defective mechanism and a practical method of accomplishing results. In such cases a decision in favor of invention as distinguished from mere mechanical improvement has not infrequently resulted, in view of the fact that the device has made the difference between an impracticable machine and a useful improvement displacing others theretofore occupying the field. — Computing *v.* Automatic, 204 U. S. 609; 51 L. Ed. 645; 27 S. Ct. 307.

Krementz *v.* Cottle, 148 U. S. 556; Consolidated *v.* Detroit, 47 Fed. 894; Star *v.* General, 111 Fed. 398.

The first to make such an improvement is not in fact an inventor, and to infer invention merely because it had not been produced sooner, would be to reach a false conclusion by an argument neither persuasive nor plausible. — Stover *v.* Mast, 89 Fed. 333; 32 C. C. A. 231.

Parlin *v.* Moline, 89 Fed. 329.

Note: This is a ruling by Judge Woods, which though entirely proper when taken with the facts in the case, is not capable of application as a general rule.

If it be conceded that all prior machines were failures; that the machine of the patent was the first practical and commercially successful one; that it was accepted by the art, and has since monopolized the field — nevertheless such evidence is not helpful to the solution of the question presented on these two claims. There is nothing to show that this minor improvement in one

part of the machine contributed at all to any such far-reaching results. — Doig *v.* Morgan, 122 Fed. 460; 59 C. C. A. 616.

When it appears that the improvement, slight though it was, led from failure to success; that, though failure was appreciated and success sought for by skilled mechanics, no one before the patentee hit on this way to secure it; and that, when the improvement was made, it was generally accepted and the patent for it respected by those practising the art — courts are constrained to hold that the simple device is a patentable invention. — Doig *v.* Morgan, 122 Fed. 460; 59 C. C. A. 616.

Schenck *v.* Singer, 77 Fed. 841; Brunswick *v.* Thum, 111 Fed. 904.

Chambers succeeded. Eastman failed. The one produced a lamp having both these characteristics. The other a lamp having but one. Instead of anticipating or seriously limiting the scope of the patent, Eastman offers mute but persuasive tribute to Chambers' skill and ingenuity. — Eldred *v.* Kirkland, 130 Fed. 342; 64 C. C. A. 588.

§ 634. Evidence of — Use by Defendant.

If the infringer claims to have known of the combination and to have perfected it, why did he not put it into general use, and why did he not apply for a patent upon it? He was already a patentee of a different and inferior apparatus. He knew all about the method of going about to get a patent. He belonged to a profession which is generally alive to the advantages of a patent right. On the hypothesis of his being the real inventor his conduct is inexplicable. — Loom Co. *v.* Higgins, 105 U. S. 580; 26 L. Ed. 1177.

Where defendant took out a patent after commencement of suit claiming the main element of the patent in suit to a new use, and upon hearing stipulated that a decree for a certain royalty might be entered against him, is estopped to deny the utility of the device in suit. — Western *v.* La Rue, 139 U. S. 601; 35 L. Ed. 295; 1 S. Ct. 670.

Walker on Pat. sec. 85; Lehnbeuter *v.* Holthaus, 105 U. S. 94; Morgan *v.* Seaward, 1 Web. P. C. 170.

Use by a defendant of the patented process or article is evidence, at least against that defendant, of utility. — Gandy *v.* Main, 143 U. S. 587; 36 L. Ed. 272; 12 S. Ct. 598.

For the reasons stated we cannot doubt the validity of the patent. The defendants did not doubt it, but admitted it, by the purchase and sale of umbrellas under the patent, until dissatisfaction and dispute arose respecting the prices they should pay. The admission is not, of course, an estoppel; but in view of the defendants' presumed familiarity with the art, such an expression of judgement is evidence, and worthy probably of as much weight as that now expressed by their experts. — Rose *v.* Hirsch, 77 Fed. 469; 23 C. C. A. 246.

While the invention displayed is of a low order, it is sufficient to support the patent. The device though simple, was new in the art, and was cheap, convenient, and supplied a want distinctly felt. Manufacturers of matches immediately recognized its usefulness, and sought the privilege of making it. The defendants were among the first to do so, and seemed to have entertained no doubt respecting the validity of the patent, until their efforts to obtain such privilege on their own terms had failed. The defendants may well be regarded as experts in the art, and their conduct was an unbiased and

emphatic expression of judgement in favor of the patent; their present expression and that of their experts are probably entitled to less weight. — Schenck *v.* Diamond, 77 Fed. 208; 23 C. C. A. 122.

It is improbable that men will render themselves liable to actions for infringement unless infringement be useful. And the fact that a patent has been infringed by a defendant is, as against such infringer, sufficient to establish its utility. — Goss *v.* Scott, 108 Fed. 253; 47 C. C. A. 302.

Lehnbeuter *v.* Holthaus, 105 U. S. 96; Vance *v.* Campbell, Fed. Cas. 16,837.

No doubt is expressed of its utility. The defendants are engaged in the business of manufacturing and selling something very similar to it, and this must be accepted as very cogent evidence for the purposes of this case. — Lamb *v.* Lamb, 120 Fed. 267; 56 C. C. A. 247.

Lehnbeuter *v.* Holthaus, 105 U. S. 94; Gandy *v.* Belting, 143 U. S. 587; Gibbs *v.* Hoefner, 19 Fed. 323; La Rue *v.* Electric, 31 Fed. 82; Seymour *v.* Osborne, 11 Wall. 516.

The defendant furnishes strong evidence of its utility by persistent adoption of the means for like purpose. — Austin *v.* American, 121 Fed. 76; 57 C. C. A. 330.

And having regard to the presumption of validity arising from the grant, the success which it has attained, the nonexistence of any anticipation, and the adoption of it by the defendant in his business, with express notice of the patent, and with a view to profit by it, we think we should hold the combination of claim 2 to be valid. — Sanders *v.* Hancock, 128 Fed. 424; 63 C. C. A. 166.

Lamb *v.* Lamb, 120 Fed. 267; Lehnbeuter *v.* Holthaus, 105 U. S. 94; Krementz *v.* Cottle, 148 U. S. 556; Streator *v.* Wire, 97 Fed. 950.

The proof also shows that it met with considerable public favor, and what is persuasive evidence of its advantages over those of the constructions the defendant advances as anticipations, the latter appropriates Milner's production as the foundation of his own business, and has therewith been successful. — Milner *v.* Yesbera, 133 Fed. 916; 67 C. C. A. 210.

Lehnbeuter *v.* Holthaus, 105 U. S. 94; Gandy *v.* Belting, 143 U. S. 587; Lamb *v.* Lamb, 120 Fed. 267.

At the time he obtained this patent (the defendant and his patent in infringement of the patent in suit) he had been engaged for over 25 years in the manufacture and sale of rolling metallic shutters, and it was open to him to adopt the joint of the prior art. His adoption of the joint of the patent in suit is quite persuasive evidence of its merit. That the changes of form were not an obvious thing, but involved invention, is shown by the fact that for a period of 40 years since the earlier inventions in metallic shutters no one seems to have conceived of the practicability of the improvement. — Kinnear *v.* Wilson, 142 Fed. 970; 74 C. C. A. 232.

It is difficult to imagine an instance where a patent should be defeated on the ground of want of utility at the instigation of one who is himself persistently using the very thing which he denounces as useless. — Hillard *v.* Fisher, 159 Fed. 439; 86 C. C. A. 469.

We have not only the persistency of the respondent corporation in availing itself of the complainant's improvement, but also a mass of alleged anticipatory patents introduced by it, both of which indicate the desirability of

something better than the prior art. — Draper *v.* American, 161 Fed. 728; 88 C. C. A. 588.

§ 635. Evidence of — Utility — When Evidence.

As a matter of law, in the absence of evidence, the court cannot pass upon the efficiency of the device in suit. — Eddy *v.* Dennis, 95 U. S. 560; 24 L. Ed. 363.

It may be laid down as a general rule, though perhaps not an invariable one, that if a new combination and arrangement of known elements produce a new and beneficial result, never attained before, it is evidence of invention. — Loom Co. *v.* Higgins, 105 U. S. 580; 26 L. Ed. 1177.

We think from the evidence, that the modifications were new and useful, and sufficient in character to sustain a patent. The burner in the form patented by Barker appears to have superseded the burner in the form patented by Clough, and, after Barker had introduced his burner into use, Clough commenced making for market burners in the same form. — Clough *v.* Gilbert, 106 U. S. 178; 27 L. Ed. 138; 1 S. Ct. 198.

Richardson's invention brought to success what prior inventors had essayed and partly accomplished. He used some things which had been used before, but he added just that which was necessary to make the whole a practically valuable and economic apparatus. The facts that the known valves were not used, and the speedy and extensive adoption of Richardson's valve, are facts in harmony with the evidence that his valve contains just what the prior valves lacked, and go to support the conclusion at which we have arrived on the question of novelty. When the ideas necessary to success are made known, and a structure embodying these ideas is given to the world, it is easy for the skillful mechanic to vary the form by mechanism which is equivalent, and is, therefore, in a case of this kind an infringement. — Consolidated *v.* Crosby, 113 U. S. 157; 28 L. Ed. 939; 5 S. Ct. 513.

Where the question before the court was upon the patentable character, rather than the novelty, of the device, the court did not err in refusing to instruct that the extensive use of the device was evidence of patentability. — Adams *v.* Bellaire, 141 U. S. 539; 35 L. Ed. 849; 12 S. Ct. 66.

Utility is only evidence, not proof or even conclusive evidence of novelty. — McClain *v.* Ortmayer, 141 U. S. 419; 35 L. Ed. 800; 12 S. Ct. 76.

Criteria by which the one may be distinguished from the other in McClain *v.* Ortmayer, 141 U. S. 419; 35 L. Ed. 800; 12 S. Ct. 76.

Where the progress in allied arts is such as to render an old and well known process of utility, where the utility of the process is referable to the improvement in the subject matter to which it is applied, general use is not evidence of invention. — Lovell *v.* Cary, 147 U. S. 623; 37 L. Ed. 307; 13 S. Ct. 472.

McClain *v.* Ortmayer, 141 U. S. 419.

Utility as an element of invention may be considered. Discriminating and limiting Gorham *v.* White, 81 U. S. 511 (design case). — Smith *v.* Whitman, 148 U. S. 674; 37 L. Ed. 606; 13 S. Ct. 768.

Lehnbeuter *v.* Holthaus, 105 U. S. 94; Northrup *v.* Adams, 2 B. & A. 567; Foster *v.* Crossin, 44 Fed. 62; Jennings *v.* Keble, 10 Fed. 669; Ripley *v.* Elson, 49 Fed. 927.

Large capacity of device is persuasive but by no means conclusive proof of invention. — National *v.* Hedden, 148 U. S. 482; 37 L. Ed. 529; 13 S. Ct. 680.

While the patented article may have been popular and met with large sales, that fact is not important when the alleged invention is without patentable novelty. — Olin *v.* Timken, 155 U. S. 141; 39 L. Ed. 100; 15 S. Ct. 49.

Duer *v.* Corbin, 149 U. S. 216.

In passing upon the question of novelty we feel at liberty to consider the fact that the Beach machine and its congeners have completely supplanted the former method; that no manufacturer can successfully compete for the trade without adopting such machine; the work is done stronger and cheaper, cleaner and more uniform; there is also a saving of material. — Hobbs *v.* Beach, 180 U. S. 383; 45 L. Ed. 586; 21 S. Ct. 409.

We conclude, therefore, that in applying to cases of doubt the primary rules touching what constitutes invention, and the secondary rules touching what is a " new and useful result," a " new function," or a " new sphere of action," we may be influenced by the facts that the improvement in question, although desired for years, was not secured until brought out by the patentee; that the product of the improved machine or process went into general use by the manufacturer for whom it was intended, and displaced wholly or in a very large degree prior products; and that, while prior products had been unsuitable, either through lack of cheapness or adaptation, the new product answered all reasonable requirements. — Watson *v.* Stevens, 51 Fed. 757; 2 C. C. A. 500.

Topliff *v.* Topliff, 145 U. S. 156; Adams *v.* Stamping Co., 141 U. S. 539; Western *v.* La Rue, 139 U. S. 601; Ansonia *v.* Electric, 144 U. S. 11; Locomotive Truck Case, 110 U. S. 490; McClain *v.* Ortmayer, 141 U. S. 419; Loom Co. *v.* Higgins, 105 U. S. 580; Barbed Wire Patent, 143 U. S. 275; Magowan *v.* Belting Co., 141 U. S. 332; Gandy *v.* Belting Co. 143 U. S. 587.

The fact that the Edison lamp was capable of use by the public, while all prior lamps had failed in practical use is evidence of invention and novelty. — Edison *v.* U. S. 52 Fed. 300; 3 C. C. A. 83.

There was evidence that the plaintiffs' machine was used to a very considerable extent by manufacturers; that the plaintiff sold numerous shop rights for its use; and that he manufactured and sold a number of his wheels with their adjustable bearings. There were witnesses who testified to the novelty and utility of his invention. There is testimony that the wheels in use prior to his invention were unsatisfactory; that they were difficult to operate and were noisy in operation; and that a considerable amount of attention was bestowed upon the question of their improvement during a period of several years antedating his patent. All these facts may be taken into consideration in a doubtful case. — Singer Mfg. Co. *v.* Brill, 54 Fed. 380; 4 C. C. A. 374.

Topliff *v.* Topliff, 145 U. S. 164; Loom Co. *v.* Higgins, 105 U. S. 591; Smith *v.* Goodyear, 93 U. S. 495.

The plaintiff's machine, here involved, was devised with special reference to paring peaches, and it proved that it was the first machine that successfully did the work. Before it was put upon the market, peaches were pared by hand. Its undoubted utility was quickly perceived by the trade and immediately it went into extensive public use. This last mentioned

fact, of itself, it is well settled, is evidence of patentable novelty, and in a doubtful case will turn the scale in favor of the patentee. — Sayre *v.* Scott, 55 Fed. 971; 5 C. C. A. 366.

Smith *v.* Vulcanite Co. 93 U. S. 486; Magowan *v.* Belting Co. 141 U. S. 332; Topliff *v.* Topliff, 145 U. S. 156; Loom Co. *v.* Higgins, 105 U. S. 580; Consolidated *v.* Crosby, 113 U. S. 157; Barbed Wire Patent, 143 U. S. 275; Gandy *v.* Belting Co. 143 U. S. 587.

The machine with this improvement was accepted as perfected, and went into extensive general use. It was the first that was ever so accepted and used, and no machine without it has ever been commercially used since that time. We are of the opinion that the discovery by these patentees of the proper means for remedying the fatal defect which existed in all prior machines of this character, simple as the device was, amounted to something more than the exercise of merely ordinary mechanical skill, and reached a higher dominion of invention. The simplicity of the device, and its apparent obviousness after the event, ought not to detract from its meritoriousness. That it had never been suggested or thought of before, and effectually supplied the one thing necessary to bring success, when before there had been nothing but failure, is sufficient to entitle it to rank as a new and useful improvement in the mechanical arts within the meaning of the patent law. — M'Kay *v.* Dizer, 61 Fed. 102; 9 C. C. A. 382.

In determining the question of invention utility plays an important part. It is not, however, conclusive. Combined with the presumption arising from the grant of letters it is sufficient to sustain a patent in the absence of evidence disproving invention. — Ritchie *v.* Obdyke, 65 Fed. 224; 12 C. C. A. 583.

The evidence leaves no doubt that it did the work it was desired to do. Subsequent improvements made it do that work better, but that is immaterial when it has been shown, as it has been here, that machines made in strict conformity to the patent have been used by manufacturers for years in doing this very work. — Inman *v.* Beach, 71 Fed. 420; 18 C. C. A. 165.

Where the question of novelty is in doubt, the fact that the device has gone into general use, and has displaced other devices previously employed for a similar purpose is sufficient to turn the scale in favor of the inventor. — Mast *v.* Dempster, 82 Fed. 327; 27 C. C. A. 191. But see 177 U. S. 485.

Potts *v.* Creager, 155 U. S. 357; Smith *v.* Vulcanite, 93 U. S. 486; Magowan *v.* Packing Co. 141 U. S. 332.

After careful consideration, we are of the opinion that the complainant's patent relates to an article of substantial, practical merit, which excels in operation and results other existing appliances, and that the patent is valid. — Diamond *v.* Goldie, 84 Fed. 972; 28 C. C. A. 589.

Consolidated *v.* Detroit, 59 Fed. 902.

As shown by the record and the evidence, persons skilled in the art had previously endeavored to accomplish the desired result, but without practical avail, and until McElroy combined the known electrical energy with his happy mechanism, and described a device for putting the heat energy involved in electricity into practical operation for this purpose, the public had continued to ride in the cold. All agree that his device is practical, useful, and a decided advance upon any theretofore described or known. It does the work. Looking at the general use and the substantial results accomplished through the mechanical arrangement and the device described,

with the practical view of giving the inventor, rather than with the view through refining processes of reasoning, of depriving him of, what fairly belongs to him, it is difficult to see how the patentability of the device in suit can be seriously challenged. — Consolidated *v.* West End, 85 Fed. 662; 29 C. C. A. 386.

He created a device — a composite structure — by which all need of the former awkward and unhandy makeshift appliances was completely obviated. It may be upon this showing Mr. Philips does not appear to have been a pioneer, yet the fact remains that the device which he gave to the art was, in its entirety, new, and was not only more convenient in its adaptation for use than any appliance which had preceded it, but also performed its two-fold function, so as in both respects to produce much better results than had ever before been attained. Both in the character of the means which he employed and in the improvement in operation which he achieved, there is evidence of origination; and therefore we cannot assent to the suggestion that his performance amounted to nothing but ingenious aggregation of the varied, offhand, and inefficient contrivances which it was his declared object to supplant. — Clinton *v.* Hendrick, 86 Fed. 137; 29 C. C. A. 612.

In a doubtful case, the fact that the patented device has gone into general use, and superseded other devices, may be sufficient to turn the scale. — Stevenson *v.* McFassell, 90 Fed. 707; 33 C. C. A. 249.

Smith *v.* Vulcanite Co. 93 U. S. 486.

It must be conceded that the sales were phenomenally large, and that the evidence shows that the Christy saddle was received with great favor by those who used the bicycle; and also, it may be admitted, that it not only added to their comfort but contributed to their safety. But still we do not think that it follows that, therefore, that invention was not required to design and construct it. — Christy *v.* Hygeia, 93 Fed. 965; 36 C. C. A. 31.

McClain *v.* Ortmayer, 141 U. S. 419; Klein *v.* Seattle, 77 Fed. 200; Grant *v.* Walter, 148 U. S. 547; Aron *v.* Railway, 132 U. S. 84.

It contains much which requires that we should hold that the invention consisted in producing the cap from a single blank, so as to be of the nature of the invention in issue in Krementz *v.* Cottle, 148 U. S. 556. — B. & S. Fastener *v.* Edgerton, 96 Fed. 489; 37 C. C. A. 523.

When the question of invention is doubtful, the presumption of validity should have due consideration. In such case, also, the success which has attended the patented thing ought not to be overlooked, and should be given due weight. It is true that the success may have resulted in large measure from the exercise of business energy and of liberal advertisement, but no enduring success could be attained unless the thing patented had merit. — Streator *v.* Wire-glass, 97 Fed. 950; 38 C. C. A. 573.

It is oftentimes sufficient to say that a thing is useful, and when the new scheme for arranging old elements and using power is universally adopted in place of the old, it is somewhat difficult to resist the conclusion that the new is a substantial improvement upon the older conditions. It is quite possible that the momentum caused, superadded to the belt power, is a more valuable element in the combination than the patentee realized; but this is hardly a reason for defeating the demonstrated practical usefulness of such superadded power as an element in the combination. — Parsons *v.* Seelye, 100 Fed. 455; 40 C. C. A. 486.

Potts *v.* Creager, 155 U. S. 597.

The utility of a machine, article of manufacture, process, and improvement thereof, is only allowed to turn the scale in favor of its patentability in those instances where the question whether the inventive faculty has been exercised is balanced in doubt and uncertainty. — Falk *v.* Missouri, 103 Fed. 295; 43 C. C. A. 240.

Duer *v.* Lock Co. 149 U. S. 216; McClain *v.* Ortmayer, 141 U. S. 419; Magowan *v.* Packing Co. 141 U. S. 332; Smith *v.* Vulcanite Co. 93 U. S. 486.

These facts establish neither the novelty nor the patentability of his device, but they certainly challenge admiration, and demand that the presumption of validity which supports his patents shall not be stricken down without careful consideration and cogent and convincing proof. The keen, shrewd, mercantile spirit of this age is seldom deceived into the purchase and continued use of worthless improvements in mechanical devices, and, when all is said, success is by no means the poorest criterion by which to judge of the acts and words of men. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

In 5 years after Hein disclosed his invention and obtained his patent, his brake beam was in use on 85 per cent. of the railroads controlling 80 per cent. of the cars using iron brake beams in this country, and in 11 years from the date of his patent, more than 1,000,000 of his brake beams had been made and sold. But where the question of novelty is fairly open for consideration under the law, the fact that a patented device or combination has displaced others which had previously been used to perform its function, and has gone into immediate and general use, is pregnant and persuasive evidence that it involves invention. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Smith *v.* Vulcanite Co. 93 U. S. 486; Loom Co. *v.* Higgins, 105 U. S. 580; Mfg. Co. *v.* Adams, 151 U. S. 139; Magowan *v.* Packing Co., 141 U. S. 332; Graphophone Co. *v.* Leeds, 87 Fed. 873; Topliff *v.* Topliff, 145 U. S. 156.

We have the prima facie arising from the grant. We have the fact that the device has gone into extensive use, — an element entitled to regard. It is to be noted that printing-press construction is mechanically a highly developed industry. The complex and intricate details of these great presses; the calls upon them for speed, strength, and product; the constant demand upon builders for improvement; and the keen rivalry existing among such builders and the users of the presses, — are factors which brought the art to this high mechanical standard. The very fact that, with all these stimulating considerations, insuring the most rapid strides in mechanical advance, no such step as Firm's was taken in duplex presses, shows that Firm's change was not in the line of mechanical progress, but in the original, inventive sphere. — Goss *v.* Scott, 108 Fed. 253; 47 C. C. A. 302.

Lehnbeuter *v.* Holthaus, 105 U. S. 94; Smith *v.* Vulcanite, 93 U. S. 486.

The advance over Cushman in the substitution of a box form with a rearward opening so simplified the construction as for that reason alone to be of very considerable utility, and to raise a very strong presumption in favor of patentability. — Hobbs *v.* Gooding, 111 Fed. 403; 49 C. C. A. 414.

It may be true that Anderson has only taken the familiar contact spring or brush, and placed it in a protected position, but this change seems to have made the difference between a defective mechanism and a practical method of attaining the desired result. Where, as in this case, the departure from former means is only small, yet the change is important, the doubt as to whether the inventive faculty has been exer-

cised is to be weighed in view of the fact that the device in question has displaced others which had previously been employed for analogous uses, and this may decide the issue in favor of invention. — Star *v.* General, 111 Fed. 398; 49 C. C. A. 409.

Krementz *v.* Cottle, 148 U. S. 556; Consolidated *v.* Detroit, 47 Fed. 894.

As organized, the heating apparatus supplied a practical and efficient adjunct to the fire engines, and its value is shown by its adoption and use by the officers of the fire department, and the fact that after it was introduced there was no attempt by them to find a substitute for it, or to improve it. In short, it fulfilled the requirements of the service for which it was designed with a degree of success not before attained or subsequently exceeded. It did not evince a high order of inventive talent to organize and construct it, but we think it did evince enough of thought and creative faculty to support a patent, and re-inforce the presumption arising from the grant. — Brickill *v.* Mayor, 112 Fed. 65; 50 C. C. A. 1.

The advance seems simple enough. One wonders why, pending its adoption, twelve years went by. But the same wonder accompanies every step forward in the useful arts. The eye that sees a thing already embodied in mechanical form gives little credit to the eye that first saw it in imagination. But the difference is just the difference between what is common observation and what constitutes an act of creation. The one is the eye of inventive genius; the other of a looker-on after the fact. Considering the utility of the new knot, and the unavailing efforts prior to the patent in suit, to reach some correction of the existing defects, and the length of time those efforts went on, we are convinced that the patent under consideration evinces something more than mere mechanical skill. — Faries *v.* Brown, 121 Fed. 547; 57 C. C. A. 609.

The improvement is confessedly novel. Its utility, apparent on its face, is reaffirmed by its great success. But did the production of it require the exercise of the inventive faculty? The conjunction of its being a true mechanical combination, its novelty, its great utility, and its notable commercial success, is persuasive that more than mechanical skill was required in taking this new step in the very, very ancient art of supporting and adjusting mirrors. The device seems exceedingly simple. But its very simplicity in such an old field, should be a warning against a too ready acceptance of the ex post facto wisdom of the bystander. — Regent *v.* Penn, 121 Fed. 80; 57 C. C. A. 334.

The testimony is abundant that the East barrel had gone into general use, that the public had attested its superior utility and value by adopting the same, and that it had superseded all other barrels previously used for like purposes. The fact that prior devices, such as the Roberts and the Georgia barrel, had not been successful, and that the East barrel secured general acceptance and extensive use, and was a commercial success, creates a strong and almost conclusive presumption that the East barrel was the product of invention and had patentable merit, and that something more than mere application of mechanical skill was involved in its production. — Farmers' *v.* Spraks, 127 Fed. 691; 62 C. C. A. 447.

But if the questions of novelty and merit were otherwise left in doubt by the evidence, they would have to be resolved in favor of the patent, because of the immediate and general use into which the device is shown to have gone when it was put upon the market. — Heekin *v.* Baker, 138 Fed. 63; 70 C. C. A. 559.

Dowagiac *v.* Minnesota, 118 Fed. 136.

The device in suit was a success from its inception, it came at once into general use, and we are satisfied is of manifest novelty and great utility. The testimony shows that it practically doubles the life of the belt. This consideration, coupled with its undoubted commercial success from the outset, would be entitled to turn the scales in favor of the validity of the patent, if it were otherwise in doubt. — Robins *v.* American, 145 Fed. 923; 76 C. C. A. 461.

Reviewing: Keystone *v.* Adams, 151 U. S. 139; Consolidated *v.* Detroit, 47 Fed. 894; Krementz *v.* Cottle Co. 148 U. S. 560.

Loom Co. *v.* Higgins, 105 U. S. 580; Topliff *v.* Topliff, 146 U. S. 156; Consolidated *v.* Crosby, 113 U. S. 157; Magowan *v.* New York, 141 U. S. 332; Barbed Wire Patent, 143 U. S. 275.

There is also evidence of more or less cogency that the device has superseded other devices in the few cities which employ scouring and flushing machines in use upon smooth or asphalt streets. These facts are entitled to weight when the question is whether the machine exhibits patentable invention. — St. Louis *v.* American, 156 Fed. 574; 84 C. C. A. 340.

Keystone *v.* Adams, 151 U. S. 139; National *v.* Interchangeable, 106 Fed. 693; Kinloch *v.* Western, 113 Fed. 652; id. 659; Krementz *v.* Cottle, 148 U. S. 556.

Has the patentee added anything of value to the sum of human knowledge, has he made the world's work easier, cheaper, safer, would the return to the prior art be a retrogression? When the court has answered this question, or these questions, in the affirmative, the effort should be to give the inventor the just reward of the contribution he has made. The effort should increase in proportion as the contribution is valuable. Where the court has to deal with a device which has achieved undisputed success and accomplishes a result never attained before, which is new, useful and in large demand, it is generally safe to conclude that the man who made it is an inventor. — O'Rourke *v.* McMullen, 160 Fed. 933; 88 C. C. A. 115.

Hobbs *v.* Beach, 180 U. S. 383; Magowan *v.* N. Y. 141 U. S. 332; Barbed Wire Case, 143 U. S. 275; Potts *v.* Creager, 155 U. S. 597; Loom Co. *v.* Higgins, 105 U. S. 590.

§ 636. Evidence of — Utility — When Not.

Although the invention confessedly has been of great utility, as proved abundantly, in the absence of any clear and positive exercise of the mind beyond mere mechanical skill, the utility of the device does not establish patentable novelty. — Hollister *v.* Benedict, 113 U. S. 59; 28 L. Ed. 901; 5 S. Ct. 717.

An invention though new in the sense that it had not been anticipated by any previous invention, and though shown to have superior utility, is not necessarily such an improvement as to be entitled to be regarded in the patent law as an invention. — Gardner *v.* Herz, 118 U. S. 180; 30 L. Ed. 158; 6 S. Ct. 1027.

The fact that the patented process involves greater care and higher skill does nor effect its utility. — Lawther *v.* Hamilton, 124 U. S. 1; 31 L. Ed. 325; 8 S. Ct. 342.

Cannot be made to control the language of the statute which limits the benefit of the patent laws to things which are new as well as useful. — Grant *v.* Walter, 148 U. S. 547; 37 L. Ed. 552; 13 S. Ct. 699.

McClain *v.* Ortmayer, 141 U. S. 419.

Limitation of rule with reference to other factors which may enter in to produce popularity of article. — Duer *v.* Corbin, 149 U. S. 216; 37 L. Ed. 707; 13 S. Ct. 850.

It is true that such extensive public use, superseding other similar devices, is evidence more or less cogent of value and usefulness. " It is not conclusive of that; much less of its patentable novelty." McClain *v.* Ortmayer, 141 U. S. 428. Complainant was active and energetic in pursuing the sale of his machine by means of circulars and travelling agents; the latter drumming for it in 13 states. Under such circumstances, extensive sales constitute little or no evidence or test of patentability. — Fox *v.* Perkins, 52 Fed. 205; 3 C. C. A. 32.

Nor do we find in the record sufficient to warrant any different conclusion upon the theory that the device supplied a long felt want, which mechanics had tried to supply unsuccessfully, nor that it has driven other competitors out of the market because its superior merits have commended it to the public. There is nothing to show to what extent, price, workmanship, liberal discounts to dealers, and ingenious and extensive advertising may have contributed to whatever success has attended the effort to introduce complainants' tool, and, in the absence of any information on these points, there is not, in the circumstance that the sales of this tool have increased from 3,926 in 1885 to 10,727 in 1891, sufficient to warrant the conclusion that there was any patentable invention in devising it, in view of the state of the art. — Saunders *v.* Allen, 60 Fed. 610; 9 C. C. A. 157.

McClain *v.* Ortmayer, 141 U. S. 428; Duer *v.* Corbin, 149 U. S. 223.

It is not sufficient that the patentee may have produced a better and more marketable article, but there must have been something novel in the means which were employed in its production. — Andrews *v.* Thum, 67 Fed. 911; 15 C. C. A. 67.

Knapp *v.* Morss, 150 U. S. 221.

This we cannot do, to the extent of ascertaining for ourselves that the appellee's device does not represent a completed and useful invention. — Packard *v.* Lacing, 70 Fed. 66; 16 C. C. A. 639.

The authority for granting a patent rests exclusively upon statute, and is thereby strictly limited to the invention of what is new and useful. McClain *v.* Ortmayer, 141 U. S. 419. It is not therefore sufficient to show the utility or great popularity of the improvement, as strenuously urged here to sustain this patent. Id. But it must also be new, in the sense of patentable diversity from prior methods, forms, and accomplishments, as recognized by the decisions. — Baldwin *v.* Kresl, 76 Fed. 823; 22 C. C. A. 593.

Utility is not an infallible test of originality. There must be original thought or inventive skill, not merely mechanical change of what was old. — Olmsted *v.* Andrews, 77 Fed. 835; 23 C. C. A. 488.

Ex parte Greeley, Fed. Cas. 5,745; Hollister *v.* Mfg. Co. 113 U. S. 59; Thompson *v.* Boisselier, 114 U. S. 1; Holder *v.* Ferguson, 119 U. S. 335; Heating *v.* Burtis, 121 U. S. 286; Marchand *v.* Emken, 132 U. S. 195; McClain *v* Ortmayer, 141 U. S. 419; Clothing *v.* Glover, 141 U. S. 560; Mfg. Co. *v.* Cary, 147 U. S. 623; Howard *v.* Stove, 150 U. S. 164.

It is undoubtedly true, that the utility of a device or machine, and the fact that it had never been used before, is sometimes high evidence of in-

vention, and in cases of doubt is given controlling effect. But every case depends upon the state of the art, the character of the improvements, the results accomplished, the methods used, the changes made, &c. The fact that a patented device has gone into general use, and has displaced other devices, is evidence of its value and usefulness, and is always of importance in considering the question whether the device or machine is patentable. But the fact that the patented device has gone into general use, while evidence of its utility, is not conclusive evidence of its patentable novelty. — Klein *v.* Seattle, 77 Fed. 200; 23 C. C. A. 114.

Smith *v.* Vulcanite, 93 U. S. 486; Adams *v.* Stamping Co. 141 U. S. 539; Mfg. Co. *v.* Adams, 151 U. S. 139; McClain *v.* Ortmayer, 141 U. S. 419; Mfg. Co. *v.* Cary, 147 U. S. 623; Grant *v.* Walter, 148 U. S. 547.

The commercial success of the patented article is only one element to be considered where patentability is otherwise in doubt. — Lane *v.* Welds, 99 Fed. 286; 39 C. C. A. 528.

Mfg. Co. *v.* Kobbins, 75 Fed. 17; McClain *v.* Ortmayer, 141 U. S. 419.

It is true that the extensive use of a machine or combination which is clearly without novelty, does not dispense with that statutory requirement, and that it will not alone sustain a patent. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

McClain *v.* Ortmayer, 141 U. S. 419; Duer *v.* Lock Co. 149 U. S. 216; Olin *v.* Timken, 155 U. S. 141; Klein *v.* City of Seattle, 77 Fed. 200.

Utility being one of the qualities necessary to patentability, the granting of the patent is prima facie evidence of it; and this is not negatived by the fact that the device is susceptible of improvement, or that like inventions are so far superior to it that they may entirely supersede the use of it. Comparative utility between machines or processes is no criterion of infringement, and comparative superiority or inferiority does not necessarily import noninfringement; nor does it tend to avoid infringement if the defendant's device is simpler and produces better results, unless the cause is due to a difference in function or mode of operation or some essential change in character. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

The mere fact that a patented device or an article meets with increasing sales and is popular is wholly unimportant when it clearly appears that the invention is without patentable novelty. — American *v.* Bullivant, 117 Fed. 255; 54 C. C. A. 287.

Duer *v.* Lock Co. 149 U. S. 216; Printing Press *v.* Scott, 103 Fed. 650; National *v.* Interchangeable, 106 Fed. 693; McClain *v.* Ortmayer, 141 U. S. 419; Klein *v.* Seattle, 77 Fed. 200.

The fact that these bookcases have gone into extensive use is due, as we think, to the elegant workmanship employed in their manufacture, and the convenience of having the sections separable, aided by the energy with which, as the bill states, they were pressed upon the market. — Globe-Wernicke *v.* Macy, 119 Fed. 696; 56 C. C. A. 304.

It sometimes happens that an improvement in a machine or device, which is the result of ordinary mechanical skill, adds much to the utility of the device or machine, but this fact does not render it patentable. If a doubt arises in the consideration of a patented article or device whether the inventive faculty has been exercised, the fact that the article in question has gone into general use, that there is a large demand for it, and that it seems to possess great utility, is entitled to great weight; but when it is apparent that the

inventive faculty has not been exercised, and that nothing more has been accomplished by the alleged inventor than what might have been done by an ordinary workman or mechanic acquainted with the art, if his attention had been directed to the subject, a patent, if granted, cannot and ought not to be sustained. — Union *v.* Peters, 125 Fed. 601; 60 C. C. A. 337.

McClain *v.* Ortmayer, 141 U. S. 419; Duer *v.* Corbin, 149 U. S. 216; Fox *v.* Perkins, 52 Fed. 205; Dueber *v.* Robbins, 75 Fed. 17; Lovell *v.* Cary, 147 U. S. 623; Falk *v.* Missouri, 103 Fed. 295; Atlantic *v.* Brady, 107 U. S. 192.

A large part of the success of complainant's tiles is undoubtedly due to their thickness and the secret composition of which they are made. — New York *v.* Sierer, 158 Fed. 819; 86 C. C. A. 79.

But the fact that the Furness patent shows a new and useful improvement does not, in itself, disclose invention. — New York *v.* Sierer, 158 Fed. 819; 86 C. C. A. 79.

Hollister *v.* Benedict, 113 U. S. 59.

It is true that the Marshall lining possesses the advantages of utility and cheapness, and that it has nearly supplanted in the market the hard fiber lining. In cases where the question of patentability is involved in more or less doubt, these practical considerations are entitled to much weight, and they have frequently been held to turn the scale in favor of sustaining the patent. They cannot avail, however, in a case where the court is clearly satisfied that the broad conception underlying the patent did not involve inventive thought. — Marshall *v.* Pettingell-Andrews, 164 Fed. 862; C. C. A.

§ 637. Evidence of — Want of Invention.

An analysis of this patent in the light of the prior art, taken in connection with the circumstances that no practical commercial machine containing this invention has ever been put into use, forbids us from holding that this is a pioneer patent which marks a great advance in the art, or lies at the basis of a new art. — New York *v.* Hollingsworth, 56 Fed. 224; 5 C. C. A. 490.

The single claim of the patent is for a "rectangular terra-cotta wire conduit pipe, having rectangular partitions, all of uniform thickness, and made in one integral piece." We might well take judicial notice of the fact, even if it was not abundantly proven by the testimony, that the art of making sewer or drain pipe, both rectangular and cylindrical in form, out of clay, is very old. — Browning *v.* Colorado, 61 Fed. 845; 10 C. C. A. 112.

The device was known for over 12 years before this bill was filed; and yet during the whole of that period it never had been put to practical use. If the case had been otherwise, the practical results might have enabled us to give the patent the support which might have come therefrom. — B. & S. Fastener *v.* Edgerton, 96 Fed. 489; 37 C. C. A. 523.

Boston *v.* Bemis, 80 Fed. 287.

The Stonemetz patent did not go into use at all. These facts would not of themselves establish that the inventions were not novel and useful, but such circumstances, unexplained, give additional ground for the belief that no very substantial improvement in the art was made. — Campbell *v.* Duplex, 101 Fed. 282; 41 C. C. A. 351.

The fact that the two devices are not separately claimed, but only in combination, would indicate that the patentee regarded the elements individually considered as old. — American *v.* Helmstetter, 142 Fed. 978; 74 C. C. A. 240.

§ 638. Evidence of — Miscellaneous Holdings.

The conversations and declarations of a patentee stating that he had made an invention and describing its details and explaining its operation are assertions of his right to the invention. — Railroad *v.* Stimpson, 14 Pet. 448; 10 L. Ed. 535.

The attempted proof that the plaintiff invented a certain device over thirty years before, made and secreted a model of it, in the light of his subsequent patent which did not disclose it and which was claimed only in a reissue 15 years later, such evidence is not impressive. — Johnson *v.* Flushing, 105 U. S. 539; 26 L. Ed. 1162.

The conduct of the inventor considered as evidence as to whether he had or had not invented the device in suit at the time alleged. — Atlantic *v.* Brady, 107 U. S. 192; 27 L. Ed. 438; 2 S. Ct. 225.

The fact that contemporary publications give to the patentees the credit of this invention considered as evidence of invention. — New Process *v.* Maus, 122 U. S. 413; 30 L. Ed. 1193; 7 S. Ct. 1304.

Where licensee gave notice to licensor that the licensed device was inoperative and then continued to make an article embodying substantially the same device indicates that the notice was a mere pretence. — St. Paul *v.* Starling, 140 U. S. 184; 35 L. Ed. 404; 11 S. Ct. 803.

The fact that the patentee had at one time offered to sell the patent for $15.00 is not competent evidence of want of novelty and was properly excluded. — Harper *v.* Wilgus, 56 Fed. 587; 6 C. C. A. 45.

Complainant patentee had suggested the idea of the device in suit to an inventor and manufacturer, who adapted a prior patented device to complainant's needs, made and sold complainant the device and marked it patented under his former patent. Later complainant took out a patent on the device, removed the former patent mark and applied his own. Upon remonstrance by the manufacturer, complainant removed his mark. *Held:* That in connection with the proofs this conduct amounted to a confession of invention of the prior patentee and of abandonment by complainant. — Forgie *v.* Oil Well, 58 Fed. 871; 7 C. C. A. 551.

When the patentee is silent as to the details of a particular feature it is to be presumed that it is a matter of common knowledge among those skilled in the art, and not novel with the patentee. — Westinghouse *v.* Edison, 63 Fed. 588; 11 C. C. A. 342.

The complainant has pressed upon us advertisements and other public declarations of the respondent maintaining the patentability of devices of the general character of the one in issue. In that class of litigation in which results can affect no interests except those of the parties to it, the court may well give weight to declarations of that nature; but with reference to a patent for an invention, which is of public concern, such declarations are

of little consequence, and neither the inventor nor the alleged infringer can be permitted to substitute his own acts or opinions for the judgment of the court. — Osgood *v.* Metropolitan, 75 Fed. 670; 21 C. C. A. 491.

It was a known law of nature when the early dental spittoons were devised; but until Hurlbut's time, it was not thought of in solving the problem of a sightly and sanitary dental basin. Is not this fact significant? Is it not persuasive that Hurlbut's conception was invention rather than mere skill — a flash of the intellect, creative and helpful, rather than the plodding advance of the mechanic. — Justi *v.* Clark, 108 Fed. 659; 47 C. C. A. 565.

The record discloses the labor and experiments required to produce a patentable supporter, and the inventive character of the device is made apparent despite first impressions as to triviality. Its novelty and utility "in its limited field" are manifest. — Parramore *v.* Taylor, 114 Fed. 97; 52 C. C. A. 45.

The learned judge said: "The case is a close one. We have not arrived at our conclusion without hesitation, and there are grounds for strongly urging a different one." But we think that the doubt which he seems to have entertained should have been resolved in support of the patent. — Cleveland *v.* Kauffman, 135 Fed. 360; 68 C. C. A. 658.

Railroad *v.* Stimpson, 14 Pet. 459; Lehnbeuter *v.* Holthaus, 105 U. S. 96; Cantrell *v.* Wallick, 117 U. S. 695.

§ 639. Force of Nature.

An exclusive right cannot exist to a new power, should one be discovered. Through the agency of machinery a new steam power may be said to have been generated. But no one can appropriate this power exclusively to himself under the patent laws. The same may be said of electricity and of any other power in nature, which is alike open to all. — Le Roy *v.* Tatham, 14 How. 156; 14 L. Ed. 367.

A force of nature cannot be broadly claimed in connection with an act. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

If this claim can be maintained, it matters not by what process or machinery the result is accomplished. For ought that we know some future inventor, in the onward march of science, may discover a mode of writing or printing at a distance by means of the electric or galvanic current, without using any part of the process or combination set forth in the plaintiff's specification. His invention may be less complicated — less liable to get out of order — less expensive in construction, and in operation. But yet if it is covered by this patent the inventor could not use it, nor the public have the benefit of it without the permission of the patentee. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

Note: No better law and no more wonderful prophecy is to be found in the books.

As it was held in O'Reilly *v.* Morse, 15 How. 62. A broad claim for the motive force of electricity could not be had, but a claim for a particular application of that force by given means is patentable. — Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

An artificial force is a natural force, so transformed in character or energies by human power as to possess new capabilities of action. This transformation

of a natural force into a force practically new involves a true inventive art. — Wall *v.* Leek, 66 Fed. 552; 13 C. C. A. 630.

1 Rob. Pat. secs. 92–96–99–103; Neilson *v.* Hartford, 1 Web. P. C. 295; Lawther *v.* Hamilton, 124 U. S. 1; McClurg *v.* Kingsland, 1 How. 202; Burr *v.* Duryee, 1 Wall. 568.

Discoveries of natural forces or of their laws are not the subjects of patents. It is only the employment of such forces by invented means, for useful purposes, which gives the inventor any standing ground. — Cowles *v.* Lowrey, 79 Fed. 331; 24 C. C. A. 616.

O'Reilly *v.* Morse, 15 How. 62.

That a claim covering the utilization of an article in a way to get the best results from its characteristics (such as using a veneer lumber with the dense side out to compensate swelling from dampness) is not patentable, see Talbot *v.* Fear, 89 Fed. 197; 32 C. C. A. 186.

Cameron having invented the tank employed and having defined it as "a septic tank," which in operation, becomes lined with a coating due to the action of bacteria and in a short time forms its own air-excluding cover by bacteria action; that these facts do not entitle him to a claim covering his elements and the elements built in by micro-organisms as constituting a combination, see Cameron *v.* Saratoga, 159 Fed. 453; 86 C. C. A. 483.

§ 640. Generic — Construction.

If one inventor precedes all the rest and strikes out something which includes and underlies all that they produce, he acquires a monopoly and subjects them to tribute. But if the advance towards the thing desired is gradual, and proceeds step by step, so that no one can claim the complete whole, then each is entitled only to the specific form of device which he produces, and every other inventor is entitled to his own specific form, so long as it differs from those of his competitors, and does not include theirs. — Chicago *v.* Sayles, 97 U. S. 554; 24 L. Ed. 1053.

It is not a pioneer patent, and is not entitled to that liberality of construction which would have been accorded to it had the inventor been the first to devise a scheme for these several adjustments. — Consolidated *v.* Barnard, 156 U. S. 261; 39 L. Ed. 417; 15 S. Ct. 333.

If it was all he claimed for it, it first supplied the efficient means of reducing to the service of the public an agency of great power and value in a highly important industry. To such an invention the courts will give precedence according to its breadth, and will treat all modifications of it which involve only the exercise of the ordinary skill and learning of that art as comprehended in the invention. — Cowles *v.* Lowrey, 79 Fed. 331; 24 C. C. A. 616.

Tilghman *v.* Proctor, 102 U. S. 707; Eames *v.* Andrews, 122 U. S. 40.

Undoubtedly Mr. Edison, by utilizing this film and perfecting the first apparatus for using it, met all the conditions necessary for commercial success. This, however, did not entitle him, under the patent laws, to a monopoly of all camera apparatus capable of utilizing the film. Nor did it entitle him to a monopoly of all apparatus employing a single camera. — Edison *v.* American, 114 Fed. 926; 52 C. C. A. 546.

This discovery was important. Tremaine & Paine were not mere improvers upon a prior machine which was capable of accomplishing the same general result. They brought to success what prior inventors had been unable

to accomplish. It was difficult, and had been considered impossible. They adopted some devices that had been used before, combined them with others that had not been used, and added the necessary elements to make a practical operative machine. Their invention was therefore more than a mere improvement or perfection of what had preceded it. It was of such novelty and importance as to constitute a distinct step in the progress of the art, and the claims of their patent are therefore entitled to a broad and liberal construction. — Los Angeles *v.* Æolian, 143 Fed. 880; 75 C. C. A. 88.

Morley *v.* Lancaster, 129 U. S. 263; Letson *v.* Alaska, 130 Fed. 129; Brown *v.* Drohen, 140 Fed. 97; Hobbs *v.* Beach, 180 U. S. 383.

§ 641. Generic — Definition.

Doubtless an invention may be good though the subject of it consists in the discovery of some principle of science or property of matter, never before known or used, by which some new and useful result is obtained, and such an invention or discovery may be the subject of a valid patent without including in the claim any new arrangement of machinery to accomplish the object, provided the inventor describes, as required in the patent law, the method, process or means of applying the invention to practical use and of obtaining the new and useful result. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

Household *v.* Neilson, 1 Web. P. C. 683; Curt. Pat. 4 ed. 279; Foote *v.* Silsby, 2 Blatchf. 260.

This word ("pioneer") although used somewhat loosely, is commonly understood to denote a patent covering a function never before performed, a wholly novel device, or one of such novelty and importance as to mark a distinct step in the progress of the art, as distinguished from a mere improvement or perfection of what had gone before. — Westinghouse *v.* Boyden, 170 U. S. 537; 42 L. Ed. 1136; 18 S. Ct. 707.

It is true that, when an invention is of a primary character, a larger latitude is given to the equivalents which the patent includes than if the invention were a modification of a well-explored art. In the former case, devices which operate upon the same principle and perform the same functions by analogous means are held to be infringements (McCormick *v.* Talcott, 20 How. 402) and it is also true that when mechanical means are for the first time invented, which enable a law of science or force of nature to be used so as to accomplish a practical and beneficial result, such as the Bell telephone, or when an inventor invents mechanical means for carrying into effect a newly discovered and useful principle of operation, like the double carbon of Brush, the inventor's properly drawn patent will include a very wide scope of analogous mechanical means which accomplish the same result. But this invention, though it may be called a primary one, is not of the character to which any such latitude can be given. Having made this improvement, he broadly claims in his patent any friction plate or pressure contrivance, and desires to include all the more elaborate and ingenious methods of constructing a brake which may be introduced. Such a construction is inadmissible, because a patented invention of this character which with difficulty maintains its right to patentability, belongs to a different class from the one to which the doctrine in McCormick *v.* Talcott and kindred cases, applies and is to receive a narrow construction. — Dederick *v.* Scigmund, 51 Fed. 233; 2 C. C. A. 169.

The result which he achieved was a distinct and single one, which had not, by any means, been previously attained. He entered upon a barren terri-

tory in the domain of invention, and was the first to occupy and appropriate it. He was a pioneer. — National *v.* American, 53 Fed. 367; 3 C. C. A. 559.

Machine Co. *v.* Lancaster, 129 U. S. 263.

The Kitselman invention, for the first time, put the fence-builder on its feet — an easy going, adaptable, working machine of the highest species. It built, for the first time, in the field, a wire mesh fence. It became a farm implement — an implement before unknown — as much so as the first harvester or the first stump puller. It turned over to the farmer in the field the work that had been previously done by the wire weaver in the shop. Out of it practically came a new product — a product as common now as the barbed fence, and probably much more useful. Kitselman disclosed to the world for the first time a practical means for supplying the farmer with a highly useful fence. He has set forth the means in detail, in the descriptive portion of his patent, and has framed the claims mentioned to correctly embody them in a mechanical unity. His work is the work of a primary inventor, certainly as much so as in the cases presented in the Corn Planter Patent, and his letters patent are therefore entitled to a liberal construction. — Kitselman *v.* Kokomo, 108 Fed. 632; 47 C. C. A. 538. Reversed, 189 U. S. 8.

Corn Planter Patent, 23 Wall. 181; Barbed Wire Patent, 143 U. S. 275.

Where the originator has boldly struck out into a practical application, and stated it, though only in general terms, he has, for the most part, made his conception clear even though the mechanical details have not been expressed or thought out. — Westinghouse *v.* Stanley, 133 Fed. 167; 68 C. C. A. 523.

Telephone Cases, 126 U. S. 1.

A primary invention is "one which performs a function never performed by an earlier invention." A secondary invention is one which performs a function previously performed, but in a substantially different way. Walker on Pat. secs. 353,359. This word (pioneer), although used somewhat loosely, is commonly understood to denote a patent covering a function never before performed, a wholly novel device, or one of such novelty and importance as to mark a distinct step in the progress of the art, as distinguished from a mere improvement or perfection of what had gone before. — Western *v.* Robertson, 142 Fed. 471; 73 C. C. A. 587.

Westinghouse *v.* Boyden, 170 U. S. 537.

§ 642. Generic — Improvement.

He brought to success what prior inventors had essayed, and but very imperfectly accomplished. In so doing he adopted some devices that had been used before, combined them with others that had not been used, and added the necessary elements to make a practical and successful machine. His combination and invention was, we think, more than a mere improvement or perfection of what had preceded it. It was of such novelty and importance as to constitute a distinct step in the progress of the art, and it went into immediate and extensive use. Its claims are therefore entitled to a fairly liberal construction. — Letson *v.* Alaska, 130 Fed. 129; 64 C. C. A. 463.

Machine Co. *v.* Lancaster, 129 U. S. 263.

For further cases on this subject see *Improvement — Generic.*

§ 643. Generic — Scope of.

It may be that electricity cannot be used at all for the transmission of speech except in the way Bell has discovered, and that, therefore, practically,

his patent gives him his exclusive use for that purpose, but that does not make his claim one for the use of electricity distinct from the particular process with which it is connected in his patent. It will, if true, show more clearly the great importance of his discovery, but it will not invalidate his patent. — Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

Where an invention is one of a primary character, and the mechanical functions performed by the machine are, as a whole, entirely new, all subsequent machines which employ substantially the same means to accomplish the same result are infringements, although the subsequent machine may contain improvements in the separate mechanisms which go to make up the machine. — Norton *v.* Jensen, 49 Fed. 859; 1 C. C. A. 452.

Machine Co. *v.* Lancaster, 129 U. S. 273.

We find that the complainant's machine is a special one, adapted to a special purpose, relating to an art entirely different from that of ordinary shearing knives. We fail to find anything which leads us to the conclusion that complainant's invention was in any way anticipated, either by prior use or by any machine possessing its functions. — Diamond *v.* Goldie, 84 Fed. 972; 28 C. C. A. 589.

§ 644. Generic — What is.

It in no wise detracts from the merit of this invention that later devices have been adopted which render its practical operation more efficient. The very term "pioneer patent" signifies that the invention has been followed by others. A pioneer patent does not shut but opens the door for subsequent invention. — (Dissenting opinion of Mr. Justice Shiras in) Westinghouse *v.* Boyden, 170 U. S. 537; 42 L. Ed. 1136; 18 S. Ct. 707.

It appears that the complainant, although the owner of the patent in suit, is not manufacturing under it at all, but continues to manufacture under Young's earlier patent. It may, then, be affirmed confidently that the invention of the patent in suit is not one of primary character. — Pittsburg *v.* Pittsburg, 109 Fed. 644; 48 C. C. A. 580.

It was more than an advanced step in an old art. There was no prior art of molding tubes or cylinders (of this character). The patent was in a certain sense a pioneer patent. To produce from a mold a tube or cylinder of insulating material, cheaply and efficiently, so that the insulating function of the cellular structure should be preserved uniformly throughout the substance of the tube or cylinder, was not an obvious suggestion of the general molding art. — Keasbey *v.* American, 143 Fed. 490; 74 C. C. A. 510.

It may, therefore, fairly be said that he fulfilled the requirements of a generic invention, in that he devised a machine which performed the function of looping on a ribbed fabric, a function never performed thereon by any earlier machine, and thereby produced a result never before produced, namely, a ribbed fabric capable of being fleeced, and that in doing this he exercised invention of a high order. — Scott *v.* Fisher, 145 Fed. 915; 76 C. C. A. 447.

The contention that Gathright is entitled to the rewards of a pioneer inventor cannot be maintained. If we may be permitted a metaphor, he did not discover the new mine, he reached it by following trails blazed by others through the wilderness; but once arrived, by his genius and energy, he converted a non-producing failure into a busy, prosperous and lucrative enter-

prise. In other words, he developed the mine. — Wagner *v.* Wycoff, 151 Fed. 585; 81 C. C. A. 129.

§ 645. Immoral Object.

We think that a patent cannot be lawfully granted when, as in the present case, it appears that the claim preferred by the patentee that he has made a discovery of a new fact or principle in medical science, and of a new mode of operation of a known force whereby the discovery is utilized, rests upon no substantial foundation, and is at best an imaginary hypothesis, and was most likely put forward merely to obtain a patent on a device which he proposes to make and sell to the public for the treatment of disease. The granting of a patent under the circumstances last stated would give to the theories enunciated in the specification an appearance of authenticity, and tend to mislead and deceive the public if the theories are false. — Mahler *v.* Animarium, 111 Fed. 530; 49 C. C. A. 431.

If the device here in question should be found insusceptible of other use than to guard gambling machines from being operated by means of bogus coins, we should be led to an outlook from which two interesting queries appear: (1) The statutes of Illinois prohibit the use of coin-operated gambling machines, but not the manufacture or sale thereof. Should a circuit court sitting in Illinois hold invalid a patent on such a machine and thereby destroy the monopoly of its manufacture and sale, because its use is forbidden in Illinois, though its manufacture and sale in Illinois, and its use in certain other states is lawful? (2) If the federal courts may properly hold patents on gambling machines void for lack of utility, because immoral, though countenanced by the legislation of particular states, is a device attached to such a machine likewise inimical to good morals, which prevents a gambler from being also a cheat? It seems clear that one who practises his invention in a noxious way only has no better standing in equity than one who declines to use the device for good purposes or to permit others to use it. And in Hoe *v.* Knapp, 27 Fed. 204, there is a statement that "under a patent which gives a patentee a monopoly, he is bound to use the patent himself, or allow others to use it on reasonable terms." But this doctrine has been vigorously denied, and rightly, we think, in subsequent cases. Roller *v.* Coombs, 39 Fed. 803; Campbell *v.* Manhattan, 49 Fed. 935; Heaton *v.* Eureka, 77 Fed. 294; Bement *v.* National, 186 U. S. 70. So nonuse is not a defense in equity. Is misuse? Equity is not concerned with the general morals of a complainant; the taint that is regarded must affect the particular rights asserted in his suit. Saddle *v.* Troxel, 98 Fed. 620; Folding *v.* Robertson, 99 Fed. 985. A complainant asserts the validity of his patent, infringement, and asks an injunction. If the defendant can do no more than show that the complainant has committed some legal or moral offense, which affects the defendant only as it does the public at large, the court must grant the equitable remedy and leave the punishment of the offender to other forums.

But another consideration leads more strongly to the same result. The inventor's right to make, vend, and use his device does not come from the patent law; it is his natural right. The government's grant to the patentee and his assigns is the right to exclude others from practising the invention. Bloomer *v.* McQuewan, 14 How. 539; Patterson *v.* Kentucky, 97 U. S. 501. If the complainant in a patent suit is seeking merely to enforce his right to exclude, according to the terms of the government's grant, an inquiry into what use (or lack of use) the inventor is making of his natural right would seem to be clearly collateral and irrelevant.

Judge Grosscup, dissenting, says: Non-use and pernicious use must not be confounded. The inventor who declines to put his patent into use occu-

pies toward society an attitude entirely distinct from the inventor who is using his inver ion in a way that injuriously affects society. Pernicious use does not deny simply to society the present benefit of an invention — it visits upon society an affirmative moral harm. Pernicious use injures where non-use only withholds; wounds, where non-use only declines to help. The court should stand aloof from the whole transaction, not because the pernicious use is a defense that lies in appellee's mouth, but because it is a consideration the public may interpose, and because to issue the writ under such circumstances would be to pollute the writ itself. — Fuller *v.* Berger, 120 Fed. 274; 56 C. C. A. 288.

§ 646. Improvement — Non-Patentable.

Mere improvement in material or quality is not patentable. — Heald *v.* Rice, 104 U. S. 737; 26 L. Ed. 910.

Hotchkiss *v.* Greenwood, 11 How. 266; Hicks *v.* Kelsey, 85 U. S. 670; Stow *v.* Chicago, 104 U. S. 547.

A mere carrying forward of an original conception resulting in an improvement in degree is only the exercise of ordinary mechanical skill. — Consolidated *v.* Walker, 138 U. S. 124; 34 L. Ed. 920; 11 S. Ct. 292.

Burt *v.* Evory, 133 U. S. 349; Hollister *v.* Benedict, 113 U. S. 59; Thompson *v.* Boisselier, 114 U. S. 1; Aron *v.* Manhattan, 132 U. S. 84; Hill *v.* Wooster, 132 U. S. 693; Howe *v.* National, 134 U. S. 388.

With all due respect to the patent office, I must say that it seems to me all these patents in suit, as well as others in this record, were very improvidently issued. They may cover improvements in this class of devices, but all improvements do not involve or imply invention. — Palmer *v.* McDermaid, 54 Fed. 509; 4 C. C. A. 489.

There is not invention merely in reducing the friction of a device by adding antifriction rollers, a method well-known in the art. — Barnes *v.* Walworth, 60 Fed. 605; 9 C. C. A. 154.

The fact alone of improvement does not establish invention. Nor, on the other hand, can it be denied for mere simplicity, which may be the feature of special merit. For the improvement claimed in this patent, however, a test is furnished under the rule frequently declared by the Supreme Court, that " a change only in form, proportion or degree, the substitution of equivalents doing substantially the same thing in the same way, by substantially the same means, with better results, is not such invention as will sustain a patent." — Baldwin *v.* Kresl, 76 Fed. 823; 22 C. C. A. 593.

Smith *v.* Nichols, 21 Wall. 112; Burt *v.* Evory, 133 U. S. 349; Cluett *v.* Claflin, 140 U. S. 180; McCarty *v.* R. R. 160 U. S. 110; Caverly's *v.* Deere, 66 Fed. 305; Griswold *v.* Wagner, 68 Fed. 494.

We are constrained to conclude that, although the patentee was entitled to the credit of making a more artistic article than those who have preceded him, he did nothing new in the patentable sense. — Janowitz *v.* Levison, 82 Fed. 63; 27 C. C. A. 61.

The rule in Smith *v.* Nichols, 21 Wall. 112, 119, has been since so many times restated and applied that it has become familiar doctrine. — Soehner *v.* Favorite, 84 Fed. 182; 28 C. C. A. 317.

Fox *v.* Perkins, 52 Fed. 205; Schreiber *v.* Grimm, 72 Fed. 671; Clark *v.* Deere, 80 Fed. 534.

The coffee may look better or more attractive in the package, but this does not involve invention. It is only a change in the form or appearance of a well-known article of merchandise and is not patentable. — Baker *v.* Duncombe, 146 Fed. 744; 77 C. C. A. 234.

Glue Co. *v.* Upton, 97 U. S. 3; King *v.* Gallun, 109 U. S. 99; Cerealine *v.* Bates, 101 Fed. 272; Sanitas *v.* Voigt, 139 Fed. 551.

§ 647. Improvement --- Patentability.

All improvement is not invention, and entitled to protection as such. Thus to entitle it, it must be the product of some exercise of the inventive faculties, and it must involve something more than what is obvious to a person skilled in the art to which it relates. — Pearce *v.* Mulford, 102 U. S. 112; 26 L. Ed. 93.

The first defense is based on the theory that a patent cannot be valid unless it is new in all its elements as well as in the combination. But this theory can not be maintained. If it were sound no patent for an improvement on a known contrivance or process could be valid. And yet the great majority of patents are for improvements in old and well known devices, or on patented inventions. Changes in the construction of an old machine which increases its usefulness are patentable. — Cantrell *v.* Wallick, 117 U. S. 689; 29 L. Ed. 1017; 6 S. Ct. 970.

Seymour *v.* Osborne, 11 Wall. 516; Loom *v.* Higgins, 105 U. S. 580; Hailes *v.* Van Wormer, 20 Wall. 353; Star *v.* Crossman, 4 Cliff. 568.

It is well settled that not every improvement in an article is patentable. The test is that the improvement must be the product of an original conception. — Burt *v.* Evory, 133 U. S. 349; 33 L. Ed. 647; 10 S. Ct. 349.

Pearce *v.* Mulford, 102 U. S. 112; Slawson *v.* Grand, 107 U. S. 649; Munson *v.* N. Y. 124 U. S. 601; Smith *v.* Nichols, 88 U. S. 112.

He has not made a great invention or a " pioneer invention," if that much abused expression be confined to its legitimate meaning, but he has produced a novel and useful device which is far removed from mechanical skill. His invention belongs to that vast field of minor achievement which has given this country its acknowledged pre-eminence and which it is the policy of the patent law to protect. — Eldred *v.* Kirkland, 130 Fed. 342; 64 C. C. A. 588.

§ 648. Improvement — Miscellaneous.

These, and all the other differences, were before the Patent Office. The granting of Volz's claims under the circumstances was a virtual finding that Volz was an independent improver in an open field, and we think such a finding is correct. -- Loew *v.* Miller, 138 Fed. 886; 71 C. C. A. 266.

Note: This is a loose statement. There is nothing to indicate that it was an " open field " so far as the Patent Office action was concerned.

The courts have generally found it inadvisable to attempt to define invention, and concluding that there are no affirmative rules by which to determine its presence or absence in every case, have recognized and applied certain negative tests to establish want of invention. Walker on Pats. secs. 24, 29. But when, upon the application of these tests, the question of invention is still left in doubt, such doubts may be resolved in favor of the patent by evidence of successful results when others have tried and failed. — American *v.* Universal, 151 Fed. 595; 81 C. C. A. 139.

Loom Co. *v.* Higgins, 105 U. S. 580; Steel Co. *v.* Cambria, 185 U. S. 403; Singer *v.* Schenck, 77 Fed. 841; Brunswick *v.* Thum, 111 Fed. 904; Frost Co. *v.* Cohn, 119 Fed. 505; Rumford *v.* Baking Co. 134 Fed. 385.

When an existing process or device thus discloses what appear to be insuperable objections to practical operation, it is persuasive evidence of invention that an improver has the foresight and courage to break away from such disclosures and conceive of some new method involving a different principle, but it is also evidence of invention if one, by taking a step forward sees that what appears to be barriers to progress are mere obstructions to side paths and byways, and that the road to a practical invention lies straight before him. — American *v.* Universal, 151 Fed. 595; 81 C. C. A. 139.

What the adaptation does in practical operation upon widely used machines in cotton spinning and twisting, old and new machines alike, as compared with the older adaptations, goes far toward demonstrating the fact of invention. Though the patent is for an improved thread-guide support, rather than for a new and original discovery, its practical success is such as to entitle it to favorable consideration, and to relieve it in a measure from the operation of the narrow rules of construction which ordinarily apply to patents for improvements which only slightly advance the art, and accomplish only unimportant and inconsiderable results. — Houghton *v.* Whitin, 153 Fed. 740; 83 C. C. A. 84.

§ 649. Manufacture.

The patent covered as an article of manufacture a rubber tip for a pencil — not in combination and not of any shape or design. *Held:* Void as there was no novelty in the rubber tip independent of its particular shape form and use in combination, none of which were claimed. — Rubber Tip *v.* Howard, 87 U. S. 498; 22 L. Ed. 410.

A claim which does not describe an article differing at all in its completed state from prior articles is clearly invalid. — Risdon *v.* Medart, 158 U. S. 68; 39 L. Ed. 899; 15 S. Ct. 745.

It is not enough that the new manufacture, because of the fitness of the material to the purposes of the article, has obviated innumerable objections inherent in prior manufactures and superseded them in the trade. It must possess an advantage and novelty in form or construction beyond the ability of a mechanic of ordinary skill and intelligence, or be the result of means or methods devised by the maker. — Kilbourne *v.* Bingham, 50 Fed. 697; 1 C. C. A. 617.

Hollister *v.* Mfg. Co. 113 U. S. 72; Smith *v.* Elliott, 9 Blatchf. 403; Morgan *v.* Seward, Web. P. C. 174; Smith *v.* Vulcanite, 93 U. S. 492.

An article of manufacture which differs from other similar articles only in degree of quality, is not patentable as such. — Blumenthal *v.* Burrell, 53 Fed. 105; 3 C. C. A. 462.

Wood Paper Patent, 23 Wall. 566.

A mere form of construction which affords increased beauty may enter into a design patent but not a patent for a structure. — Sochner *v.* Favorite, 84 Fed. 182; 28 C. C. A. 317.

There is no clear line of demarkation between what may be called a new article of commerce, not patentable though useful, and new articles of manu-

facture patentable as such. Each instance brought the attention of the court must be determined more or less upon the situation peculiar to itself. We think it sufficient to say that no result of a machine or process is patentable independently, where it is apparent that such result is a degree only in advance, in the evolution of an art that is as wide as the manufacture of cereal foods and flour. — Cerealine *v.* Bates, 101 Fed. 272; 41 C. C. A. 341.

That where the patent is for a new article of manufacture, and the means for producing it are old, and the article itself is merely the result of transferring such means from an analogous art, and possesses characteristics similar to those of the articles of the analogous art, the patent is void, see, Weierman *v.* Shaw, 157 Fed. 928; 85 C. C. A. 222.

§ 650. Mathematical Formula.

But when the patentee in his claim enumerates as one element of his combination a wire of a length which will accomplish the result sought to be achieved, and his patent discloses a method for determining that length with mathematical exactness, his claim may fairly be sustained for the length thus shown, although it might be that some other length covered by the language of the claim, but not of the rule, would fall outside the claim. The "length of wire exposed," etc., "operated by," etc., "substantially as set forth," is the length of wire that the specification shows as the result of a given formula. The so-called "Stanley rule" is therefore a part of the invention disclosed and claimed in the patent, — indeed, it would seem to be the main part of the invention, — and, with the patent thus construed, the citations from the prior art show neither anticipation nor lack of invention. The whole argument of defendants on that branch of the case is so interwoven with the postulate that the Stanley rule is to be eliminated from the patent that when the postulate is not granted the argument becomes wholly unpersuasive. — Westinghouse *v.* Saranac, 113 Fed. 884; 51 C. C. A. 514.

§ 651. Means.

The invention covered must consist of a new and useful means of obtaining the end sought. In other words, the subject of a patent is the device or mechanical means by which the desired result is to be secured. — Knapp *v.* Morss, 150 U. S. 221; 37 L. Ed. 1059; 14 S. Ct. 81.

Carver *v.* Hyde, 41 U. S. 519; Leroy *v.* Tatham, 55 U. S. 156; Corning *v.* Burden, 56 U. S. 252; Burr *v.* Duryee, 68 U. S. 531; Fuller *v.* Yentzer, 94 U. S. 288.

Novelty must be a novelty in the means or mechanical device and not in the use to which the combination is put. — Wollensak *v.* Sargent, 151 U. S. 221; 38 L. Ed. 137; 14 S. Ct. 291.

Knapp *v.* Morss, 150 U. S. 221.

Patents cover means employed to effect results. — Miller *v.* Eagle, 151 U. S. 186; 38 L. Ed. 121; 14 S. Ct. 310.

Rubber Tip Pencil Co. *v.* Howard, 87 U. S. 507; Fuller *v.* Yentzer, 94 U. S. 288; Roberts *v.* Ryer, 91 U. S. 150; Stow *v.* Chicago, 104 U. S. 547.

In such case any appropriate means for making it operative will be understood. Otherwise the infringer might take the most important part of an invention and, by changing the method of adapting it to the machine to which it is an improvement, avoid the charge of infringement. The invention of a needle with an eye near the point is the basis of all the sewing machines used; but the methods of operating such a needle are many, and if Howe had been obliged to make his own method a part of every claim in which the

needle was an element, his patent would have been practically worthless. — Deering *v.* Winona, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

If the inventor were in fact the first to invent the device of the patent, he is entitled to a patent therefor, though the infringer may make use of other means than those employed by him to operate it. — Deering *v.* Winona, 155 U. S. 286; 39 L. Ed. 153; 15 S. Ct. 118.

Webster *v.* Higgins, 105 U. S. 580.

The results attained by the means employed by the patent in suit are not in conflict with the rule of Knapp *v.* Morss, 150 U. S. 221; and Wollensak *v.* Sargent, 151 U. S. 227, that the end or purpose sought to be accomplished by a device is not the subject of a patent. The fallacy of defendant's argument lies in the assumption that the object to be accomplished was the moving of the wing instead of the more perfect operation of the rods. — National *v.* Boston, 156 U. S. 502; 39 L. Ed. 511; 15 S. Ct. 434.

Brown *v.* Piper, 91 U. S. 37; Penna. *v.* Locomotive, 110 U. S. 490; Aron *v.* Manhattan, 132 U. S. 84; Wollensak *v.* Sargent, 151 U. S. 221; Blake *v.* San Francisco, 113 U. S. 679; St. Germain *v.* Brunswick, 135 U. S. 227.

While it is true under the rule of Knapp *v.* Morss, 150 U. S. 221; Wollensak *v.* Sargent, 151 U. S. 227; that the end or object of an invention is not patentable, that the means, not the end, is the patentable subject matter, and while it is also true in view of Brown *v.* Piper, 91 U. S. 37; Penna. *v.* Locomotive, 110 U. S. 490; Aron *v.* Manhattan, 132 U. S. 84; Wollensak *v.* Sargent, supra; Blake *v.* San Francisco, 113 U. S. 679; and St. Germain *v.* Brunswick, 135 U. S. 227; that the employment of old and well known means to a new and analogous use is not patentable, — yet in a case where a desired function is accomplished by the employment of old means remotely analogous, such a degree of skill may be required as to involve the inventive faculty; and in that case it is the idea of means, though old, that is patentable, and not the end attained. — National *v.* Boston, 156 U. S. 502; 39 L. Ed. 511; 15 S. Ct. 434.

It is the character of the means employed, and not the inventions or details of forms, which denote the substance of the invention. — Union *v.* Battle Creek, 104 Fed. 337; 43 C. C. A. 560.

Morey *v.* Lockwood, 8 Wall. 230; Ives *v.* Hamilton, 92 U. S. 431; Elizabeth *v.* Pavement Co. 97 U. S. 137.

The Knowles & Tatham patent is merely for an improved form of means for accomplishing an old result. It does not employ any new mechanical principles or any essentially new mode of operation. The substance of the invention resides in the form of the means. It is a case where form and substance are inseparable. — Lowell *v.* Saco, 122 Fed. 632; 58 C. C. A. 324.

Winans *v.* Denmead, 15 How. 330.

In our opinion, upon full consideration, the device belongs to that class of inventions in which the invention resides, in the language of the Supreme Court in Hobbs *v.* Beach, 180 U. S. 383, rather in "the idea that such change could be made than in making the necessary mechanical alterations." Other inventors had been engaged in perfecting these machines, and yet it never occurred to anyone before that the old, cumbersome, and troublesome method of running off the nines could be obviated by this simple device. — Comptograph *v.* Mechanical, 145 Fed. 331; 76 C. C. A. 205.

§ 652. Mechanical Skill — Adaptation.

Unless more ingenuity and skill in applying the old method of fastening the shank and the knob were required in the application of it to the clay or porcelain knob than were possessed by an ordinary mechanic acquainted with the business, there was an absence of that degree of skill and ingenuity which constitute essential elements of every invention. In other words the improvement is the work of the skillful mechanic, not that of the inventor. — Hotchkiss *v.* Greenwood, 11 How. 248; 13 L. Ed. 683.

To cut the material so as to get the grain in a particular way, and so as to avoid waste, requires simple mechanical skill, without involving invention. — Brown *v.* D. C. 130 U. S. 87; 32 L. Ed. 863; 9 S. Ct. 437.

It does not involve invention to place the gripping device of a cable railway system on a dummy car and attaching the dummy to a carrying car calculated to be used also upon other than cable systems. — Butte City *v.* Pacific, 60 Fed. 410; 9 C. C. A. 41.

The mere adaptation of means to avoid binding or friction, as changing the point of application of a force, such as would occur to any mechanic is not invention. — Union *v.* Smith, 69 Fed. 827; 16 C. C. A. 451.

Stirrat *v.* Mfg. Co. 61 Fed. 980.

The adaptation of a spring in form and location merely to make a more effective bicycle brake is not invention. — Gormully *v.* Western, 84 Fed. 968; 28 C. C. A. 586.

Invention cannot be predicated merely on making holes for purposes of ventilation. — Tileston *v.* Vaughan, 149 Fed. 999; 79 C. C. A. 509.

§ 653. Mechanical Skill — Aggregation.

Mere duplication of parts, as placing two panes of glass where there was only one before, is not invention, but ordinary mechanical skill. — Slawson *v.* Grand, 107 U. S. 649; 27 L. Ed. 576; 2 S. Ct. 663.

Hotchkiss *v.* Greenwood, 11 How. 248; Phillips *v.* Paige, 24 How. 167; Dunbar *v.* Meyers, 94 U. S. 187; Stimpson *v.* Woodman, 10 Wall. 117; Brown *v.* Piper, 91 U. S. 37; Atlantic *v.* Brady, 107 U. S. 192.

Mere aggregation of old devices and elements, though useful, is not invention. — Watson *v.* Cincinnati, 132 U. S. 161; 33 L. Ed. 295; 10 S. Ct. 45.

§ 654. Mechanical Skill — Carrying Forward.

The general rule stated in terms of Smith *v.* Nichols, 88 U. S. 112; and Penna. *v.* Locomotive, 110 U. S. 490. — Stephenson *v.* Brooklyn, 114 U. S. 149; 29 L. Ed. 58; 5 S. Ct. 777.

Vinton *v.* Hamilton, 104 U. S. 485; Blake *v.* San Francisco, 113 U. S. 679.

A mere carrying forward of an original conception, resulting in an improvement in degree, is only the exercise of ordinary mechanical skill. — Consolidated *v.* Walker, 138 U. S. 124; 34 L. Ed. 920; 11 S. Ct. 292.

Burt *v.* Evory, 133 U. S. 349; Hollister *v.* Benedict, 113 U. S. 59; Thompson *v.* Boisselier, 114 U. S. 1; Aron *v.* Manhattan, 132 U. S. 82; Hill *v.* Wooster, 132 U. S. 693; Howe *v.* National, 134 U. S. 388.

A mere carrying forward, or new or more extended application of the original thought, a change only in form, proportions or degree, the substi-

tution of equivalents doing substantially the same thing in the same way by substantially the same means with better results, is not such invention as will sustain a patent. — Ansonia *v.* Electrical, 144 U. S. 11; 36 L. Ed. 327; 12 S. Ct. 601.

Smith *v.* Nichols, 88 U. S. 112; Morris *v.* McMillin, 112 U. S. 244; Buscll *v.* Stevens, 137 U. S. 423.

The adaptation of the process of tempering clock bells to that of helical coil springs held to be a mere carrying forward of an old process. — Lovell *v.* Cary, 147 U. S. 623; 37 L. Ed. 307; 13 S. Ct. 472.

Hollister *v.* Benedict, 113 U. S. 59.

It matters not that the means might have been so feeble or inadequate as to only imperfectly perform their duty; the mere extension of those means in size and number, or change of form, would not, in the absence of special circumstances, make the improvement produced thereby patentable. "It is a mere difference in degree; the carrying forward of an old idea; a result perhaps more perfect than had heretofore been attained, but not rising to the dignity of invention." — Wells *v.* Curtis, 66 Fed. 318; 13 C. C. A. 494.

Wright *v.* Yuengling, 155 U. S. 47.

A thing or a combination of cooperating parts may be invented and the original embodiment of it will be shown in a crude and imperfect form. The skill of the trained workman will develop the idea of the inventor in more refined, more delicate and more exactly suitable forms than the original. He may cut away needless bulk, he may increase the size of parts, he may make them stronger, if need be, by the substitution of one familiar material for another, make them lighter or heavier, he may divide one part into two, or combine two in one, or make any other transformation of details, so long as he is pursuing and working out the original discovery or invention by the exercise of the insight, good judgment, and expertness which he is expected to possess and apply. And this improvement may go on so long as any improvement in bringing the means already supplied to greater perfection can be made, and yet it continues to be only an embodiment of the primal idea. — Bullock *v.* General, 149 Fed. 409; 79 C. C. A. 229.

The time was so short after the introduction of the direct current dental motor that it would seem the alternating current motor of the patent was produced as a development due to the gradual extension of the use of commercial alternating currents. The record does not make out a case "where the need had long been apparent and various persons had vainly sought to accomplish the desired result." — Pieper *v.* Electro-Dental, 160 Fed. 930; 88 C. C. A. 112.

Electric *v.* Jamaica, 61 Fed. 655.

The mere bringing together of old elements which in their new places do no more than their original work and do not co-operate with other elements in doing something new and useful is not invention. — National *v.* Aiken, 163 Fed. 254; C. C. A.

Thatcher *v.* Burtis, 121 U. S. 286; Richards *v.* Chase, 158 U. S. 299; Campbell *v.* Duplex, 101 Fed. 282; Goodyear *v.* Rubber, 116 Fed. 363; Johnson *v.* Foos, 141 Fed. 73.

§ 655. Mechanical Skill — Change of Form.

Merely to change the form of a machine is the work of a constructor, not an inventor. Such a change cannot be deemed an invention. — Winans *v.* Denmead, 15 How. 330; 14 L. Ed. 717.

Change of form, though better, is not invention. — Belding *v.* Challenge, 152 U. S. 100; 38 L. Ed. 370; 14 S. Ct. 492.

Roberts *v.* Ryer, 91 U. S. 150.

A mere difference or change in the mechanical construction in the size or form of the thing used, in order to obviate known defects existing in the previous devices, although those changes are highly advantageous, and far better and more efficacious and convenient, does not make the improved device patentable. In order to be patentable, it must embody some new idea or principle not before known. It must, as before stated, be a discovery, as distinguished from mere mechanical skill or knowledge. Atlantic *v.* Brady, 107 U. S. 192; Hollister *v.* Benedict, 113 U. S. 59; Thompson *v.* Boisselier, 114 U. S. 2; Busell *v.* Stevens, 137 U. S. 423; Andrews *v.* Thum, 67 Fed. 911. Nor does the fact that better material is used in constructing the device, such material being well known as adapted to the purpose for which it is used, make the device patentable.

In Hotchkiss *v.* Greenwood, 11 How. 248, where it was held that the substitution of porcelain for metal in making door knobs of a particular construction was not patentable, the court said: "No one will pretend that a machine made, in whole or in part, of materials better adapted to the purpose for which it is used than the materials of which the old one is constructed, and for that reason better and cheaper, can be distinguished from the old one, or, in the sense of the patent law, can entitle the manufacturer to a patent. It may afford evidence of judgment and skill in the selection and adaptation of the materials in the manufacture of the instrument for the purposes intended, but nothing more." — Klein *v.* Seattle, 77 Fed. 200; 23 C. C. A. 114.

See also Hicks *v.* Kelsey, 18 Wall. 670; Dunbar *v.* Myers, 94 U. S. 187; Florsheim *v.* Schilling, 137 U. S. 64.

A mere change of curvature, or of form, or to a veneer from a single piece does not involve invention. — Brunswick *v.* Phelan, 79 Fed. 85; 24 C. C. A. 451.

Hicks *v.* Kelsey, 18 Wall. 670.

Each element, taken by itself, has its own effect, and it is also difficult to understand how it was that the practised eye of skilled mechanics did not at once see and apply the necessary remedy to the troublesome evil which the invention removes. The fact however, that such an evil long existed, and that no mechanic perceived or applied the remedy, is the most conclusive evidence that something more than his eyes and skill were required to discover and apply the requisite device. If nought but the skill of the mechanic was required to make this improvement it is passing strange that no mechanic ever made it until after Martin discovered and described it. The best evidence that the application of the internal-spur-wheel of the new use of propelling the machinery of a windmill would not occur to a person of ordinary mechanical skill, is that it did not occur to any one of them in all the years in which windmills had been in use before Martin discovered and applied it. — Mast *v.* Dempster, 82 Fed. 327; 27 C. C. A. 191. But see 177 U. S. 485.

Electric *v.* LaRue, 139 U. S. 601; Crane *v.* Price, Web. Pat. C. 409; Potts *v.* Creager, 155 U. S. 597; Thomson *v.* Bank, 53 Fed. 250; Loom Co. *v.* Higgins, 105 U. S. 580; Consolidated *v.* Crosby, 113 U. S. 157; Magowan *v.* Packing Co. 141 U. S. 332; Barbed Wire Pat. 143 U. S. 275.

It is the mere adaptation by the art of skill already possessed to the mechanical and technical solutions of a new draft on its resources. When existing skill meets such demand, there is no exercise of the higher faculty of original, creative invention. — Way *v.* McClarin, 96 Fed. 416; 37 C. C. A. 516.

Hollister *v.* Mfg. Co. 113 U. S. 59.

§ 656. Mechanical Skill — Definition and Distinction from Invention.

An instrument of manufacture which is the result of mechanical skill merely is not patentable. Mechanical skill is one thing; invention is a different thing. Perfection of workmanship, however much it may increase the convenience, extend the use, or diminish expense, is not patentable. The distinction between mechanical skill, with its conveniences and advantages and inventive genius, is recognized in all the cases. — Reckendorfer *v.* Faber, 92 U. S. 347; 23 L. Ed. 719.

Rubber *v.* Howard, 20 Wall. 498; Curtis, sec. 726.

The improvement consists in simply taking a material well known and long used, and constructing a pavement in a method well known and long used. It is plain that the improvement described in the patent was within the mental reach of any one skilled in the art to which the patent relates, and did not require invention to devise it, but only the use of ordinary judgment and mechanical skill. It involves merely the skill of a workman and not the genius of an inventor. — Phillips *v.* Detroit, 111 U. S. 604; 28 L. Ed. 532; 4 S. Ct. 580.

Hotchkiss *v.* Greenwood, 11 How. 248; Hailes *v.* Van Wormer, 20 Wall. 353; Smith *v.* Nichols, 21 Wall. 112; Reckendorfer *v.* Faber, 92 U. S. 347; Atlantic *v.* Brady, 107 U. S. 93; Howe *v.* Abbott, 2 Story, 190; Key *v.* Marshall, 8 Clark & F. 245; Stimpson *v.* Woodman, 10 Wall. 117; Pencil *v.* Howard, 20 Wall. 498; Slawson *v.* R. R. 107 U. S. 649; King *v.* Gallun, 109 U. S. 99.

Criteria by which one may be distinguished from the other in McClain *v.* Ortmayer, 141 U. S. 419; 35 L. Ed. 800; 12 S. Ct. 76.

It is not easy to draw a line that separates the ordinary skill of a mechanic versed in his art from the exercise of patentable invention, and the difficulty is especially great in the mechanic arts, where the successive steps in improvements are numerous, and where the changes and modifications are introduced by practical mechanics. — Krementz *v.* Cottle, 148 U. S. 556; 37 L. Ed. 558; 13 S. Ct. 719.

The task of distinguishing between invention and the power of adaptation possessed by a skillful mechanic is not always an easy one, nor have the courts apparently succeeded in formulating a proposition to cover all cases. While the statutes require that a patent, to be valid, must disclose invention and novelty, yet the degree or amount of invention required is not prescribed, and, from the nature of the case, cannot be. — Hillborn *v.* Hale, 69 Fed. 958; 16 C. C. A. 569.

It is true, as contended by counsel for the appellants, that no general definition has been found which clearly marks the distinction between invention and mechanical skill, and it is always difficult, and ofttimes impossible, to determine with certainty that the conception of a device was "spontaneous, and by a necessity of human reasoning," and that any doubt in that regard should then be resolved in favor of invention, unless it is clearly placed within the domain of mere mechanical construction by some of the well settled rules of the patent law. — Baldwin *v.* Kresl, 76 Fed. 823; 22 C. C. A. 593.

Long practice and observation naturally lead those familiar with the arts to the perception of new adaptations. Mechanical education and skill, fostered and promoted by the public, are rapidly advancing in every direction, and there is a constant and universal endeavor in handicraft to utilize that which is known, and press it into service in practical arts. But the steps

of this normal progress and improvement are not invention, nor the subject of monopoly to one who, in the exercise of the "skill of his calling," has put an old thing to a new use. — Capital *v.* Kinnear, 87 Fed. 333; 31 C. C. A. 3.

The line between mechanical ingenuity and invention is sometimes very hard to draw. It is a question of fact, and one upon which the opinions of men differ. In the present case, this court differs from the court below, and holds invention to be present in the Morrison device. — Kisinger-Ison *v.* Bradford, 97 Fed. 502; 38 C. C. A. 300.

No one has yet been able to formulate a test whereby a line of demarkation between the products of the inventor's intuition and the results of the skill of the mechanic may be surely drawn in all cases as they arise. That question is and always must be left for determination by a careful exercise of the judgment, enlightened by a knowledge of the state of the art and of the advance in it which the device in question makes, and guided by the established rules and principles of the law. The two classes of cases led by Atlantic Works *v.* Brady, 107 U. S. 192, and Loom Co. *v.* Higgins, 105 U. S. 580, have been again cited and reviewed for our guidance. — Kinloch *v.* Western, 113 Fed. 659; 51 C. C. A. 369.

There will always be a point where ordinary mechanical skill and invention are so closely associated as to make it difficult to say upon which side of the line the particular matter lies. Where this is the case the doubt should be settled in favor of the patent. But by analogy to a number of well-known precedents we have no trouble in holding that the present case (the use of zinc to hold a frog-plate in place, zinc having been used analogously) is not one of invention. — Johnson *v.* Toledo, 119 Fed. 885; 56 C. C. A. 415.

Mfg. Co. *v.* Cary, 147 U. S. 623; Penn. *v.* Locomotive, 110 U. S. 490; Mast *v.* Stover, 177 U. S. 485; Stearns *v.* Russell, 85 Fed. 218; Ansonia *v.* Electrical, 144 U. S. 11; Schreiber *v.* Grimm, 72 Fed. 671; Aron *v.* Railroad, 132 U. S. 84; Brown *v.* Piper, 91 U. S. 37; Roberts *v.* Ryer, 91 U. S. 150; Griswold *v.* Wagner, 68 Fed. 494.

It is not necessary to the patentable novelty of a device, which consists in employing a new material for an old one in constructing one of its parts, that the substitution should involve the discovery or utilization of an unknown or unexpected property of the material. This is one of the tests of patentable novelty, but it is not the only one. Whether the feature of novelty is the employment of a new material, or a change of adaptation in other respects, the inquiry always is whether what was done involved the exercise of inventive faculty as distinguished from the ordinary skill of the calling. When the substitution has accomplished a result which those skilled in the art had long and vainly sought to effect, the evidence that it involved something beyond the skill of the calling is so persuasive that it generally resolves the inquiry in favor of patentable novelty. — Frost *v.* Cohn, 119 Fed. 505; 56 C. C. A. 185.

The law does not allow mere mechanical skill to usurp the place of invention, which involves higher thought, and brings different faculties into activity. It will not allow one to take from the public that which the public already has, or grant exclusive privilege which the patent confers without consideration. It therefore is the duty of the courts, which, in the last analysis, are the guardians of the public interest, to scrutinize with care every attempt to establish the monopoly which the patent gives, to examine the state of the art, and to see if the idea expressed in the invention has ever been communicated to the public, and was in such a stage of development

in a prior patent that a skilled mechanic working upon the plan or principle therein suggested, could by mechanical means attain the result which the patentee attains. To constitute anticipation the previous patent should not only suggest the idea, but indicate the means and essential elements so distinctly that a mechanic versed in the art, in the light of the patent and of the state of the art at the time the same was granted, and not in the light of subsequent discoveries, could make, construct and practise the invention without the exercise of his own inventive skill. — Imperial *v.* Crown, 139 Fed. 312; 71 C. C. A. 442.

For a long and labored discussion of the questions of mechanical skill, invention, utility as evidencing invention, and prior unsuccessful attempts to attain an end as evidence of invention, see Imperial *v.* Crown, 139 Fed. 312; 71 C. C. A. 442.

§ 657. Mechanical Skill — Degree of Knowledge and Skill.

The improvement consists in simply taking a material well known and long used, and constructing a pavement in a method well known and long used. It is plain that the improvement described in the patent was within the mental reach of any one skilled in the art to which the patent relates, and did not require invention to devise it, but only the use of ordinary judgment and mechanical skill. It involves merely the skill of the workman and not the genius of the inventor. — Phillips *v.* Detroit, 111 U. S. 604; 28 L. Ed. 532; 4 S. Ct. 580.

Hotchkiss *v.* Greenwood, 11 How. 248; Hailes *v.* Van Wormer, 20 Wall. 353; Smith *v.* Nichols, 21 Wall. 112; Reckendorfer *v.* Faber, 92 U. S. 347; Atlantic *v.* Brady, 107 U. S. 193; Howe *v.* Abbott, 2 Story, 190; Key *v.* Marshall, 8 Clark & F. 245; Stimpson *v.* Woodman, 10 Wall. 117; Pencil *v.* Howard, 20 Wall. 498; Slawson *v.* R. R. 107 U. S. 649; King *v.* Gallun, 109 U. S. 99.

As soon as the mischief became apparent, and the remedy was seriously and systematically studied by those competent to deal with the subject, the present regulation was promptly suggested and adopted, just as a skilled mechanic, witnessing the performance of a machine inadequate by reason of some defect, to accomplish the object for which it had been designed; by the application of his common knowledge and experience, perceives the reason of the failure and supplies what is obviously wanting. It is but the display of the expected skill of the calling and involves only the exercise of the ordinary faculties of reasoning upon the materials supplied by a special knowledge, and the faculty of manipulation which results from the habitual and intelligent practice; and is in no sense the creative work of the inventive faculty which it is the purpose of the Constitution and the patent laws to encourage and reward. — Hollister *v.* Benedict, 113 U. S. 59; 28 L. Ed. 901; 5 S. Ct. 717.

The suggestion of such a change as would occur to the rudest and most unskilled mechanic could not be called invention, and ought not to be dignified by letters patent. — Yale *v.* Greenleaf, 117 U. S. 554; 29 L. Ed. 952; 6 S. Ct. 846.

Atlantic *v.* Brady, 107 U. S. 192; Slawson *v.* Grand, 107 U. S. 649; Phillips *v.* Detroit, 111 U. S. 604.

Given a disk-shaped file with a continuous cutting surface that clogs and chatters in action, and the plain statements of the patents to Keeble and Prescott which declare that the remedy for that evil is a broken cutting surface, and the problem Wright claims to have solved becomes so simple that one who is not a mechanic could hardly fail to perceive that the evil would

be remedied by cutting off the sides of the disk. This was all that Wright did. — Samson *v.* Donaldson, 69 Fed. 621; 16 C. C. A. 342.

Stirrat *v.* Mfg. Co. 61 Fed. 980; Atlantic *v.* Brady, 107 U. S. 192; Vinton *v.* Hamilton, 104 U. S. 485; Slawson *v.* Railroad, 107 U. S. 649; King *v.* Gallun, 109 U. S. 99; Double Pointed *v.* Two Rivers, 109 U. S. 117; Estey *v.* Burdett, 109 U. S. 633; Busey *v.* Mfg. Co. 110 U. S. 131; Phillips *v.* Detroit, 111 U. S. 604; Morris *v.* McMillin, 112 U. S. 244.

Although his pertinacity, diligence, money and skill has made his machine a success, his improvements are not thereby taken out of the domain of mechanical skill. — Birmingham *v.* Gates, 78 Fed. 350; 24 C. C. A. 132.

Atlantic *v.* Brady, 107 U. S. 199.

The need, such as it was, was not obscure; and granting that the remedy was not obvious to the ordinary mechanic, possessed of only the common skill and learning of his profession, yet, to one who was conversant, as Brown is necessarily presumed to have been, with the devices which scientific learning had already given to the world and had employed in this very art, it was not far to seek, and, indeed, was manifest. — Brown *v.* King, 107 Fed. 498; 46 C. C. A. 432.

Note: The soundness of this rule is seriously questioned. It is doubtful if it may be left to the Chancellor, to determine by his own judgment, the particular status of the particular engineer to whom the test of mechanical skill is to be applied. If this already shadowy rule may be made further obscure by giving the Court the right to determine the degree of intelligence and education necessarily possessed by the inventor, the rule would seem to be so vague as to have lost all of its usefulness.

This is apparent (that it was mere mechanical skill) from the fact that Brown and Gilmour each left this to the judgment of the workman or draftsman whom he employed. In view of the Little patent it did not involve invention to supply the means. They were at hand in the prior art. — Lincoln *v.* McWhirter, 142 Fed. 967; 74 C. C. A. 229.

Mast *v.* Stover, 177 U. S. 493; Aron *v.* Manhattan, 132 U. S. 84.

§ 658. Mechanical Skill — Dividing or Uniting Parts.

The prior art shows and the patent admits that such a thing in two pieces was old. That it does not involve invention merely to make such a lining in one piece is well settled. Howard *v.* Detroit, 150 U. S. 164; Standard *v.* Caster, 113 Fed. 162. Nor would the mere fact that the one-piece device was cheaper or more durable constitute invention when such results were merely such ordinary consequences of dispensing with joints as would naturally be anticipated by the workman. Mfg. Co. *v.* Holzer, 67 Fed. 907. — General *v.* Yost, 139 Fed. 568; 71 C. C. A. 552.

The hopper formed of two annular sections does not alter the operation of the crusher. Was this more than the employment of obvious mechanical expedients which would naturally occur to a skilled mechanic or engineer in the intelligent practice of his calling? We think not. To divide into parts what cannot be conveniently handled as a whole is elementary, if not instinctive, and to make the division of circular objects along circular lines has long been common. — Gates *v.* Overland, 147 Fed. 700; 78 C. C. A. 88.

Atlantic *v.* Brady, 107 U. S. 192; Hendy *v.* Miners', 127 U. S. 370.

§ 659. Mechanical Skill — Improvement.

The plan covered by the claims is not "the creative work of that inventive faculty which it was the purpose of the constitution and the patent laws

to encourage and reward." To sustain these claims would be to sanction a monopoly in that which belongs to the public. — Westinghouse *v.* Edison, 63 Fed. 588; 11 C. C. A. 342.

Hollister *v.* Mfg. Co. 113 U. S. 59; Atlantic *v.* Brady, 107 U. S. 192.

A mere improvement in operation by the employment of well known elements and combinations in a well known art with no change of result is not of itself necessarily invention. — Excelsior *v.* Foote, 79 Fed. 442; 24 C. C. A. 673.

Indeed, while Scribner, in the earlier patent, may not have contributed to electrical knowledge the exact concept embodied in the inner combination of the patent suit, but did contribute there to the thought that led up to his later thought. — Western *v.* Galesburg, 144 Fed. 684; 75 C. C. A. 500.

§ 660. Mechanical Skill — Increased Efficiency.

It is no more than mechanical skill to perform with increased speed a series of surgical operations old in themselves and in the order in which they were before performed. — International *v.* Gaylord, 140 U. S. 55; 35 L. Ed. 347; 11 S. Ct. 716.

A more thorough doing of that which has already been done is not invention. — Ansonia *v.* Electrical, 144 U. S. 11; 36 L. Ed. 327; 12 S. Ct. 601.

§ 661. Mechanical Skill — Old Device, Analogous Use.

The mere adaptation of an old device to an analogous use to produce a known result with no other change than the substitution of a figured roller for a smooth one is not invention. — Stimpson *v.* Woodman, 77 U. S. 117; 19 L. Ed. 866.

The adaptation of an old device to an analogous use by a well known means of application does not involve invention. — Bussey *v.* Excelsior, 110 U. S. 131; 28 L. Ed. 95; 4 S. Ct. 38.

The employment of a device which would naturally suggest itself to any mechanic, used within the range of common knowledge and experience, and used here to perform an office exactly analogous to that in which it has been frequently formerly used is not invention. — Day *v.* Fair Haven, 132 U. S. 98; 33 L. Ed. 265; 10 S. Ct. 11.

Substituting a routing machine to perform that which was formerly done by hand to accomplish the same end is not invention. — Corbin *v.* Eagle, 150 U. S. 38; 37 L. Ed. 989; 14 S. Ct. 28.

The devising of means by which the temperature of the flowing water should be varied at different parts of the column, involved nothing but mechanical skill, and was plainly disclosed by Richter's patent. The question where the cooler water ought to be introduced and what the variations in temperature ought to be, were questions for experiment, and are not answered by anything in the patent. — Solvay *v.* Michigan, 90 Fed. 818; 33 C. C. A. 285.

Stearns *v.* Russell, 83 Fed. 218; Steiner *v.* Adrian, 59 Fed. 132.

That the use of well-known mechanical means or well-known mechanical methods to perform known functions, where the result is merely more effective, is only mechanical skill, see U. S. Peg-Wood *v.* Sturtevant, 125 Fed. 378; 60 C. C. A. 244.

Bates *v.* Keith, 82 Fed. 100; affd. 84 Fed. 1014; Nutter *v.* Brown, 98 Fed. 892; Consolidated *v.* Holzer, 67 Fed. 907.

Its location in its new environment evinced merely good judgment, and the slight changes necessary for the suitable adaptation of the associated parts evinced only ordinary mechanical skill. In short, the patentee invented no new device; he used it for no new purpose; he applied it to an old combination. All he did was to apply it to an old purpose in a different, but old, combination. This does not rise to the dignity of invention. — Bradley *v.* Eccles, 143 Fed. 521; 74 C. C. A. 478.

Mast *v.* Stover, 177 U. S. 493.

§ 662. Mechanical Skill — Old Device, New Use.

That mere combination of old devices is mechanical skill, see Clark *v.* Ferguson, 119 U. S. 335; 30 L. Ed. 406; 7 S. Ct. 387.

Vinton *v.* Hamilton, 104 U. S. 485; Hall *v.* Macneale, 107 U. S. 90; Atlantic *v.* Brady, 107 U. S. 192; Slawson *v.* Grand, 107 U. S. 649; King *v.* Gallun, 109 U. S. 99; Double Pointed *v.* Two Rivers, 109 U. S. 117; Esty *v.* Burdett, 109 U. S. 633; Bussey *v.* Excelsior, 110 U. S. 131; Penna. *v.* Locomotive, 110 U. S. 490; Phillips *v.* Detroit, 111 U. S. 604; Morris *v.* McMillin, 112 U. S. 244; Hollister *v.* Benedict, 113 U. S. 59; Thompson *v.* Boissilier, 114 U. S. 1; Stephenson *v.* Brooklyn, 114 U. S. 149; Yale *v.* Greenleaf, 117 U. S. 554; Gardner *v.* Herz, 118 U. S. 180.

Adaptation of an old device to a new use is presumably no more than mechanical skill. — Knapp *v.* Morss, 150 U. S. 221; 37 L. Ed. 1059; 14 S. Ct. 81.

Aron *v.* Manhattan, 132 U. S. 85.

The mechanical adaptation of a machine capable of large general use, such as the Blanchard former, to a specific use, such as a sole rounder involves only mechanical skill. — Gibbon *v.* Loewer, 79 Fed. 325; 24 C. C. A. 612.

Howe *v.* National, 134 U. S. 383.

As the inventor of a machine is entitled to all the uses to which it may be put it is not invention to apply that machine to a specific use after the patent has expired. — Gibbon *v.* Loewer, 79 Fed. 325; 24 C. C. A. 612.

Ansonia *v.* Electrical, 144 U. S. 11.

§ 663. Mechanical Skill — Old Elements, Old Result.

Combination of old elements which perform no new function and accomplish no new result does not involve patentable novelty. — Knapp *v.* Morss, 150 U. S. 221; 37 L. Ed. 1059; 14 S. Ct. 81.

If he has greatly increased the effectiveness of the mechanism he claims, his patent may be sustained, although his elements are old and no original result is accomplished, under the principle of Loom Co. *v.* Higgins, 105 U. S. 580. — Muller *v.* Lodge, 77 Fed. 621; 23 C. C. A. 357.

Barbed Wire Patent, 143 U. S. 275; Topliff *v.* Topliff, 145 U. S. 156.

It is a settled rule of law that the mere combination of several parts, chosen from old machines in the same art, to perform in a new machine the same functions which they performed in the old machines, where the adaptations are such as require only the skill of a mechanic trained in the art, is not patentable as an invention. — Smith *v.* Ridgly, 103 Fed. 875; 43 C. C. A. 365.

§ 664. Mechanical Skill — Portability.

Merely putting rollers under an article, so as to make it movable, when, without rollers, it would not be movable, does not involve the inventive faculty. — Hendy *v.* Golden, 127 U. S. 370; 32 L. Ed. 207; 8 S. Ct. 1275.

Atlantic *v.* Brady, 107 U. S. 192; Thompson *v.* Boissilier, 114 U. S. 1; Yale *v.* Greenleaf, 117 U. S. 554; Pomace *v.* Ferguson, 119 U. S. 335.

The portability of a device is not patentable. — Black Diamond *v.* Excelsior, 156 U. S. 611; 39 L. Ed. 553; 15 S. Ct. 482.

Hendy *v.* Golden, 127 U. S. 370.

§ 665. Mechanical Skill — Strengthening or Increasing.

What is sought in all these patents is strength and lightness, together with cheapness and durability, but they are simply modes of construction. And that described in this patent embraces nothing that is not old and really nothing that is patentable, that is, which involves invention rather than mechanical skill. — Pattee *v.* Kingman, 129 U. S. 294; 32 L. Ed. 700; 9 S. Ct. 389.

It would certainly seem that the proportioning of parts was the work of a mechanic, and not of an inventor. — American *v.* Driggs-Seabury, 109 Fed. 83; 48 C. C. A. 241.

That strengthening parts by ordinary mechanical devices and mechanical skill does not constitute invention, see American *v.* Wyeth, 139 Fed. 389; 71 C. C. A. 485.

Smith *v.* Nichols, 21 Wall. 112; Galvin *v.* Grand Rapids, 115 Fed. 511; Eames *v.* Worcester, 123 Fed. 67.

It was a mere question of extent or degree, of an increase of the size of an existing device to more completely fulfil its purpose. — Streit *v.* Kaiper, 143 Fed. 981; 75 C. C. A. 167.

Smith *v.* Nichols, 21 Wall. 112; Burt *v.* Evory, 133 U. S. 349; Grant *v.* Walter, 148 U. S. 547; Market *v.* Rowley, 155 U. S. 621; Fox *v.* Perkins, 52 Fed. 205; Galvin *v.* Grand Rapids, 115 Fed. 511; Eames *v.* Worcester, 123 Fed. 67.

§ 666. Mechanical Skill — Miscellaneous Decisions.

The mere addition of a cinder notch to a blast furnace, to perform the same function it had performed in a cupola furnace did not involve invention. — Vinton *v.* Hamilton, 104 U. S. 485; 26 L. Ed. 807.

The suggestion of such a change as would occur to the rudest and most unskilled mechanic could not be called invention and ought not to be dignified by letters patent. — Yale *v.* Greenleaf, 117 U. S. 554; 29 L. Ed. 952; 6 S. Ct. 846.

Atlantic *v.* Brady, 107 U. S. 192; Slawson *v.* Grand, 107 U. S. 649; Phillips *v.* Detroit, 111 U. S. 604.

That mechanical skill is not invention, see Ansonia *v.* Electrical, 144 U. S. 11; 36 L. Ed. 327; 12 S. Ct. 601.

Simply to do by a steam attachment, without novelty of application or operation, what had previously been done by hand does not disclose invention. — Stillwell-Bierce *v.* Eufaula, 117 Fed. 410; 54 C. C. A. 584.

That the improvement being a perfectly self-evident step which would occur to any mechanic, and being the natural and only change that could

be made to meet the demand is mere mechanical skill, see American *v.* Morris, 142 Fed. 166; 73 C. C. A. 384.

§ 667. Novelty — Definitions and Distinctions.

It is an elementary proposition in patent law, that, to entitle a plaintiff to recover for the violation of a patent, he must be the original inventor, not only in relation to the U. S. but to other parts of the world. Even if the plaintiff did not know that the discovery had been made before, still he cannot recover if it had been in use or described in public prints, and if he be not in truth the original inventor. — Sewall *v.* Jones, 91 U. S. 171; 23 L. Ed. 275.

Dawson *v.* Follen, 2 Wash. C. C. 311; Bedford *v.* Hunt, 1 Mas. 302.

Hotchkiss *v.* Greenwood, 11 How. 248, does not decide that no use of one material in lieu of another in the formation of a manufacture can, in any case, amount to invention, or be the subject of a patent. If such a substitution involves a new mode of construction, or develops new uses and properties of the article formed, it may amount to invention. The substitution may be something more than formal. It may require contrivance, in which case the mode of making it would be patentable; or the result may be productive of an analogous but substantially different manufacture. — Smith *v.* Goodyear, 93 U. S. 486; 23 L. Ed. 952.

Hicks *v.* Kelsey, 18 Wall. 670; Crane *v.* Price, 1 Web. P. C. 393; Knease *v.* Bk. 4 Wash. C. C. 9.

The degree of ability necessary to constitute patentable invention must be beyond ordinary mechanical skill. — Dunbar *v.* Meyers, 94 U. S. 187; 24 L. Ed. 34.

Hotchkiss *v.* Greenwood, 11 How. 267; Phillips *v.* Paige, 24 How. 167; Jones *v.* Morehead, 1 Wall. 162; Stimpson *v.* Woodman, 10 Wall. 121; Hicks *v.* Kelsey, 18 Wall. 670; Brown *v.* Piper, 91 U. S. 38; Smith *v.* Nichols, 21 Wall. 115; Howe *v.* Abbott, 2 Story, 194; Bean *v.* Smallwood, 2 Story, 411; Glue *v.* Upton, 6 O. G. 842, 7 O. G. 648.

Exclusive rights of the kind are granted only to inventors or discoverers of some new and useful art, machine, manufacture or composition of matter or some new and useful improvement thereof; and the law is well settled that nothing short of invention or discovery will support a patent for any such alleged new and useful improvement. Certain other important conditions are also annexed to the exercise of the right to obtain such a muniment of title for such an invention or discovery; as, for example, the improvement must not only be new and useful, but it must be one not known or used by others in this country and not patented or described before the invention or discovery in any printed publication in this or any foreign country, and must not have been in public use or on sale more than two years prior to the application for a patent. — Roemer *v.* Simon, 95 U. S. 214; 24 L. Ed. 384.

Collar *v.* Van Dusen, 23 Wall. 531; Dunbar *v.* Meyers, 94 U. S. 187.

All improvement is not invention, and entitled to protection as such. Thus to entitle it, it must be the product of some exercise of the inventive faculties, and it must involve something more than what is obvious to persons skilled in the art. — Packing Company Cases, 105 U. S. 566; 26 L. Ed. 1172.

Quoting from Pearce *v.* Mulford, 102 U. S. 112.

Rubber Tip *v.* Howard, 87 U. S. 498; Hotchkiss *v.* Greenwood, 11 How. 248; Stimpson *v.* Woodman, 77 U. S. 117.

In passing upon the novelty of the alleged improvement covered by this patent we are permitted to consider matters of common knowledge or things in common use. — Phillips *v.* Detroit, 111 U. S. 604; 28 L. Ed. 532; 4 S. Ct. 580.

Brown *v.* Piper, 91 U. S. 37; Terhune *v.* Phillips, 99 U. S. 592; King *v.* Gallun, 109 U. S. 99; Ah Kow *v.* Nunen, 5 Sawy. 552.

Novelty and utility regardless of the inventive act do not confer patentability. — Gardner *v.* Herz, 118 U. S. 180; 30 L. Ed. 158; 6 S. Ct. 1027.

Thompson *v.* Boisselier, 114 U. S. 1; Yale *v.* Greenleaf, 117 U. S. 554.

What constitutes, see Clark *v.* Ferguson, 119 U. S. 335; 30 L. Ed. 406; 7 S. Ct. 382.

Vinton *v.* Hamilton, 104 U. S. 485; Hall *v.* Macneale, 107 U. S. 90; Atlantic *v.* Brady, 107 U. S. 192; Slawson *v.* Grand, 107 U. S. 649; King *v.* Gallun, 109 U. S. 99; Double Pointed *v.* Two Rivers, 109 U. S. 117; Esty *v.* Burdett, 109 U. S. 633; Bussey *v.* Excelsior, 110 U. S. 131; Penna. *v.* Locomotive, 110 U. S. 490; Phillips *v.* Detroit, 111 U. S. 604; Morris *v.* McMillin, 112 U. S. 244; Hollister *v.* Benedict, 113 U. S. 59; Thompson *v.* Boisselier, 114 U. S. 1; Stephenson *v.* Brooklyn, 114 U. S. 149; Yale *v.* Greenleaf, 117 U. S. 554; Gardner *v.* Herz, 118 U. S. 180.

This court has repeatedly held that, under the Constitution and the Acts of Congress, a person, to be entitled to a patent, must have invented or discovered some new and useful art, machine, or some new and useful improvement thereof, and that "it is not enough that a thing shall be new in the sense that in the shape or form in which it is produced it shall not have been before known, and that it shall be useful," but it must, under the Constitution and the Statute, amount to an invention or discovery. — Hill *v.* Wooster, 132 U. S. 693; 33 L. Ed. 502; 10 S. Ct. 228.

Thompson *v.* Boisselier, 114 U. S. 1; Stephenson *v.* Brooklyn, 114 U. S. 149; Yale *v.* Greenleaf, 117 U. S. 554; Gardner *v.* Herz, 118 U. S. 180; Pomace *v.* Ferguson, 119 U. S. 335; Hendy *v.* Golden, 127 U. S. 370; Holland *v.* Shipley, 127 U. S. 396; Pattee *v.* Kingman, 129 U. S. 294; Brown *v.* D. C. 130 U. S. 87; Day *v.* Fair Haven, 132 U. S. 98; Watson *v.* Cincinnati, 132 U. S. 161; Marchand *v.* Emken, 132 U. S. 195; Royer *v.* Roth, 132 U. S. 201.

The cheaper article is not always the better one. The substitution of one material for another, or the reduction or increase in size or weight, is not proof of invention. Such changes result from observation and experience, and most frequently are only the carrying forward of the plans and suggestions which have been already made by others. It is not enough that a thing shall be new in the sense that in the shape or form in which it is produced it shall not have been known, and that it shall be useful, but it must amount to an invention or discovery. — Bonnell *v.* Stoll, 61 Fed. 767; 10 C. C. A. 48.

Thompson *v.* Boisselier, 114 U. S. 11; Esty *v.* Burdett, 109 U. S. 633; Penna. *v.* Locomotive, 110 U. S. 490; Hollister *v.* Mfg. Co. 113 U. S. 59; Burt *v.* Evory, 133 U. S. 349; French *v.* Carter, 137 U. S. 239.

Every novelty, in some sense, brings a new result, but whether the new result is such, within the meaning of the decisions, is a very different question. These words are very far from furnishing a universal solvent. Sometimes the character of the new result is such as appeals directly to the trained mind, as well as to the ordinary one. But usually the novelty of the result is only one fact to be weighed in the mass with others. — Consolidated *v.* Holtzer, 67 Fed. 907; 15 C. C. A. 63.

The subject (electricity) is one of the most abstruse and subtle of all the practical sciences, and its pursuit involves the exercise of the keenest in-

telligence and most patient research that gifted man can bestow upon it. We ought, therefore, to be cautious, when a distinct and practical improvement is made in so useful an art, in denying to the author the reward which the law gives to meritorious inventions. — Dayton *v.* Westinghouse, 118 Fed. 562; 55 C. C. A. 390.

But the fact that a thing is new does not prove that invention was present any more than it establishes the other element of patentability — usefulness. — American *v.* Choate, 159 Fed. 140; 86 C. C. A. 330.

Morris *v.* McMillin, 112 U. S. 244; Underwood *v.* Gerber, 149 U. S. 224.

§ 668. Novelty — Evidence of.

The fact that a device might, by modification and change, be made to perform a new and useful function other than the principal purpose of the patent, does not establish novelty or utility. — Metropolitan *v.* Providence, 87 U. S. 342; 22 L. Ed. 303.

Where prior attempts have not been along the same line as that of the patent in suit, such prior unsuccessful efforts do not evidence invention in the successful device. — Butler *v.* Steckel, 137 U. S. 21; 38 L. Ed. 582; 11 S. Ct. 25.

The fact that the change made was one which would have occurred only to a person skilled in the art, and to him only after bestowing considerable thought in overcoming difficulties, evidences the exercise of the inventive faculty. — Gandy *v.* Main, 143 U. S. 587; 36 L. Ed. 272; 12 S. Ct. 598.

The question is, whether a contrivance is patentable which is thus novel in structure and thus novel in its means and manner of using chloride of sodium and surprisingly successful beyond example in accomplishing its purposes. The use of ice as a cooling and of salt as a preserving agent is as old as human knowledge; but the means and manner of employing them in these functions may be infinite, opening a wide field for experiment and invention; and when a device is fallen upon which produces unprecedented and unequalled results in the use of these familiar agents, that device may possess a very high degree of patentable merit. Moreover, the device itself may be a combination of several elementary devices, each as familiar to the public as the letters of the alphabet; yet the combination of them may, as whole, possess an extraordinary novelty and utility. — Haffcke *v.* Clark, 50 Fed. 531; 1 C. C. A. 570.

Harrison *v.* Foundry, 1 App. Cas. 574; Murray *v.* Clayton, 7 Ch. App. 577; Furbush *v.* Cook, 2 Fish. P. C. 668; Ryan *v.* Goodwin, 3 Sumn. 514.

We conclude, therefore, that in applying to cases of doubt the primary rules touching what constitutes invention and the secondary rules touching what is a " new and useful result," a " new function," or a " new sphere of action," we may be influenced by the facts that the improvement in question, although desired for years, was not secured until brought out by the patentee; that the product of the improved machine or process went into general use, and displaced wholly or in a very large degree, prior products. — Watson *v.* Stevens, 51 Fed. 757; 2 C. C. A. 500.

Novelty of combination does not establish invention. — Lamson *v.* Hillman, 123 Fed. 416; 59 C. C. A. 510.

Interior *v.* Perkins, 80 Fed. 528; Kelly *v.* Clow, 89 Fed. 297; Busell *v.* Stevens, 137 U. S. 423.

This precise combination in its entirety was novel; but mere novelty is not invention, when the teachings of the art would naturally lead one skilled therein to produce such a combination whenever an improvement of that sort was required. — Pieper *v.* Electro-Dental, 160 Fed. 930; 88 C. C. A. 112.

§ 669. Novelty — Miscellaneous Rules.

The combination must be new; and if productive of new and useful results and not a mere aggregation of results, it might be the subject of a patent, though all the parts were used before. But here the combinations patented as well as their separate elements, had been anticipated. — Dane *v.* Chicago, 131 U. S. cxxvi, app.; 23 L. Ed. 82.

Though it may be true that every one of these elements had been employed before, yet they had never been used in the same combination and put together in the same manner as the inventor combined and arranged them, so as to produce a result like his. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

In any view of the case, the specification describes nothing that the patentee is entitled to claim; but only what every one had a right to use without his assistance. To sustain this patent would be to deprive the public of the right to arrange and use a well known apparatus in the only way in which its purpose can be beneficially accomplished. — Preston *v.* Manard, 116 U. S. 661; 29 L. Ed. 763; 6 S. Ct. 695.

Guidet *v.* Brooklyn, 105 U. S. 550; Flood *v.* Hicks, 2 Biss. 169; 4 Fish. P. C. 156; King *v.* Wheeler, 2 B. & A. 345; Macnamara *v.* Hulse, Car. & M. 4; Kay *v.* Marshall, 7 Scott, 548; S. C. 5 Bing. N. C. 492; 1 Beav. 535; 8 Cl. & Fin. 245; West. H. L. 682; 2 Web. P. C. 34, 68, 75, 77, 82, 84.

There is no novelty in applying an old device used for heating water by a steam coil to a similar use in heating wines to age them. — Dreyfus *v.* Searle, 124 U. S. 60; 31 L. Ed. 352; 8 S. Ct. 390.

When an element in the combination performs no function and has no mechanical effect it is not sufficient to constitute novelty in combination. — Fond Du Lac *v.* May, 137 U. S. 395; 34 L. Ed. 714; 11 S. Ct. 98.

Pickering *v.* McCullough, 104 U. S. 310; Double Pointed *v.* Two Rivers, 109 U. S. 117; Stephenson *v.* Brooklyn, 114 U. S. 149; Hendy *v.* Golden, 127 U. S. 370; Aron *v.* Manhattan, 132 U. S. 84.

The question of novelty, though not pleaded, is before the court. — Richards *v.* Chase, 158 U. S. 299; 39 L. Ed. 991; 15 S. Ct. 831.

Dunbar *v.* Myers, 94 U. S. 187; Slawson *v.* Grand, 107 U. S. 649; Brown *v.* Piper, 91 U. S. 37.

§ 670. Old Device, New Use — Aggregation.

With all the anticipatory devices before us, it is apparent that the mere changes in the shape of the dies was a minor part of the work involved in so changing the machine as to make it perform a wholly different function, the invention consisting rather in the idea that such change could be made, than in making the necessary mechanical alterations. — Hobbs *v.* Beach, 180 U. S. 383; 45 L. Ed. 586; 21 S. Ct. 409.

Beach *v.* American, 63 Fed. 597.

It is not invention to adapt two old devices to analogous uses and combining them into one machine, where each performs its own separate function,

the result being the sum and not the product of the two functions. — Appleton *v.* Star, 60 Fed. 411; 9 C. C. A. 42.

Penna. *v.* Locomotive, 110 U. S. 490; Brown *v.* Piper, 91 U. S. 37; Howe *v.* Abbott, 2 Story, 190; Fuller *v.* Yentzer, 94 U. S. 288; Roberts *v.* Ryer, 91 U. S. 150; Stow *v.* Chicago, 104 U. S. 550; Heald *v.* Rice, 104 U. S. 755; Stimpson *v.* Woodman, 10 Wall. 117; Tucker *v.* Spalding, 13 Wall. 453; Grant *v.* Walter, 148 U. S. 547.

§ 671. Old Device, New Use — General Rules.

The application of an old process or machine to a similar or analogous subject, with no change in the manner of application, and no result substantially distinct in its nature, will not sustain a patent, even if the new form of result has not before been contemplated.

The leading case, most frequently cited, giving both American and English authorities. — Pennsylvania *v.* Locomotive, 110 U. S. 490; 28 L. Ed. 222; 4 S. Ct. 220.

Hotchkiss *v.* Greenwood, 11 How. 248; Phillips *v.* Page, 24 How. 164; Jones *v.* Morehead, 1 Wall. 155; Revg. 1 Fish. P. C. 521; Hicks *v.* Kelsey, 18 Wall. 670; Smith *v.* Nichols, 21 Wall. 112; Brown *v.* Piper, 91 U. S. 37; Roberts *v.* Ryer, 91 U. S. 150; *Bridge v. Iron*, 95 U. S. 274; *Planing v.* Keith, 101 U. S. 479; Pearce *v.* Mulford, 102 U. S. 112; Heald *v.* Rice, 104 U. S. 737; Atlantic *v.* Brady, 107 U. S. 192; Crane *v.* Price, 4 Man. & G. 580; 5 Scott, (N. R.) 338; 1 Web. P. C. 393; Dobbs *v.* Penn. 5 Exch. 427; Smith *v.* Dent. Co. 93 U. S. 486; Dental *v.* Davis, 102 U. S. 222; Bush *v.* Fox, Macrcdy P. C. 152; 9 Exch. 651; 5 H. L. Cas. 707; Brook *v.* Aston, 27 L. J. (N. S.) Q. B. 145; 8 El. & Bl. 478; Envelope *v.* Seymer, 28 L. J. (N. S.) C. P. 22; 5 C. B. (N. S.) 164; Herwood *v.* G. N. R. Co. 11 H. L. Cas. 654.

The rule in Penna. *v.* Locomotive, 110 U. S. 490, quoted and followed. — Blake *v.* San Francisco, 113 U. S. 679; 28 L. Ed. 1070; 5 S. Ct. 692.

It is not invention to adapt an old device used at sea to an analogous use on land. — Blake *v.* San Francisco, 113 U. S. 679; 28 L. Ed. 1070; 5 S. Ct. 692.

The adaptation of an old device to a new and analogous use, involving such changes only as would occur to any skilled mechanic is not invention. — Peters *v.* Hanson, 129 U. S. 541; 32 L. Ed. 742; 9 S. Ct. 393.

Penna. *v.* Locomotive, 110 U. S. 490.

The adaptation of an old device to a new and analogous use, involving such changes as would occur to any skilled mechanic, is not invention. — Peters *v.* Active, 129 U. S. 530; 32 L. Ed. 738; 9 S. Ct. 389.

Penna. *v.* Locomotive, 110 U. S. 490.

Though the inventor be entitled to the merit of being the first to employ an old combination in a new and useful way, if the use be analogous, his right to a patent must depend upon the novelty of means employed and not the end accomplished. — Aron *v.* Manhattan, 132 U. S. 84; 33 L. Ed. 272; 10 S. Ct. 24.

If the adaptation required invention it was patentable; but if, in view of the state of the art it involved only mechanical skill it was not invention. — Aron *v.* Manhattan, 132 U. S. 84; 33 L. Ed. 272; 10 S. Ct. 24.

Neither is it invention to combine old devices into a new article without producing any new mode of operation. — Burt *v.* Evory, 133 U. S. 349; 33 L. Ed. 647; 10 S. Ct. 349.

Stimpson *v.* Woodman, 77 U. S. 117; Heald *v.* Rice, 104 U. S. 737; Hall *v.* Macneale, 107 U. S. 90; Hill *v.* Wooster, 132 U. S. 693.

The application of an old process or machine to a similar or analogous subject, with no change in the manner of applying it, and no result substantially distinct in its nature, will not sustain a patent, even if the new form of result has not before been contemplated. — Howe *v.* National, 134 U. S. 388; 33 L. Ed. 963; 10 S. Ct. 570.

Penna. *v.* Locomotive, 110 U. S. 490; Thompson *v.* Boisselier, 114 U. S. 1; Peters *v.* Active, 129 U. S. 530; Peters *v.* Hanson, 129 U. S. 542; Aron *v.* Manhattan, 132 U. S. 84; Watson *v.* Cincinnati, 132 U. S. 161.

Merely putting an old device to a new use is not invention. — St. Germain *v.* Brunswick, 135 U. S. 227; 34 L. Ed. 122; 10 S. Ct. 822.

The application of an old process, machine or device to a like or analogous use, with no change in the mode of application and no result substantially different in its nature, will not sustain a patent even if the new form of result has not been before contemplated. — Consolidated *v.* Walker, 138 U. S. 124; 34 L. Ed. 920; 11 S. Ct. 292.

Penna. *v.* Locomotive, 110 U. S. 490; Blake *v.* San Francisco, 113 U. S. 679.

Nothing is better settled in this court than that the application of an old process to a new and analogous purpose does not involve invention, even if the new result had not been before contemplated. It is no new invention to use an old machine for a new purpose. The inventor of a machine is entitled to all the uses to which it can be put, no matter whether he had conceived the idea of the use or not. — Ansonia *v.* Electrical, 144 U. S. 11; 36 L. Ed. 327; 12 S. Ct. 601.

Gandy *v.* Main, 143 U. S. 587; Roberts *v.* Ryer, 91 U. S. 150; Pennsylvania *v.* Safety T. 110 U. S. 490; Miller *v.* Force, 116 U. S. 22; Crandall *v.* Watters, 20 Blatchf. 97; Re Arkell, 15 Blatchf. 437; Blake *v.* San Francisco, 113 U. S. 679; Smith *v.* Elliott, 9 Blatchf. 400; Western Elec. Co. *v.* Ansonia, 114 U. S. 447; Spill *v.* Celluloid, 22 Blatchf. 441; Sewall *v.* Jones, 91 U. S. 171.

It is not a patentable invention to apply old and well-known devices and processes to new uses in other and analogous arts. — Lovell *v.* Cary, 147 U. S. 623; 37 L. Ed. 307; 13 S. Ct. 472.

Vinton *v.* Hamilton, 104 U. S. 485; Stow *v.* Chicago, 104 U. S. 547; Penna. *v.* Locomotive, 110 U. S. 490; Blake *v.* San Francisco, 113 U. S. 679; Thompson *v.* Boisselier, 114 U. S. 1; Miller *v.* Force, 116 U. S. 22; Dreyfus *v.* Searle, 124 U. S. 60; Brown *v.* D. C. 130 U. S. 87; Aron *v.* Manhattan, 132 U. S. 82; Watson *v.* Cincinnati, 132 U. S. 161; Marchand *v.* Emken, 132 U. S. 195; Royer *v.* Roth, 132 U. S. 201; Hill *v.* Wooster, 132 U. S. 693; Burt *v.* Evory, 133 U. S. 349; Howe *v.* Needle Co. 134 U. S. 388; Florsheim *v.* Schilling, 137 U. S. 64; Consolidated *v.* Walker, 138 U. S. 124; Ansonia *v.* Electric, 144 U. S. 11; Ryan *v.* Hard, 145 U. S. 242.

Compare Cary *v.* Wolff, 24 Fed. 139; Crane *v.* Price, 1 Web. P. C. 393; Smith *v.* Goodyear, 93 U. S. 486; Loom Co. *v.* Higgins, 106 U. S. 580.

Where the alleged novelty consists in transferring a device from one branch of industry to another, the answer depends upon a variety of considerations. In such cases we are bound to inquire into the remoteness of relationship of the two industries; what alterations were necessary to adapt the device to its new use, and what the value of such adaptation has been to the new industry. If the new use be analogous to the former one, the court will undoubtedly be disposed to construe the patent more strictly, and to require clear proof of the exercise of the inventive faculty in adapting

it to the new use — particularly if the device be one of minor importance in its new field of usefulness. On the other hand, if the transfer be to a branch of industry but remotely allied to the other, and the effect of such transfer has been to supersede other methods of doing the same work, the court will look with a less critical eye upon the means employed in making the transfer. Doubtless a patentee is entitled to every use to which his invention is susceptible, whether such use be known or unknown to him; but the person who has taken his device and by improvements thereon has adapted it to a different industry, may also draw to himself the quality of inventor. If, for instance, a person should take a coffee mill and patent it as a mill for grinding spices, the double use would be too manifest for serious argument. So, too, this court has denied invention to one who applied the principle of an ice cream freezer to the preservation of fish (Brown *v.* Piper, 91 U. S. 37); to another who changed the proportions of a refrigerator in such manner as to utilize the descending instead of the ascending current of cold air (Roberts *v.* Ryer, 91 U. S. 150); to another who employed an old and well-known method of attaching car trucks to the forward truck of a locomotive engine (Penna. *v.* Locomotive, 110 U. S. 490); and to still another who placed a dredging screw at the stem instead of the stern of a steamboat (Atlantic *v.* Brady, 107 U. S. 192). In Tucker *v.* Spalding, 80 U. S. 453, the patent covered the use of movable teeth in saws and saw plates. A prior patent exhibited cutters of the same general form as the saw teeth of the other patent, attachable to a circular disk, and removable as in the other, the purpose of which patent was for cutting of tongues and grooves, mortises, etc. The court held that if what it actually did was in its nature the same as sawing, and its structure and action suggested to the mind of an ordinary skilled mechanic this double use to which it could be adapted without material change, that such adaptation to a new use was not invention, and was not patentable.

Indeed it often requires as acute a perception of the relations between cause and effect, and as much of the peculiar intuitive genius which is characteristic of great inventors, to grasp the idea that a device used in one art may be made available in another as would be necessary to create the device de novo. And this is not the less true if, after the thing has been done, it appears to the ordinary mind so simple as to excite wonder that it was not thought of before. The apparent simplicity of a new device often leads an inexperienced person to think that it would have occurred to anyone familiar with the subject; but the decisive answer is that with dozens and perhaps hundreds of others laboring in the same field, it had never occurred to anyone before. The practised eye of the ordinary mechanic may be safely trusted to see what ought to be apparent to anyone. As was said in Webster *v.* Higgins, 105 U. S. 580, " now that it has succeeded, it may seem very plain to anyone that he could have done it as well. This is often the case with inventions of the greatest merit. It may be laid down as a general rule, though perhaps not an invariable one, that if a new combination and arrangement of known elements produce a new and beneficial result never attained before, it is evidence of invention."

If the new use be so nearly analogous to the former one, that the applicability of the device to its new use would occur to a person of ordinary mechanical skill, it is only a case of double use, but if the relations between them be remote, and especially if the use of the old device produce a new result, it may at least involve the exercise of the inventive faculty. — Potts *v.* Creager, 155 U. S. 597; 39 L. Ed. 275; 15 S. Ct. 194.

That an old device may be put to a new use, though the result itself be old, thus involving invention, see National *v.* Boston, 156 U. S. 502; 39 L. Ed. 511; 15 S. Ct. 434.

The defense of noninvention is, in this case, entirely theoretical. The question relates to an important and complex art in which experience is both valuable and is at hand; but experience has not apparently tested itself on the subject. The assertion is that inasmuch as the motive power of steam or air has been employed in many engines, and the means of such employment have been shown in many patents, nothing is necessary for the application of such power to produce a new result, but to select, and perhaps adapt, old and well known appliances. But as was said by Judge Wheeler, in the circuit court, with respect to the McCoy and Bates tools, "the building, adapting in size, proportion and relation, and so enclosing such parts as to form a tool of such power, capable of guidance to such work by hand, would seem to involve high and most useful inventive skill, well worthy of a patent upon the tool itself, or improvements of that kind upon it." While it is true that modern scientific skill has developed an exceedingly great variety of ways in which the agency of steam can be made useful, the element of novelty is generally present in the particular means which produce a new result. And it is not reasonable to infer from the variety of old appliances that the ascertainment of means to properly move and control the movement of a new tool of the delicacy, accuracy, force and rate of speed required for such an instrument as a dental tool demanded no invention, but required merely a selection by the mechanic from the types of engines at hand in a workshop, or in a volume of drawings. In addition, the history of the tool of this patent shows that the ascertainment of the appropriate means, or of an improvement upon existing means, which should properly move a hand cutter for the carving of marble, also called for an inventive mind. Though marble cutting and engine building were each old arts, no improvement upon the mallet and chisel appeared until the tools of McCoy and Bates came into existence. If the turning of a rock drill into a marble or granite cutter was a thing to be had for the asking, it would seem that the transformation would have been more promptly made. — Fisher *v.* American, 71 Fed. 523; 18 C. C. A. 235.

There may be invention in applying a device which is either simple or old where it is used in a new way, and accomplishes a new result; and the rule is well settled in cases of that class that doubt on the question of patentable novelty may be resolved in favor of the patent on such proof of utility and popular acceptance as shown in this record. — Irwin *v.* Hasselman, 97 Fed. 964; 38 C. C. A. 587.

Loom Co. *v.* Higgins, 105 U. S. 580; Topliff *v.* Topliff, 145 U. S. 156; Krementz *v.* Cottle, 148 U. S. 556.

It is only when the new use is so recondite and remote from that to which the old device has been applied, or for which it was conceived, that the application to the new use would not occur to the mind of the ordinary mechanic, skilled in the art, seeking to devise means to perform the desired function, with the old machine or combination present before him, that its conception rises to the dignity of invention. — Mallon *v.* Gregg, 137 Fed. 68; 69 C. C. A. 48.

Potts *v.* Creager, 155 U. S. 597; Hobbs *v.* Beach, 180 U. S. 383; Adams *v.* Lindell, 77 Fed. 432; National *v.* Interchangeable, 106 Fed. 693.

The rule is unquestionable that new adaptation of old means may constitute invention — that the test may reside in the creative thought, rather than the mechanical difficulties overcome — but it is equally well settled that monopoly cannot be granted for an adaptation which is merely a double use, or calls only for the exercise of ordinary mechanical skill. The line of distinction between the one and the other attribute is incapable of clear

general definition, and the grant of a patent which is rightly presumptive of invention should not be defeated as wanting in that quality, unless the prior art plainly taught such adaptation. But when analogous use is well known and no substantial departure appears in the patentee's adaptation, monopoly cannot be authorized within the policy of the law. — Lowden *v.* Janesville, 148 Fed. 686; 78 C. C. A. 548.

§ 672. Old Device, New Use — Non-Patentable.

The learned judge, by interpolating the new purpose of the improvement, not only inserted what was not specified in the claim; but if it had been, it would not have helped out the difficulty, as it was in effect, upon the construction given, simply applying an old organization to a new use, which is not a patentable object. — Phillips *v.* Page, 65 U. S. 164; 16 L. Ed. 639.

The elements of the combination were old; the result produced was old; the combination had been employed for analogous uses. The principal change was the substitution of a figured roller for pebbling for a smooth roller for smoothing. *Held:* not invention. — Stimpson *v.* Woodman, 77 U. S. 117; 19 L. Ed. 866.

The idea of this patentee was a good one, but his device to give it effect, though useful, was not new. Consequently he took nothing by his patent. — Rubber Tip *v.* Howard, 87 U. S. 498; 22 L. Ed. 410.

It is no new invention to use an old machine for a new purpose. The inventor of a machine is entitled to the benefit of all the uses to which it can be put, no matter whether he had conceived the idea of the use or not. — Roberts *v.* Ryer, 91 U. S. 150; 23 L. Ed. 267.

It would seem, that if all the elements may be found old, and that if, in the opinion of the Court (Justice Woods writing the opinion) the combination did not produce a new result (although an old result was produced in a new way by the combination of old elements) it did not require the least degree of ingenuity, and cannot be called invention. — Stephenson *v.* Brooklyn, 114 U. S. 149; 29 L. Ed. 58; 5 S. Ct. 777.

Hotchkiss *v.* Greenwood, 11 How. 248; Stimpson *v.* Woodman, 10 Wall. 117; Atlantic *v.* Brady, 107 U. S. 192; Slawson *v.* R. R. 107 U. S. 649; King *v.* Gallun, 109 U. S. 99; Phillips *v.* Detroit, 111 U. S. 604.

A patent cannot be taken out for an article old in purpose and shape and mode of use, when made for the first time out of an existing material, and with accompaniments before applied to such an article, merely because the idea has occurred that it would be a good thing to make the article out of that particular old material. — Gardner *v.* Herz, 118 U. S. 180; 30 L. Ed. 158; 6 S. Ct. 1027.

The mere adaptation of an old device to a new combination, involving no functional change, is not invention. — Royer *v.* Roth, 132 U. S. 201; 33 L. Ed. 322; 10 S. Ct. 58.

Double Pointed *v.* Two Rivers, 109 U. S. 117; Pomace *v.* Ferguson, 119 U. S. 335; Dreyfus *v.* Searle, 124 U. S. 60; Hendy *v.* Golden, 127 U. S. 370.

The adaptation of an old device to a new and analogous use to be patentable must show novelty of means. — Aron *v.* Manhattan, 132 U. S. 84; 33 L. Ed. 272; 10 S. Ct. 24.

It is not invention to adapt an old machine designed for turning wood to an analogous use in turning metal. — Howe *v.* National, 134 U. S. 388; 33 L. Ed. 963; 10 S. Ct. 570.

To make a combination of old elements patentable, there must be some new result accomplished, and as the result in this case is a mere aggregation of the several functions of the different elements of the combination, each performing its old function in the old way, we see nothing upon which a claim to invention can be based. The device is undoubtedly a convenient one, and appears to have proven profitable to the patentee, but we are unanimously of opinion that it lacks the necessary quality of invention. — Richards *v.* Chase, 159 U. S. 477; 40 L. Ed. 225; 16 S. Ct. 53.

The new use is not an analogous use. It is the same use. It seems clear to us, therefore, that it did not involve invention to take the hollow reel from the ordinary fire engine or water sprinkler, and put it on a chemical engine. The introduction of the hollow journaled reel in the chemical fire engine was nothing but the application of an old device to a similar subject, with little or no change in the manner of application, and with no result substantially distinct in its nature. The hollow journaled reel may have been better adapted to the use in the chemical engine than in the ordinary steam pressure pump engine; but this, it seems to us, is a mere difference in degree of the result, and did not involve, in bringing it about, anything but what would naturally occur to one skilled in the art. — Steiner *v.* Adrian, 59 Fed. 132; 8 C. C. A. 44.

Roller Mill *v.* Walker, 138 U. S. 124; Electric *v.* LaRue, 139 U. S. 606; Blake *v.* San Francisco, 113 U. S. 679; Penna. *v.* Locomotive, 110 U. S. 490; Preston *v.* Manard, 116 U. S. 661.

All the advantages ascribable to the patented combination are due to the assembling together of an old elevator and an old cutter adjusting mechanism. This could be effected without requiring any modification of the parts, which was not an obvious one and within the ordinary skill of the mechanic. The application of an old organism to an analogous use is not patentable. It is not invention to use an old combination of devices in a new location to perform the same operations, when no change or modifications are required to adapt it to the new use, or when only such are required as can be made by the exercise of ordinary mechanical skill. — Briggs *v.* Central, 60 Fed. 87; 8 C. C. A. 480.

Blake *v.* San Francisco, 113 U. S. 679; Penna. *v.* Locomotive, 110 U. S. 490; Steiner *v.* Adrian, 59 Fed. 132; Aron *v.* Railway, 132 U. S. 84.

The entire argument of the appellants proceeds upon the erroneous assumption that a machine or mechanical combination which in itself contains no novelty amounting to invention may be patentable because of some new use or result which is accomplished; a proposition which, as we have seen, leads to the inadmissible conclusion that for one use or purpose a device may be public property and for another use may be the subject of a patent. On the contrary, it is well settled, we suppose, "that a patent for a machine covers its use for all purposes, whether anticipated by the patentee or not, and that the functions or methods of operation of mechanical devices are not patentable." — Galt *v.* Parlin, 60 Fed. 417; 9 C. C. A. 49.

Appleton *v.* Star, 60 Fed. 411; Western *v.* Sperry, 58 Fed. 186; Temple *v.* Goss, 58 Fed. 193; Collar Co. *v.* Van Deusen, 23 Wall. 530; Fuller *v.* Yentzer, 94 U. S. 288; Burr *v.* Duryee, 1 Wall. 531; Heald *v.* Rice, 104 U. S. 755; Stow *v.* Chicago, 104 U. S. 550; Roberts *v.* Ryer, 91 U. S. 150; Stimpson *v.* Woodman, 10 Wall. 117; Tucker *v.* Spalding, 13 Wall. 453.

If the alleged new article of manufacture was in fact an old article at the date of the patent, — as we think it was, — then it goes without saying that the patentee was not entitled to a patent merely because he suggested the idea of devoting it to a new use. — Browning *v.* Colorado, 61 Fed. 845; 10 C. C. A. 112.

Brown *v.* Piper, 91 U. S. 37; Roberts *v.* Ryer, 91 U. S. 150; Knapp *v.* Morss, 150 U. S. 221; Aron *v.* Railway, 132 U. S. 84; Ansonia *v.* Electrical, 144 U. S. 11.

In the case at bar it cannot be said that there has been a transfer to a "branch of industry remotely allied," of the use of solid in lieu of jointed work, because this substitution has been practised in every industry, unless it be in the particular one at bar; and it cannot be said that the latter is remotely allied to all others, though it may be to some. Whatever has become free and common to the field of practical arts, as a whole, must be free to every part of that field, except under extremely exceptional circumstances. — Consolidated *v.* Holtzer, 67 Fed. 907; 15 C. C. A. 63.

Potts *v.* Creager, 155 U. S. 597.

If it is of importance to simultaneously raise two disconnected but adjacent objects of comparatively small size, which can be accomplished by a small expenditure of force, it would seem natural to connect them by a rod, and also that the experiment would be within the ordinary scope of the mechanic who is in charge of the work of construction. The simplicity of the device may lead us to disregard the inventive skill which produced it, but it was, in our opinion, an ordinary mechanical experiment appearing in a new place. When it is enlarged to meet the needs of enlarged train service, the looped wire becomes a series of levers, but the improvement, in its original and patented form, was an obvious and natural one. — Mayor *v.* American, 70 Fed. 853; 17 C. C. A. 467.

It is simply the case of an employment for a new use, and nothing more, and falls within the general doctrine of those cases in which it has been so many times held that the mere extension of a well-known device into another field of usefulness, where the transfer does not involve the faculty of inventive genius, will not support a patent. — Schreiber *v.* Grimm, 72 Fed. 671; 19 C. C. A. 67.

Distinguishing, Potts *v.* Creager, 155 U. S. 597; Electric *v.* LaRue, 139 U. S. 601; Topliff *v.* Topliff, 145 U. S. 156; Barbed Wire Case, 143 U. S. 275; Sessions *v.* Romadka, 145 U. S. 29.

Nor is it invention to inclose the operative mechanism in an old bicycle, double dish shell when used for a bicycle bell, instead of mounting it upon a standard, for a call bell; affixing it to a door jam for a door bell; or arranging it to engage with an opening window sash for a burglar alarm. — New Departure *v.* Bevin, 73 Fed. 469; 19 C. C. A. 534.

That the mere bringing together, in a new combination, of old devices or elements, especially if they belong to the same art or to arts kindred to that to which the combination belongs, does not constitute invention is well settled. "It is not enough that a thing shall be new, in the sense that in the shape or form in which it is produced it shall not have been before known and that it shall be useful, but it must, under the constitution and the statute, amount to an invention or discovery." — Interior *v.* Perkins, 80 Fed. 528; 25 C. C. A. 613.

Thompson *v.* Boisselier, 114 U. S. 1; Hill *v.* Wooster, 132 U. S. 693; Burt *v.* Evory, 133 U. S. 349; Pickering *v.* McCullough, 104 U. S. 310; Florsheim *v.*

Schilling, 137 U. S. 64; Adams *v.* Stamping Co. 141 U. S. 539; Deere *v.* Case, 56 Fed. 841.

The adaptation of an old device to a new and uncontemplated use, involving mere change of detail and arrangement is not invention. — Eastman *v.* Getz, 84 Fed. 458; 28 C. C. A. 459.

In view of the use of a string wrapper in the form of an envelope for letters, it was not invention to apply the string to wrappers or envelopes for newspapers. — Williams *v.* Wrapper, 84 Fed. 197; 28 C. C. A. 325. Reversed, 86 Fed. 641.

It has long been settled that a mere use or function is not the subject of a patent, and also that "the inventor of a machine is entitled to the benefit of all the uses to which it can be put, no matter whether he conceived the idea of the use or not." Roberts *v.* Ryer, 91 U. S. 150; Goshen *v.* Bissell, 72 Fed. 67. It would seem to follow as a corollary to these two propositions that, where it requires substantially no change in the old device to adapt it to the new use, such adaptation cannot be the subject of a patent, no matter how remote and unthought of the use may be, provided no new force or mode of application be necessary in carrying on such use; otherwise, in case the device has been patented, the right of monopoly of the prior patentee is invaded by excluding him from a use of a machine which, by the rule stated and the authorities cited above, he is entitled exclusively to enjoy. If, however, the adaptation of the old machine to the new use involves a change in its form or operation, it may, by the changes and very newness of the use or function, become either a new machine or an improvement on an old machine, and be patentable as such; or the new use of the old machine may result in a new product, which is itself patentable; or the use may be a step in a new and patentable process. — Stearns *v.* Russell, 85 Fed. 218; 29 C. C. A. 121.

Penna. *v.* Locomotive, 110 U. S. 490; reviewing Potts *v.* Creager, 155 U. S. 597; Schreiber *v.* Grimm, 72 Fed. 671; Electric *v.* La Rue, 139 U. S. 601; Colgate *v.* Telegraph, 15 Blatch. 365; Williames *v.* McNeeley, 64 Fed. 766; Howe *v.* Abbott, 2 Story, 190; Bean *v.* Smallwood, 2 Story, 408; Knapp *v.* Morss, 150 U. S. 221; Aron *v.* Railroad, 132 U. S. 85; Ansonia *v.* Electrical, 144 U. S. 11; Trimmer *v.* Stevens, 137 U. S. 423; Dunbar *v.* Tack Co. 4 B. & A. 518; Moffitt *v.* Rogers, 8 Fed. 147; Miller *v.* Force, 116 U. S. 22; Manufacturing Co. *v.* Cary, 147 U. S. 623; Kay *v.* Marshall, 2 Web. Pat. Cas. 36; Harwood *v.* Railway, 11 H. L. Cas. 654; McClain *v.* Ortmayer, 141 U. S. 419; Knapp *v.* Morss, 150 U. S. 221.

Note: This holding by Judge Taft, undoubtedly proper as applied to the case in hand, is believed to be too broad a statement of the rule. It is an attempt to draw the line between invention and double use or mechanical skill; and like every such attempt must have its faults. The line never can be drawn in advance of the case presented.

The arrangement of such pipe in transverse horizontal series with provisions for varying the heat in the different series, is shown in the beer-cooler patent. To apply the apparatus thus disclosed in the prior art to the Solvay column, does not seem to us to have required any invention whatever. — Solvay *v.* Michigan, 90 Fed. 818; 33 C. C. A. 285.

Attention is called to the circumstance that, when the former opinion of this court was handed down (Feb. 27, 1894, 60 Fed. 87), the Supreme Court had not decided Potts *v.* Creager, (1895) 155 U. S. 597, 15 Sup. Ct. 194. It is not thought, however, that that case lays down any new principle of law, nor that it has overruled the earlier decisions which were cited in Briggs *v.*

Ice Co. On the contrary, it indicates quite clearly that the question of so-called double use — whether, that is to say, the new use is so nearly analogous to the former one that the applicability of the device to its new use would occur to a person of ordinary mechanical skill — is one dependent upon the peculiar facts of each case. It would be difficult to find uses more analogous than we have here. If the apparatus for raising and lowering had, in its earlier use, been applied, for instance, to the movements of ore buckets in a shaft, it might, perhaps, be urged that the analogy was imperfect; but here in both applications the apparatus moves a cutter (which is itself to remove surplus material) to the place where the operator wishes it to cut. It would seem to make little difference that the workmen who plane wood do not plane ice. In Potts *v.* Creager, the Supreme Court approved their former decision in Brown *v.* Piper, 91 U. S. 40, where a patent for preserving fish for food purposes was held to be without patentable novelty, in view of an earlier patent for a "corpse preserver" used in the undertaker's art. — Briggs *v.* Duell, 93 Fed. 972; 36 C. C. A. 38.

Stearns *v.* Russell, 85 Fed. 218; Rogers *v.* Fitch, 81 Fed. 959.

But it is said that in the "furniture caster art" such a spring made integral with the caster socket is not shown, and that it may be invention to transfer a device from one art to another. Potts *v.* Creager, 155 U. S. 597. But the transfer has plainly been made from arts where the spring was integral with the socket, and where its purpose and function was precisely that to which it was applied in Berkey's device. No change in form has been made to adopt (adapt) the device to a new application. No difficulties of adaptation have had to be cleared away. Such a change from even a non-analogous art cannot be regarded as involving invention. — Standard *v.* Caster, 113 Fed. 162; 51 C. C. A. 109.

Schreiber *v.* Grimm, 72 Fed. 671.

There was no substantial difference in the method or purpose in using zinc as a means of retaining Moxham's plate in its pocket over its former well-known use in other branches of the founder's or iron worker's art. Its use by Moxham was plainly analogous, although never before applied in railway structure. It is merely a case of new use without any change in the method of using the old element to adapt it to the new use or any new mode of application. — Johnson *v.* Toledo, 119 Fed. 885; 56 C. C. A. 415.

Mfg. Co. *v.* Cary, 147 U. S. 623; Potts *v.* Creager, 155 U. S. 597.

It is not invention to combine old devices into a new article without producing any new mode of operation. — Greist *v.* Parsons, 125 Fed. 116; 60 C. C. A. 34.

Walker Pat. sec. 37; Burt *v.* Evory, 133 U. S. 349; Florsheim *v.* Schilling, 137 U. S. 64; Interior *v.* Perkins, 80 Fed. 528; Kelly *v.* Clow, 89 Fed. 297.

The thought that a machine or combination which is discovered in a remote art, where it is used to perform another function, a machine or combination which was never designed by its maker, was never actually used, and was not apparently suitable, to accomplish the desideratum may be adopted to perform the requisite function, may be, and frequently is, with proper mechanical adaptation, the result of the exercise of the inventive faculty. But a thought which would naturally occur to any mechanic familiar with the object to be attained, and with an existing machine or combination discovered in the same art or in one nearly analogous to it, designed, suitable, and used to perform a similar function, that this machine or combination can be used or adapted to perform the function desired, is not the product of

inventive genius, but the mere result of the application of the skill of the mechanic to the subject under consideration. The application of an old device to a new use is not in itself an invention or capable of protection by a patent. A prior patentee who has plainly described and claimed his machine or combination has the right to every use to which his device can be applied, and to every way in which it can be utilized to perform its function, whether he was aware of all these uses or methods of use when he claimed and secured his monopoly or not. — Mallon *v.* Gregg, 137 Fed. 68; 69 C. C. A. 48.

National *v.* Interchangeable, 106 Fed. 693; Roberts *v.* Ryer, 91 U. S. 150; Miller *v.* Mfg. Co. 151 U. S. 186; Goshen *v.* Bissell, 72 Fed. 67; Stearns *v.* Russell, 85 Fed. 218; Manufacturing Co. *v.* Neal, 90 Fed. 725; Tire Co. *v.* Lozier, 90 Fed. 732.

That the mere adaptation of an elevator with closing floors to use in a refrigerating plant, although useful, is not invention. — Wills *v.* Scranton, 153 Fed. 181; 82 C. C. A. 355.

Conceding that plaintiff was the first to apply these old interlocking systems to an old flat mask of flexible material, we discover no invention in his doing so, but only the capacity of a skilled mechanic addressing himself to the particular problem in question. — Merrill-Soule *v.* Star, 159 Fed. 142; 86 C. C. A. 332.

Surely invention cannot be claimed in the appropriation of an old device by reason of the unthought of and undisclosed function in question (dovetail armature laminæ). — Bullock *v.* General, 162 Fed. 28; 89 C. C. A. 68.

§ 673. Old Device, New Use — Patentable.

Though the inventor be entitled to the merit of being the first to employ an old combination in a new and useful way, if the use be analogous, his right to a patent must depend upon the novelty of means employed and not the end accomplished. — Aron *v.* Manhattan, 132 U. S. 84; 33 L. Ed. 272; 10 S. Ct. 24.

The patent for the adaptation of old and well known means to a new use with new material if sustainable at all must be limited specifically. — Wright *v.* Clinton, 67 Fed. 790; 14 C. C. A. 646.

Well-known cases are cited on behalf of the defendants, in which it has been held that the application of an old process or machine to a similar or analogous subject, with no change in the manner of application, and no result substantially distinct in its nature, will not sustain a patent, even if the new form of result had not before been contemplated. Without dissenting the least from this doctrine, we do not regard it as applicable to the present case. It has never been held that where the structures compared belong to totally distinct departments of invention — to practical arts that have no connection with or similarity to each other — the subsequent inventor is precluded from using well-known mechanical contrivances or devices that have become the common stock of manufacturers. Such a view would, in the mechanical arts, restrict the operation of the patent statutes to the first and most striking efforts of invention, and leave no field open for the exercising of the inventive power in devising the numerous less conspicuous machines and apparatus that do so much to promote the convenience and comfort of daily life. — Hillborn *v.* Hale, 69 Fed. 958; 16 C. C. A. 569.

When Beach took this machine from another art, where it was doing different work, and, by modification, adapted it to different use in his own

art, and thereby gave to his own art the first machine it ever had which could do work necessary to be done, and always theretofore done by hand, he made an invention to the fruits of which he should be entitled. — Inman *v.* Beach, 71 Fed. 420; 18 C. C. A. 165.

Admitting a closer resemblance and analogy between the two classes of machines, it by no means follows that the device in suit would come within the rule of " a double use," and thus fall short of invention and patentability. — Taylor *v.* Sawyer, 75 Fed. 301; 22 C. C. A. 203.

Potts *v.* Creager, 155 U. S. 607; DuBois *v.* Kirk, 158 U. S. 58; Tamage *v.* Zahn, 70 Fed. 1003; Topliff *v.* Topliff, 145 U. S. 156.

Where an inventor has devised a machine or tool for doing work which previously had been done only by hand, and the utility of the device is at once recognized by the trade, the court should hesitate to declare the patent void for want of invention simply because what was done may be affected by the modification of an old structure, used for a different purpose. — Reynolds *v.* Buzzell, 96 Fed. 997; 37 C. C. A. 656.

The fact that this conveyor is found in a different place in a former combination will not defeat the claim for invention, if the new location is such as to produce a new and useful result. — Stillwell-Bierce *v.* Eufaula, 117 Fed. 410; 54 C. C. A. 584.

Star *v.* General, 111 Fed. 398; Dowagiac *v.* Superior, 115 Fed. 886.

It is true that East has not discovered any new elementary material for the making of barrels, and the elementary principle upon which barrels are constructed is old; but he has adopted a new form, and discovered a new combination, a diversity of method and a diversity of effect, a new modus operandi, whereby it has been practically demonstrated that cheaper and better results are obtained, which benefit the world; and therefore, under the principles and precedents, he has become entitled to that protection which the patent laws are intended to secure for " any new and useful improvement on any art, machine, manufacture, or composition of matter." Such combination, however simple and obvious, if entirely new, is patentable, and not the less so because up to a certain point he uses old methods and old materials. — Farmers' *v.* Spruks, 127 Fed. 691; 62 C. C. A. 447.

It performs a beneficial function for which the device of the prior art was not designed, adapted, or used. We are of opinion that this creation involved invention. — Cleveland *v.* Kauffman, 135 Fed. 360; 68 C. C. A. 658.

Topliff *v.* Topliff, 145 U. S. 161; Clough *v.* Barker, 106 U. S. 176; Wickelman *v.* Dick, 88 Fed. 266; Boyer *v.* Keller, 127 Fed. 130.

Felt discovered the possibility of this new use of a series of pivoted levers in performing additive subtraction, and he adapted them to this new use. Such use was novel, and has proved of great utility. These circumstances negative the conclusion that the step taken by Felt was obvious to any skilled mechanic. — Comptograph *v.* Mechanical, 145 Fed. 331; 76 C. C. A. 205.

Hobbs *v.* Beach, 180 U. S. 383; Loom Co. *v.* Higgins, 105 U. S. 580; Krementz *v.* S. Cottle Co. 148 U. S. 556; Potts *v.* Creager, 155 U. S. 597; Dowagiac *v.* Superior, 115 Fed. 886; Brunswick *v.* Thum, 111 Fed. 904; Schenck *v.* Singer, 77 Fed. 841.

All of the elements were old, and if Avery made merely a selection and rearrangement of old elements, without producing any new result, want of invention would be clear. Geist *v.* Parsons, 125 Fed. 116. Or if he were only

a detail improver, he could not exclude others from gleaning in the same open fields. Milwaukee *v.* Brunswick, 126 Fed. 171. But, though old elements were used, the combination was not merely new in specific construction, but was new in kind; and in this very ancient and familiar art we do not see that the most gifted inventor could do more than produce a new result by a new mode of operation in some minor adjunct of the main structure. Inasmuch as Avery did this, he was entitled to generic as well as specific claims. Lamson *v.* Hillman, 123 Fed. 416; Ries *v.* Barth, 136 Fed. 850. — Avery *v.* Case, 148 Fed. 214; 78 C. C. A. 110.

If the Dodge patent (prior and mechanical) was of such a nature as to suggest a transference, by appropriate means, from the purely mechanical to the electric art, of the invention embodied in the Parcelle (electrical) patent, then the Parcelle patent contained no invention. And in this connection it is certainly a singular thing that the ten patents from the mechanical art, to which we have referred, should have been in existence for so many years without ever having suggested an expedient, like the Parcelle patent, for the purpose of supplying a needed want in the electrical art. Obviously, the relation between the mechanical and electric arts was not so close and apparent that it would follow as a matter of course that the invention of a method of bolting a bedstead together, or of securing a wooden covering on an iron pulley, would, of itself, furnish a suggestion for solving the problem of detachably fastening the laminated pole pieces of a field magnet to the solid yoke thereof. — General *v.* Bullock, 152 Fed. 427; 81 C. C. A. 569.

Potts *v.* Creager, 155 U. S. 597; McClain *v.* Ortmayer, 141 U. S. 419.

To accomplish a new and useful result within the meaning of the patent law, (R. S. 4886), it is not necessary that a result before unknown should be brought about, but it is sufficient if an old result is accomplished in a new and more effective way. If the value and effectiveness of a machine are substantially increased, the new combination of old elements which does it is patentable. — St. Louis *v.* American, 156 Fed. 574; 84 C. C. A. 340.

Loom Co. *v.* Higgins, 105 U. S. 580; Cantrell *v.* Wallick, 117 U. S. 689; Anderson *v.* Collins, 122 Fed. 451.

Note: This rule as applied in this case is correct; but as broadly stated it is entirely incorrect, for it is the novelty of the new elements in combination and not the effectiveness of the result wherein the patentability resides.

The reference to sundry sawmill patents showing conveying tables and driven chains extending between them for transferring logs or lumber from one table to the other do not show anticipations. There is little analogy between the problem involved in conveying and transferring rigid, cold bodies from one conveying table to another, and that presented when the subject is long, flexible sheets of hot metal, which must be cooled uniformly and without warping while the carrying and transferring is going on. We must not be misled by the apparent resemblance between a device taken from one industry and applied to a new use in another when the original inventor never designed nor actually used the device for the purpose to which it has been put. — National *v.* Aiken, 163 Fed. 254; C. C. A.

Potts *v.* Creager, 155 U. S. 597: Western *v.* La Rue, 139 U. S. 601; Stearns *v.* Russell, 85 Fed. 218; Heaton-Peninsular *v.* Elliott, 58 Fed. 220; Topliff *v.* Topliff, 145 U. S. 156.

§ 674. Old Elements, New Result.

Patented inventions are also made which embrace both a new ingredient and a combination of old ingredients embodied in the same machine. Even more particularity of description is required in such a case, as the property

of the patentee consists not only in the new ingredient, but also in the new combination, and it is essential that his invention shall be so fully described that others may not be led into mistake, as no other person can lawfully make, use or vend a machine containing such new ingredient or such new combination. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Valid letters patent may be granted for an invention which consists entirely in a new combination of old ingredients, provided it appears that the new combination of the ingredients produce a new and useful result, but the rule is equally well settled, in such a case, that the invention consists merely in the new combination of the ingredients, and that a suit for infringement cannot be maintained against a party who constructs or uses a substantially different combination, even though it includes the exact same ingredients. — Gill *v.* Wells, 89 U. S. 1; 22 L. Ed. 699.

Gould *v.* Rees, 15 Wall. 194.

The combination expressed in the claim, viewed as an entirety and in reference to its purposes and uses, is new, and produces a new and useful result. And it is no objection to the validity of a patent for such a combination that some of the elements of which it is composed are not new. — Brown *v.* Guild, 90 U. S. 181; 23 L. Ed. 161.

The combination to be patentable must produce a different force or effect, or result in the combined forces or processes from that given by their separate parts. There must be a new result produced by their union; if not so, it is only an aggregation of separate elements. — Reckendorfer *v.* Faber, 92 U. S. 347; 23 L. Ed. 719.

Every element found in complainant's machine is found in a prior patent, and was well known to the art. His patent, therefore, must be treated as for a combination of well-known devices and elements. — Jones *v.* Munger, 49 Fed. 61; 1 C. C. A. 158.

No pre-existing machine contained the specific means employed. It is also reasonably certain from the history of the machine that these claims describe combinations which are practically operative and successful, and a manifest weakness and insecurity characterize the defendant's attempts to deny patentable invention. — Bagley *v.* Empire, 58 Fed. 212; 7 C. C. A. 191.

But notwithstanding the fact that all the parts are old, in the sense that each of them may be found in previous patents, the combination of parts in the patent in suit brings about a new result, and involves patentable invention. — Columbus *v.* Robbins, 64 Fed. 384; 12 C. C. A. 174.

The new use of an old compound has been held to be patentable. — Thomson-Houston *v.* National, 65 Fed. 427; 12 C. C. A. 671.

Muntz *v.* Foster, 2 Web. P. C. 93; Merwin, 306.

Nor is the complainants' device only an aggregation of old parts. The metal and the rubber do not act independently, but co-operate in producing a new result, and this constitutes a patentable combination. — Thomson-Houston *v.* National, 65 Fed. 427; 12 C. C. A. 671.

Reckendorfer *v.* Faber, 92 U. S. 357; Hailes *v.* Van Wormer, 20 Wall. 353; Pickering *v.* McCullough, 104 U. S. 310.

"If a new combination and arrangement of known elements produce a new and beneficial result, never obtained before, it is evidence of invention."— Muller *v.* Lodge, 77 Fed. 621; 23 C. C. A. 357.
Quoting, Loom Co. *v.* Higgins, 105 U. S. 580.

All the mechanisms which formed the elements of his combination, were old. His patent was granted, and it must stand, if it stand at all, not upon the ground that he invented or discovered any new machine or mechanical device, but on the ground that he organized a new combination of old and well-known elements, by means of which a new and useful result was obtained. — Adams *v.* Lindell, 77 Fed. 432; 23 C. C. A. 223.
Thompson *v.* Bank, 53 Fed. 250; Seymour *v.* Osborne, 11 Wall. 516; Gould *v.* Rees, 15 Wall. 187.

The fact that each and every element of the combination was at the date of his patent, old and well-known, was not sufficient to deprive the invention claimed by him of novelty, for most of the inventions of the present day consist of the utilization and adaptation of mechanical appliances that are themselves old and well-known. Using an old process and utilizing a well-known device, by combinations which produce results not theretofore accomplished by the said process or device, is in fact invention. — American *v.* Streat, 83 Fed. 700; 28 C. C. A. 18.

The new result of a patentable combination is a result which is new and distinguishable as compared with results produced by the elements in their separated state, or as assembled in a mere aggregation, without functional relations to each other. A combination is not unpatentable merely because its results may also have been produced by other combinations. — Deere *v.* Rock Island, 84 Fed. 171; 28 C. C. A. 308.
Rob. Pat. 156, n.; Reckendorfer *v.* Faber, 92 U. S. 357.

It is a familiar rule that where the thing patented is an entirety, the mere fact that the different elements are taken from different old devices or exhibits, does not create conclusion of non-invention. — National *v.* Elsas, 86 Fed. 917; 30 C. C. A. 487.
Imhauser *v.* Buerk, 101 U. S. 647; Dederick *v.* Cassell, 9 Fed. 306.

But, while all the elements of appellant's patent may be found singly in the ore crushers which preceded it, the appellee's invention was in its combination a distinct departure in the art. — Trent *v.* Risdon, 102 Fed. 635; 42 C. C. A. 529.

The device was no mere mechanical device, or a mere juxtaposition of old elements, which only continued to exercise their former isolated functions. In their new relation, the three elements were made to so mutually co-operate, co-act, and in effect, unify with each other, that they produced a new unitary result. — Bliss *v.* Reed, 106 Fed. 314; 45 C. C. A. 304.

A new combination of old elements whereby a new and useful result is produced, or an old result is attained in a more facile, economical and efficient way, may be protected by patent as securely as a new machine or composition of matter. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.
Seymour *v.* Osborne, 11 Wall. 516; Gould *v.* Rees, 15 Wall. 187; Thompson *v.* Bank, 53 Fed. 250.

If they accomplished it in a new way, and to devise them involved thought and ingenuity beyond the ordinary skill of the calling, they were features of patentable novelty. We do not regard the prior patents for improvements in cheese-making apparatus as sufficient per se to negative invention in introducing and adapting these appliances. The appliances for a double hot water circulation shown in those patents are quite dissimilar in details of construction and arrangement to those of the patent in suit, and it is doubtful whether their use in supplying heated water to control the temperature of milk during the process of cheese-making can be regarded as a cognate case. — Brickill *v.* Mayor, 112 Fed. 65; 50 C. C. A. 1.

It is true that the mere bringing together of old elements found in older machines of the same or a kindred art to perform the same functions and to effect the same mechanical result does not constitute patentable invention. But the converse of the proposition is equally true, — that if a new organization of old elements is such that it produces a new mode of operation and a beneficial result, there may be a patentable invention. — Dowagiac *v.* Superior, 115 Fed. 886; 53 C. C. A. 36.

Campbell *v.* Duplex, 101 Fed. 282; Overweight *v.* Vogt, 102 Fed. 957; Burnham *v.* Mfg. Co. 110 Fed. 765; Rob. Pat. sec. 155; Star *v.* General, 111 Fed. 398.

While it is true that the mere bringing together of old elements found in older machines of the same or a kindred art, to perform the same functions and to effect the same mechanical results, does not constitute patentable invention, still, where a new organization of old elements is such that it produces a new mode of operation and a beneficial result, there may be a patentable invention. — Dowagiac *v.* Minnesota, 118 Fed. 136; 55 C. C. A. 86.

Rob. Pat. sec. 155; Dowagiac *v.* Superior, 115 Fed. 886.

The fact that the machine is an aggregation of known devices does not show that it is lacking in novelty. A machine of necessity is made of known things. — American *v.* American, 128 Fed. 709; 63 C. C. A. 307.

Note: The judge making this statement did not say what he meant; he did not mean by the use of the word " aggregation " what that word usually stands for in the patent law. Moreover, the statement that a machine is of necessity made of known things is generally, but not always, true.

Ries got together a collection of old elements. Motors, circuits, switches to close the circuits, levers, resistance coils, solenoids, and other actuating mechanisms for moving an arm over contact points, dashpots, and adjustable dashpots were all old. The prior patents prove this. They show the elements severally, and some in combinations. But none exhibits Ries's thought. That is, Ries disclosed to the world a new desirable result to be attained, and devised a new means by which the new idea could be put to use. Than this, there is no higher quality of invention. — Ries *v.* Barth, 136 Fed. 850; 69 C. C. A. 528.

Morley *v.* Lancaster, 129 U. S. 263.

Strictly speaking the combinations are not, as we have seen, of old elements, but conceding that the elements are all old, it cannot be denied, we think, that the combination is not only new but that it produces a new result or, at least, an old result in a better way than any device which preceded it. The elements of the combination so act that each qualifies every other and the new result is due to their co-operative action. Remove one and the machine becomes inoperative; it fails to produce the desired result. — International *v.* Dey, 142 Fed. 736; 74 C. C. A. 68.

By such coaction the three elements, each of which, in itself, we may assume was old — effected a novel and highly useful advance in armature construction. — Prudential *v.* Westinghouse, 158 Fed. 985; 86 C. C. A. 189.

§ 675. Old Elements, Old Result.

The elements of the claim of the patent in suit were all old; the result produced was well known; the combination of the elements employed had been used for other purposes. *Held:* void. — Stimpson *v.* Woodman, 77 U. S. 117; 19 L. Ed. 866.

It was well known that the points of a staple on their outer sides would force the points together in use; and there was no invention in beveling the points of a fastener so that they would both travel in the same direction. — Double Pointed *v.* Two Rivers, 109 U. S. 117; 27 L. Ed. 877; 3 S. Ct. 105.

Obiter dicta on the English law. Quoting, Saxby *v.* Gloucester, 7 Q. B. Div. 305. — Gardner *v.* Herz, 118 U. S. 180; 30 L. Ed. 158; 6 S. Ct. 1027.
Penna. *v.* Locomotive, 110 U. S. 490.

While a combination of old elements producing a new and useful result will be patentable, yet where the combination is merely assembling of old elements producing no new and useful result, invention is not shown. — Computing *v.* Automatic, 204 U. S. 609; 51 L. Ed. 645; 27 S. Ct. 307.
Office *v.* Fenton, 174 U. S. 492.

The mere bringing together of elements selected from old machines, to perform the same functions which they severally performed in the machines from which they were taken, and producing the same result, is not invention. — Campbell *v.* Duplex, 101 Fed. 282; 41 C. C. A. 351.
Hailes *v.* Van Wormer, 20 Wall. 350; Royer *v.* Roth, 132 U. S. 201; Union *v.* Keith, 139 U. S. 530; Wright *v.* Yuengling, 155 U. S. 47.

There is no invention in merely selecting and fitting together the most desirable parts of different machines in the same art, where each operates in the same way in the new machine that it did in the old, and effects the same result. — Overweight *v.* Vogt, 102 Fed. 957; 43 C. C. A. 80.
Hailes *v.* Van Wormer, 21 Wall. 358; Mfg. Co. *v.* Robbins, 75 Fed. 17; Stearns *v.* Russell, 85 Fed. 218; Campbell *v.* Duplex, 101 Fed. 282.

The mere bringing together of elements selected from old machines to perform the same functions which they severally performed in the machines from which they were taken, and producing the same results, is not invention. — Brown *v.* King, 107 Fed. 498; 46 C. C. A. 432.
Union *v.* Keith, 139 U. S. 530; Campbell *v.* Duplex, 101 Fed. 282.

The application of an old structure to a similar use is not invention. (Thus was the application of ball-bearings to hair clippers). — Coates *v.* Boker, 119 Fed. 358; 56 C. C. A. 94.

None of the elements was new, and it did not produce a new result; but we think the record clearly discloses that the combination, although of old elements, was new, and that it accomplished an old result in a more facile, economical and efficient way. This gave it patentable novelty. — Heckin *v.* Baker, 138 Fed. 63; 70 C. C. A. 559.
National *v.* International, 106 Fed. 693.

§ 676. Old Process, New Use — Non-Patentable.

The adaptation of an old process to a new and similar use is not invention; and judicial notice will be taken of such common use in determining the question of invention. — Dunbar *v.* Myers, 94 U. S. 187; 24 L. Ed. 34.

Brown *v.* Piper, 91 U. S. 38.

The application of an old process or machine to a similar analogous subject, with no change in the manner of application, and no result substantially distinct in its nature, will not sustain a patent, even if the new form of result had not before been contemplated. The leading case, giving American and English authorities. — Pennsylvania *v.* Locomotive, 110 U. S. 490; 28 L. Ed. 222; 4 S. Ct. 220.

Hotchkiss *v.* Greenwood, 11 How. 248; Phillips *v.* Page, 24 How. 164; Jones *v.* Morehead, 1 Wall. 155; Revg. 1 Fish. P. C. 521; Hicks *v.* Kelsey, 18 Wall. 670; Smith *v.* Nichols, 21 Wall. 112; Brown *v.* Piper, 91 U. S. 37; Roberts *v.* Ryer, 91 U. S. 150; Bridge *v.* Iron, 95 U. S. 274; Planing *v.* Keith, 101 U. S. 479; Pearce *v.* Mulford, 102 U. S. 112; Heald *v.* Rice, 104 U. S. 737; Atlantic *v.* Brady, 107 U. S. 192; Crane *v.* Price, 4 Man. & G. 580; 5 Scott (N. S.) 338; 1 Web. P. C. 393; Dobbs *v.* Penn. 3 Exch. 427; Smith *v.* Dent. Co. 93 U. S. 486; Dental *v.* Davis, 102 U. S. 222; Bush *v.* Fox, Macrery, P. C. 152; 9 Exch. 651; 5 H. L. Cas. 707; Brook *v.* Aston, 27 L. J. (N. S.) Q. B. 145; 8 El. & Bl. 478; Envelope *v.* Seymer, 28 L. J. N. S. C. P. 22; 5 C. B. (N. S.) 164; Harwood *v.* G. N. R. Co. 11 H. L. Cas. 654.

The patent covers an old process applied to the same subject, with no change in the manner of applying it, and with no result substantially distinct in its nature. It cannot, therefore, be a valid patent. — Western *v.* Ansonia, 114 U. S. 447; 29 L. Ed. 210; 5 S. Ct. 447.

Penna. *v.* Locomotive, 110 U. S. 490; Vinton *v.* Hamilton, 104 U. S. 485.

The application of an old process or machine to a similar or analogous subject, with no change in the manner of applying it and no result substantially distinct in its nature will not sustain a patent, even if the new form of result had not before been contemplated. — Miller *v.* Force, 116 U. S. 22; 29 L. Ed. 552; 6 S. Ct. 204.

Penna. *v.* Locomotive, 110 U. S. 490.

The adaptation of an old process to the production of another product than contemplated in the former process, with only mechanical change, is not invention. — Eastman *v.* Getz, 84 Fed. 458; 28 C. C. A. 459.

It was nothing more than the application of an old process to analogous matter, producing a result substantially similar in its nature, and was therefore entirely lacking in invention. — De Lamar *v.* De Lamar, 117 Fed. 240; 54 C. C. A. 272.

Ansonia *v.* Electrical, 144 U. S. 11; Mfg. Co. *v.* Cary, 147 U. S. 623.

It is a familiar proposition of law, recognized and enforced in a multitude of cases, "that the application of an old process or machine to a similar or analogous subject, with no change in the manner of application, and no result substantially distinct in its nature, will not sustain a patent, even if the new form of result had not before been contemplated." — Neptune *v.* National, 127 Fed. 563; 62 C. C. A. 345.

Pennsylvania *v.* Locomotive, 110 U. S. 490; Morris *v.* McMillin, 112 U. S. 244; Blake *v.* San Francisco, 113 U. S. 679; St. Germain *v.* Brunswick, 135 U. S. 227; Gates *v.* Fraser, 153 U. S. 332.

The mere application of a process for enameling iron to the enameling of steel involves no invention if the same result is obtained. — National *v.* New England, 151 Fed. 19; 80 C. C. A. 485.

§ 677. Old Process, New Use — Patentable.

In carrying out the purpose proposed, the materials employed were all old. It is also true that the steps in the process were not all new. But the process extended beyond the use of known materials and the employment of the processes mentioned. A new product was the result differing from all that had preceded it, not merely in degree of usefulness and excellence, but differing in kind, having new uses and properties. We cannot resist the conviction that devising and forming such a manufacture by such a process and of such materials was invention. — Smith *v.* Goodyear, 93 U. S. 486; 23 L. Ed. 952.

§ 678. Omitting Element.

While the omission of an element in a combination may constitute invention, if the result of the new combination be the same as before; yet if the omission of an element is attended by a corresponding omission of the function performed by that element, there is no invention, if the elements retained perform the same function as before. — Richards *v.* Chase, 159 U. S. 477; 40 L. Ed. 225; 16 S. Ct. 53.

§ 679. Patentability — Definition.

It is a new mode of operation, by means of which a new result is obtained. It is this new mode of operation which gives it the character of an invention, and entitles the inventor to a patent; and this new mode of operation is, in view of the patent law, the thing entitled to protection. The patentee may, and should, so frame his specification of claim as to cover this new mode of operation which he has invented. — Winans *v.* Denmead, 15 How. 330; 14 L. Ed. 717.

Whoever discovers that a certain useful result will be produced in any art, machine, manufacture or composition of matter by the use of certain means is entitled to a patent for his invention, provided he specifies the means he uses in a manner so full and exact that anyone skilled in the science to which it appertains can, by using the means he specifies, without any addition or subtraction from the described means, produce precisely the results he describes. Such description must be correct, as it is settled law that the patent is void if the described result cannot be obtained by the described means. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

O'Reilly *v.* Morse, 15 How. 119.

Invention or discovery is the requirement which constitutes the foundation of the right to obtain a patent; and it was decided by this court, more than a quarter of a century ago, that unless more ingenuity and skill were required in making or applying the said improvement than are possessed by an ordinary mechanic acquainted with the business, there is an absence of that degree of skill and ingenuity which constitute the essential element of every invention. — Dunbar *v.* Meyers, 94 U. S. 187; 24 L. Ed. 34.

Hotchkiss *v.* Greenwood, 11 How. 267; Phillips *v.* Page, 24 How. 167; Jones *v.* Morehead, 1 Wall. 162; Stimpson *v.* Woodman, 10 Wall. 121.

Actual invention or discovery must have been made, and the English courts apply this rule more readily and with a much closer scrutiny than is done in this country. — Dunbar *v.* Meyers, 94 U. S. 187; 24 L. Ed. 34.

Ralston *v.* Smith, 11 H. L. Cases, 223; Harwood *v.* R. R. 11 H. L. Cas. 654; Jordan *v.* Moore, L. R. 1 C. P. 624; Kay *v.* Marshall, O. & F. 245; Bush *v.* Fox, 5 H. L. Cas. 707; Tetley *v.* Easton, 2 C. B. (N. S.) 70; Horton *v.* Mabon, 12 C. B. (N. S.) 437; Ormson *v.* Clarke, 4 C. B. (N. S.) 475; Parks *v.* Stevens, L. R. 8 Eq. 358; Envelope *v.* Seymer, 5 C. B. (N. S.) 471; Ormson *v.* Clarke, 13 C. B. (N. S.) 337; Ralston *v.* Smith, 9 C. B. (N. S.) 117; Sanders *v.* Aston, 3 B. & A. 881; Seed *v.* Higgins, 8 El. & Bl. 755.

The process of development in manufactures creates a constant demand for new appliances, which the skill of ordinary head workmen and engineers is generally adequate to devise, and which, indeed, are the natural and proper outgrowth of such development. Each step forward prepares the way for the next, and each is usually taken by spontaneous trials and attempts in a hundred different places. To grant to a single party a monopoly of every slight advance made, except where the exercise of invention somewhat above ordinary mechanical or engineering skill is distinctly shown, is unjust in principle and injurious in its consequences.

The design of the patent laws is to reward those who make some substantial discovery or invention, which adds to our knowledge and makes a step in advance in the useful arts. Such inventors are worthy of all favor. It was never the object of those laws to grant a monopoly for every trifling device, every shadow of a shade of an idea, which would naturally and spontaneously occur to any skilled mechanic or operator in the ordinary progress of manufacture. Such an indiscriminate creation of exclusive privileges tends rather to obstruct than to stimulate invention. It creates a class of speculative schemers who make it their business to watch the advancing wave of improvement, and gather its foam in the form of patented monopolies, which enable them to lay a heavy tax upon the industry of the country, without contributing anything to the real advancement of the arts. It embarrasses the honest pursuit of business with fears and apprehensions of concealed liens and unknown liabilities, to law suits, and vexatious accountings for profits made in good faith. — Atlantic *v.* Brady, 107 U. S. 192; 27 L. Ed. 438; 2 S. Ct. 225.

The provisions of the Constitution (Art. 1, Sec. 8) is that "the Congress shall have power to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." The beneficiary must be an inventor and he must have made a discovery. The statute has always carried out this idea. Under the Act of July 4, 1836, 5 S. at L. 119, 36, in force when the patents were granted, the patentee was required to be a person who had "discovered or invented" a new and useful art, machine, manufacture or composition of matter. "In the Act of July 8, 1870, 16 S. at L. 201, 324, the patentee was required to be a person who had invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof;" and that language is reproduced in Sec. 4886 of the R. S. So it is not enough that a thing shall be new, in the sense that in the shape or form in which it is produced it shall not have been before known, and that it shall be useful, but it must, under the constitution and the statute, amount to an invention or a discovery. — Thompson *v.* Boisselier, 114 U. S. 1; 29 L. Ed. 76; 5 S. Ct. 1042.

Vinton *v.* Hamilton, 104 U. S. 485; Hall *v.* McNeal, 107 U. S. 90; Atlantic *v.* Brady, 107 U. S. 192; Slawson *v.* R. R. 107 U. S. 649; King *v.* Gallun, 109 U. S. 99; Tuck *v.* Mfg. Co. 109 U. S. 117; Esty *v.* Burdett, 109 U. S. 633; Bussey *v.* Mfg. Co. 110 U. S. 131; R. R. *v.* Truck Co. 110 U. S. 490; Phillips *v.* Detroit, 111 U. S. 604; Morris *v.* McMillin, 112 U. S. 244; Hollister *v.* Mfg. Co. 113 U. S. 59.

But the object of an invention is a very different thing from the invention itself. The object may be accomplished in many ways; the invention shows one way. — White *v.* Dunbar, 119 U. S. 47; 30 L. Ed. 303; 7 S. Ct. 72.

Patents cover the means employed to effect results. Neither an idea nor a function, nor any other abstraction, is patentable in a machine patent. — Goshen *v.* Bissell, 72 Fed. 67; 19 C. C. A. 13.

Burr *v.* Duryee, 1 Wall. 570; Fuller *v.* Yentzer, 94 U. S. 288; Eames *v.* Andrews, 122 U. S. 40; Roberts *v.* Ryer. 91 U. S. 150; McCormick *v.* Aultman, 69 Fed. 371; Pfeifer *v.* Dixon, 55 Fed. 390.

The invention resides in the conception and its embodiment. — Rose *v.* Hirsh, 77 Fed. 469; 23 C. C. A. 246.

A patent must combine utility, novelty, and invention. It may, in fact, embrace utility and novelty in a high degree, and still be only the result of mechanical skill, as distinguished from invention. A person, to be entitled to a patent, must have invented or discovered some new and useful art, machine, manufacture, or composition of matter, or some new and useful improvement thereof. In the language of the Supreme Court:

"It is not enough that a thing shall be new, in the sense that, in the shape or form in which it is produced, it shall not have been before known, and that it shall be useful, but it must, under the constitution and statute, amount to an invention or discovery." Hill *v.* Wooster, 132 U. S. 701, and authorities there cited. — Klein *v.* Seattle, 77 Fed. 200; 23 C. C. A. 114.

If the fact that an improvement was found to be novel and useful should inevitably establish that the improvement came from an inventor, the skilled mechanic would be eliminated from the dramatis personae, and his part utterly deleted from the play of progress. — Seiler *v.* Fuller, 121 Fed. 85; 57 C. C. A. 339.

Patents are granted for advances in the useful arts, nor for increments of knowledge. — Diamond *v.* Westinghouse, 152 Fed. 704; 81 C. C. A. 630.

§ 680. Patentability — Patentable Difference.

The fact that the patent in suit was pending before the Department with another application owned by the plaintiff set up by the defense is strong evidence the plaintiff did not consider them competitive inventions. — Pope *v.* Gormully, 144 U. S. 248; 36 L. Ed. 420; 12 S. Ct. 637.

Issue of another patent prima facie evidence. — Miller *v.* Eagle, 151 U. S. 186; 38 L. Ed. 121; 14 S. Ct. 310.

Corning *v.* Burden, 56 U. S. 252; Duff *v.* Sterling, 107 U. S. 636.

As both applications were pending in the Patent Office at the same time, and as the respective letters were granted, it is obvious that it must have been the judgment of the officials that there was no occasion for an interference and that there were features which distinguished the one from the other. — Boyd *v.* Janesville, 158 U. S. 260; 39 L. Ed. 973; 15 S. Ct. 837.

American *v.* Elizabeth, 4 Fish. P. C. 189; Burns *v.* Myer, 100 U. S. 671.

The presumption from the grant of the letters patent is that there was a substantial difference between the inventions. — Kokomo *v.* Kitselman, 189 U. S. 8; 47 L. Ed. 689; 23 S. Ct. 521.

The issue of a subsequent patent relating to the same art is evidence presumptive of patentable difference although the two patents were not in interference nor concurrently before the patent office. — Ney *v.* Ney, 69 Fed. 405; 16 C. C. A. 293.

Boyd *v.* Tool Co. 158 U. S. 260.

In Corning *v.* Burden, 15 How. 265, the Supreme Court, after referring to the presumption which attends the fact that, after an examination of the records of the patent office, a patent has been issued for the plaintiff's invention, said:

"It is not easy to perceive why the defendant who uses a patented machine should not have the benefit of a like presumption in his favor, arising from a like investigation of the originality of his invention, and the judgment of the public officers that his machine is new, and not of the patent previously granted to the plaintiff."

The case of Blanchard *v.* Putnam, 8 Wall. 420, overruled this holding of the court and decided that evidence of the defendant's patent is not admissible.

The decision in Blanchard *v.* Putnam was followed in the trial of this case and also that of Norton *v.* Can Co. 59 Fed. 137 where it was said:

"Abstractly, it would seem that, if the plaintiff's patent was prima facie evidence of novelty (difference from things before it); a subsequent patent to the defendant, or for a device used by the defendant, would be prima facie evidence of novelty (difference from all things before it, and hence from the plaintiff's device) and hence would be admissible in evidence on the issue of infringement, and its use would be innocent, and it was so held in Corning *v.* Burden, 15 How. 271. But this case was overruled in Blanchard *v.* Putnam, 8 Wall. 420."

The recent cases, however, of Miller *v.* Mfg. Co. 151 U. S. 208, and Boyd *v.* Tool Co. 158 U. S. 260, citing Pavement Co. *v.* Elizabeth, 4 Fish. P. C. 189, expressly affirms the doctrine of Corning *v.* Burden, and held that the issuance of the defendant's patent creates a prima facie presumption of a patentable difference from the prior patent of the plaintiff. The plaintiff in error was entitled, therefore, to an instruction which would permit the jury to consider the presumption that the law creates from the fact that a patent has issued in any case. — Ransome *v.* Hyatt, 69 Fed. 148; 16 C. C. A. 185.

That Lorraine and Aubin were granted a patent for their combination affords a presumption that there is a patentable difference between their device and those of Janey or any of the many improvers who obtained patents between Janey and the application of Lorraine and Aubin. — St. Louis *v.* National, 87 Fed. 885; 31 C. C. A. 265.

Boyd *v.* Tool Co 158 U. S. 250.

The rule is well settled that the grant of a subsequent patent raises a legal presumption of patentable difference from the earlier invention. — Milwaukee *v.* Brunswick-Balke, 126 Fed. 171; 61 C. C. A. 175.

Miller *v.* Eagle, 151 U. S. 186; Kokomo *v.* Kitselman, 189 U. S. 8.

That the grant of a subsequent patent covering the device alleged to infringe is evidence of patentable difference see Union *v.* Diamond, 162 Fed. 148; 89 C. C. A. 172.

Boyd *v.* Janesville, 158 U. S. 260; Kokomo *v.* Kitselman, 189 U. S. 8.

§ 681. Patentability — Duty of Court.

It is a thoroughly settled rule that, as to patentability and the range of the claims in a patent, inasmuch as these matters concern the public at

large, the court will not allow parties to frame their issues in such a way as to take from it the scrutiny of all the questions which may be involved. — Millard *v.* Chase, 108 Fed. 399; 47 C. C. A. 429.

Note: This is a sound rule. It is one which should be followed, and which is not followed to any extent whatever. It should be the duty of the court when it has a patent before it so narrow or so weak that infringement cannot be established, instead of following the line of least resistance and disposing of the case on noninfringement, to perform its duty by the public as well as by the parties, and, if on investigation the patent is found wanting in patentable novelty, to destroy then and there the monopoly improperly granted.

The judge who heard the case in the court below, apparently for a kindly desire to save the patent from extinction, contented himself with giving it a construction so narrow that it would not include defendant's tube. In affirming the decree of the court below we are constrained to base our decision upon the invalidity of the patent. — Hurlbut *v.* U. S., 124 Fed. 66; 59 C. C. A. 626.

§ 682. Patentability — Mental Conception.

The complainant's claim to be enrolled upon the list of inventors is based upon propositions too theoretical and visionary for acceptance. — Marchand *v.* Emken, 132 U. S. 195; 33 L. Ed. 332; 10 S. Ct. 65.

Dreyfus *v.* Searle, 124 U. S. 60; Crescent *v.* Gottfried, 128 U. S. 158; Hollister *v.* Benedict, 113 U. S. 59.

Mere conception is not invention. It is the crystallizing of that conception into the invention itself, operative and practical, that entitled the inventor to the protection of letters patent. — Forgie *v.* Oil Well, 58 Fed. 871; 7 C. C. A. 551.

The mere existence of an intellectual notion that a certain thing could be done, and, if done, might be of practical utility, does not furnish a basis for a patent, or estop others from developing practically the same idea. — Standard *v.* Peters, 77 Fed. 630; 23 C. C. A. 367.

Agawam *v.* Jordan, 7 Wall. 583; Cristie *v.* Seybold, 55 Fed. 69.

And here we may observe that a mere mental conception, not tested or reduced to practice, nor followed by any embodiment of the idea, is not invention. — Mississippi *v.* Franzen, 143 Fed. 501; 74 C. C. A. 135.

This was the patent on expanded metal — the well-known article which consists in slitting sheet metal and stretching the intervening strips of metal. *Held:* We have been obliged to come to the conclusion that the so-called invention was not really an invention at all within the meaning of the patent laws. As we regard the application, it was no more than the announcement by Golding of a happy thought, unaccompanied by any sufficient description of the means by which his thought might be realized. Indeed it does not seem unfair to add, that the applicant himself was in such doubt about the validity of the patent that he hastened to take out a patent for a machine by which the desired result could be accomplished. The applicant is asking for a patent upon what may have been a valuable idea, but was after all no more than this. — Bradford *v.* Expanded, 146 Fed. 984; 77 C. C. A. 230. Reversed, 214 U. S. 366.

Rob. on Pat. 509; Risdon *v.* Medart, 158 U. S. 68

Note: This a wrong application of the rule stated by Robinson. If the inventor did, as a matter of fact, even as a "happy thought," hit upon a

new article of manufacture which possessed utility as well as novelty, he was entitled to a patent. Put to the test of novelty and utility, and surviving both tests, the court should have held the patent good. Such course would have conformed to good judgment, whether it squared with academic reasoning or not.

§ 683. Patentability — Scientific Principles and Ideas.

A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented as no one can claim in either of them an exclusive right. — Le Roy *v.* Tatham, 14 How. 156; 14 L. Ed. 367.

The discovery of a principle in natural philosophy or physical science is not patentable. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

We find no authority to grant a patent for a " principle " or a " mode of operation " or an idea or any other abstraction. — Burr *v.* Duryee, 68 U. S. 531; 17 L. Ed. 750.

An idea of itself is not patentable, but a new device by which it may be made practically useful is. — Rubber Tip *v.* Howard, 87 U. S. 498; 22 L. Ed. 410.

A principle or an idea is not patentable. — Fuller *v.* Yentzer, 94 U. S. 288; 24 L. Ed. 103.

Burr *v.* Duryee, 1 Wall. 531.

Their discovery, which is conceded to be valuable and of great benefit, was that the old process of fumigating trees by means of an oiled tent and hydrocyanic acid gas, both of which were old and free to the public, could be made successful " provided the fumigation is done at night." Such a discovery, however new and valuable it may be, is not within the pale of patentable inventions. It does not come within any of the principles of the patent law, or any of the provisions of the statute relating to patents. A mere naked principle, a law of nature or property of matter cannot be patented. So long as the principle is a mere item of knowledge, and sometimes from its nature it must always remain such, no patent can be held valid, however brilliant and useful the discovery may be. — Wall *v.* Leck, 66 Fed. 552; 13 C. C. A. 630.

Merw. Pat. Inv. 4, 73, 529; 1 Rob. Pat. sec. 140; LeRoy *v.* Tatham, 14 How. 156; Morton *v.* Infirmary, 2 Fish. P. C. 320.

A principle, considered as a natural physical force, is not the product of inventive skill. It is the common property of all mankind. It exists in nature independently of human effort, and can neither be diminished nor increased by human power. Man can discover and employ it, but his employment of it in the modes or through the instrumentalities by which it is applied in nature is a mere imitation of what every man is able to perceive and reproduce as well as he. All endeavors to confine it to himself are at once futile and unjust. It exists for all men, as well after his discovery as before. The laws necessarily recognize and protect his right, and do not permit any man to exclusively use the conditions which are the gifts of nature, simply because he was the first one to discover its value. Not until some new instrument or method is contrived for its direction towards ends which it cannot naturally accomplish does his creative genius manifest itself. — Wall *v.* Leck, 66 Fed. 552; 13 C. C. A. 630.

1 Rob. Pat. sec. 136 et seq.; Detmold *v.* Reeves, 1 Fish. P. C. 131; Morton *v.* Infirmary, 2 Fish. P. C. 320; Morton's Patent, 8 Op. Attys. Gen. 269.

The magnetic current is not itself a part of the device or invention any more than a current of water is an element of a water wheel. — Thomson-Houston *v.* Western, 70 Fed. 69; 16 C. C. A. 642.

But it does not follow that a conception is patentable merely because it is first in time. Concept alone is not patentable. Concept must be accompanied by mechanical embodiment; and, as the law now stands, must itself be unanticipated. — Voightmann *v.* Perkinson, 138 Fed. 56; 70 C. C. A. 482.

§ 684. Patentability — Miscellaneous Rules.

It would seem that an architectural design, such as an improvement in the construction of jails, is not patentable. — Jacobs *v.* Baker, 74 U. S. 295; 19 L. Ed. 200.

Whether an invention covering an "improvement in the constructions and operation of prisons" comes within any of the classes of patentable inventions doubted in Fond du Lac *v.* May, 137 U. S. 395; 34 L. Ed. 714; 11 S. Ct. 98.

Jacobs *v.* Baker, 74 U. S. 295.

An invention made principally to forestall competition in trade rather than to obtain the just reward of invention will not be looked upon favorably. — Pope *v.* Gormully, 144 U. S. 254; 36 L. Ed. 426; 12 S. Ct. 643.

Complainant consulted an inventor and manufacturer of machinery owning a patent upon a certain device as to devising improved means for performing an operation in complainant's business. The inventor consulted, at complainant's suggestion, made an adaptation of his patented device and constructed a device for complainant's use. Complainant bought and used the device and others; and a year later, took out a patent thereon in his own name. *Held:* That the suggestions of complainant did not amount to invention and that the manufacturer was the true inventor. — Forgie *v.* Oil Well, 58 Fed. 871; 7 C. C. A. 551.

If such a movement is patentable, evidently it must be because in itself, and apart from any mechanism, it constitutes "a new and useful art." R. S. 4886. There seems to be no controlling reason against considering the claims as if for mechanisms. — Campbell *v.* Michle, 102 Fed. 159; 42 C. C. A. 235.

§ 685. Process — Definition.

The processes used to extract, modify and concentrate natural agencies, constitute invention. The elements of the power exist; the invention is not in discovering them but in applying them to useful objects. Whether the machinery used be novel, or consist of a new combination of parts known, the right of the inventor is secured against all who use the same mechanical power, or one that shall be substantially the same. — Le Roy *v.* Tatham, 14 How. 156; 14 L. Ed. 367.

A process which attains a new and previously unknown result is novel and patentable, though the elements of the process are not novel. — Mowry *v.* Whitney, 81 U. S. 620; 20 L. Ed. 860.

In this case the inventor had a patent upon a process for preparing raw hides for belting, etc. In his claim he uses the words "prepared raw hide." The specification describes the entire several processes including that of

removing the hair and producing a "prepared raw-hide." Effort was made to limit the extent of the process to the several steps subsequent to those of preparing the hide. *Held*, that as these first steps were made an essential part of the specification and were fully described and the advantages set out, he is not at liberty to construe his invention by curtailment of the steps involved so as to place in infringement another using the subsequent steps of the process. — Royer *v.* Coupe, 146 U. S. 524; 36 L. Ed. 1073; 13 S. Ct. 166.

The familiar doctrine was not overlooked, though not restated, that a process consisting of different steps, like a combination of different mechanical elements, may be new and patentable though every step by itself be old. But when a process has no novelty unless it can be found in a particular step, and it proves to be wanting there, the entire process necessarily lacks patentability. — Evans *v.* Suess, 86 Fed. 779; 30 C. C. A. 367.

This patent cannot be sustained on the ground merely that the production of a pyroxyline compound in imitation of onyx or its production in the manner described in the specification was novel. It is necessary that such production should also have involved invention. — Arlington *v.* Celluloid, 97 Fed. 91; 38 C. C. A. 60.

§ 686. Process — Mechanical.

The case of Westinghouse *v.* Boyden, 170 U. S. 537, absolutely unsettles the question of the patentability of a mechanical process. The invention in question is the discovery by Westinghouse of the accomplishment of a new function, viz., sending the train-pipe air, in emergency, along with the reservoir air to produce a quick or emergency action. Westinghouse clearly was the first to perform this function, and he disclosed in his patent mechanical means for carrying out his discovery. Boyden invented mechanical means for performing the same function, and apparently as good or better means. It is not denied that the utilization of this function or process was well-nigh as great a discovery as that of the original air-brake by Westinghouse — it is even so admitted in the opinion of Mr. Justice Brown. But the court held by a bare majority of one (Justices Shiras, Brewer, Gray and McKenna dissenting) that although Westinghouse was unquestionably the discoverer of the function and the patentee of the process, the patent (although a pioneer) must be limited to the mechanical combination of the patent or absolute equivalents.

In order to show the unsettled holding, the following extracts are given from the opinion of Mr. Justice Brown and the dissenting opinion of Mr. Justice Shiras in which Mr. Justice Brewer concurred, Justices Gray and McKenna generally dissenting from the opinion and decision of the court.

Opinion of Court

The difficulty we have found in this claim is this: That, if it be interpreted simply as a claim for the function of admitting air to the brake cylinder directly from the train-pipe, it is open to the objection (held in several cases to be fatal) that the mere function of a machine cannot be patented (Corning *v.* Burden, 15 How. 252; Burr *v.* Duryea, 1 Wall. 531; Fuller *v.* Yentzer, 94 U. S. 288; Locomotive *v.* Medart, 158

Dissenting Opinion

It in no wise detracts from the merit of this invention that later devices have been adopted which under its practical operation are more efficient. The very term "pioneer patent" signifies that the invention has been followed by others. A pioneer patent does not shut, but opens, the door for subsequent invention. Being of the character as described as a pioneer, the patent in suit is entitled to a broad

U. S. 68; Wick *v.* Ostrum, 103 U. S. 461; Paper Bag Case, 30 Fed. 63; Machine Co. *v.* Waterbury, 39 Fed. 771).

This rule was clearly laid down in the leading case of Corning *v.* Burden, 15 How. 252, in which Mr. Justice Grier, delivering the opinion of the court, drew the distinction between such processes as were the result or effect of "chemical action, by the operation or application of some element or power of nature, or of one substance to another" and the mere result of the operation of a machine. . . . We have no desire to qualify the repeated expressions of this court to the effect that, when the invention is functional and the defendant's device differs from that of the patentee only in form or in a rearrangement of the same elements of the combination, he would be adjudged an infringer, even if, in certain particulars, his device be an improvement upon that of the patentee. But after all, even if the patent for a machine be a pioneer, the alleged infringer must have done something more than reach the same result. He must have reached it by substantially the same or similar means, or the rule that the function of a machine cannot be patented is of no practical value. To say that the patentee of a pioneer invention for a new mechanism is entitled to every mechanical device which produces the same result is to hold in other language, that he is entitled to a patent for his function. Mere variations of form may be disregarded, but the substance of the invention must be there. . . . "That two machines produce the same effect will not justify the assertion that they are substantially the same, or that the devices used are therefore mere equivalents for those of the other."

or liberal construction. In other words, the invention is not to be restricted narrowly to the mere details of mechanism described as a means of carrying the invention into practical operation.

I cannot assent to what is perhaps rather intimated than decided in the opinion of the court, — that what is called a "process," in order to be patentable, must involve a chemical or other similar elemental action." The term "process or method" as describing the subject of a patent, is not found in the statutes. No reason is given in the authorities, and I can think of none in the nature of things, why a new process or method may not be patentable, even though a mechanical device or a mechanical combination may be necessary to render the new process practicable. It seems to be used by the courts as descriptive of an invention which, from its novelty and priority in the art to which it belongs, is not to be construed as inhering only in the particular means described in the letters patent as sufficient to exemplify the invention and bring it into practical use.

Winans *v.* Denmead, 15 How. 330; McCormick *v.* Talcott, 20 How. 402; Machine Co. *v.* Lancaster, 129 U. S. 263; Proctor *v.* Bennis, 36 Ch. Div. 740; Neilson's Pat. Web. P. C. 275; 715; Tilghman *v.* Proctor, 102 U. S. 767; O'Reilly *v.* Morse, 15 How. 62; Telephone Cases, 126 U. S. 1. . . .

The conclusion justified by the authorities is that whether you call Westinghouse's discovery, that "quick action" may be accomplished by the co-operation of the main pipe air and that from the reservoir, a "process" or a "mode of operation," yet if he was the first to declare it, and to describe a mechanical means to give practical effect to the invention, he must be regarded as a pioneer inventor, and as entitled to protection against those who, availing themselves of the discovery, seek to justify themselves by pointing to mere differences in mechanical form in the mechanical devices used.

— Westinghouse *v.* Boyden, 170 U. S. 537; 42 L. Ed. 1136; 18 S. Ct. 707.

Note: It is perfectly clear that this dire confusion of a principle of law could have been avoided and the proper award made Westinghouse for his great invention, rather than leaving him with the empty compliment of being a " pioneer," if the court had held to a broad, sane application of the doctrine of equivalents; but this the court did not do, and to what extent the next great " pioneer " will be shorn of the fruits of his genius by this narrow American rule, no one can surmise. With Germany holding " functional " claims the proper form, and England recognizing generic mechanisms capable of protection by functional claims, it seems to us Mr. Justice Shiras has the better of the argument.

When he disclosed his process, he disclosed enough to enable any mechanic familiar with the art or industry to which this discovery belonged to construct the apparatus essential to the employment of the patented process (the process of separating cotton hulls and lint). — Johnson *v.* Foos, 141 Fed. 73; 72 C. C. A. 105.

Whether a mechanical process is patentable, see Daylight *v.* American, 142 Fed. 454; 73 C. C. A. 570.

§ 687. Process — Non-Patentable.

This was simply the application by the patentee of an old process to a new subject, without any exercise of the inventive faculty and without the development of any idea which can be deemed new or original in the sense of the patent law. The thing was within the circle of what was well known before, and belonged to the public. No one could lawfully appropriate it to himself and exclude others from using it in any usual way for any purpose to which it may be desired to apply it. — Brown *v.* Piper, 91 U. S. 37; 23 L. Ed. 200.

Ames *v.* Howard, 1 Sumn. 487; Howe *v.* Abbott, 2 Story, 194; Bean *v.* Smallwood, 2 Story, 411; Winans *v.* R. R. 2 Story, 412; Hotchkiss *v.* Greenwood, 11 How. 248.

A mere difference in degree or thoroughness of a process resulting in the same but more advantageous product is mechanical skill, not invention. — Commercial *v.* Fairbank, 135 U. S. 176; 34 L. Ed. 88; 10 S. Ct. 972.

The complainants do nothing more than apply the lumps or cartridges to beer instead of to water, and thus adopt an old form or method of applying the alkali, without any novelty in the mode of application; and this, it has been frequently decided, will not sustain a patent even if the new form of result had not been before contemplated. — Zinsser *v.* Krueger, 48 Fed. 296; 1 C. C. A. 73.

Railroad *v.* Locomotive, 110 U. S. 490.

A mere intellectual process, such as " means for securing against excessive losses of bad debts " is not patentable. — U. S. Credit *v.* American, 59 Fed. 139; 8 C. C. A. 49.

§ 688. Process — Process and Machine.

Where the patentee has produced a better, though not novel, article of manufacture, and described and claimed his invention in the terms of his process, it was held, that all he invented was a machine for the more perfect manufacture, but that the operation or function of such machine was not patentable. — Risdon *v.* Medart, 158 U. S. 68; 39 L. Ed. 899; 15 S. Ct. 745.

Neilson *v.* Harford, 1 Web. P. C. 331; O'Reilly *v.* Morse, 50 U. S. 62, 115; Household *v.* Neilson, 1 Web. P. C. 673; Tilghman *v.* Proctor, 102 U. S. 708; Mowry *v.* Whitney, 81 U. S. 620; Cochrane *v.* Deener, 94 U. S. 780; New Process *v.* Maus, 122 U. S. 413; Telephone Cases, 126 U. S. 1; Bell Tel. *v.* Dolbear, 15 Fed. 488; Wyeth *v.* Stone, 1 Story, 273; Corning *v.* Burden, 56 U. S. 252; McKay *v.* Jackman, 12 Fed. 615; Brainard *v.* Cramme, 12 Fed. 621; Gage *v.* Kellogg, 23 Fed. 891; Hatch *v.* Moffat, 15 Fed. 252; Sickles *v.* Falls, 4 Blatchf. 518; Excelsior *v.* Union, 32 Fed. 221.

(The patent contained both machine and process claims). The defense therefore is not the press upon the process. It is the other way, the process upon the press; for it is impossible to consider the 5th claim as describing anything but the operation and effect of the press. What, indeed, is the process — what is the force at work? And the inquiry is entirely independent of the questions as to what constitutes a patentable process discussed by this court in Risdon *v.* Medart, 158 U. S. 69; and in Westinghouse *v.* Boyden, 170 U. S. 537. What then, is the force at work and how is it applied? It is force (pressure) applied to sheets of paper placed between "compressing heads." In other words, a special application of pressure began in the press and continued in the bundle by means of strings and cords. This, however, is the operation and effect of the machine, and it is none the less so because the pressure is held indefinitely. Its existence in the bundle is not independent of the press. The pressure is as much an effect in the bundle as when first applied. The pressure is applied by the press. — Busch *v.* Jones, 184 U. S. 598; 46 L. Ed. 707; 22 S. Ct. 511.

It is established by authority that an inventor may be entitled to a patent for the method or process for producing new and useful results, and also for the means by which it is produced, when the method or process is susceptible of being performed by known means, and the means invented are of such a character as to merit a patent. — Dayton *v.* Westinghouse, 118 Fed. 562; 55 C. C. A. 390.

Merrill *v.* Yeomans, 94 U. S. 568.

§ 689. Property of Matter.

A new property discovered in matter, when practically applied, in the construction of a useful article of commerce or manufacture, is patentable. — Le Roy *v.* Tatham, 14 How. 156; 14 L. Ed. 367.

Houschill *v.* Nelson, Web. P. C. 683; See, Le Roy *v.* Tatham (S. C.) 22 How. 132.

He had discovered a new property or force in matter, and had made practical application of such newly discovered force to an object. This was patentable. — American *v.* Howland, 80 Fed. 395; 25 C. C. A. 500.

Poillon *v.* Shmidt, Fed. Cas. 11,241; Smith *v.* Ely, Fed. Cas. 13,043; Parker *v.* Hulme, Fed. Cas. 10,740; LeRoy *v.* Tatham, 14 How. 156; Collar Co. *v.* White, Fed. Cas. 14,396; Ansonia *v.* Electrical, 144 U. S. 11; Rob. Pat. sec. 101.

§ 690. Result or Function.

A patent is not good for an effect, or the result of a certain process, as that would prohibit all other persons from making the same thing by any means whatsoever. This, by creating monopolies, would discourage arts and manufactures against the avowed policy of the patent laws. — Le Roy *v.* Tatham, 14 How. 156; 14 L. Ed. 367.

He claims a patent for an effect produced by the use of electro-magnetism, distinct from the process or machinery necessary to produce it. No patent

can lawfully issue for such a claim. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

It is for the discovery or invention of some practical method or means of producing a beneficial result or effect, that a patent is granted, and not for the result or effect itself. — Corning *v.* Burden, 15 How. 252; 14 L. Ed. 683.

The result produced by a machine or combination is not patentable. — Brown *v.* Guild, 90 U. S. 181; 23 L. Ed. 161.

The prior structures never effected the kind of result attained by Richardson's apparatus, because they lacked the thing which gave success. — Consolidated *v.* Crosby, 113 U. S. 157; 28 L. Ed. 939; 5 S. Ct. 513.

The plaintiff may or may not have been entitled to a patent for the machinery employed in the manufacture of the article in question; but he certainly was not entitled to a patent for the function of such machine, nor to the completed article which differs from the prior ones only in its superior workmanship. — Risdon *v.* Medart, 158 U. S. 68; 39 L. Ed. 899; 15 S. Ct. 745.

The distinction between the object of an invention and the means contrived for its accomplishment should not be forgotten. The object to be achieved is not patentable; the means may be. — Brush *v.* Western, 76 Fed. 761; 22 C. C. A. 543.

That an unexpected function develops in actual use, which cannot be referred to the combination described and claimed, if the combination described and claimed is anticipated by a prior patent, such new function is not sufficient to distinguish the invention from the anticipation. — Magic *v.* Economy, 97 Fed. 87; 38 C. C. A. 56.

Corning *v.* Burden, 15 How. 252; Westinghouse *v.* Power Brake Co., 170 U. S. 537.

The mere end and purpose sought to be accomplished by a device is not the subject of a patent, but only the new and useful means for obtaining that end. — Hickory *v.* Frazier, 100 Fed. 99; 40 C. C. A. 296.

Knapp *v.* Morss, 150 U. S. 221; Wollensak *v.* Sargent, 151 U. S. 227.

While mere results are not ordinarily patentable, many constructions, and many processes, — simple and obvious enough when looked at after the occurrence, — have been held to be patentable inventions, not so much because the patentee exerted inventive thought in his immediate work of construction, as because the step taken lay toward the creation of some new aid to the convenience of mankind — some distinct addition to the equipment of civilized classes. — Indiana *v.* Crocker, 103 Fed. 496; 43 C. C. A. 287.

Note: Certainly this is a remarkable holding; for nowhere else in the books do I know of a case which has for one moment maintained that a result could be made the subject of a claim. While it is true that, in a sense, a process and a product are both patentable and in that sense, the result may be patented, there is no authority for the suggestion that " mere result " might possibly be patentable.

These ways of varying resistance, and the difference between them, have been brought out and emphasized by the learned and skilled experts. These ways are simply the different modes of operation of the material which com-

pose the electrodes. They certainly cannot form the basis for any method patent covering all materials whose mode of operation is the same, because there is nothing in the so-called area varying method, or density varying method, or intimacy of contact method, considered by themselves and apart from the discovery of microphonic action, or the special properties of some material like carbon, which has ever contributed anything to the progress of the telephonic art. — American *v.* National, 119 Fed. 893; 56 C. C. A. 423.

Where a new result has been attained by some patentable mode of operation, the patentee cannot have a monopoly of the new result. It is open for any one to devise and patent a new means of producing the same result — a means that has a different principle of operation — and one who succeeds in doing this is not an infringer of the older patent. — Ries *v.* Barth, 136 Fed. 850; 69 C. C. A. 528.

§ 691. Scientific Principles and Laws.

Imparting to matter a peculiar motion in rotation according to the natural laws of fluids for the purpose of assisting a chemical process, the means employed being old, is not patentable. — Marchand *v.* Emken, 132 U. S. 195; 33 L. Ed. 332; 10 S. Ct. 65.

The inventor need not understand the philosophic principle embodied in his invention. — Cowles *v.* Lowrey, 79 Fed. 331; 24 C. C. A. 616.
Eames *v.* Andrews, 122 U. S. 40.

That while a physical law or law of nature, like centrifugal action, is not patentable, the means of employing the same to effect a definite result may be patentable; but such patent will not cover other means for effecting the same result, see Whitaker *v.* Huntington, 95 Fed. 471; 37 C. C. A. 151.

He describes the process, the mode of operation and the result, and the means for obtaining it. The scientific principle is not part of the process, is not patentable, and need not be set forth. — Emerson *v.* Nimocks, 99 Fed. 737; 40 C. C. A. 87.
Eames *v.* Andrews, 122 U. S. 40.

While a law of nature — the mere principle — is not patentable, the inventor of means by which the principle can be utilized may be entitled to a patent. The new application of the law by the described mechanical means to a new purpose, which affords a new and useful practical result, is patentable. — Thomson-Houston *v.* Nassau, 107 Fed. 277; 46 C. C. A. 263.

Nor can the Bardsley patent be construed to rightfully exclude others from using a jet of water, tangentially applied to the inner surface of a bowl, to revolve the bowl. This was a law of nature, well known before the Bardsley device. — Johnson *v.* McCurdy, 108 Fed. 671; 47 C. C. A. 577.

The motor only utilized a well-known law of nature — that a jet of water, applied tangentially to the inner surface of a basin nicely pivoted, would tend to revolve it. This had been partially exemplified for many years in preceding water motors. — Justi *v.* Clark, 108 Fed. 659; 47 C. C. A. 565.

It was not, in any just sense, an independent discovery in nature, subsequently utilized in one of the arts; for, in substance, it was nothing but a chemical search into a chalk already in the art, for the ingredients which

gave to such chalk its excellence. It was research, but not patentable discovery. — Hoskins *v.* Matthes, 108 Fed. 404; 47 C. C. A. 434.

When, under special circumstances, a particular practical application of a known principle proves to be of advantage in the arts, and yet the thought of making it has not occurred to those expert therein, such application, at times, involves invention. — Westinghouse *v.* Stanley, 133 Fed. 167; 68 C. C. A. 523.

Watson *v.* Stevens, 51 Fed. 757; Heap *v.* Tremont, 82 Fed. 449; Western *v.* La Rue, 139 U. S. 601; National *v.* Boston, 156 U. S. 502; DuBois *v.* Kirk, 158 U. S. 58.

We do not understand that this ignorance of the patentee, or the knowledge subsequently gained from the prior art, affects the status of the invention in suit. The fact that the patentee did not fully understand the principle upon which his invention operated, or that his instructions were capable of a construction which would render the patent impracticable and defeat its purposes, should not deprive him of the benefit of a meritorious invention, provided it appears, as is found in this case, that the patent sufficiently disclosed to those skilled in the art the cause of previous defects and a new and useful discovery and invention by means of which they might be successfully overcome. He is not to be deprived of the benefit of his invention because he may have been mistaken in his statement of the reasons why the result was secured, or may have failed to correctly state the theory of their operation. — Westinghouse *v.* Montgomery, 153 Fed. 890; 82 C. C. A. 636.

Dixon *v.* Pfeifer, 55 Fed. 390.

§ 692. Simplicity — Does not Negative Invention.

The simplicity of an invention, or the fact that it might have occurred to anyone, does not negative invention. Citing Loom Co. *v.* Higgins, 105 U. S. 591. — Pittsburgh *v.* Roberts, 71 Fed. 706; 18 C. C. A. 302.

To obtain absolute simplicity is the highest trait of genius. — Dececo *v.* Gilchrist, 125 Fed. 293; 60 C. C. A. 207.

It cannot be denied that a mere simplification of a very substantial character, disposing of parts which have long been in use, expensive and burdensome in their nature, and which the trade has found no method of dispensing with, may amount to patentable invention. To obtain absolute simplicity is the highest trait of genius. — Dececo *v.* Gilchrist, 125 Fed. 293; 60 C. C. A. 207.

Hobbs *v.* Goodling, 111 Fed. 403; discussing Richards *v.* Chase, 159 U. S. 477; 159 U. S. 54; National *v.* Hedden, 148 U. S. 482; Lawther *v.* Hamilton, 124 U. S. 1; Crescent *v.* Gottfried, 128 U. S. 158.

The simplicity and obvious nature of East's device seem to be the chief argument against its patentability, but the books are full of cases where patents have been sustained for changes in methods which seem equally simple. — Farmers' *v.* Spruks, 127 Fed. 691; 62 C. C. A. 447.

Barbed Wire Pat. 143 U. S. 275; Keystone *v.* Adams, 151 U. S. 144; Smith *v.* Goodyear, 93 U. S. 498; Topliff *v.* Topliff, 145 U. S. 156; Crown *v.* Aluminum, 108 Fed. 845.

The device of the claim when completed is so diminutive in size and simple in construction that, unless care is taken, the assertion that there is no room for invention in so small a structure may receive greater consideration than is warranted. This court has repeatedly upheld patents for

similar improvements, the test being not the simplicity of the device, but the difficulties overcome and the result accomplished. — U. S. Fastener *v.* Bradley, 149 Fed. 222; 79 C. C. A. 180.

Fastener *v.* Littauer, 84 Fed. 164; Kent *v.* Simons, 39 Fed. 606; Fastener *v.* Hays, 100 Fed. 984; Consolidated *v.* Fastener, 79 Fed. 795.

§ 693. Simplicity — Ex post facto Judgment.

It should be borne in mind that this process was not one accidentally discovered, but was the result of a long search for the very purpose. The surprise is that the manufacturers of steel, having felt the want for so many years, should have never discovered from the multiplicity of patents and of processes introduced into this suit, and well known to the manufacturers of steel, that it was but a step from what they already knew to that which they had spent years in endeavoring to find out. It only remains now for the wisdom which comes after the fact to teach us that Jones (the inventor) discovered nothing, invented nothing, accomplished nothing. — Carnegie *v.* Cambria, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

Loom Co. *v.* Higgins, 105 U. S. 591.

It is true the Jones patent is a simple one, and in the light of present experience it seems strange that none of the expert steel makers, who approached so near the consummation of their devices, should have failed to take the final step which was needed to convert their experiments into an assured success. This, however, is but the common history of important inventions, the simplicity of which seems to the ordinary observer to preclude the possibility of their involving an exercise of the inventive faculty. — Carnegie *v.* Cambria, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

Its very simplicity in such an old field should be a warning against a too ready acceptance of the ex post facto wisdom of the bystander. — Regent *v.* Penn, 121 Fed. 80; 57 C. C. A. 334.

It is difficult to draw the line between mechanical skill and patentable invention, and now that East has succeeded in producing a barrel of great commercial use, out of simple and inexpensive material, by what seems a trivial modification of previously known devices, it is easy to say that any mechanic skilled in the art, having before him the previous invention of Roberts, could readily have accomplished the same object by ordinary mechanical skill, but the fact remains that, notwithstanding the great demand and imperative need of the very thing that East produced, no other mechanic or barrel maker had ever produced such a barrel previous to East's patent. Simple as the device is, others failed to see it, or to estimate its value, or to bring it to the public notice. — Farmers' *v.* Spruks, 127 Fed. 691; 62 C. C. A. 447.

The fact that a new combination or device may be simple and obvious to the ordinary understanding, when once produced in concrete form, is not necessarily proof that invention was not involved. This is almost a commonplace in the jurisprudence of patent law. — Buchanan *v.* Perkins, 135 Fed. 90; 67 C. C. A. 564.

It is easy now to minimize its importance and say it consisted simply in applying a pneumatic hammer to a sieve, but the fact remains that, with the difficulty of enameling keenly recognized in the art, no one made such a combination. — Mott *v.* Standard, 159 Fed. 135; 86 C. C. A. 325.

§ 694. Simplification.

Under some circumstances it may happen that there is invention in substituting for a complex or expensive form something simple or inexpensive. If, therefore, the concave-convex form had been a long time in use, and the patentee had discovered that the convex-flat form was less expensive, and more simple, and yet would answer the purpose, and if he had been the first to put that discovery into practice, there might be invention in so doing, notwithstanding he had made a mistaken claim that his construction had other advantages; but the case does not show such a condition of things. — Kenney *v.* Bent, 97 Fed. 337; 38 C. C. A. 205.

While it is perhaps true that sometimes the mere simplification of mechanism by omitting parts may amount to patentable invention, yet this is only under exceptional circumstances. — U. S. Peg-Wood *v.* Sturtevant, 125 Fed. 378; 60 C. C. A. 244.

Patentable novelty may be found in an improvement which simplifies a complicated train of mechanism by eliminating some of its elements, with the result that the defects due to the presence of these elements are done away with. — Brown *v.* Huntington, 134 Fed. 735; 67 C. C. A. 639.

§ 695. Substitution — Elements.

There would be no invention in changing one of the elements of the Covel patent by bringing into it a feature of the Wilkin patent. — Rich *v.* Baldwin, 133 Fed. 920; 66 C. C. A. 464.

Overweight *v.* Vogt, 120 Fed. 957.

The evidence, we think, fairly leads to the conclusion that the patentee took the combination of Thyng's patent, but instead of using the form of link of that patent, substituted therefor another old form of link which had been commonly used for the same or analogous purposes. This substitution may have secured better results, but it did not involve invention. — North Jersey *v.* Brill, 134 Fed. 580; 67 C. C. A. 380.

Stimpson *v.* Woodman, 10 Wall. 117; Smith *v.* Nichols, 21 Wall. 112; Pennsylvania *v.* Locomotive, 110 U. S. 490; Office Specialty *v.* Fenton, 174 U. S. 492.

§ 696. Substitution — New Material — Non-Patentable.

But superiority of material of itself can never be the subject of a patent. No one will pretend that a machine made in whole or in part of materials better adapted to the purpose for which it is used can be distinguished from the old one, or, in the sense of the patent law, can entitle the manufacturer to a patent. — Hotchkiss *v.* Greenwood, 11 How. 248; 13 L. Ed. 683.

A mere substitution for an element in a combination producing no change except a better result is not patentable. — Hotchkiss *v.* Greenwood, 11 How. 248; 13 L. Ed. 683.

Mere change of material is not sufficient to constitute invention, the purpose and the means being the same. — Hicks *v.* Kelsey, 85 U. S., 670; 21 L. Ed. 852.

Hotchkiss *v.* Greenwood, 11 How. 248; Crane *v.* Price, Web. P. C. 409; Curt. Pat. secs. 70–73.

Mere change in a machine, of one material for another, as wood or wood strengthened with iron for iron alone, is not invention. — Dunbar *v.* Meyers, 94 U. S. 187; 24 L. Ed. 34.

Hicks *v.* Kelsey, 18 Wall. 670.

The substitution of metal for wood was destitute both of patentable invention and utility. — Terhune *v.* Phillips, 99 U. S. 592; 25 L. Ed. 293.

The substitution of one material for another without involving a new mode of construction, or developing anything substantially new is not invention. — Brown *v.* D. C. 130 U. S. 87; 32 L. Ed. 863; 9 S. Ct. 437.

Hotchkiss *v.* Greenwood, 52 U. S. 248; Hicks *v.* Kelsey, 85 U. S. 670; Smith *v.* Goodyear, 93 U. S. 486; Phillips *v.* Detroit, 111 U. S. 604.

The substitution of one material for another which does not involve change of method nor develop novelty of use, even though it may result in a superior article, is not necessarily a patentable invention. — Florsheim *v.* Schilling, 137 U. S. 64; 34 L. Ed. 574; 11 S. Ct. 20.

Hotchkiss *v.* Greenwood, 52 U. S. 248; Hicks *v.* Kelsey, 85 U. S. 670; Terhune *v.* Phillips, 99 U. S. 592; Brown *v.* D. C. 130 U. S. 87.

The substitution of one material for another in the employment of an old method of manufacture is not invention. — Hoff *v.* Iron Clad, 139 U. S. 326; 35 L. Ed. 179; 11 S. Ct. 580.

Substitution of one well known material for another such as would occur to any mechanic who had skill enough to adapt a cumbersome device to new circumstances is not invention. — Ryan *v.* Hard, 145 U. S. 241; 36 L. Ed. 691; 12 S. Ct. 919.

Mere change of material is not invention. — Potts *v.* Creager, 155 U. S. 597; 39 L. Ed. 275; 15 S. Ct. 194.

Hotchkiss *v.* Greenwood, 52 U. S. 248; Hicks *v.* Kelsey, 85 U. S. 670; Terhune *v.* Phillips, 99 U. S. 592; Brown *v.* D. C. 130 U. S. 87.

But when the substitution was for a purpose wholly different from that for which they had been employed, under such circumstances we have repeatedly held that a change of material was invention. — Potts *v.* Creager, supra.

Smith *v.* Goodyear, 93 U. S. 486; Goodyear *v.* Davis, 102 U. S. 222.

The specification of material in the patent is nothing more than a selection, for it is stated that it is preferably though not necessarily, of wood. — National *v.* Merrill, 49 Fed. 157; 1 C. C. A. 214.

The use of wrought steel or iron in lieu of cast metal is mere substitution of materials, which, whatever the degree of superiority given to the manufacture thereby, is not patentable. — Kilbourne *v.* Bingham, 50 Fed. 697; 1 C. C. A. 617.

Hotchkiss *v.* Greenwood, 11 How. 248; Hicks *v.* Kelsey, 18 Wall. 670; Phillips *v.* Detroit, 111 U. S. 604; Gardner *v.* Herz, 118 U. S. 180; Brown *v.* D. C. 130 U. S. 87; Florsheim *v.* Schilling, 137 U. S. 64.

That the substitution of one material for another, even when the substitution produces a beneficial result, where the material substituted was known, is not invention, see — Interior *v.* Perkins, 80 Fed. 528; 25 C. C. A. 613.

The substitution of one kind of material for another, especially of kinds so intimately allied as those of cast or wrought or malleable iron or steel, is not of the character of invention, nor are the products thereof patentable, for the reason that one may possess greater advantages than another. No doubt there are exceptions to the general rule, but they depend upon especial facts, indicating the presence of more genius or invention than is exercised

by the ordinary skill and knowledge of those familiar with the qualities of materials and their various adaptations to the useful arts. — Strom *v.* Weir, 83 Fed. 170; 27 C. C. A. 502.

Kilbourne *v.* Bingham, 50 Fed. 697; Hoff *v.* Mfg. Co. 139 U. S. 326; Potts *v.* Creager, 155 U. S. 597.

It is conceded that the patent cannot be sustained upon the theory that Shaw substituted electric power instead of steam or hydraulic power in such machines. — Shaw *v.* Shriver, 86 Fed. 466; 30 C. C. A. 196.

That the mere substitution of electric or magnetic energy for mechanical energy is not invention, see Bradford *v.* Belknap, 115 Fed. 711; 53 C. C. A. 293.

It is elemental in the patent law that the mere substitution of steel or wrought iron for cast iron is not invention. The advantages and differences of the two forms of iron are too well known to require the skill of an inventor to displace one for the other, where the conditions are such as to make one preferable to the other. — Drake *v.* Brownell, 123 Fed. 86; 59 C. C. A. 216.

Kilbourne *v.* Bingham, 50 Fed. 697; Strom *v.* Weir, 83 Fed. 170; Union *v.* Selchow, 112 Fed. 1006; Florsheim *v.* Schilling, 137 U. S. 64; Hicks *v.* Kelsey, 18 Wall. 670.

The new thing done was to substitute paper for tin or other metal, as material for the dome-shaped cap. A mere substitution of one material for another does not constitute invention. — Lafferty *v.* Acme, 138 Fed. 729; 71 C. C. A. 285.

Florsheim *v.* Schilling, 137 U. S. 64; Gardner *v.* Herz, 118 U. S. 180; Celluloid *v.* Tower, 26 Fed. 451.

The rubber is fastened to the metal more securely than before, but that is all. If this be invention, it must follow that one who substitutes some other material — glass or porcelain, for instance — and fastens the rubber block to this handle by some well-known mechanical device which he substitutes for the gripping flanges of the patent in suit, will be entitled to a patent, and so on until all available fastening devices are exhausted. We are clearly of the opinion that the patent discloses nothing which does not belong to the skill of the calling. — Kuhn *v.* Lock-Stub, 165 Fed. 445; C. C. A.

Rubber-Tip *v.* Howard, 20 Wall. 498; Reckendorfer *v.* Faber, 92 U. S. 347.

§ 697. Substitution — New Material — Patentable.

Although carbon conductors had been used previously, it was invention to select a material capable of subdivision or filamentation to produce the Edison lamp. — Edison *v.* U. S. 52 Fed. 300; 3 C. C. A. 83.

Even if what he did was merely to employ a basic material differing in the degree of porosity and toughness, and a coating differing in the degree of softness from that which had been previously used, (using the "yoshino" paper and a soft wax to make a mimograph stencil) he accomplished thereby a new result. Each of these modifications was necessary to successfully introduce the new principle, which differentiated his production from the stencil sheets of the prior art. — Wickelman *v.* Dick, 88 Fed. 264; 31 C. C. A. 530.

That its selection (rubber for a button for a hose-supporter) was not an obvious thing is persuasively and cogently shown by the fact that during many years numerous inventors were trying to remedy the defects in the old

device, and it did not occur to them how simply and satisfactorily this could be done by making the button of rubber or some other elastic or yielding material. Its employment in the device was a new use, and imparted to the device a remarkable efficiency, as compared with the best type of former devices. — Frost *v.* Cohn, 119 Fed. 505; 56 C. C. A. 185.

To sustain a patent based upon a change of material, it must be shown that some new and useful result has been accomplished; for it is only then that the substitution of one material for another can attain the dignity of invention. — Drake *v.* Brownell, 123 Fed. 86; 59 C. C. A. 216.

Hotchkiss *v.* Greenwood, 11 How. 248; Union *v.* Selchow, 112 Fed. 1006; Frost *v.* Cohn, 119 Fed. 505.

Quite likely the substitution alone of one material for another would not amount to invention, but the successful adaptation of the metal finger-head which made the use of highly tempered thread guides possible is something to be considered in connection with the other elements of the combination upon the question as to whether what he did amounted to invention. — Houghton *v.* Whitin, 153 Fed. 740; 83 C. C. A. 84.

In solving that problem, he, in common with the plumber's art, was aware that brass and iron in contact will not rust; and that iron being harder than brass, sealing surfaces of those metals grind and seal into each other. In the face of these facts long and well known to the plumber's art, it is remarkable that no one took advantage of them to make a brass-to-iron contact in the simple and effective way Hewlitt did to produce a union for common plumbing use. There are instances where an iron nut was used to screw on to brass whereby a rustless joint was secured; there are instances where sealing faces of brass and iron were used, but even these uses and others we might add of even greater suggestiveness, led no one prior to Hewlitt to utilize these known facts to devise a common, cheap, and rustless plumber's union which could be repeatedly uncoupled and recoupled without injury. — Raincar *v.* Western, 159 Fed. 431; 86 C. C. A. 411.

§ 698. Systems and Arrangements.

There is nothing peculiar or novel in preparing a sheet of paper with headings generally appropriate to classes of facts to be recorded, and whatever peculiarity there may be about the headings in this case, is a peculiarity resulting from the transactions themselves. — U. S. Credit *v.* American, 59 Fed. 139; 8 C. C. A. 49.

Whether a new method of conducting a business such as insurance, is or is not patentable, and whether "forms of contract" by which improved methods in conducting such business are made effective are or are not patentable, are questions which were discussed at length upon the argument, but which need not be decided upon this appeal. They do not arise under the patent. — U. S. Credit *v.* American, 59 Fed. 139; 8 C. C. A. 49.

In view of the art, the arrangement of figures to operate as a safety check, as used in postal orders does not involve invention. — Berry *v.* Wynkoop, 84 Fed. 646; 28 C. C. A. 505.

The patent describes a new plan for handling the large number of passengers who patronize the public vehicles provided for rapid transit in large cities. It is argued that this is patentable as a "machine" under the language of the statute. If a scheme for handling the traveling public in congested districts can, for patent purposes, be regarded as a machine, it is by no means

easy to perceive why a new plan for reorganizing the police force, or mobilizing the army or manipulating the guests at crowded public functions, may not also be aptly described as a machine and patented as such. — Fowler *v.* City of N. Y. 121 Fed. 747; 58 C. C. A. 113.

The patent purports to disclose an improved method of preventing and rectifying mistakes in railroad shipping. The patentee has provided a box in which the truckman is to deposit the voucher instead of returning it to the shipping clerk, and has located it at the most convenient place, and where there is the least likelihood of his making the mistake of depositing the voucher in the wrong one. All this evidences good judgment upon the part of one who is experienced in the particular business, but it does not rise to the level of invention. — Hocke *v.* N. Y. Central, 122 Fed. 467; 58 C. C. A. 627.

This "system" is brought about by a rearrangement of old parts, and in the literature of the art these parts had already been brought together in such a variety of ways, and there had been so many substitutions of one device for another, so many methods shown of controlling one current by another and of displaying and obscuring signals, such a transposition of parts and shifting of currents that it seems to us entirely clear that the rearrangement of the patentees, clever though it may have been and in its details perhaps novel, was nevertheless one of those minor improvements which was easily within the ordinary skill of the telephone engineer. The case seems to come within the views expressed in Atlantic *v.* Brady, 107 U. S. 199, and peculiarly within those expressed in Thomson-Houston *v.* Western, 65 Fed. 619. — Western *v.* Rochester, 145 Fed. 41; 75 C. C. A. 313.

That an invention cannot be founded merely upon an arrangement of color signals, see Library Bureau *v.* Macey, 148 Fed. 380; 78 C. C. A. 194.

That an indexing system may be narrowly patentable, see Library Bureau *v.* Macey, 148 Fed. 380; 78 C. C. A. 194.

Note: As a matter of fact, in its last analysis, what is held to be patentable in this case is an article of manufacture or an implement, rather than a system. This I believe to be the test of invention in such cases. The invention must reside in the novel article or implement which makes the system possible.

If at the time of Hicks' application, there had been no system of bookkeeping of any kind in restaurants, we should be confronted with the question whether a new and useful system of cash-registering and account-checking in such an art is patentable under the statute. This question seems never to have been decided by a controlling authority and its decision is not necessary now unless we find that Hicks has made a contribution to the art which is new and useful. We are decidedly of the opinion that he has not, the overwhelming weight of authority being that claims granted for such improvements as he has made are invalid for lack of patentability. — Hotel *v.* Lorraine, 160 Fed. 467; 87 C C. A. 451.

Hocke *v.* N. Y. Central, 122 Fed. 467; U. S. Credit *v.* American, 59 Fed. 139.

§ 699. Tests of — Last Step Rule.

Sutton has taken the step which marks the difference between a successfully operating machine and one which stops short at that point, and that advance entitles him to the protection of a patent. — Cimiotti *v.* American, 198 U. S. 399; 49 L. Ed. 1100; 25 S. Ct. 697.

It is true that it has been said upon high authority that in the law of patents it is the last step that wins, but this stride must be made by the inventor, who originates, and not by the mechanic, who merely improves. It is also true that the cases recognize the fact that an improvement when made is not to be deprived of the protection of the law because it seems simple after it is accomplished. There are cases where many have been striving to reach a given result without success, when there comes upon the scene the inventor who solves the difficulty in a manner which makes strange the want of earlier discovery of a thing so simple, but who is, nevertheless, entitled to the protection of the patent law. — Galvin *v.* City, 115 Fed. 511; 53 C. C. A. 165.

It was this last step which has turned previous failures into a success, and we are therefore of opinion that the East patent is valid. — Farmers' *v.* Spruks, 127 Fed. 691; 62 C. C. A. 447.

If it be true that Boxley (the inventor of the alleged anticipating device), even though ignorant of the fact, had previously made a machine capable of doing the work of the Pine device (patent in suit) in the same way, the patent of the latter cannot be sustained. But, on the other hand, if Boxley intending to accomplish a different result ignorantly stumbled upon a structure which, in the light of Pine's achievement, can be distorted into a temporary and inefficient substitute for the successful machine, quite a different proposition is presented. If Pine did nothing more than take an old abandoned failure and, by the introduction of new and ingenious features, no matter how simple they may be, convert the rustic relic into a living machine which does the required work better, faster, cheaper than it was ever done before, he is entitled to the protection which his patent is intended to give. — United *v.* Beattie, 149 Fed. 736; 79 C. C. A. 442.

Potts *v.* Creager, 155 U. S. 597; Clough *v.* Barker, 106 U. S. 166.

§ 700. Tests of — Miscellaneous.

In determining the question of invention each case must depend upon its own facts, the inquiry always being whether what has been done required the exercise of the inventive faculties. Has a new or better result been obtained? Is it cheaper and more durable? Has it new capabilities? Does it perform new functions? — Rumford *v.* New York, 134 Fed. 385; 67 C. C. A. 367.

Smith *v.* Vulcanite Co. 93 U. S. 486; Loom Co. *v.* Higgins, 105 U. S. 580; King *v.* Anderson, 90 Fed. 500.

The number of patents relating to this subject which had been taken out is strong evidence that the results which had already been reached had already exhausted the common skill and learning of the craft. — Western *v.* North, 135 Fed. 79; 67 C. C. A. 553.

While it might be possible for a skilled mechanic with the prior art and the present object both before him to construct the device of the patent; *Held:* To conceive the idea and then embody it in a combination which produces a machine which for accuracy, convenience, celerity and fairness to employer and employed shows marked improvement over anything preceding it, required the exercise of the inventive faculty, though not, perhaps, of the highest order. — International *v.* Dey, 142 Fed. 736; 74 C. C. A. 68.

Hobbs *v.* Beach, 180 U. S. 383; Loom Co. *v.* Higgins, 105 U. S. 580; Ciniotti *v.* Fur. Co. 198 U. S. 399; Topliff *v.* Topliff, 145 U. S. 156.

The practically abandoned experimental models made by the Brill Company, the real defendant in interest herein, the fact that it never made any

construction like the alleged infringement until after O'Leary had obtained his patent and shown it to the president of said company, the cogent and persuasive fact that in the Brill model illustrating the use of the inflexible and flexible sashes, its constructors showed their inability to adapt their methods to the storage of an inflexible sash overhead, and were obliged to arrange it so as to slide downwards, the state of the prior art, and the fact that with a great body of would-be inventors in the field, O'Leary was the first to show in a car a method of storage in an overhead chamber of inflexible panels arranged to slide abreast instead of tandem; the absence from the hansom cab structure of the merging and widening grooves, and the impossibility of adapting its construction to the roof of a car without substantial and radical modifications; the obviation by O'Leary of all overhead obstructions or interference, and the adoption by the Brill Company of a modified form of the patented car, considered together, show a compliance with the most rigid requirements of the tests of invention and demonstrate patentable novelty beyond question. — O'Leary *v.* Utica, 144 Fed. 399; 75 C. C. A. 377.

§ 701. Transposition of Parts.

It is true that where a mechanical result is obtained, by the movement of one element upon another element of a combination, it does not usually involve invention merely to reverse the operation, and secure the same result by making the first element stationary and the second movable. And so, where result of motion is secured by a stationary cam guiding a tool, it may often be an obvious change to reverse the parts by making the cam movable and the tool stationary. But the question whether it is obvious is to be determined by examination of the particular machines in which the change is made. — Penfield *v.* Chambers, 92 Fed. 630; 34 C. C. A. 579.

In the Jennings case, the circuit court indicated that the proper limit of the width of such strip should be not to exceed the depth of the teeth, to wit: — one-thirty-second of an inch. We concur in this conclusion.

Wallace, C. J. dissenting. When it becomes necessary to discriminate between a temper line which is within or beyond one thirty-second of an inch from the base of the teeth, and make the validity of the patent and the question of infringement depend upon that test, this seems to me to be splitting hairs, and, in view of the prior art, to be sustaining a patent for a mere change of degree, and utterly unwarranted. — Thompson *v.* Bushnell, 96 Fed. 238; 37 C. C. A. 456.

That the mere transposition of parts, performing the same functions, is not invention, see Excelsior *v.* Morse-Keefer, 101 Fed. 448; 41 C. C. A. 448.

Fastener Co. *v.* Hays, 100 Fed. 984.

§ 702. Utility.

Inventions, in order that they may be the proper subjects of letters patent, must be new and useful. Utility in most cases is a question of fact, as it usually depends upon the evidence resulting from an actual experiment. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

Patent laws have for their leading purpose the encouragement of useful inventions. Practical utility is their object, and it would be strange if, with such object in view, the law should consider two things substantially the same which, practically and in reference to their utility, are substantially different. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

Curt. Pat. sec. 331.

Neither an invention which will not enable the operator to accomplish the desired result, nor one which constantly exposes the operator to the loss of his life or to great bodily harm can be regarded as being useful within the meaning of the patent law. — Mitchell *v.* Tilghman, 86 U. S. 287; 22 L. Ed. 125.

The patent was for a process for spotting the leaves of tobacco to give them the appearance of the real sumatra leaf. *Held:* In authorizing patents to the authors of real and useful discoveries and inventions, Congress did not intend to extend protection to those which confer no other benefit upon the public than the opportunity of profiting by deception and fraud. To warrant a patent, the invention must be useful; that is, capable of some beneficial use as distinguished from a pernicious use. — Rickard *v.* DuBon, 103 Fed. 868; 43 C. C. A. 360.

We cannot think that a decision adverse to the utility and operativeness of this invention could safely rest on the ill success of experiments made by those who were not specially desirous of making their experiments succeed. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

The evidence showed that the device of the patent was not a success and that the patent did not disclose means for obviating the difficulties in adapting such apparatus to the needs of the art. *Held:* Taking this as the strongest answer that can be made (that experiment would be necessary to reduce the invention to actual practice) of the statutory requirement that the patentee shall make a written description of his invention or discovery, "in such full, clear and exact terms as to enable any person skilled in the art to make, construct and use the same," we are of opinion, in the face of strong and uncontradicted proof of those skilled in the art, that the problem of roll contour has not been solved — that the disclosures of this patent are not of the practical and useful character the law makes the consideration for the grant of a patent monopoly. The evidence satisfies us the problem of continuous sheet-rolling was neither solved nor disclosed by this patent, and that to sustain this patent would not be to reward invention, but to block further experiment and development. — Donner *v.* American, 165 Fed. 199; C. C. A.

Deering *v.* Harvester Works, 155 U. S. 286.

INVENTOR.

Statute and General Statement § 703 | *Death of Applicant* § 300; *Employer and Employee* § 364; *Joint Inventions* § 704; *License* § 749

See — Administrator § 38; *Assignment* § 149; *Copartnership* § 270;

§ 703. Statute and General Statement.

Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof * * * R. S. 4886.

Any person having the maturity and mentality to understand the nature of an oath may make application for a patent. By the terms of Sec. 4896, as enacted 3 March, 1871, an executor or administrator of a deceased inventor may make application for a patent upon an invention of a deceased person; and since the amendment of May 23, 1908, to that section, the legal representative of an insane person may, in like manner, make or prosecute an application for patent. Thus there are no restrictions as to sex, race or citizenship, and the full enjoyment of the right of patent is open to all who are able to establish the statutory prerequisites to the grant.

A party seeking a right under the patent statutes may avail himself of all their provisions, and the court may not deny him the benefit of a single one. — United States *v.* Am. Bell. 167 U. S. 224; 42 L. Ed. 144; 17 S. Ct. 809.

JOINT INVENTIONS.

General Statement and Rules § 704 | *See — Letters Patent* § 738

§ 704. General Statement and Rules.

The rights of joint inventors have been recognized from the earliest times, and but few questions of joint inventorship have reached the appellate courts. Moreover, the few rules which are given below are not altogether universal in their application. The rule in Welsbach *v.* Cosmopolitan, for example, in that particular case was undoubtedly correct; but it is not difficult to conceive of a case where an invention consisting of a "single thought" might be the product of collaboration of two minds working toward and finally reaching the single, decisive step and taking it in step, so to speak, in such unity and simultaneousness that neither of the two could declare under oath which actually produced the "single thought." On the other hand, the rule in Quincy *v.* Krause must be qualified. Many cases exist where the invention consists of a series of sub-combinations which go to make up a machine, the machine itself as an entirety being non-patentable; and in many such cases two or more engineers are at work improving the machine or apparatus or system generally; and it is evident that a joint patent of such a series of improvements would be improper, and yet would be within the strict terms of the rule of that case.

There is no statutory provision as to joint inventorship; and it is well there is not, for any attempt to delimit joint inventorship from sole inventorship must be unsatisfactory.

Roper having with Spencer invented and constructed a machine which contains a certain useful combination, thereafter takes out a patent in his own name covering this very combination. If the prior machine produced by both men, and known to both, does not disentitle Roper to cover such combination in his patent, it would not disentitle Spencer to cover the same combination in a patent to himself; and we should have two joint inventors, each rightfully holding a separate patent for the same invention, which is absurd. — Bannerman *v.* Sanford, 99 Fed. 294; 39 C. C. A. 534.

The patent contains two claims, the first is for a single thought, — the described improvement in strengthening incandescent mantles, consisting in coating a completed mantle with paraffine or other suitable material. It is difficult to apprehend how two could have shared in the conception. — Welsbach *v.* Cosmopolitan, 104 Fed. 83; 43 C. C. A. 418.

At the time the application was made they were going into a partnership, and it appears most probable that they conceived the idea of having the patent vest a joint interest to conform to their interest in the business. If these are the facts, the patent was not properly issued to them jointly. — Standard *v.* Computing, 126 Fed. 639; 61 C. C. A. 541.

The co-owners of the invention were foreigners and made joint application in the United States after one of them had obtained sole foreign patents. The invention was clearly that of one, while minor adaptations were joint. *Held:* Invalid. — De Laval *v.* Vermont, 135 Fed. 772; 68 C. C. A. 474.

"Every machine before it can be used must be constructed as well as invented. If one man does all the inventing and another does all the constructing, the first is the sole inventor." — United *v.* Beattie, 149 Fed. 736; 79 C. C. A. 442.

Agawam *v.* Jordan, 7 Wall. 583.

When a claim covers a series of steps or a number of elements in combination, the invention may well be joint, though some of the steps or some of the elements may have come as the thought of but one. — Quincy *v.* Krause, 151 Fed. 1012; 81 C. C. A. 290.

Welsbach *v.* Cosmopolitan, 104 Fed. 83.

JUDICIAL NOTICE.

General Statement § 705
Common Knowledge § 706
Novelty § 707
Patentability § 708
Prior Art § 709
Public Use § 710
Records § 711
Miscellaneous § 712
See — Demurrer § 324

§ 705. General Statement.

The exercise of this prerogative has occurred, perhaps, more frequently in connection with demurrer raising the question of the validity of the patent in suit. See title *Demurrer*. It is thought that there is a growing tendency to exercise this right in connection with injunctions. Properly exercised the effect is salutary. The First Circuit has said:

It is a thoroughly settled rule that, as to patentability and the range of the claims in a patent, inasmuch as these matters concern the public at large, the court will not allow parties to frame their issues in such a way as to take from it the scrutiny of all the questions which may be involved. Millard *v.* Chase, 108 Fed. 399 (§ 681). And it is believed that the courts must, in the future, recognize their duty to the public more fully than they have done in the past, and with the scientific knowledge possessed by our courts, the range of judicial notice should be extended.

§ 706. Common Knowledge.

Courts will take notice of whatever is generally known within the limits of their jurisdiction; and if the judge's memory is at fault, he may refresh it by resorting to any means for that purpose which he may deem safe and proper. This extends to such matters of science as are brought before him. — Brown *v.* Piper, 91 U. S. 37; 23 L. Ed. 200.

Greenleaf, Ev. 11; Gres. Eq. Ev. 294; Taylor Ev. 4; Hoare *v.* Silverlock, 12 Ad. & Ell. (N. S.) 624.

The court will take judicial notice of matters of common knowledge and use. — Dunbar *v.* Meyers, 94 U. S. 187; 24 L. Ed. 34.

Brown *v.* Piper, 91 U. S. 38.

It has always been done, and we are not required to shut our eyes to the fact that with this object, among others, the sheer and flare of vessels of all classes have been almost infinitely varied. — Boynton *v.* Morris, 87 Fed. 225; 30 C. C. A. 617.

King *v.* Gallun, 109 U. S. 99.

There are some elementary details of everyday domestic mechanics of which a court will take judicial notice. No sworn testimony is needed to

inform it that the use of leather washers to relieve friction, prevent rattling, secure even pressure and avoid wear and tear between metal surfaces, has been the common property not only of mechanics but of all persons possessing ordinary intelligence, for many generations. — Bradley *v.* Eccles, 139 Fed. 447; 71 C. C. A. 291.

It is only when the court by bringing to its aid matters of common knowledge, is convinced, that the patent is void on its face, that such proofs can be dispensed with. — American *v.* DeGrasse, 157 Fed. 660; 87 C. C. A. 260.

§ 707. Novelty.

In passing upon the novelty of the alleged improvement, we are permitted to consider matters of common knowledge or things in common use. — Phillips *v.* Detroit, 111 U. S. 604; 28 L. Ed. 532; 4 S. Ct. 580.

Brown *v.* Piper, 91 U. S. 37; Terhune *v.* Phillips, 99 U. S. 592; King *v.* Gallun, 109 U. S. 99; Ah Know *v.* Nunen, 5 Sawy, 552.

Whether or not the design is new is a question of fact, which, whatever our impressions may be, we do not think it proper to determine by taking judicial notice of the various designs which may have come under our observation. It is a question which may and should be raised by answer and settled by proper proofs. — New York *v.* New Jersey, 137 U. S. 445; 34 L. Ed. 741; 11 S. Ct. 193.

The court will take judicial notice of devices which are common. — Black Diamond *v.* Excelsior, 156 U. S. 611; 39 L. Ed. 553; 15 S. Ct. 482.

Brown *v.* Piper, 91 U. S. 37; Terhune *v.* Phillips, 99 U. S. 592; King *v.* Gallun, 109 U. S. 99; Phillips *v.* Detroit, 111 U. S. 604.

It is a thoroughly well settled principle of patent law that in clear cases the court may, of its own motion, adjudge a patent invalid, even if its validity is not set up by the alleged infringer. — Osgood *v.* Metropolitan, 75 Fed. 670; 21 C. C. A. 491.

That the court will take judicial notice of palpable want of novelty, even if the answer contains only a general denial and no notice of the prior art, see Baker *v.* Duncombe, 146 Fed. 744; 77 C. C. A. 234.

Black Diamond *v.* Excelsior, 156 U. S. 611; Brown *v.* Piper, 91 U. S. 37; Richards *v.* Chase, 158 U. S. 299; Specialty *v.* Fenton, 174 U. S. 492; Fond Du Lac *v.* May, 137 U. S. 406; Mahler *v.* Animarium, 111 Fed. 530; Westinghouse *v.* Union, 117 Fed. 495; Appleton *v.* Star, 60 Fed. 411; Beer *v.* Walbridge, 100 Fed. 465.

§ 708. Patentability.

We think the practice thus sanctioned is not unfair or unjust to complainants in suits brought on letters patent. If letters patent are void because the device or contrivance described therein is not patentable, it is the duty of the court to dismiss the cause on that ground, whether the defense is made or not. It would ill become a court of equity to render money decrees in favor of a complainant for the infringement of a patent which the court could see was void on its face for want of invention. Every suitor in a cause founded on letters patent should, therefore, understand that the question whether his invention is patentable or not is always open to the consideration of the court, whether the point is raised by the answer or not. — Slawson *v.* Grand, 107 U. S. 649; 27 L. Ed. 576; 2 S. Ct. 663.

Dunbar *v.* Myers, 94 U. S. 187; Brown *v.* Piper, 91 U. S. 44.

In deciding whether the patent covers an article, the making of which requires invention, we are not required to shut our eyes to matters of common knowledge or things in common. — King *v.* Gallun, 109 U. S. 99; 27 L. Ed. 870; 3 S. Ct. 202.

Brown *v.* Piper, 91 U. S. 43; Terhune *v.* Phillips, 99 U. S. 592; Ah Know *v.* Nunan, 5 Sawy, 552.

Where the combination, or the elements described are well known, the court is at liberty to judge whether there be any invention in using them in the combination claimed. — Richards *v.* Chase, 158 U. S. 299; 39 L. Ed. 991; 15 S. Ct. 831.

§ 709. Prior Art.

The state of the art, under many circumstances, is a matter of which the court can take judicial notice, especially in equity suits, where the court exercises the privileges to a jury as well as of judges sitting to determine questions of law. It is also true there may be, with reference to a particular subject matter, such a mass of patents covering so long a period, that they may be taken to have become part of the common knowledge which the court shares. So also, a mass of patents continued for a long period, may so clearly indicate such a state of the art as to be sufficient to invalidate a patent, precisely as the common state of the practical art existing throughout the community may invalidate it. Of course, under such circumstances, in neither the one case nor the other need the defense be specially pleaded under the statute.

This court has several times said that it cannot assume to take notice of special facts, within a limited and peculiar field, like that which the appellee seeks to bring to our attention. It is plain that the state of the art of which the court may take judicial notice, and as to which it can be assisted by the statements of the parties or their counsel, without proofs furnished in accordance with the rules of law, is matter of general knowledge, and such judicial notice cannot extend to a single patent, relating to a particular fact in a limited art. — Parsons *v.* Seelye, 100 Fed. 452; 40 C. C. A. 484.

Potts *v.* Creager, 155 U. S. 597; Locomotive *v.* Medart, 158 U. S. 68; Richards *v.* Elevator, 158 U. S. 299; Office Specialty Co. *v.* Fenton, 174 U. S. 492; N. Y. *v.* New Jersey, 137 U. S. 445; American *v.* Buckskin, 72 Fed. 508.

The courts will take judicial notice of facts which are within common knowledge, including those relating to the arts and industries and matters of science, and may refer to the dictionaries and encyclopedias for information when necessary to go outside the records. — Beer *v.* Walbridge, 100 Fed. 465; 40 C. C. A. 496.

Brown *v.* Piper, 91 U. S. 37.

§ 710. Public Use.

The determination of this case is controlled by Brown *v.* Piper, 91 U. S. 37. We cannot fail to take judicial notice that the thing patented was known and in general use long before the issuing of the patent. — Terhune *v.* Phillips, 99 U. S. 592; 25 L. Ed. 293.

Such a familiar device the court may properly take judicial notice of. — Office *v.* Fenton, 174 U. S. 492; 43 L. Ed. 1058; 19 S. Ct. 641.

Brown *v.* Piper, 91 U. S. 37; Terhune *v.* Phillips, 99 U. S. 592; King *v.* Gallun, 109 U. S. 99; Phillips *v.* Detroit, 111 U. S. 604.

§ 711. Records.

For the purpose of ascertaining the state of the art, when it concerns a matter of general interest, as it does in the determination of the construction of this class of letters patent, we are certainly authorized to take notice of our own records, and perhaps we may always do so. — Cushman *v.* Goddard, 95 Fed. 664; 37 C. C. A. 221.

Butler *v.* Eaton, 141 U. S. 240; Smelting Co. *v.* Billings, 150 U. S. 31; Creamer *v.* Washington, 168 U. S. 124; In re Boardman, 169 U. S. 39.

If there were any doubt as to what those questions are, we could take judicial notice of the records of our own court for the purpose of informing ourselves. — Rumford *v.* Hygienic, 159 Fed. 436; 86 C. C. A. 416. Reversed, 215 U. S. 156.

§ 712. Miscellaneous.

Where the bill did not allege the signature of the acting commissioner of patents, the court will take judicial notice of such officer whether of a permanent or transient character. — Railroad *v.* Winans, 58 U. S. 31; 25 L. Ed. 1009.

Wilson *v.* Rousseau, 4 How. 686.

Of private and special facts, in trials in equity and at law, the court or jury is bound carefully to exclude the influence of all previous knowledge. — Brown *v.* Piper, 91 U. S. 37; 23 L. Ed. 200.

That the same rule as to judicial notice applies in design patents as is the rule with mechanical patents, see Roberts *v.* Bennett, 136 Fed. 193; 69 C. C. A. 533.

Black Diamond *v.* Excelsior, 156 U. S. 611; Market *v.* Rowley, 155 U. S. 621.

JURISDICTION.

The Statute § 713
Contracts § 714
Court of Claims § 715 (*see* § 428)
District Judge § 716
Equity (*see* § 370)
Expiration of Patent Pendente Lite § 717
Rule § 718
For Determining Profits or Assessing Damages Only § 719
Miscellaneous § 720
Infringement § 721 (*see* § 445)
Licensor and Licensee § 722 (*see* § 765)
Residence § 723
State Court § 724 (*see* § 920)
Supreme Court § 725
See — Appeals § 130; *Decrees* § 301; *Equity* § 370; *Pleading* § 788

§ 713. The Statute.

The district courts shall have original jurisdiction as follows:

* * * * * * *

Seventh. Of all suits at law or in equity arising under the patent, the copyright, and the trade-mark laws of the United States. — Jud. Code, Sec. 24.

The jurisdiction vested in the courts of the United States in the cases and proceedings hereinafter mentioned, shall be exclusive of the courts of the several States.

* * * * * * *

Fifth. Of all cases arising under the patent-right or copyright laws of the United States. Jud. Code, Sec. 256.

By the Act of Mar. 3, 1897, and re-enactment as Sec. 48, of the Judicial Code, the following provision was made as to jurisdiction and service of process:

That in suits brought for the infringement of letters patent the circuit courts of the United States shall have jurisdiction in law or in equity, in the district of which the defendant is an inhabitant, or in any district in which the defendant, whether a person, partnership, or corporation, shall have committed acts of infringement and have a regular and established place of business. If such suit is brought in a district of which the defendant is not an inhabitant, but in which such defendant has a regular and established place of business, service of process, summons, or subpoena upon the defendant may be made by service upon the agent or agents engaged in conducting such business in the district in which the suit is brought.

The subject of appellate jurisdiction, so far as the statute is concerned, need not be recited here, as it has been fully set out under *Appeals*.

§ 714. Contracts.

The object of the bill was to set aside a contract licensing the use of a patented machine. The dispute does not arise under any act of Congress, nor does the decision depend upon the construction of any law in relation to patents. It arises out of the contract stated in the bill; and there is no act of Congress providing for or regulating contracts of this kind. The rights of the parties depend altogether upon common law and equity principles. The injunction asked is to be the consequence of the decree of the court sanctioning the forfeiture. And if the case made in the bill was a fit one for relief in equity, it is very clear that whether the contract ought to be declared forfeited or not in a court of chancery depended wholly upon the rules and principles of equity and in no degree whatever upon any act of Congress. — Wilson *v.* Sanford, 10 How. 99; 13 L. Ed. 344.

Complainant and defendant had made a contract (verbal) and defendant had entered upon the use of the patent under such agreement. Plaintiff then presented a written contract embodying the terms (and others) of the agreement. Defendant refused to sign, and complainant brought action for infringement upon the failure of defendant to pay royalties. Both were citizens of the same state.

If either party disregards it, it can be specifically enforced against him, or damages can be recovered for its violation. But until so rescinded or set aside it is a subsisting agreement, which, whatever it is, or may be shown to be, must govern the rights of these parties in the use of complainant's process, and must be the foundation of any relief given to a court of equity. Such a case is not cognizable in a court of the United States, by reason of its subject-matter, and as the parties could not sustain such a suit in the circuit court by reason of citizenship, this bill should have been dismissed. — Hartell *v.* Tilghman, 99 U. S. 547; 25 L. Ed. 357.

Reviewing: Burr *v.* Gregory, 2 Paine, 426; Littlefield *v.* Perry, 21 Wall. 205; Meserole *v.* Paper, 6 Blatchf. 356; Blanchard *v.* Sprague, 1 Cliff. 288; Hill *v.* Whitcomb, 1 Holmes. 317; Brooks *v.* Stolley, 3 McLean, 523; Goodyear *v.* Rubber Co., 4 Blatchf. 63.

The controversy as stated by the appellants is whether certain goods manufactured by them embody the invention covered by the appellees' patents. Both parties may agree as to what the patented invention is, and yet disagree on the question whether the invention is employed in the manufacture of certain specified goods. The controversy between the parties in this case is clearly of the latter kind and cannot be said to be one which grows

out of the legislation of Congress. — Albright *v.* Teas, 106 U. S. 613; 27 L. Ed. 295; 1 S. Ct. 550.

Wilson *v.* Sanford, 10 How. 99; Hartell *v.* Tilghman, 99 U. S. 547; Goodyear *v.* Rubber, 4 Blatchf. 63; Meserole *v.* Paper, 6 Blatchf. 355; Blanchard *v.* Sprague, 1 Cliff. 288; Hill *v.* Whitcomb, 1 Holmes, 317.

While in actions for infringement, in which the validity of the patent is put at issue under R. S. 4920, the circuit courts have exclusive jurisdiction, actions founded on contracts for the use of patented inventions may be maintained elsewhere. — U. S. *v.* Palmer, 128 U. S. 262; 32 L. Ed. 442; 9 S. Ct. 104.

U. S. *v.* Burns, 79 U. S. 246; Wilson *v.* Sanford, 51 U. S. 99; Hartell *v.* Tilghman, 99 U. S. 547; Albright *v.* Teas, 106 U. S. 613; Dale *v.* Hyatt, 125 U. S. 46.

But the same does not hold good with reference to the licensee. There were practically but two ways in which the patentee could impair the grant he made to the licensee, and those were by a revocation of the license by a bill in equity, or by treating it as abandoned and revoked, and granting a license to another party. He elected the latter remedy and made a contract with the Pacific Bridge Co. to make and sell wooden pipe within the same territory. A suit in a state court would either be inadequate or would involve questions under the patent law. If the licensee sued at law he would be obliged to establish the fact that the patent had been infringed which the patentee might have denied and in any case could only recover damages for past infringement. If he sued in equity he could only pray an injunction against future infringements; but this is exactly what he prays in this case, and thereby raises a question under the patent laws. In either case the patentee could defeat the action by showing that he did not infringe, — in either case the defendant could so frame his answer as to put in issue the title, the validity, or the infringement of the patent. The natural and practically the only remedy, as it seems to us, was for the plaintiff to assert his title under the license, and to prosecute the defendants as infringers. In doing this he does what every plaintiff is bound to do, namely, set forth his title either as patentee, assignee, or licensee, and thereby put that title in issue. The defendant is at liberty in such a case to deny the title of the plaintiff by declaring that the license no longer exists, but in our opinion this does not make it a suit upon the license or contract, but it still remains a suit for the infringement of a patent, the only question being as to the validity of plaintiff's title. There can be no doubt whatever that if the plaintiff sued some third person for an infringement of his patent, the defendant might attack the validity of his license in the same way, but it would not oust the jurisdiction of the court. Why should it do so in this case? — Excelsior *v.* Pacific, 185 U. S. 282; 46 L. Ed. 910; 22 S. Ct. 681.

Hartell *v.* Tilghman, 99 U. S. 547; Littlefield *v.* Perry, 21 Wall. 205; Atherton *v.* Atwood-Morrison, 102 Fed. 949; White *v.* Rankin, 144 U. S. 628.

An oral agreement existed between the parties whereby the defendants were to perform certain acts in the exploitation of the invention, but by which they acquired no legal or equitable interest in the patent. A subsequent written agreement existed, the contents and intent of which was seriously disputed, by which, apparently, the defendants acquired some legal interest in the title. The defendants failed to perform and the action was for specific performance under the oral contract and also for cancellation of the alleged written assignment. *Held:* Cases are not infrequent where, upon the facts, it is somewhat difficult to draw the jurisdictional line. The case in hand, however, presents no difficulty. It is perfectly apparent that the case is one which arises entirely under the contract as set out in the bill, and for the tort

involved in the alleged fraudulent or forged assignment, and not in any wise under the patent laws or laws of the United States. — Kurtz *v.* Straus, 106 Fed. 414; 45 C. C. A. 366.

Atherton *v.* Atwood, 102 Fed. 949.

Under this contract the complainant claims that it had the exclusive right to use, and to let to others to use and sell and deal in within the states of Maryland and Delaware and the District of Columbia. The jurisdiction of the court therefore rests altogether on the diverse citizenship of the parties. — Rahley *v.* Columbia, 122 Fed. 623; 58 C. C. A. 639.

Excelsior *v.* Pacific, 185 U. S. 282.

When a contract is made respecting a right under a patent, and the parties get into litigation, confusion sometimes arises over the question whether the cause of action originates in the contract or in the patent laws. The test is this: If the plaintiff is seeking a judgment for debt or damages, or a decree for cancellation or specific performance, on account of the defendant's breach of his covenants, the cause of action arises out of the contract; and, though the determination of the issue of breach or no breach may involve the interpretation of the patent and of the prior art, the insistence of the defendant that his device, according to the true construction of the patent and the prior art, is not within the patent right granted him in the contract, cannot change the nature of the action. Standard *v.* Leslie, 118 Fed. 557. On the other hand, if the plaintiff is seeking a judgment for damages, or a decree for an injunction and an accounting, on account of defendant's unauthorized use of the patent right in making or using or selling the device without license, the cause of action arises out of the patent laws; and, though the determination of the issue of infringement or no infringement may involve the interpretation of the contract, the insistence of the defendant that his act was within his rights under the contract, if properly construed, cannot change the nature of the action. — Victor *v.* The Fair, 123 Fed. 424; 61 C. C. A. 58.

Wilson *v.* Sanford, 10 How. 99; Littlefield *v.* Perry, 21 Wall. 205; Excelsior *v.* Pacific, 185 U. S. 282; Atherton *v.* Atwood, 102 Fed. 949; Ball *v.* Ball, 58 Fed. 818; Siebert *v.* Manning, 32 Fed. 625.

An action which raises a question of infringement is an action arising under the patent law. That the patentee may have a remedy for breach of contract also does not defeat the jurisdiction. — Rupp *v.* Elliott, 131 Fed. 730; 65 C. C. A. 544.

Heaton-Peninsular *v.* Eureka, 77 Fed. 288; Victor *v.* The Fair, 123 Fed. 424.

When a patentee imposes such restrictions, they may likewise constitute a contract between the patentee and his direct vendee or licensee. In such case the patentee would have a double remedy — an action in tort for infringement, or an action for the breach of the contract. — Park *v.* Hartman, 153 Fed. 24; 82 C. C. A. 158.

Heaton *v.* Eureka, 77 Fed. 288; Victor *v.* The Fair, 123 Fed. 424; Bement *v.* National, 186 U. S. 70; National *v.* Schlegel, 128 Fed. 733.

As is well known, a suit for injunctive relief against the infringement of a patent, and incidentally for the recovery of damages arising therefrom, is one arising under the patent laws of the United States, and may be maintained in the courts of the United States; but it is firmly settled that, in the absence of diversity of citizenship of the parties, a suit on a private contract between the parties fixing and governing their rights to use a patented device, or a suit for the specific performance or rescission of a contract for

the use or sale of a patent, is not maintainable in those courts. — St. Louis *v.* Sanitary, 161 Fed. 725; 88 C. C. A. 585.

Wilson *v.* Sanford, 10 How. 99; Brown *v.* Shannon, 20 How. 55; Dale *v.* Hyatt, 125 U. S. 46; Albright *v.* Teas, 106 U. S. 613; Pratt *v.* Paris, 168 U. S. 255.

§ 715. Court of Claims.

It would seem that an action for infringement against the U. S. would be properly brought in the Court of Claims. — James *v.* Campbell, 104 U. S. 356; 26 L. Ed. 786.

Carr *v.* U. S. 98 U. S. 433.

It would seem that the use of an invention by a government official in the discharge of his duties would be an exercise of the right of eminent domain, and that action would lie in the Court of Claims. — Hollister *v.* Benedict, 113 U. S. 59; 28 L. Ed. 901; 5 S. Ct. 717.

U. S. *v.* Mfg. Co. 112 U. S. 645.

The court of claims has jurisdiction to award royalties arising under an implied contract. — U. S. *v.* Palmer, 128 U. S. 262; 32 L. Ed. 442; 9 S. Ct. 104.

Distinguishing: Pitcher's Case, 1 Ct. Cl. 7.

The Court of Claims has no jurisdiction of an action for tort in infringement. — U. S. *v.* Berdan, 156 U. S. 552; 39 L. Ed. 530; 15 S. Ct. 420. But see App. § 428.

Gibbons *v.* U. S. 75 U. S. 269; Morgan *v.* U. S. 81 U. S. 531; Hill *v.* U. S. 149 U. S. 593; Schillinger *v.* U. S. 155 U. S. 162; U. S. *v.* Palmer, 128 U. S. 262.

§ 716. District Judge.

The fourth objection is based upon the provisions of section 719 of the Revised Statutes of the United States, relating to the issuing of an injunction by a district judge. But that section does not apply to this case. Vulcanite Co. *v.* Folsom, 3 Fed. 509. The injunction here was not issued by the district judge under section 719. When the case was heard below, and the injunction was granted, the district judge was holding the circuit court, under section 609, Rev. St. U. S.; and his authority was co-extensive with that of any other judge sitting in the same court. Robinson *v.* Satterlee, Fed. Cas. No. 11,967. Therefore his action in granting the injunction had the same force and effect as if the court had been held by the circuit justice, or a circuit judge, or by a full bench. Industrial *v.* Electrical, 58 Fed. 732. The decree appealed from is the decree of the circuit court. — McDowell *v.* Kurtz, 77 Fed. 206; 23 C. C. A. 119.

§ 717. Equity — Expiration of Patent Pendente Lite.

The bill was filed 15 days before the expiration of the patent. The general allegations of the bill were sufficiently comprehensive to meet such a case. But even without that, if the case was one for equitable relief when the suit was instituted, the mere fact that the ground for such relief expired by the expiration of the patent would not take away the jurisdiction and preclude the court from proceedings to grant the incidental relief which belongs to cases of that sort. This has often been done in patent causes, and a large number of cases may be cited to that effect; and there is nothing in Root *v.* Railway, 105 U. S. 189 to the contrary. — Clark *v.* Wooster, 119 U. S. 322; 30 L. Ed. 392; 7 S. Ct. 217.

Cotton *v.* Simmons, 106 U. S. 89; R. R. Co. *v.* Car Brake, 110 U. S. 229; Consolidated *v.* Crosby, 113 U. S. 157; Thomson *v.* Wooster, 114 U. S. 104.

As the patent was in force at the time the bill was filed, and as the complainants were entitled to a preliminary injunction at that time, the jurisdiction of the court is not defeated by the expiration of the patent by lapse of time before final decree. There is nothing in the case of Root *v.* Railway, 105 U. S. 189, to sustain the objection made by the appellant on this account. See also Clark *v.* Wooster, 119 U. S. 322 and cases there cited. — Beedle *v.* Bennett, 122 U. S. 71; 30 L. Ed. 1074; 7 S. Ct. 1090.

This seeks to determine jurisdiction of the court by conditions which came into existence after the commencement of the suit, not upon those which existed at the time the bill was filed. Appellee's contention as to the jurisdiction is, therefore, not justified, and a discussion of the reasons for this conclusion is not necessary. — Busch *v.* Jones, 184 U. S. 598; 46 L. Ed. 707; 22 S. Ct. 511.

Clark *v.* Wooster, 119 U. S. 322; Beedle *v.* Bennett, 122 U. S. 71.

When this suit was commenced the patent had two months and 22 days to run. It was therefore clearly within the power of the court to grant a temporary injunction, if not to enter a final decree, before the patent should expire; and though no restraining order was issued or perhaps could have been after the patent had expired, jurisdiction of the case was not lost on that account. — Ross *v.* Ft. Wayne, 63 Fed. 466; 11 C. C. A. 288.

Clark *v.* Wooster, 119 U. S. 322; Beedle *v.* Bennett. 122 U. S. 71; American *v.* Brown, 58 Fed. 409; American *v.* Weston, 58 Fed. 410.

The patents bearing numbers below 164,050 all expired before the suit was commenced, and, therefore, as the circuit court held, afforded no basis for equitable relief. No. 164,050 expired just after the filing of the original bill, but before the return day of the subpoena; and the bill in respect to that patent was within the discretion of the court to dismiss the bill in respect to that patent for want of equity. — Russell *v.* Kern, 69 Fed. 94; 16 C. C. A. 154.

Keyes *v.* Mining Co. 15 Sup. Ct. 772.

It is well settled that the expiration of a patent pending suit for infringement does not defeat the jurisdiction of a court of equity, although it is a reason for denying an injunction which was the basis of equity jurisdiction. — Reedy *v.* Western, 83 Fed. 709; 28 C. C. A. 27.

Beedle *v.* Bennett, 122 U. S. 71; Clark *v.* Wooster, 119 U. S. 322.

The bill was filed nearly three months before the expiration of the patent, and contained prayers for a preliminary and a perpetual injunction. The patent had yet a month to run after the defendant was required to answer under the rules. It was therefore clearly within the power of the court, when the suit was begun, not only, upon proper proof, to grant a preliminary injunction, but, either by a decree pro confesso, in case of default, or upon the bill and answer, if an answer should be filed within the rules, to dispose of the case finally, by awarding a permanent injunction, before the expiration of the patent. The conditions at the time the bill was filed thus availing to give the court jurisdiction, both for the purpose of a preliminary injunction and a permanent decree, during the life of the patent, such jurisdiction could not be defeated by subsequent happenings, whether due to the delay of the defendant or the contingencies of litigation. — U. S. Mitis *v.* Detroit, 122 Fed. 863; 59 C. C. A. 589.

New York *v.* Peoria, 21 Fed. 878; Brooks *v.* Miller, 28 Fed. 615; Singer *v.* Wilson, 38 Fed. 586; American *v.* Chicago, 41 Fed. 522; Keyes *v.* Mfg. Co. 45 Fed. 199; Ross *v.* City, 63 Fed. 466; Chinnock *v.* Paterson, 110 Fed. 199; Clark

v. Wooster, 119 U. S. 322; Beedle *v.* Bennett, 122 U. S. 71; Busch *v.* Jones, 184 U. S. 598.

The court below took the view that its jurisdiction in equity was dependent upon the right of the complainant to a preliminary injunction upon the bill as filed, and therefore held the verification upon information and belief insufficient. But there was no attempt to use the bill as evidence to secure an injunction pendente lite. Nor was there any need to do so, in order to sustain the jurisdiction of the court. The bill was filed Apr. 10. The patent did not expire until July 8. Under the rules the answer of the defendant was due June 5, more than a month before the patent expired. The bill, after describing the patent, averring its ownership by the complainant, and setting forth the adjudication sustaining it, charged the defendant with infringement, and called for answers to certain interrogatories calculated to clear up any doubt upon the point of infringement. If the defendant had answered upon the rule day, June 5, admitting the use of the patented process, or if it had failed to plead, and allowed the bill to be taken pro confesso, in either event the complainant would have been entitled to a permanent injunction a month before the expiration of the patent. The fact that the defendant failed to comply with the rules cannot prejudice the complainant. The complainant had reason to expect the answer on the rule day, and on each day thereafter until the defendant filed its pleading. For these reasons it was not necessary to verify the bill in positive terms. — U. S. Mitis *v.* Detroit, 122 Fed. 863; 59 C. C. A. 589.

Hughes *v.* Northern, 18 Fed. 106; Black *v.* Allen, 42 Fed. 618; Burns *v.* Lynde, 6 Allen, 305; More *v.* Cheeseman, 23 Mich. 290; Hawkins *v.* Hunt, 14 Ill. 42; Sand Creek *v.* Robbins, 41 Ind. 79.

The bill was filed Mar. 12, 1906. The patent expired June 3, 1906. The bill was for a preliminary and permanent injunction and an accounting. No motion for a preliminary injunction was made. Demurrer was filed challenging jurisdiction. *Held:* The suit was then one of equitable jurisdiction when instituted, and under the rules of practice in equity there can be no doubt there was ample time to award a preliminary injunction before the patent expired. These facts, we think, conferred jurisdiction for all purposes, not only for the preliminary injunctive relief, but also for the incidental accounting. — Carnegie *v.* Colorado, 165 Fed. 195; C. C. A.

Root *v.* Railway, 106 U. S. 189; Keyes *v.* Eureka, 158 U. S. 150; Deere *v.* Dowagiac, 153 Fed. 177; Clark *v.* Wooster, 119 U. S. 322; Beedle *v.* Bennett, 122 U. S. 71; Busch *v.* Jones, 184 U. S. 598; Ross *v.* Fort Wayne, 63 Fed. 466; Chinnock *v.* Paterson, 112 Fed. 531; U. S. Mitis *v.* Detroit, 122 Fed. 863.

§ 718. Equity — Rule.

The plain and obvious purpose of this provision (the Act of 1870) is, to furnish appropriate modes in equity pleading for the trial of all issues, both of fact and law, relating both to the alleged infringement and the validity of the patent, without the necessity of framing special issues out of chancery for trial by jury, or sending the parties to a court of law for the trial of an action in that forum, in order to determine their legal right. It proceeds upon the idea that the court of equity having acquired jurisdiction, for the purpose of administering the equitable relief sought by the bill, may determine directly and for itself, in the same proceeding, all questions incidental to the exercise of its jurisdiction, notwithstanding they may be questions affecting legal rights and legal titles. — Root *v.* Ry., 105 U. S. 189; 26 L. Ed. 975.

The difficulty with the defendant's position in the case under consideration is that it apparently leaves the plaintiff without an adequate remedy. De-

fendant has broken no express covenant of the contract, since it has made no covenant. It has simply ignored the existence of the contract and granted a license to another party. It is difficult to see what remedy is available to the plaintiff in a state court that would not involve the right of the defendant to use the patent. In other words, it would be an ordinary suit for infringement in which the federal courts alone would have jurisdiction. Whether it sued at law, or in equity, its damages would be such as are usual in cases of infringement, and the only injunction it could obtain would be against the further use of the invention. — Excelsior *v.* Pacific, 185 U. S. 282; 46 L. Ed. 910; 22 S. Ct. 681.

Pratt *v.* Paris, 168 U. S. 255.

It is not denied in this case (Root *v.* Railway) but that there may be other grounds for equitable relief than the right to an injunction which would justify a circuit court, sitting as a court in equity, in trying a patent case, and, as an incident to the equitable matters presented in the bill, take an accounting of the profits and revenues of which the patentee may have been deprived by the infringement of his patent, and also the validity of the patent, and the fact of infringement. Before any of these matters however, can be considered, the bill must clearly present some ground for the interposition of a court of equity. — Germain *v.* Wilgus, 67 Fed. 597; 14 C. C. A. 561.

Root *v.* Railway, 105 U. S. 189; Smith *v.* Sands, 24 Fed. 470; Adams *v.* Iron, 26 Fed. 324; Brooks *v.* Miller, 28 Fed. 615; Clark *v.* Wooster, 119 U. S. 323.

§ 719. Equity — For Determining Profits or Assessing Damages Only.

The objection that there is a remedy at law is only available when such remedy is as plain, adequate and effectual as the remedy in equity. Here, if the complainants could recover the moneys claimed, they would be entitled also to discovery and account. — Sullivan *v.* Railroad, 94 U. S. 806; 24 L. Ed. 324.

Boyce *v.* Grundy, 3 Pet. 215.

The prayers of the bill are sufficient in either aspect, as they include discovery and an account, a decree for payment, injunctions to prevent the violation of the provisions of the agreement, " and such other relief as the equity of the case may require." So far as the relief desired is a mere account of stipulated royalties, counsel are not able to point out any decision of the Supreme Court clearly sustaining the bill. On the other hand, it is claimed that Root *v.* Railway, 105 U. S. 189, defeats jurisdiction in the case at bar. But that was a case of a mere tortious infringement of a patent expired before the bill was brought, while this suit, in our view, relates to patents still in life, and, in another, to agreed royalties. — B. & S. Fastener *v.* B. G. Fastener, 58 Fed. 818; 7 C. C. A. 498.

The ground upon which a court of equity will take cognizance of a suit for an infringement of a patent is the relief through an injunction. There is nothing so peculiar to a suit for damages and profits for infringement of a patent as will, independently of some recognized ground of equitable jurisdiction, justify a court of chancery in assuming jurisdiction. It must appear that the legal remedy at law is inadequate, and if the case is one in which equitable relief by injunction is inappropriate, as when the patent has expired, or when the circumstances are such as to justify a court in refusing equitable relief, the suit will not be entertained for the mere purpose of an account of past damages and profits. — Woodmansee *v* Williams, 68 Fed. 489; 15 C. C. A. 520.

Root *v.* Railway, 105 U. S. 189; McLaughlin *v.* Railway, 21 Fed. 574; Clark *v.* Wooster, 119 U. S. 325.

It is doubtless true, as contended, aside from any right to an injunction, that there may be ground for jurisdiction in equity in the nature and circumstances of the account, and in the necessity for discovery, but in respect to the expired patents, which are here assumed to be valid, it is not shown that the remedy at law would be inadequate. — Russell *v.* Kern, 69 Fed. 94; 16 C. C. A. 154.

Equity will not entertain a suit which simply involves the ascertainment of damages and profits for past infringement. — Truman *v.* Holmes, 87 Fed. 742; 31 C. C. A. 215.

Root *v.* Railway, 105 U. S. 189; Hayward *v.* Andrews, 106 U. S. 672; Cary *v.* Wooster, 119 U. S. 325; Rob. Pat. sec. 1086; Walk. Pat. sec. 572.

§ 720. Equity — Miscellaneous.

The single question remains whether the assignee of a chose in action may proceed by bill in equity to enforce for his own use the legal right of his assignor, merely because he cannot sue at law in his own name. If the assignee of the chose in action is unable to assert in a court of law the legal right of the assignor, which in equity is vested in him, then the jurisdiction of a court of chancery may be invoked because it is the proper forum for the enforcement of equitable interests and because there is no adequate remedy at law; but when, on the other hand, the equitable title is not involved in the litigation, and the remedy is sought merely for the purpose of enforcing the legal right of his assignor, there is no ground for an appeal to equity because, by an action at law in the name of the assignor, the disputed right may be perfectly indicated and the wrong done by the denial of it fully redressed. To hold otherwise would be to enlarge the jurisdiction of courts of equity to an extent the limits of which could not be recognized; and that, in cases where the only matters in controversy would be purely legal rights. — Hayward *v.* Andrews, 106 U. S. 672; 27 L. Ed. 271; 1 S. Ct. 544.

Explaining, Root *v.* Ry. 105 U. S. 189; Hammond *v.* Messenger, 9 Sim. 327.

Walker *v.* Brooks, 125 Mass. 241; Dhegetaft *v.* London, 4 Bro. P. C. 2nd ed. 436; Motteux *v.* Insurance, 1 Atk. 545; Cator *v.* Burke, 1 Bro. Ch. 434; Hunt *v.* Hollingsworth, 100 U. S. 103; Van Norden *v.* Merton, 99 U. S. 380; Rose *v.* Clark, 1 Yew. & C. Ch. 534; Carter *v.* Ins. Co. 1 Johns, Ch. 463; Bank *v.* Mumford, 2 Barb. Ch. 596; Riddell *v.* Mandevill, 5 Cranch, 322; Lenox *v.* Roberts, 2 Wheat. 373; Thompson *v.* R. R. 6 Wall. 134; Walker *v.* Derville, 12 Wall. 442.

Where plaintiff's damages were measurable in terms of royalties established, there being no other ground for equity jurisdiction, the remedy is complete at law. — Keyes *v.* Eureka, 158 U. S. 150; 39 L. Ed. 929; 15 S. Ct. 772.

The respondent having made a full appearance and pleaded to the merits of the bill, has waived the objection that as the suit was begun it was against another party on account of an erroneous statement as to county location, and also the objection that the original complainant had an adequate remedy at law. — Ross *v.* Ft. Wayne, 63 Fed. 466; 11 C. C. A. 288.

Kilborn *v.* Sunderland, 130 U. S. 509.

A complainant in equity may transfer to another his interest in the subject-matter of the contest, and confer upon the assignee the right to prosecute

the suit to a decree upon the merits, notwithstanding by reason of events subsequent to the bringing of the suit the controversy has so changed as to be the subject only of an action at law; and such new party may be substituted by filing an original bill in the nature of a supplemental bill. — Ross *v.* Ft. Wayne, 63 Fed. 466; 11 C. C. A. 288.

In this case the appellee had sued appellant at law for infringement of a subsequent patent. This bill is for infringement of a prior patent owned by appellant and for an injunction to restrain appellee from prosecuting his action at law on the subsequent patent. *Held:* That ground for equitable relief was not shown. — Germain *v.* Wilgus, 67 Fed. 597; 14 C. C. A. 561.

Note: While it would seem that the ruling in this case upon this point is acceptable, the doctrine set forth by Knowles, D. J. of equity jurisdiction is open to grave doubt.

The suggestion has been made that, although defendants may be guilty of infringement, complainant's remedy at law is adequate, and, under the circumstances of the case, equity ought not to accord to the patentee the equitable relief of injunction. As to this aspect of the case, it would seem clear that, if complainant has imposed a legal restriction upon the use of the invention embodied in the structures made and sold by it, the remedy at law is wholly inadequate, and relief by injunction should be awarded upon the case stated in the bill. If the complainant has a right to reserve a control over the use in the manner stated in its bill, then its machines, to the extent it has reserved such control, are within the monopoly of the patent. If its licenses do not infringe public policy, but are within the purposes awarded by the patent, then it must follow that the case presented should be accorded relief by injunction restraining the acts complained of. A court of equity has the power, independently of any other relief, to restrain the continuing infringement of a patent. — Heaton *v.* Eureka, 77 Fed. 288; 25 C. C. A. 267.

Supply Co. *v.* McCready, Fed. Cas. 295.

The bill was upon the Gray patent, but the infringement was of the Hahl patent which complainant owned but did not sue on. Defendant failed to answer and the decree was pro confesso. On the accounting, the Hahl patent having expired pendente lite, defendant came in and claimed want of jurisdiction, as the remedy should be at law, and that the infringement was, if any, of the Hahl patent. *Held:* We think the argument for the appellant overlooks the distinction between the facts which show that the merits of the case are against the plaintiff, and facts which establish that the court is without jurisdiction to determine the merits of the case. It is also very clear that the facts which the appellant's counsel says show that the plaintiff's remedy is at law really in their effect establish that the plaintiff is without any right to recover either at law or in equity, for, if the device were made under the Hahl patent, it is clear that the plaintiff could not recover in an action at law any more than by a suit in equity, the suit being upon the Gray patent only. If the defendant had regularly filed answer and made an issue on the facts stated in the bill, and had on hearing disproved the allegations of the bill, it would certainly not be insisted that this defeated the jurisdiction of the court. — Reedy *v.* Western, 83 Fed. 709; 28 C. C. A. 27.

That after a circuit court has obtained jurisdiction in the premises by the issuance of a subpoena, that jurisdiction will not be ousted by the hard and fast rules of the Patent Office, see — Lobel *v.* Cossey, 157 Fed. 664; 85 C. C. A. 142.

We are content to rest affirmance of the court below with the remark upon the case of Kessler *v.* Eldred, 206 U. S. 285, decided since the hearing below, as

plainly upholding jurisdiction in equity for like relief, in favor of the manufacturer, primarily sued for infringement, to prevent complication and injury in further suits against purchasers from him of the alleged infringing article. Whether the injunction should issue depends upon the equities presented. — Commercial *v.* Avery, 159 Fed. 935; 87 C. C. A. 206.

§ 721. Infringement.

An action which raises a question of infringement is an action arising "under the patent law," and one who has the right to sue for the infringement may sue in the circuit court. Such a suit may involve the construction of a contract as well as the patent, but that will not oust the court of its jurisdiction. If the patent is involved it carries with it the whole case. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

It would seem that an action for infringement against the U. S. would be properly brought in the Court of Claims. — James *v.* Campbell, 104 U. S. 356; 26 L. Ed. 786.

Carr *v.* U. S. 98 U. S. 433.

Where the validity of the patent was admitted and there was an established license fee, the remedy at law was complete and adequate at law. — Keyes *v.* Eureka, 158 U. S. 150; 39 L. Ed. 929; 15 S. Ct. 772.

The act of Congress of 1870, as embodied in Section 629 of the Revised Statutes, provides that the "circuit courts shall have original jurisdiction as follows: . . . of all suits at law or in equity, arising under the patent or copyright laws of the United States." The jurisdiction thus conferred is exclusive. All questions, therefore, which concern the infringement or validity of, and the title to, patents granted under the patent laws of the United States, must be litigated in the circuit courts of the United States. "It is perfectly well settled," however, "that where a suit is brought on a contract, of which a patent is the subject-matter, either to enforce such contract or to annul it, the case arises on the contract or out of the contract, and not under the patent laws." Where a bill in equity states a contract between complainant and defendant, and which it seeks to have set aside in order to pursue the defendant as an infringer, or where the bill states a contract between complainant and defendant, which it seeks to enforce, as giving complainant title to the patent, the case cannot be said to arise under the patent laws. In either case the court is called upon to administer the law of the contract, and not the patent laws of the United States, or rights claimed under them. But, where t' contract set up or stated is not between the parties to the suit, it is co l thereto and cannot, therefore, give character to the case as being on tract, and not one arising under the patent laws. In the case before ction was not brought to enforce a contract or to set aside a contr en defendant and complainant. In other words, it was not a suit u ntract between the parties to the suit, within the scope of the decisions re ed to. The appellee is mistaken in its contention that questions of title to patents, such as are raised in this case, cannot be questions arising under the patent laws of the United States, because they involve the derivation of title from a contract. The complainant in this case has stated in its bill that it is the owner of the patent in suit, and derives title through an assignment from the patentee. — Atherton *v.* Atwood-Morrison, 102 Fed. 949; 43 C. C. A. 72.

That one who manufactures, filling a specific order for a dealer according to the terms of the order, without intent to infringe, and after discontinu-

ance of such infringement, and with no evidence of threatened continuance of infringement, cannot be sued in equity, there being adequate remedy at law for past acts, see — Globe-Wernicke *v.* Brown, 121 Fed. 90; 57 C. C. A. 344.

Although both the parties are citizens of New York, as the action was for the infringement of a patent, and was so tried and decided in the courts below, this court has jurisdiction, notwithstanding that one of the defenses depends upon the construction of a contract of license. We do not think that the decision in Hartell *v.* Tilghman, 99 U. S. 547, implies. — Clancy *v.* Troy, 157 Fed. 554; 85 C. C. A. 314.

Complainant's counsel contends before this court that the defendants by filing a general appearance in the cause without objection to the jurisdiction of the court, waived their right to object to being sued in the Eastern District of Pa., and hence that, as the action is within the general jurisdiction of the circuit court, the complainant, because of such waiver, may show in support of his bill acts of infringement committed outside of such district. If that be admitted, however, as a general proposition, it does not relieve the complainant in this case of the burden of proving that the defendants have committed infringing acts within said district, since that was substantially the issue tendered by the bill, denied by the answer, and to the maintenance of which the proofs were directed. — Gray *v.* Grinberg, 159 Fed. 138; 86 C. C. A. 328.

§ 722. Licensor and Licensee.

A mere licensee cannot sue strangers who infringe. In such cases redress is obtained through or in the name of the patentee or his assignee. Here, however, the patentee is the infringer, and as he cannot sue himself, the licensee is powerless so far as the courts of the United States are concerned unless he can sue in his own name. A court of equity looks to substance rather than form. When it has jurisdiction of parties it grants the appropriate relief without regard to whether they come in as plaintiff or defendant. In this case the person who should have protected the plaintiff against all infringements has become himself the infringer. He held the legal title to his patent in trust for his licensees. He has been faithless to his trust, and courts of equity are always open for the redress of such a wrong. This wrong is an infringement. Its redress involves a suit, therefore, arising under the patent laws, and of that suit the circuit court has jurisdiction. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

While we do not allow the jurisdiction of the federal courts to be invoked primarily for the determination of the respective rights of parties to a contract concerning patents, yet when the bill is an ordinary one for infringement, and the answer puts in issue the title of the plaintiff to sue, we think the jurisdiction is not ousted by the mere allegation that the license has been revoked, and that the court is at liberty to go on and determine that fact. — Excelsior *v.* Pacific, 185 U. S. 282; 46 L. Ed. 910; 22 S. Ct. 681.

Littlefield *v.* Perry, 21 Wall. 205; White *v.* Rankin, 144 U. S. 628.

The bill in this case is in the customary form for infringement of letters patent, and the proposition contended for necessarily implies that the jurisdiction invoked by the filing of such a bill may be defeated by a plea of license which admits the use and validity of the patent sued on. If the decision of Hartell *v.* Tilghman, 99 U.S 547, ever meant that much, it has been explained and limited by later decisions, which leave no doubt of the federal jurisdiction in cases like the present. — Elgin *v.* Nichols, 65 Fed. 215; 12 C. C. A. 578.

White *v.* Rankin, 144 U. S. 628; Mfg. Co. *v.* Hyatt, 125 U. S. 46; Marsh *v.* Nichols, 140 U. S. 344.

The validity of the under-license or contract and the right of the licensee to restrain future sale in violation thereof must necessarily be determined by the patent laws, and by the rules applicable to a suit by a patentee or an assignee to enjoin the infringement of a patent. — National *v.* Schlegel, 128 Fed. 733; 64 C. C. A. 594.

§ 723. Residence.

The Act of Congress exempts a defendant from suit in any district of which he is not an inhabitant, or in which he is not found at the time of the service of the writ. It is an exemption which he may waive, but unless waived, he need not answer and will not be bound by anything which may be done against him in his absence. — Butterworth *v.* Hill, 114 U. S. 128; 29 L. Ed. 119; 5 S. Ct. 796.

The act of March 3, 1897, was obviously intended to add to the general statutes upon the subject of jurisdiction in patent cases a definition for the particular requisites for jurisdiction, of such cases by the various circuit courts, and of the proper method of service of process upon a defendant in the district of which he is not an inhabitant. The object was to determine with precision the boundaries of jurisdiction, and to create a future method of service of process in patent causes against non-resident defendants, which had not theretofore been stated in a federal statute. — Westinghouse *v.* Great Northern, 88 Fed. 258; 31 C. C. A. 625.

The averment is, that the defendant had a regular and established place of business in Philadelphia, and that the acts of infringement had been committed by the defendant in that city. It by no means follows, that, because the defendant had not such a place of business in the exhibition, it might not have had one or more such places of business elsewhere in Philadelphia; nor are we ready to hold that because one writ of subpoena in this case has proved ineffectual, valid service of another may not be made. We, therefore, do not regard the order appealed from as in any sense a final decree either in substance or form. — Waterman *v.* Parker, 107 Fed. 141; 46 C. C. A. 203.

In re Grossmayer, 177 U. S. 48; Ex parte Schollenberger, 96 U. S. 369.

A corporation chartered under the laws of New Jersey is not an inhabitant of the district in Texas where it does business. It might have agents and carry on business in every one of the many districts of the United States, and it could not be held that, because of such business, it was an inhabitant of every district in which it did business. — Shaw *v.* American, 108 Fed. 842; 48 C. C. A. 68.

Shaw *v.* Mining Co. 145 U. S. 444; Carter, Jur. Fed. Cts. 155.

§ 724. State Court.

An action to recover royalties under contract for the sale of a patent, though there may arise collaterally the question whether articles made come within the patent does not arise under the patent laws so as to give jurisdiction to the Circuit Court. — Albright *v.* Teas, 106 U. S. 613; 27 L. Ed. 295; 1 S. Ct. 550.

Wilson *v.* Sanford, 10 How. 99.

The federal courts have no right, irrespective of citizenship, to entertain suits for the amount of an agreed license or royalty, or for the specific execution of a contract for the use of a patent, or of other suits where a subsisting contract is shown governing the rights of the party in the use of an invention, and that such suit not only may, but must, be brought in the state court. — Pratt *v.* Paris, 168 U. S. 255; 42 L. Ed. 458; 18 S. Ct. 62.

Hartell *v.* Tilghman, 99 U. S. 547; Wilson *v.* Sanford, 10 How. 99; Albright *v.* Teas, 106 U. S. 613; Goodyear *v.* Day, 1 Blatch. 565; Blanchard *v.* Sprague, 1 Cliff. 288; Mfg. Co. *v.* Hyatt, 125 U. S. 46; Wade *v.* Lawder, 165 U. S. 624.

It is no objection to the jurisdiction of the state court that the question of validity may involve the examination of conflicting patents, or the testimony of experts. It is the fact of its invalidity, and not the reasons for it, that is material. (Citing at length the state law on the subject). — Pratt *v.* Paris, 168 U. S. 255; 42 L. Ed. 458; 18 S. Ct. 62.

§ 725. Supreme Court.

The Supreme Court has jurisdiction on appeal of a cause arising under the patent laws regardless of the amount involved. — Phillip *v.* Nock, 80 U. S. 185; 20 L. Ed. 567.

As the court had jurisdiction at the inception of the suit, even though upon narrow ground, yet, as the defendants did not ask the dismissal of the bill on the ground of want of jurisdiction, we should be very reluctant, if we had the power now, on an appeal, after the case had been tried and determined, to reverse the decree. — Clark *v.* Wooster, 119 U. S. 322; 30 L. Ed. 392; 7 S. Ct. 217.

We have jurisdiction to review the final decree in the suit and all interlocutory decrees and orders. — Worden *v.* Searles, 121 U. S. 14; 30 L. Ed. 853; 7 S. Ct. 814.
Distinguishing Ex parte Kearney, 20 U. S. 39; New Orleans *v.* Steamship, 87 U. S. 387.

The Supreme Court has jurisdiction to review a judgment of the Court of Appeals D. C. — U. S. *v.* Seymour, 153 U. S. 353; 38 L. Ed. 742; 14 S. Ct. 849.

Now, actions at law for infringement and suits in equity for infringement, for interference, and to obtain patents, are suits which clearly arise under the patent laws; being brought for the purpose of vindicating rights created by those laws, and coming strictly within the avowed purpose of the act, (Judiciary Act, Mar. 3, 1891) to relieve the court of that burden of litigation which operated to impede the disposition of cases of peculiar gravity and general importance. We are of opinion that it is reasonable to assume that the attention of Congress was directed to this class of cases; — that there is nothing intended to place a limitation on the appellate jurisdiction of this court in a case such as this. — United States *v.* Am. Bell, 159 U. S. 548; 40 L. Ed. 255; 16 S. Ct. 69.

LACHES.

General Statement § 726
Application § 727
Bringing Suit § 728
Excuses § 729
Injunction § 730 (*see* § 533)
Reissue § 731 (*see* § 869)
Miscellaneous Rulings § 732
See — Abandonment § 1; *Defenses* § 306; *Disclaimer* § 339; *Injunction* §§ 558, 568

§ 726. General Statement.

The Patent Statute does not employ the term laches. Delay of application which bars a patent is abandonment under Sec. 4886. See title *Abandonment*. Failure to prosecute an application may work abandonment. Sec. 4894. Failure to pay the final fee within the prescribed period may work abandonment, and the question of abandonment will be considered as a question of fact by the Patent Office. Sec. 4897. While Sec. 4916, relating to reissues does not make delay a bar to a valid reissue, the fact of unreasonable delay or of intervening rights may render the reissue invalid. See *Reissue*. The common rules of laches and stale claims apply to cases in equity involving patents.

§ 727. Application.

Congress has established a department, with officials selected by the government, to whom all applications for patents must be made; has prescribed the terms and conditions of such applications, and entrusted the entire management of affairs of the department to those officials; that when an applicant complies with the terms and conditions prescribed, and files his application with the officers of the department, he must abide their action, and cannot be held to suffer or lose rights by reason of any delay on the part of those officials, whether reasonable or unreasonable, unless such delay has been brought about through his corruption of the officials or through his inducement or at his instance. Proof that they were in fault, that they acted unwisely, unreasonably, and even that they were culpably dilatory, casts no blame on him and abridges none of his rights. — United States *v.* Am. Bell, 167 U. S. 224; 43 L. Ed. 144; 17 S. Ct. 809.

The mere fact of delay does not, therefore, operate to deprive the inventor of his legal rights. Before he can be punished it must be shown that he has been guilty of a wrong — that he has caused the delay. He cannot be punished on account of the delay of the tribunal before which he is presenting his suit. — United States *v.* Am. Bell, 167 U. S. 224; 43 L. Ed. 144; 17 S. Ct. 809.

We do not, however, intend to have it inferred that we have determined that the law requires any degree of diligence beyond a compliance with the statutory provisions, official regulations, and the formal demands from time to time of the public officials charged with duties under the patent law. We do not determine that any degree of laches whatever will forfeit a patent once granted, reserving, of course, cases of abandonment, and other cases where, through laches, the equities of strangers have become established. Congress, in 4894 and 4904, R. S., established certain fixed periods for giving progress to applications for patents, which the Supreme Court has so far recognized by analogy as to apply the limitation to a bill in equity filed under sec. 4915 R. S. Gandy *v.* Marble, 122 U. S. 432. The United States asks us to establish a period of limitations other than that fixed by statute, and we do not decide that, under any circumstances, we have any authority so to do. We merely determine that the case of extreme diligence as made by the United States cannot be maintained. — Am. Bell Tel. *v.* U. S. 68 Fed. 542; 25 C. C. A. 569.

That others received his invention with incredulity and ridicule was no fault of his. He never abandoned his invention. Nor do we find such laches on his part as to deprive him of its use. He was a poor man and was ill for a long time. He, unaided, was without means to construct his apparatus on such a scale as to demonstrate its merit. Those to whom he applied for its

introduction turned a deaf ear to him. In the face of discouragement and with reasonable diligence in view of his circumstances, he persisted in his efforts until they were finally crowned with success. We must therefore hold that the Reid & Billington apparatus did not anticipate any of the claims of the patent in suit, and consequently that Williames was under no obligation to enter a disclaimer. — McNeely *v.* Williames, 96 Fed. 978; 37 C. C. A. 641.

Late in December, 1893, the inventor became insane. At this crisis there remained three months' time during which an application might have been filed, if there had been anyone legally capable of making an application. The trouble was that there was then no law authorizing the guardian to file an application for a patent upon an invention made by an insane person. The law which for the first time took cognizance of such a situation was passed Feb. 28, 1899 (C. 227, 30 Stat. 915). The act of that date amended sec. 4896 R. S. which authorizes the administrator or executor of a deceased inventor to file an application for an invention made by his intestate or testator, by providing that the guardian of an insane person may file an application upon an invention made by such person before his insanity. The last clause of that act provides that it "is to cover all applications now on file in the Patent Office or which may be hereafter made." Jenner, as guardian, at date of this act had on file an application for a patent upon the insane inventor's invention. There was no authority of law for its filing at the time it was filed, but that trouble, we shall assume, was cured by the retroactive effect of the act of 1899. But the date of that application was Nov. 20, 1895, and we are confronted with the fact that at that date the invention had been in public use for more than three years. Congress having created the monopoly, may put such restrictions upon it as it pleases. Having made no exception in favor of an insane person, we can make none. — Jenner *v.* Bowen, 139 Fed. 556; 71 C. C. A. 540.

§ 728. Bringing Suit.

Delay in bringing suit for 15 years is laches. — Leggett *v.* Standard, 149 U. S. 287; 37 L. Ed. 737; 13 S. Ct. 902.

McLean *v.* Fleming, 96 U. S. 245; Spiedel *v.* Henrici, 120 U. S. 377; Galliher *v.* Cadwell, 145 U. S. 368.

It is thus apparent that so far from the complainant having made out a case of wilful infringement by defendant company, the converse is the fact. Fully aware as early as 1880, which is about a year after the infringing nets were made, that the defendant was using them, and kept advised from time to time by his foreman that infringement was continuing, complainant carefully refrained from saying or doing anything to warn defendant that it was infringing until almost the very day when the patent expired. The reason for this policy of inaction is quite apparent. A careful examination of the record will leave no doubt in any unprejudiced mind, that, had complainant notified defendant at any time from 1880 to 1886 that the slings were infringements of his patent, the use of such slings would have ceased forthwith. They were convenient, and in some respects and under some conditions, superior to other appliances; hence, the set of four were always kept renewed. But manifestly, they were not so superior as complainant contends, for their number was never increased. If they did not offer sufficient advantages to warrant increasing their number, it is difficult to believe that those advantages would have been sufficient to induce continued use after defendant was advised that they were infringements of a patent. The complainant has deliberately chosen not to warn an unconscious infringer, whom he has watched infringing year after year, no doubt hoping thereby to increase the

amount of profits ultimately recoverable. This is sharp practice, and if there ever was a case where complainant should be required to establish these profits by reliable and tangible proof, this is preeminently such. — Hohorst *v.* Hamburg-American, 91 Fed. 655; 34 C. C. A. 39.

§ 729. Excuses.

It would seem that poverty or sickness would excuse delay in prosecuting an application. — Woodbury *v.* Keith, 101 U. S. 479; 25 L. Ed. 939.

Where, it otherwise appearing on the face of the bill that the claim is stale, or is barred by lapse of time, and it is sought to avoid the effect of such a bar on the ground that the fraud complained of was concealed and had been only recently discovered. It is necessary that the particular acts of fraud or concealment should have been set forth by distinct averments, as well as the time when discovered, so that the court may see whether, by the exercise of ordinary diligence the discovery might have been before made. — Wollensak *v.* Reiher, 115 U. S. 96; 29 L. Ed. 355; 5 S. Ct. 1132.

Beanbien *v.* Beanbien, 23 How. 190; Stearnes *v.* Page, 7 How. 819; Moore *v.* Green, 19 How. 69; Marsh *v.* Whitmore, 21 Wall. 178; Godden *v.* Kimmell, 99 U. S. 201; Badger *v.* Badger, 2 Wall. 87; Wood *v.* Carpenter, 101 U. S. 135; Lansdale *v.* Smith, 106 U. S. 391.

Plaintiff's poverty is no excuse for laches in this case. — Leggett *v.* Standard, 149 U. S. 287; 37 L. Ed. 737; 13 S. Ct. 902.

Hayward *v.* Bank, 96 U. S. 611.

Note: This holding is without authority and the citation is not truly made. In Hayward *v.* Bank, the court did not say " that a party's poverty or pecuniary embarrassment was not a sufficient excuse for postponing the assertion of his rights." What the court did say was " *His* poverty or pecuniary embarrassment was not a sufficient excuse for postponing the assertion of his rights," which is quite a different thing when the true context is seen. That was a case for the recovery of hypothecated stocks, a case in equity to recover title to personal property. The delay there was a very different one from an action in tort against a great monopoly like the present case; and the learned justice went a long way and spun a very fine thread of analogy in an attempt to make such a hard and fast rule.

The plaintiff's excuse, in this instance, that he preferred for prudential reasons, to receive a salary from the defendant rather than to demand a royalty is entitled to a less favorable consideration by a court of equity than if his conduct had been that of mere inaction. — Lane *v.* Locke, 150 U. S. 193; 37 L. Ed. 1049; 14 S. Ct. 78.

The Edison company brought suit seasonably against the first and principal infringer. It was not laches to delay bringing suit against other infringers until the first suit had reached adjudication. Edison Electric *v.* Sawyer-Man. 53 Fed. 592; 3 C. C A. 605.

With knowledge of infringement by complainant and its predecessors in business for fourteen years without any excuse equitable rights are lost. Woodmansee *v.* Williams, 68 Fed. 489; 15 C. C. A. 520.

Action was brought against a prior infringer within a year from the time the infringement began, and the issue was not finally settled until within a year previous to the time this suit was brought. *Held:* That suit was finally determined in favor of the complainant on Oct. 21, 1898 (the bill here was filed Apr. 10, 1899). Such pending litigation involving the validity and con-

struction of the patent was sufficient reason for not bringing other suits for infringement until the patent should be finally adjudicated. — U. S. Mitis *v.* Detroit, 122 Fed. 863; 59 C. C. A. 589.

Edison *v.* Sawyer, 53 Fed. 592; Taylor *v.* Sawyer, 75 Fed. 301; New York *v.* Loomis, 91 Fed. 421; Stears-Roger *v.* Brown, 114 Fed. 939.

§ 730. Injunction.

Where there was a delay of seventeen years nearly and no explanation was made, such laches would disentitle complainant to a preliminary injunction. — Keyes *v.* Eureka, 158 U. S. 150; 39 L. Ed. 929; 15 S. Ct. 772.

McLaughlin *v.* People's, 21 Fed. 574; American *v.* Chicago, 41 Fed. 522; Keyes *v.* Pueblo, 31 Fed. 560; Root *v.* Railway, 105 U. S. 189; Clark *v.* Wooster, 119 U. S. 322; Lane *v.* Locke, 150 U. S. 193.

For full list of cases on this subject see *Injunction — Grounds for Refusing — Laches*, § 568.

§ 731. Reissue.

Even if the patentee had the right to a reissue if applied for in seasonable time, he had lost it by his laches and unreasonable delay. — Johnson *v.* Flushing, 105 U. S. 539; 26 L. Ed. 1162.

Miller *v.* Brass Co. 104 U. S. 350.

Laches in obtaining reissue. — Wollensak *v.* Sargent, 151 U. S. 221; 38 L. Ed. 137; 14 S. Ct. 291.

For full list of cases on this subject see *Reissue — Delay*, §§ 875–9.

§ 732. Miscellaneous Rulings.

Delay of twelve years raises laches. — Lane *v.* Locke, 150 U. S. 193; 37 L. Ed. 1049; 14 S. Ct. 78.

Reasonable diligence as well as good faith are necessary to call into operation the powers of a court of equity. — Woodmansee *v.* Williams, 68 Fed. 489; 15 C. C. A. 520.

Maxwell *v.* Kennedy, 8 How. 222; Kittle *v.* Hall, 29 Fed. 511; Piatt *v.* Vattier, 9 Pet. 416; Leggett *v.* Oil, 149 U. S. 288; McLaughlin *v.* Railway, 21 Fed. 574; Speidel *v.* Henrici, 15 Fed. 753; The Walter M. Fleming, 9 Fed. 474; Lewis *v.* Chapman, 3 Beav. 133; Lane *v.* Locke, 150 U. S. 193; Keyes *v.* Mining, 158 U. S. 772.

The infringement not being evident either from the name or character of the article, and neither complainant nor its assignor having actual knowledge of it, although the article was sold for years, does not constitute laches to prevent recovery by accounting. — Imperial *v.* Stein, 77 Fed. 612; 23 C. C. A. 353.

This suit was brought about two and one-half months before the expiration of the patent, and after the extensive and expensive manufacture of Appleby machines had progressed at an increasingly active rate within the complainant's knowledge and observation for about 14 years. All the adjudged cases in regard to laches proceed upon the inequitable conduct of the complainant, and the inequity which would result if the stale claim was permitted to be enforced, and the judgments adverse to the complainant are founded upon the fact that the party to whom the laches is imputed has all the time "knowledge of his rights, and an ample opportunity to establish them in

the proper forum; that, by reason of his delay, the adverse party had good reason to believe that the alleged rights are worthless or had been abandoned; and that, because of the change in conditions or relations during this period of delay, it would be an injustice to the latter to permit him to now assert them." A further reference to the cited cases is unnecessary, as Judge Coxe has cited many of them in his opinion (82 Fed. 95). — Richardson *v.* Osborne, 93 Fed. 828; 36 C. C. A. 610.

LAW ACTIONS

General Statement § 733
Directing Verdict § 734
Findings § 735
Instructions § 736
Miscellaneous Rules § 737

See — Appeals §§ 131-2; *Damages* § 285; *Defenses* § 306; *Evidence* §§ 401-6; *Infringement* § 492; *Jurisdiction* § 713; *Pleading and Practice* § 788

§ 733. General Statement.

The subject of *Jurisdiction* has been considered under that title, and Sec. 4915 need not be here repeated. Under the old practice, prior to the revision of the Patent Act in 1870-1872, action on the case was the common method of procedure. At the present time law actions are rare except in the Ninth Circuit. Where there is no ground for equitable relief, with the present rules as to damages, and in the absence of a very clear measure of damages — making the computation little more than a simple problem in arithmetic — a law action is well-nigh futile. It is, furthermore, the observation of the writer that the submission of facts in a patent case to a jury is a most hazardous proceeding. It is not possible, under our jury system, to obtain a panel of scientific men.

§ 734. Directing Verdict.

The courts of the United States have no power to order a peremptory nonsuit, against the will of the plaintiff. — Silsby *v.* Foote, 14 How. 218; 14 L. Ed. 394.

Doe *v.* Grymes, 1 Pet. 469; D'Wolf *v.* Raband, 1 Pet. 476; Cram *v.* Morris, 6 Pet. 598.

Where it is entirely clear that the plaintiff cannot recover, it is proper to give such a direction, but not otherwise. — Klein *v.* Russell, 86 U. S. 433; 22 L. Ed. 116.

In our opinion this was a question of fact properly to be left for determination to the jury, under suitable instructions from the court upon the rules of law, which should guide them to their verdict. And there was evidence upon both sides of the issue sufficient to require that it should be weighed and considered by the jury in determination of the question; and this implies that, if it had been submitted to the jury and the verdict had been for the plaintiffs, it would have been the duty of the court to set it aside as not supported by sufficient evidence. The court erred, we think, in withdrawing the case from the jury as it did by directing a verdict for the defendants. — Keyes *v.* Grant, 118 U. S. 25; 30 L. Ed. 54; 6 S. Ct. 974.

Randall *v.* Baltimore, 109 U. S. 478.

A motion to direct a verdict is broad enough to cover the question of the invalidity of the patent. — May *v.* Juneau, 137 U. S. 408; 34 L. Ed. 729; 11 S. Ct. 102.

Brown *v.* Piper, 91 U. S. 37; Dunbar *v.* Myers, 94 U. S. 187; Slawson *v.* Grand, 107 U. S. 649; Hendy *v.* Golden, 127 U. S. 370.

We are of opinion the court ought to have directed a verdict for the defendant on the ground that the patent was void. — Fond Du Lac *v.* May, 137 U. S. 395; 34 L. Ed. 714; 11 S. Ct. 98.

Note: But see on this subject whether such a course as here suggested by Justice Blatchford is justified by the rule laid down in Silsby *v.* Foote, 14 How. 218; Doe *v.* Grymes, 1 Pet. 469; D'Wolf *v.* Rabaud, 1 Pet. 476; Cram *v.* Morris, 6 Pet. 598; and compare Justice Fuller's remark in Haines *v.* McLaughlin, 135 U. S. 584, saying, " all questions of fact are exclusively for the jury to decide. The court does not decide nor instruct you whether any device was or was not an anticipation of plaintiff's patent. The question of anticipation is purely a question of fact and is exclusively for the jury to determine."

In view of the fact that the state of the art had to be considered in this case, the broad statement of Justice Blatchford seems open to criticism.

If upon the state of art as shown to exist by the prior patents, and upon a comparison of the older devices with those described in the patent in suit, it should appear that the patented claims are not novel, it becomes the duty of the court to so instruct the jury. — Market *v.* Rowley, 155 U. S. 621; 39 L. Ed. 284; 15 S. Ct. 224.

Giant *v.* California, 98 U. S. 126; Heald *v.* Rice, 104 U. S. 737; Fond Du Lac *v.* May, 137 U. S. 396.

Dissented to by Justice Brown, and rightly, too, as I think, in view of Battin *v.* Taggart, 58 U. S. 74; Bischoff *v.* Wetherhead, 76 U. S. 812.

And if, therefore, the construction of plaintiff's patent was for the determination of the court, either on the face of the patent, or on the face of the patent in connection only with facts of such nature that their existence and effect could not be reasonably disputed, it follows that the entire issue of infringement was practically for the court, however it might have been with issues of novelty, and patentability, or other issues which might have been raised if the issue of infringement could properly have been submitted to the jury, or determined for the plaintiffs. — DeLoriea *v.* Whitney, 63 Fed. 611; 11 C. C. A. 355.

The law is now well settled that the trial court not only has the power, but it is its duty, where the evidence is insufficient to support a verdict in favor of the plaintiff, to instruct the jury to find a verdict in favor of the defendant. — Overweight *v.* Improved, 94 Fed. 155; 36 C. C. A. 125.

The question of invention is ordinarily for the jury, subject to the direction of the court concerning the construction to be put on the letters patent. If, however, the patent in suit appears to the court to be plainly invalid for want of invention, a verdict for the defendants should be ordered. The presumption of validity which arises from the patent itself does not necessarily require the submission of the question of invention to the jury. — Look *v.* Smith, 148 Fed. 12; 78 C. C. A. 180.

Heald *v.* Rice, 104 U. S. 737; May *v.* Juneau, 137 U. S. 408; Fond Du Lac *v.* May, 137 U. S. 395; Market *v.* Rowley, 155 U. S. 621.

§ 735. Findings.

In a suit at law where evidence was taken and the question of infringement was determined, this court will not review the evidence as if it were a suit in equity. — St. Paul *v.* Starling, 140 U. S. 184; 35 L. Ed. 404; 11 S. Ct. 803.

Upon a special finding upon different issues, if judgment has been given in favor of the defendant, if the finding on one issue is unassailable, no error of law or fact in respect to another issue can be deemed harmful. — Keene *v.* Barratt, 100 Fed. 590; 40 C. C. A. 571.

§ 736. Instructions.

It is not error to refuse to instruct as to an abstract question, and instructions should never be given upon hypothetical statements of fact, of which there is no evidence. — Haines *v.* McLaughlin, 135 U. S. 584; 22 L. Ed. 241; 10 S. Ct. 876.

Where the court stated the facts as shown by the evidence as to an anticipating device, and then left the matter wholly to them, there was no error. — Haines *v.* McLaughlin, 135 U. S. 584; 22 L. Ed. 241; 10 S. Ct. 876.

Eastern *v.* Hope, 95 U. S. 297.

A statement by the court to the jury which is immaterial, if it is justified in the course of the trial, will not be regarded on appeal. — Haines *v.* McLaughlin, 135 U. S. 584; 22 L. Ed. 241; 10 S. Ct. 876.

At the trial in the court below, the presiding judge read to the jury, as a part of his charge, an extract from the opinion of Judge Colt in McDonald *v.* Whitney, 24 Fed. 600. Defendants excepted. We are of opinion that this action of the court below was erroneous, and that the exception was well taken. The case read from was a suit between different parties on the same patent. In the extract read to the jury, Judge Colt gave his views upon the questions of law and fact involved. Upon these issues the finding of another tribunal in a case between other parties was not competent evidence, and should not have been called to the attention of the jury. — Arey *v.* De Lorica, 55 Fed. 323; 5 C. C. A. 116.

It was the duty of the court to define the patented invention as the same was expressed in the language of the claim. — Holmes *v.* Truman, 67 Fed. 542; 14 C. C. A. 517.

Rob. Pat. p. 378.

§ 737. Miscellaneous Rules.

During opening, and before any evidence was taken, a juror became ill. The court called and swore a new juror. On exception, held that as such was the practice in the state where the circuit was held, and as it was a case where no serious injury could result, it was in the discretion of the court. — Silsby *v.* Foote, 14 How. 218; 14 L. Ed. 394.

When the essence of an alleged infringing machine is not in dispute, so that the question of infringement by it turns so plainly on the true construction of the patent alleged to be infringed that such construction being ascertained or not in dispute, a verdict in one direction ought to be set aside as against the weight of evidence, then, under the rule as now understood, the court ought to direct a verdict in the other direction; and under such circumstances, the issue of infringement is essentially the same as that of the construction of the patent in suit. — DeLorica *v.* Whitney, 63 Fed. 611; 11 C. C. A. 355.

The action was on contract. The court directed non-suit on the ground that the claims of the patents in suit, in view of the prior art, could not be con-

struced to cover defendant's acts. *Held:* The present case is at law, and the question is not one of equity but of strict contract right. The contract is explicit, and, in our opinion, excludes any enquiry into the prior art for the purpose of limiting the scope of the patent. — Leslie *v.* Standard, 98 Fed. 827; 39 C. C. A. 314.

LETTERS PATENT.

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§ 738. Statutory Requirements.

The seal heretofore provided for the Patent Office shall be the seal of the Office, with which letters patent and papers issued from the Office shall be authenticated. R. S. 478.

All patents shall be issued in the name of the United States of America, under the seal of the Patent Office, and shall be signed by the Commissioner of Patents, and they shall be recorded, together with the specifications, in the Patent Office in books to be kept for that purpose. R. S. 4883.

Every patent shall contain a short title or description of the invention or discovery, correctly indicating its nature and design, and a grant to the patentee, his heirs or assigns, for the term of seventeen years, of the exclusive right to make, use, and vend the invention or discovery throughout the United States and the Territories thereof, referring to the specifications for the particulars thereof. A copy of the specifications and drawings shall be affixed to the patent and be a part thereof. R. S. 4884.

Every patent shall issue within a period of three months from the date of the payment of the final fee, which fee shall be paid not later than six months from the time at which the application was passed and allowed and notice thereof was sent to the applicant or his agent; and if the final fee is not paid within that period the patent shall be withheld. R. S. 4885 as amended May 23, 1908.

As thus amended the section differs materially from the section as originally enacted July 8, 1870. The section as affecting all patents issued prior to May 23, 1908, read as follows:

Every patent shall bear date as of a day not later than six months from the time at which it was passed and allowed and notice thereof was sent to the applicant or his agent; and if the final fee is not paid within that period the patent shall be withheld.

Patents may be granted and issued or reissued to the assignee of the inventor or discoverer; but the assignment must first be entered of record in the Patent Office. And in all cases of an application by an assignee for the issue of a patent, the application shall be made and the specification sworn to by the inventor or discoverer; and in all cases of an application for a reissue of any patent, the application must be made and the corrected specification signed by the inventor or discoverer, if he is living, * * * R. S. 4895.

As provided by Sec. 4896, the representative of a deceased inventor or an insane inventor may make the necessary application.

§ 739. General Statement.

It is unnecessary to enter upon the refinements that have been made to establish the so-called "contract theory," or the distinction between a patent and a crown monopoly, or even the distinction between a patent for an invention and a patent for land. This is certain: The patent for an invention is a grant which exists only by reason of the Constitution and the acts of Congress. Every right and every ruling must, therefore, root back in the statute. This principle is fundamental. Again, this we know to be the fact: Whether the contract theory applies or not, the practical question in determining whether the inventor has performed his part is whether he has complied with the terms of the statute.

§ 740. Construction.

The letters patent need not contain a recital that all prerequisites to the grant have been complied with. — Railroad *v.* Stimpson, 14 Pet. 448; 10 L. Ed. 535.

The character and purpose of the specification as compared with the English system. — Hogg *v.* Emerson, 6 How. 437; 12 L. Ed. 505.

It is not, of course, doubted that the courts in construing the patent as all other statutes, must have regard to the spirit as well as the letter. That simply requires that the courts shall ascertain their true meaning, but when this is ascertained the applicant for a patent is entitled to all the benefits which these statutes thus construed give. — United States *v.* Am. Bell, 167 U. S. 224; 42 L. Ed. 144; 17 S. Ct. 809.

§ 741. Contract Theory.

The legislation based on the provision (Const. Art I, sec. 8) regards the right of property in the inventor as the medium of the public advantage derived from his invention; so that in every grant of the limited monopoly two interests are involved, that of the public, who are the grantors, and that of the patentee. There are thus two parties to any application for a patent, and more, when, as in case of interfering claim or patents, other private interests compete for preference. The questions of fact arising in this field find their answers in every department of physical science, in every branch of mechanical art; the questions of law, necessary to be applied in the settlement of this class of public and private rights, have founded a special branch of technical jurisprudence. — Butterworth *v.* Hoe, 112 U. S. 50; 28 L. Ed. 656; 5 S. Ct. 25.

A patent is a contract by which the Government secures to the patentee the exclusive right to vend and use his invention for a few years, in consideration of the fact he has perfected and described it and has granted its use to the public forever after. The general rules for the interpretation of grants and contracts govern its construction. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

§ 742. Defective.

In this case the patent was issued in the regular process of business. Subsequently and after infringement and after this suit was brought, it was discovered that the signature of the acting or assistant Secretary of the Interior had, by accident, been omitted. This defect was sought to be cured

by having the signature supplied by the secretary who had been succeeded in that office. The defense had left complainant to his proofs as to the grant of the letters, and therefore set up the defense that the patent was invalid. *Held*, that such error defeated the patent; that the same might be remedied by proper proceeding, but not by having the signature supplied; that no recovery for infringement prior to the correction could be had, and that under correction the grant could not relate back to the date of its issue. — Marsh *v.* Nichols, 128 U. S. 605; 32 L. Ed. 538; 9 S. Ct. 168.

Note: While it is not the author's purpose to criticise the decisions of the great court at Washington, it would seem, that if the court had considered the fact of notice which the issue and record of the grant gave, and the fact that the defendant was a tort feasor, trespassing under such notice, it should have held that, notwithstanding the general rule, the defendant was estopped to question the regularity of the method by which the error was corrected.

A mistake in issuance cannot be corrected by supplying the omitted signature after issue, and certainly not after such officer had gone out of office. — Marsh *v.* Nichols, 128 U. S. 605; 32 L. Ed. 538; 9 St. 168.

Where the defect in the patent is apparent on its face, it may be attacked without special pleading setting up the specific acts which defeat the instrument. — Marsh *v.* Nichols, 128 U. S. 605; 32 L. Ed. 538; 9 S. Ct. 168.

Eureka *v.* Bailey, 78 U. S. 492.

The patent, as originally issued being in every respect a regularly executed document, and the statute providing for no subsequent alteration thereof by the patent office (except in cases of reissue, which this is not) the action of the commissioner in endorsing it with an attempted "correction," was without jurisdiction and wholly void. — Edison *v.* U. S. 52 Fed. 300; 3 C. C. A. 83.

§ 743. Definition.

The meaning of the words "patent" and "patented" as used in section 4887, is not difficult to ascertain. The word "patent," originally a qualifying adjective applied to the "open letters" by which a sovereign grants an estate or privilege, has come to mean, in connection with the so-called patent laws of the United States, as well as in common parlance, the exclusive privilege itself granted by the sovereign authority to an inventor with respect to his invention. What the nature and extent of the exclusive privilege thus granted by the constitution and laws of the United States may be, depends upon the terms of the act of Congress providing for and regulating the same; and, when this section 4887 speaks of an invention which has been previously patented in a foreign country, it obviously means an invention with respect to which the inventor has received from the sovereign authority of such country such exclusive privilege as its laws provide for or sanction. — Atlas *v.* Simonds, 102 Fed. 643; 42 C. C. A. 398.

§ 744. Monopoly.

His exclusive right does not rest alone upon his discovery, but also upon the legal sanctions which have been given to it, and the forms of law with which it has been clothed. — Shaw *v.* Cooper, 7 Pet. 292; 8 L. Ed. 689.

The entire question of a monopoly founded upon a patent or a series of patents in relation to recent federal legislation against restraint of commerce and trade has been so fully reviewed by the Supreme Court in the Harrow

Case that to excerpt from it would result in quoting substantially the entire opinion. A few of the salient points of that case may be summarized:

1. That the findings of a state court in an equity suit are conclusive upon the Supreme Court.
2. That the Act of July 2, 1890, may be set up as a defense by an individual.
3. That ordinarily, restrictive provisions in the license or sale of a patent are not in contravention of that act.
4. That the owner of a patent may sell, keep, use, license, or refuse to use a patent, as he pleases; this the monopoly grants.
5. That a state has the right to regulate its internal affairs, including the manufacture, use, or sale of an article subject to a patent.
6. That common carriers employing patented means in its business must recognize the paramountcy of their duties under their franchises, and cannot make a patent monopoly, if used, a means for the evasion of duty to the public.
7. That notwithstanding these limitations (5 and 6), the general rule is absolute freedom in use, sale, or license; since the patent is a monopoly created under the constitution and statute in contravention of the common-law right.
8. That reasonable and legal conditions and restrictions put upon an assignee or licensee are not within the purview of the interstate commerce act.
9. That license or sale conditions fixing prices of a patented article are not in violation of that act.

It is believed that the fundamental principle underlying this decision and the others quoted from in this section is this: When the essence of the act resides within the monopoly of the patent, such act is a conceded, limited privilege; when the essence of the act resides without the monopoly of the patent, and the monopoly of the patent is made a cover for combinations and machinations contrary to law, the patent grant will not avail the wrongdoer. — Bement *v.* National, 186 U. S. 70; 46 L. Ed. 1058; 22 S. Ct. 747.

It is manifest, as well from the contract as from the proofs outside of it, that the purpose of the parties was to form a combination between the various manufacturers to prevent competition in business and enhance prices. The corporation provided to hold the legal title of the several patents, is merely an instrument to effect this object. The fact that the property involved is covered by letters patent is urged as a justification; but we do not see how any importance can be attributed to this fact. Patents confer a monopoly as respects the property covered by them, but they confer no right upon the owners of several distinct patents to combine for the purpose of restraining competition and trade. Patented property does not differ in this respect from any other. The fact that one patentee may possess himself of several patents, and thus increase his monopoly, affords no support for an argument in favor of a combination by several distinct owners of such property to restrain manufacture, control sales and enhance prices. Such combinations are conspiracies against the public interests, and abuses of patent privileges. The object of these privileges is to promote the public benefit, as well as to reward inventors. The suggestion that the contract is justified by the situation of the parties — their exposure to litigation — is entitled to no greater weight. Patentees may compose their differences, as the owners of other property may, but they cannot make the occasion an excuse or cloak for the creation of monopolies to the public disadvantage. — National *v.* Hench, 83 Fed. 36; 27 C. C. A. 349.

Nestor *v.* Brewing Co. 161 Pa. St. 473; Carbon Co. *v.* McMillin, 119 N. Y. 46; Morris *v.* Barclay, 68 Pa. St. 173; Distilling *v.* People, 41 N. E. 188; National *v.* Quick, 67 Fed. 130.

The parties had entered into a monopoly agreement which practically closed the art to every other person. The policy was to be to " tire out " as well as to defend the patents. *Held:* That such a contract is not void as against public policy, in that it tends to create a monopoly, has been decided in the case of Bement *v.* National, 186 U. S. 70. — U. S. Consolidated *v.* Griffin, 126 Fed. 364; 61 C. C. A. 334.

We do not look on this as a contract in restraint of trade. It binds no one to stay out of the trade. At most, it is an agreement, merely, that if Pungs renews his connection with the trade, he shall return the consideration received. He has merely put himself where, without putting any binding restraint on his inventive faculties, he will realize, for the time being, on what he has already invented. — American *v.* Pungs, 141 Fed. 923; 73 C. C. A. 157.

Harrison *v.* Glucose, 116 Fed. 304; Morse *v.* Morse, 103 Mass. 73.

That articles made under patents may be the subject of contracts by which their use and price in subsales may be controlled by the patentee, and that such contracts, if otherwise valid, are not within the terms of the act of Congress against restraints of interstate commerce or the rules of the commerce law against monopolies and restraints of trade, is now well settled. — Park *v.* Hartman, 153 Fed. 24; 82 C. C. A. 158.

Heaton *v.* Eureka, 77 Fed. 286; Dickerson *v.* Tinling, 84 Fed. 192; Edison *v.* Kaufman, 105 Fed. 960; Edison *v.* Pike, 116 Fed. 863; Rupp *v.* Elliott, 131 Fed. 730; Victor *v.* The Fair, 123 Fed. 428; Bement *v.* National, 186 U. S. 70.

That an article which is the product of a patent is not an ordinary article of commerce, see — Indiana *v.* Case, 154 Fed. 365; 83 C. C. A. 343.

The rule in U. S. Bell Tel. Co. 167 U. S. 224, followed. — Indiana *v.* Case, 154 Fed. 365; 83 C. C. A. 343.

Congress having created the patent law, has the right to repeal or modify it, in whole or in part, directly or by necessary implication. The Sherman law contains no reference to the patent law. Each was passed under a separate and distinct constitutional grant of power; each was passed professedly to advantage the public; the necessary implication in not one iota was taken away from the patent law; the necessary implication is that patented articles, unless or until they are released by the owner of the patent from the dominion of his monopoly, are not articles of trade or commerce among the several states. — Rubber Tire *v.* Milwaukee, 154 Fed. 358; 83 C. C. A. 336.

The only grant to the patentee was the right to exclude others, to have and to hold for himself and his assigns a monopoly, not a right limited or conditioned according to the sentiment of judges, but an absolute monopoly constitutionally conferred by the sovereign lawmakers. Over and above an absolute monopoly created by law, how can there be a further and unlawful monopoly in the same thing? If plaintiff were the sole maker of Grant tires, how could plaintiff's control of prices and output injure the people, deprive them of something to which they have a right? Is a greater injury or deprivation inflicted, if plaintiff authorizes a combination or pool to do what plaintiff can do directly? — Rubber Tire *v.* Milwaukee, 154 Fed. 358; 83 C. C. A. 336.

The right of an owner of a patent to reserve to himself as a part of his monopoly the control of the price at which dealers may sell the patented product to users is unquestioned. — The Fair *v.* Dover, 166 Fed. 117; C. C. A.

Victor *v.* The Fair, 123 Fed. 424; Fuller *v.* Berger, 120 Fed. 274; Rubber Tire *v.* Milwaukee, 154 Fed. 358; Indiana *v.* Case, 154 Fed. 365; Continental *v.* Eastern, 210 U. S. 405; Bobbs-Merrill *v.* Straus, 210 U. S. 339; Globe *v.* Walker, 210 U. S. 356.

§ 745. Nature of Grant.

Letters patent are not to be regarded as monopolies, created by the executive authority at the expense and to the prejudice of all the community except the persons therein named as patentees, but as public franchises granted to the inventor of new and useful improvements for the purpose of securing to others as such inventors, for the limited term therein mentioned, the exclusive right and liberty to make and use and vend to others to be used their own inventions, as tending to promote the progress of science and the useful arts, and as matter of compensation to the inventors for their labor, toil and expense in making the inventions, and reducing the same to practice for the public benefit, as contemplated by the Constitution and sanctioned by the laws of Congress. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

The authority by which the patent issues is that of the United States of America. The seal which is used is the seal of the Patent Office, and that was created by Congressional enactment. It is signed by the Secretary of the Interior, and the Commissioner of Patents, who also countersigns it, is an officer of that Department. The patent, then, is not the exercise of any prerogative power or discretion by the President, or by any other officer of the Government, but it is the result of a course of proceeding, quasi judicial in its character, and is not subject to be repealed or revoked by the President, the Secretary of the Interior, or the Commissioner of Patents, when once issued. — United States *v.* Am. Bell, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

U. S. *v.* Schurz, 102 U. S. 378.

Charters and patents authenticating grants of personal privileges were in the earlier days of the English Government made by the Crown. They were supposed to emanate directly from the King, and were not issued under any authority given by Acts of Parliament, nor were they regulated by any statutes. Being, therefore, in their origin an exercise of his personal prerogative, the power of working them, so far as they could be worked at all, was in the King, and was exercised by him as a personal privilege. But whatever may have been the course of procedure in English jurisprudence, it can have but little force in limiting or restraining the measures by which the government of the United States shall have a remedy for an imposition upon it or its officers in the procurement or issue of a patent. We have no King in this country; we have had no prerogative right of the Crown; and letters patent whether for inventions or for grants of land, issue not from the President, but from the United States. The President has no prerogative in the matter. He has no right to issue a patent, and, though it is the custom for patents for lands to be signed by him, they are of no avail until the proper seal of the Government is affixed to them. Indeed, a recent Act authorizes the appointment of a clerk for the special purpose of signing the President's name to patents of that character. And so far as patents for inventions are concerned, since the Act of 1870, they are issued without his signature and

without his name or his style of office being mentioned in them. — United States *v.* Am. Bell, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

The monopoly thus granted is one entire thing and cannot be divided into parts except as authorized by law. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

Compared with Patents for Land, see United States *v.* Am. Bell, 167 U. S. 224, and cases cited; 42 L. Ed. 144; 17 S. Ct. 809.

The cases declare that he receives nothing from the law that he did not have before, and that the only effect of the patent is to restrain others from manufacturing and using that which he has patented. Wherever this court has had occasion to speak, it has decided that an inventor receives from a patent the right to exclude others from its use for the time prescribed by the statute. — Continental *v.* Eastern, 210 U. S. 405; 51 L. Ed. 922; 28 S. Ct. 748.

Root *v.* Railway, 105 U. S. 189; U. S. *v.* Bell Telephone, 167 U. S. 224; Grant *v.* Raymond, 6 Pet. 242; Bloomer *v.* McQuewan, 14 How. 539; Patterson *v.* Kentucky, 97 U. S. 501; Wilson *v.* Rousseau, 4 How. 646; Seymour *v.* Osborne, 11 Wall. 516; Cammeyer *v.* Newton, 94 U. S. 225; Densmore *v.* Scofield, 102 U. S. 375; Bement *v.* National, 186 U. S. 70; Heaton *v.* Eureka, 77 Fed. 294; Hoe *v.* Knapp, 27 Fed. 204.

Under its constitutional right to legislate for the promotion of the useful arts, Congress passed the patent statutes. The public policy thereby declared is this: Inventive minds may fail to produce many useful things that they would produce if stimulated by the promise of a substantial reward; what is produced is the property of the inventor; he and his heirs and assignees may hold it as a secret till the end of time; the public would be largely benefited by obtaining conveyances of these new commodities; so the people through their representatives say to the inventor: Deed us your property, possession to be yielded at the end of 17 years, and in the mean time we will protect you absolutely in the right to exclude everyone from making, using, or vending the thing patented, without your permission. Congress put no limitations, excepting time, upon the monopoly. Courts can create none without legislating. The monopoly is of the invention, the mental concept as distinguished from the materials that are brought together to give it a body. Use of the materials may be enjoined as injurious to the public; but that does not invade the monopoly. Use of the invention cannot be had except on the inventor's terms. Without paying or doing whatever he exacts, no one can be exempted from his right to exclude. Whatever the terms, courts will enforce them, provided only that the licensee is not thereby required to violate some law outside of the patent law, like the doing of murder or arson. Does the requirement that the licensee join other licensees in a combination or pool to control the prices and output of an innocuous patented article violate the Sherman law? We cannot dispose of the question on the authority of Bement *v.* National, 186 U. S. 70, for according to our reading the question was expressly excepted from the decision. — Rubber Tire *v.* Milwaukee, 154 Fed. 358; 83 C. C. A. 336.

Bloomer *v.* McQuewan, 14 How. 539; U. S. *v.* Bell Tel., 167 U. S. 224; Bement *v.* National, 186 U. S. 70; Good *v.* Deland, 121 N. Y. 1; Fuller *v.* Berger, 120 Fed. 274; Victor *v.* The Fair, 123 Fed. 424; Rupp *v.* Elliott, 131 Fed. 730.

§ 746. Property Rights in.

Inventions secured by letters patent are property in the holder of the patent, and as such are as much entitled to protection as any other property, consisting of a franchise, during the time for which the franchise or the

exclusive right is granted. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Right of parties with reference to a patented invention will be construed according to the act under which the patent was granted. — Brown *v.* Piper, 91 U. S. 37; 23 L. Ed. 200.

The right of property in a patented invention is as much entitled to protection as any other right. — Cammeyer *v.* Newton, 94 U. S. 225; 24 L. Ed. 72.

Seymour *v.* Osborne, 11 Wall. 516; 16 St. at L. 201.

Patents rightfully issued are property, and are surrounded by the same rights and sanctions which attend all other property. Patentees as a class are public benefactors, and their rights should be protected. But the public has rights also. The rights of both should be upheld and enforced by an equally firm hand, wherever they come under judicial consideration. — Densmore *v.* Scofield, 102 U. S. 375; 26 L. Ed. 214.

The property right of a patentee is, after all, but a property right, and subject as is all other property, to the general law of the land. We may also concede that contracts respecting the use of inventions and discoveries are, like all other contracts, subject to the limitations imposed by definite principles of public policy.

Neither the patentee, nor the machine involving his invention, nor a license for use, can be exempted from the liabilities and regulations which, in public interest, attach to all persons and property under the general law of the land. Neither is the right to make or sell or use a patented invention or process free from the restraints imposed by the police power in the states. — Heaton *v.* Eureka, 77 Fed. 288; 25 C. C. A. 267.

Missouri *v.* Bell Tel. Co., 23 Fed. 539; State *v.* Delaware, 47 Fed. 633; State *v.* Delaware, 50 Fed. 677; Patterson *v.* Kentucky, 97 U. S. 501; Vasuini *v.* Paine, 1 Har. 65; Registering Co. *v.* Sampson, L. R. 19 Eq. 462.

If he see fit, he may reserve to himself the exclusive use of his invention or discovery. If he will neither use his device, nor permit others to use it, he has but suppressed his own. That the grant is made upon the reasonable expectation that he will either put his invention to practical use, or permit others to avail themselves of it upon reasonable terms, is doubtless true. This expectation is based alone upon the supposition that the patentee's interest will induce him to use, or let others use, his invention. The public has retained no other security to enforce such expectations. A suppression can endure but for the life of the patent, and the disclosure he has made will enable all to enjoy the fruit of his genius. His title is exclusive and so clearly within the constitutional provisions in respect of private property that he is neither bound to use his discovery himself, nor permit others to use it. The dictum found in Hoe *v.* Knapp, 27 Fed. 204, is not supported by reason or authority. — Heaton *v.* Eureka, 77 Fed. 288; 25 C. C. A. 267.

Wilson *v.* Rousseau, 4 How. 674; Pitts *v.* Wemple, Fed. Cas. No. 11,194; Grant *v.* Raymond, 6 Pet. 218; U. S. *v.* Bell Tel. 29 Fed. 17; Consolidated *v.* Coombs, 39 Fed. 805; Campbell *v.* Manhattan, 49 Fed. 935.

Whether his patent be good or bad, no one has the right to claim the privilege of making and selling his goods as though made under it and thereby depriving the owner of such credit as belongs to it, and inducing the public to suppose that the seller has title to the invention supposed to be embodied in the subject of the sale. — Stimpson *v.* Stimpson, 104 Fed. 893; 44 C. C. A. 241.

§ 747. Scope of.

It was authoritatively declared in James *v.* Campbell, 104 U. S. 356, that the right of the patentee was exclusive of the government as well as of all others. — Hollister *v.* Benedict, 113 U. S. 59; 28 L. Ed. 901; 5 S. Ct. 717.

The inventor's right to make, use, and vend his device does not come from the patent law; it is his natural right. The government's grant to the patentee and his assigns is the right to exclude others from practising the invention. As Mr. Chief Justice Taney said in Boomer *v.* McQuewan, 14 How. 539: "The franchise which the patent grants consists altogether in the right to exclude every one from making, using or vending the thing patented, without permission of the patentee. This is all he obtains by the patent." — Fuller *v.* Berger, 120 Fed. 274; 56 C. C. A. 588.

§ 748. Miscellaneous Decisions.

Delivery is not necessary to the validity of letters patent. — Marbury *v.* Madison, 1 Cranch, 137; 2 L. Ed. 60.

Power to grant letters patent is conferred by law upon the Commissioner of Patents, and when that power has been lawfully exercised, and a patent has been duly granted, it is of itself prima facie evidence that the patentee is the original and first inventor of that which is therein described and secured to him as his invention. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

The power therefore, (in view of Art. 4, sec. 3, par. 2) to issue a patent for an invention, and the authority to issue such an instrument for a grant of land, emanate from the same source, and although exercised by different bureaux or officers under the Government, are of the same nature, character and validity, and imply in each case the exercise of the power of government according to modes regulated by Acts of Congress. — United States *v.* Am. Bell, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

The full six months are allowed by the statute to the applicant, and it can hardly be supposed that Congress intended that this period could be cut short by the exigencies of the Patent Office. Again, the statute declares that, if the final fee is not paid within the six months, the patent shall be withheld, but it does not declare that, if not dated as directed, the patent shall not issue, or, if issued, shall be void. — Western *v.* North, 135 Fed. 79; 67 C. C. A. 553.

LICENSE.

Statutory Provision § 749
General Distinction from Assignment § 750
Assignment § 751 (*see* § 149)
Construction of § 752
Contract § 753
Estoppel § 754 (*see* § 381)
Forfeiture § 755
Implied § 756
Machine § 757 (*see* § 768)
Non-Assignable § 758
Patol § 759
Royalties § 760 (*see* § 897)
Scope § 761
Termination of § 762
Territorial § 763
Miscellaneous § 764
See — Administrator § 40; *Assignment* § 165; *Copartnership* § 270; *Corporations* § 271; *Damages* § 292; *Defenses* § 311; *Employer and Employee* § 366; *Estoppel* § 384; *Infringement* §§ 509–13; *Injunction* § 569; *Jurisdiction* § 722; *Licensor and Licensee* § 765; *Royalties* § 897; *Sale of Patented Article* § 899

§ 749. Statutory Provision.

The statute does not use the term license. By the terms of sec. 4898

Every patent or any interest therein shall be assignable in law by an instrument in writing, and the patentee or his assigns or legal representatives may, in like manner, grant and convey an exclusive right under his patent to the whole or any specified part of the United States.

And sec. 4899 makes the following provision as to purchase before application:

Every person who purchases of the inventor or discoverer, or, with his knowledge and consent, constructs any newly invented or discovered machine, or other patentable article, prior to the application by the inventor or discoverer for a patent, or who sells or uses one so constructed, shall have the right to use, and vend to others to be used, the specific thing so made or purchased, without liability therefor.

§ 750. General Distinction from an Assignment.

The patentee or his assigns may, by instrument in writing, assign, grant and convey, either (1) the whole patent comprising the exclusive right to make, use and vend the invention throughout the United States; or, (2) an undivided part or share of that exclusive right; or, (3) the exclusive right under the patent within and throughout a specified part of the United States. (R. S. 4898.) A transfer of either of these three kinds of interests is an assignment properly speaking, and vests in the assignee a title in so much of the patent itself, with a right to sue infringers; in the second place conjointly with the assignor, in the first and third cases in the name of the assignee alone. Any assignment or transfer short of one of these, is a mere license, giving the licensee no title in the patent; and no right to sue at law in his own name for infringement. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

Gayler *v.* Wilder, 51 U. S. 477; Moore *v.* Marsh, 74 U. S. 515.

§ 751. Assignment.

An assignment of a right to make, use and sell for a limited time in a limited territory, in the absence of express words, does not pass to an executor or administrator. — Oliver *v.* Rumford, 109 U. S. 75; 27 L. Ed. 862; 3 S. Ct. 61.

Troy *v.* Corning, 14 How. 193.

Not assignable unless so expressed in instrument. — Lane *v.* Locke, 150 U. S. 193; 37 L. Ed. 1049; 14 S. Ct. 78.

Where a licensee assigns a license to a corporation succeeding to the business and the original licensor acquiesces in or by implication ratifies the transfer it is binding upon him. — Lane *v.* Locke, 150 U. S. 193; 37 L. Ed. 1049; 14 S. Ct. 78.

Hammond *v.* Mason, 92 U. S. 724; Lightner *v.* Boston, 1 Law. Des. 338.

Distinguishing, Hapgood *v.* Hewitt, 119 U. S. 226; Troy *v.* Corning, 55 U. S. 193; Oliver *v.* Rumford, 109 U. S. 75; Applying, McClurg *v.* Kingsland, 42 U. S. 202; Solomons *v.* U. S. 137 U. S. 342.

No license is assignable by the licensee to another unless it contains words which show that it was intended to be assigned. — Waterman *v.* Shipman, 55 Fed. 982; 5 C. C. A. 371.

Factory *v.* Corning, 14 How. 193; Rubber Co. *v.* Goodyear, 9 Wall. 788; Adams *v.* Howard, 22 Fed. 656; Baldwin *v.* Sibley, 1 Cliff. 150.

A license to use a patented invention that does not contain words importing assignability is a grant of a mere personal right to the licensee which does not pass to his heirs or representatives and which cannot be transferred to another without the expressed consent of the licensor. — Bowers *v.* Lake Superior, 149 Fed. 983; 79 C. C. A. 493.

Hapgood *v.* Hewitt, 119 U. S. 227; Oliver *v.* Rumford, 109 U. S. 75; Troy *v.* Corning, 14 How. 193.

§ 752. Construction of.

"The sole and exclusive right and license to manufacture and sell fountain penholders containing the said patented improvement throughout the United States," did not include the right to use such penholders, at least if manufactured by third persons, and was therefore a mere license and not an assignment of any title and did not give the licensee the right to sue alone, at law or in equity. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

Gayler *v.* Wilder, 51 U. S. 477; Paper Bag Cases, 105 U. S. 766, 771.

An assignment which is neither an undivided interest in the whole patent, nor of an exclusive right within a certain territory, is a mere license. — Pope *v.* Gormully, 144 U. S. 298; 36 L. Ed. 420; 12 S. Ct. 637.

We are, however, of opinion that tender of an executed license is not a condition precedent to recovery of royalties arising from use of the patented machines. By the contract the defendants agreed to pay a specified royalty for such use, they, or another for them, have had the use and reaped the benefit. The delivery of the executed, formal license in no way affected that obligation, and was not by any term of the contract a condition precedent to its fulfillment. The obligation to pay was dependent upon the use, not upon the license. The defendants were in no way injured, nor their interest jeopardized by the omission. Aside from the grant of use, the licenses were merely for the benefit of the lessor, regulating and restricting the use. The contract was of itself, a license to use, fully protecting the defendants against any claim of infringement of the plaintiff's right. It estopped the plaintiff to assert infringement. An agreement to license is as efficacious as a license in that respect, the conditions being performed by the licensee. A license would be presumed from the mere acquiescence of the plaintiff in such use and from the relation and acts of the parties. — American *v.* VanNortwick, 52 Fed. 752; 3 C. C. A. 274.

Blanchard *v.* Sprague, 1 Cliff. 288; McClurg *v.* Kingsland, 1 How. 202; Chabot *v.* Overseaming Co. 6 Fish. 71; Hermann *v.* Hermann, 29 Fed. 94.

That where two license agreements existed in which license fees were not to be paid under the terms of the second license except in the event of the termination of the first license, that when the first license was terminated in fact by failure of the parties to perform thereunder, the terms of the second license became of force and royalties were recoverable thereunder, see — Shepard *v.* Kinnear, 86 Fed. 638; 30 C. C. A. 315.

That a contract to be subsequently approved and signed, is invalid if, before approval, alterations or amendments therein have been made not consistent with the purpose and intent of the parties at the time the minds met, see — Keene *v.* Barratt, 100 Fed. 590; 40 C. C. A. 571.

No implied contract of license, arising from the circumstances under which the patent was taken out and the relations of the parties, can be set up in the face of a proved special contract. — Standard *v.* Arrott, 135 Fed. 750; 68 C. C. A. 388.

That a state statute or code provision affecting contractile relations applies to licenses of patents, see Wilfley *v.* New Standard, 164 Fed. 421; C. C. A.

§ 753. Contract.

Complainant agreed to furnish patented parts, and in event of failure, to allow defendant to make. Complainant failed to furnish; defendant made. *Held*, that no notice from defendant was necessary and the making was not infringement. — Hammond *v.* Mason, 92 U. S. 724; 23 L. Ed. 767.

A license contract cannot be set aside at the mere volition of the licensor so that he can sue for infringement. — Burdell *v.* Denig, 92 U. S. 716; 23 L. Ed. 764.

Complainants contracted to sell to defendants certain machines upon agreed terms of royalty. Defendants thereupon organized the W. P. B. Co., officered by them and had the machines shipped to their company. *Held:* that as there was no consent on the part of complainant as creditor of defendants, the delivery of the machines to such company at the request of defendants did not work novation. — American *v.* VanNortwick, 52 Fed. 752; 3 C. C. A. 274.

The contract was between complainant and defendant. It is no answer to say that, in ordering the licensed machines to be delivered to their company, they acted in a representative capacity. If they had personal objection to such delivery, they should have made it manifest. They were silent when it became them to speak. They cannot now object that the delivery, which as representatives of the company, they sought and obtained, was counter to their individual wishes. They are estopped. — American *v.* VanNortwick, 52 Fed. 752; 3 C. C. A. 274.

Swain *v.* Seamens, 9 Wall. 254; Bronson *v.* Chappell, 12 Wall. 681.

The right does not, however, grow out of the paper, but out of the contract, of which the paper is evidence simply. — Union *v.* Johnson, 61 Fed. 940; 10 C. C. A. 176.

Walk. Pat. sec. 303; Rob. Pat. secs. 806, 809; Buss *v.* Putney, 38 N. H. 44; Potter *v.* Holland, 4 Blatchf. 206; Baldwin *v.* Sibley, 1 Cliff. 150; Jones *v.* Berger, 58 Fed. 1006.

The secret intentions of the parties cannot be injected into a written contract to vary its terms by parol evidence. — Standard *v.* Leslie, 78 Fed. 325; 24 C. C. A. 107.

Proof of the circumstances out of which the contract grew, and which surrounded its adoption, may be proven to ascertain its subject-matter and the standpoint of the parties in relation to it, where the language of the contract is obscure or doubtful; but such evidence cannot be received to vary the contract by addition or substitution. — Standard *v.* Leslie, 78 Fed. 325; 24 C. C. A. 107.

West *v.* Smith, 101 U. S. 263; Union *v.* Western, 59 Fed. 49.

Grammatical rules raise only a prima facie presumption, and do not preclude the settling of the meaning by detracting somewhat from the exactness

of the language in order to give effect to more cogent reasons of another sort. — Cowles *v.* Lowry, 79 Fed. 331; 24 C. C. A. 616.

C. Litt. 197 a; Justice Windham's Case, 5 Coke, 7 b; Wharton *v.* Fisher, 2 Serg. & R. 182; Williams *v.* Hadley, 21 Kan. 350; Judd *v.* Gibbs, 3 Gray, 539; Von Wittberg *v.* Carson, 44 Conn. 289; Coffin *v.* Douglass, 61 Tex. 406; Shoe Co. *v.* Terrell, 68 Tex. 638; Bank *v.* Beedle, 37 Minn. 527.

The license contract contained a provision requiring the plaintiff in error to "vigorously prosecute infringers of said letters patent, and to prevent as far as possible all unlawful interference with the business and rights of said party of the second part under and by virtue of the contract." These are proper provisions, and they are not open to criticism. — U. S. Consolidated *v.* Griffin, 126 Fed. 364; 61 C. C. A. 334.

§ 754. Estoppel.

A plea of that condition, to satisfy the words "in case it should at any time be judicially decided" that the patent was bad, would have to be that it had been decided to that effect. It would not be enough to say that the defendant thought the patent bad and would like to have the court decide so now. — U. S. *v.* Harvey, 196 U. S. 310; 49 L. Ed. 492; 25 S. Ct. 240.

Complainant sold defendant two of his designs before patent at the regular price with knowledge that the same were purchased to be copied. It was a license, although the sale was made in the threat of defendant to purchase elsewhere if complainant would not sell them. — Anderson *v.* Eiler, 50 Fed. 775; 1 C. C. A. 659.

The complainant company is the owner of the Spaulding patent with a great many others in the same art. Some time before bringing this suit, it made an arrangement with the owners of other patents by which all were conveyed to a trustee to issue licenses to others for the use of all their patents. In some of these licenses the Spaulding patent was included as one of a number, and it is now agreed that the complainant company cannot be heard to deny the operativeness of the Spaulding patent. As the defendants were not among complainant's licensees, no estoppel arises in this suit, and the fact is only evidential as an admission against complainant which can be explained or rebutted. The evidence in the case as to the Spaulding patent, and its inoperative character, in our view, completely overcomes any inference thus sought to be drawn, while the omnibus character of the licenses, including so many patents, much weakens the evidential force of the otherwise natural implication of a license that the licensor asserts the operativeness of the device licensed. — McCormick *v.* Aultman, 69 Fed. 371; 16 C. C. A. 259.

The defendants agreed to pay the expenses of the patents, but failed and refused to do so. They as infringers are estopped to plead a license. — Timoney *v.* Buck, 84 Fed. 887; 28 C. C. A. 561.

That a licensee may show the state of the prior art for the purpose of enabling the court to ascertain the scope of the patent, see — American *v.* Helmstetter, 142 Fed. 978; 74 C. C. A. 240.

In a former suit between the same parties, a mutual agreement had been reached by which the complainant practically licensed the defendant to manufacture the device in brass so long as he did not manufacture it in iron. Subsequently the defendant manufactured a device in iron, but not one which came within the terms of the contract. Complainant then brought this

suit on the ground that the conduct of defendant had operated as a revocation of the license. *Held:* that such manufacture of the device in iron not in infringement of the patent did not revoke the license to manufacture in brass. — Clancy *v.* Troy, 157 Fed. 554; 85 C. C. A. 314.

§ 755. Forfeiture.

An attempted sale in violation of a specific agreement works a forfeiture of the license. — Platt *v.* Fire Extinguisher, 59 Fed. 897; 8 C. C. A. 357.

The defendant agreed that if he failed to perform his covenants, the license might be forfeited by a written notice served upon him, or his successor, and this was done. His subsequent tender of money in payment of royalties, and a promise to perform his covenants, could not avail to remove the forfeiture without the consent of the licensor and the other licensees. — Platt *v.* Fire Extinguisher, 59 Fed. 897; 8 C. C. A. 357.

Hammacher *v.* Wilson, 26 Fed. 239; White *v.* Lee, 3 Fed. 222.

The license purported to be an exclusive one. Its very exclusiveness was the substance of the thing granted. It was of the essence of that for which the defendants in error agreed to pay royalties. It was coupled with a covenant to protect the licensees in the exclusive use of the rights so granted. There has been a total breach of that covenant. The licensors, instead of affording the promised protection, have by their own acts in effect reappropriated to their own use that which they granted the licensee. In short, their course was such that the licensee was evicted from the granted right immediately after the execution of the license, and the eviction was continuous until the commencement of the suit. — Wilfley *v.* New Standard, 164 Fed. 421; C. C. A.

Rob. Pat. § 1241; Angier *v.* Eaton, 98 Pa. 594; Edison *v.* Thakara, 167 Pa. 530; McKay *v.* Smith, 39 Fed. 556; National *v.* Boston, 41 Fed. 48; Standard *v.* Ellis, 159 Mass. 448.

It will hardly be denied that, if at any time the licensees' operations are unsatisfactory, the parties might by subsequent agreement modify them; or, if the operations of the licensee were so unsatisfactory and unbusinesslike as to amount to a breach of the agreement, the licensor would have the right to terminate it and make a license to another. — Goshen *v.* Single Tube, 166 Fed. 431; C. C. A.

§ 756. Implied.

Whatever license resulted to the corporation from the facts of the case to use the invention, it was confined to that corporation and not assignable by it. — Hapgood *v.* Hewitt, 119 U. S. 226; 30 L. Ed. 369; 7 S. Ct. 193.

Troy *v.* Corning, 55 U. S. 193; Oliver *v.* Rumford, 109 U. S. 75.

Where complainant through his foundryman furnished defendant with certain parts of machinery used in complainant's process, which parts were employed in other processes, the defendant could not claim implied license to the process from the purchase of such elements used therein. — Lawther *v.* Hamilton, 124 U. S. 1; 31 L. Ed. 325; 8 S. Ct. 342.

Where partnership constructed a machine with knowledge and consent of inventor before application; an implied license arises in favor of the machine so constructed. Wade *v.* Metcalf, 129 U. S. 202; 32 L. Ed. 661; 9 S. Ct. 271.

Where a government employee made an invention and made a contract with his superior licensing the bureau to use his invention during the term of his employment, *Held*, that such agreement did not abrogate the right of the bureau to a shop right use of the invention after the discharge of the employee. — McAleer *v.* U. S. 150 U. S. 424; 37 L. Ed. 1130; 14 S. Ct. 160.

Solomons *v.* U. S., 137 U. S. 342; Davis *v.* U. S. 23 Ct. Cl. 329; McClurg *v.* Kingsland, 42 U. S. 202; Seitz *v.* Brewers, 141 U. S. 510.

Where a government employs a mechanic who invents, obtains a patent and makes a specific assignment of a shop right to his bureau, such license will not be abrogated by any subsequent parol agreement. — McAleer *v.* U. S. 150 U. S. 424; 37 L. Ed. 1130; 14 S. Ct. 160.

We know of no principle upon which a contract can be evoked from a distinct refusal of one party to recognize the rights of the other, and a formal protest against any such rights being granted him. — Kirk *v.* U. S. 163 U. S. 49; 41 L. Ed. 66; 16 S. Ct. 911.

Defendant purchased of complainant two articles of complainant's design with the stated purpose of copying them, paying the market price. *Held:* that such sale constituted a license. — Anderson *v.* Eiler, 50 Fed. 775; 1 C. C. A. 659.

Do the facts that the copartnership, styled the Bank of Fargo, was permitted to use the patented invention for seven months before the application for a patent was filed, and that the defendant subsequently succeeded to their business and property, confer upon it an implied license to make and use the new account books embodying the patented invention? The application was filed Dec. 31, 1886. The Bank of Fargo first applied the invention to their account book June 2, 1886, and used it thereafter with complainant's consent until the firm was dissolved Jan. 1, 1887. The defendant corporation was organized and commenced business on that day. The defendant did not purchase, construct, or use any article embodying complainant's invention before he filed his application for a patent, since it did not come into existence until after that filing. Whatever license it had it derived from the dissolved copartnership by purchase or assignment; but the only right the partnership had was the statutory privilege of using and vending to others to be used the specific thing they had made with complainant's consent. This was not a grant of any portion of the franchise; it was a mere naked license, personal to the copartnership, and incapable of assignment or transfer. — Thomson *v.* Citizens Nat. Bk. 53 Fed. 250; 3 C. C. A. 518.

Hapgood *v.* Hewitt, 119 U. S. 226; Locke *v.* Bodley, 35 Fed. 289; Troy *v.* Corning, 14 How. 193; Oliver *v.* Chem. Wks., 109 U. S. 75.

The duration and scope of a license must depend upon the nature of the invention and the circumstances out of which an implied license is presumed, and both must at least depend upon the intention of the parties. — Withington *v.* Kinney, 68 Fed. 500; 15 C. C. A. 531.

Rob. Pat. secs. 808–811; Montross *v.* Mabie, 30 Fed. 237.

According to the rule in Mfg. Co. *v.* Kinney, 68 Fed. 500, an implied license, if it relates to an improvement in the process, ordinarily authorizes the employer to continue to practise the process during the whole period of the patent. This follows because the subject matter is indivisible; but, if the invention pertains to a machine, it is understood, ordinarily, that only the specific machine or machines which have been set up during the time of the employment are protected. Such is the ordinary rule, and it is plainly based

on a sound discretion. It is, of course, more a rule for the application of facts than a rule of law, and therefore is not rigid. When the patented matter is a product, particularly if it is a minor product, or even if it is a minor machine, so that in either case it is used in quantity, like the stop-valve in Lane *v.* Locke, 150 U. S. 193, its unlimited use during the time of employment may raise an implication of facts in favor of a license for a time likewise unlimited, as in the case of a process. — Boston *v.* Allen, 91 Fed. 248; 33 C. C. A. 485.

McClurg *v.* Kingsland, 1 How. 202; Hapgood *v.* Hewitt, 119 U. S. 226; Wade *v.* Metcalf, 129 U. S. 202; Solomons *v.* U. S. 137 U. S. 342; Dalzell *v.* Mfg. Co., 149 U. S. 315; Keys *v.* Mining Co. 158 U. S. 150; Gill *v.* U. S. 160 U. S. 426.

To restrict the right of a purchaser of an apparatus embodying a patented invention to use it for the purposes for which it is peculiarly adapted, there must appear some express or implied agreement by which the mode or time or place of use has been limited; and this was the principle upon which the Button Fastener Case was decided. But there may be circumstances under which the sale by a patentee of one patented article, will carry with it the right to use another in co-operation with the first, although the thing be covered by a second patent. Thus, if the article sold be of such peculiar construction as that it is of no practical use unless it be used in combination with some subordinate part, covered by another patent to the vendor, the right to use the latter in co-operation with the former, might be implied from circumstances. It is a general principle of law that a grant necessarily carries with it that without which the thing granted cannot be enjoyed. The limitation upon this is, that the things which pass by implication only must be incident to the grant, and directly necessary to the enjoyment of the thing granted. The foundation of the maxim lies in the presumption that the grantor intended to make his grant enjoyable. — Edison *v.* Peninsular, 101 Fed. 831; 43 C. C. A. 479.

Cutter *v.* Sheldon, 10 Blatchf. 1; Heaton *v.* Eureka, 77 Fed. 288; Adams *v.* Burks, 17 Wall. 453.

It is evident that the extent of an implied license must depend upon the peculiar types of each case. The question in each case is, whether or not the circumstances are such as to estop the vendor from asserting infringement. — Edison *v.* Peninsular, 101 Fed. 831; 43 C. C. A. 479.

Roosevelt *v.* Electric Co. 20 Fed. 724; United *v.* California, 25 Fed. 475; American *v.* Ament, 74 Fed. 789; Stonecutter *v.* Shortsleeves, 16 Blatchf. 381; Illingsworth *v.* Spaulding, 43 Fed. 831.

Among the defenses interposed was that of an implied license to the defendants to use the invention. The defense was based upon Brickill's conduct in equipping two of the steam fire engines of the fire department with his patented apparatus before making application for his patent, and in permitting other engines to be equipped with it while he remained in the employ of the department. The court below was of the opinion that a license to use the invention with the first two engines was to be implied, but that none was to be implied as to the others. There is no assignment of error challenging the correctness of the decree in respect to this defense. The defense was not argued at the bar, although it is urged in the brief for the appellants. Under the circumstances we do not feel called upon to consider it further than to say that we think the court below disposed of it correctly. — Brickill *v.* Mayor, 112 Fed. 65; 50 C. C. A. 1.

In view of the fact that buildings specially designed for the use of Barber's process and apparatus were constructed under his direction, we think the

presumption is that he intended to grant to the carbon company the right to use his process in connection with the machines, for which space in the several factories had been specially arranged with his knowledge and under his direction. The right of use presumed is the right to use such number of machines as had been prepared for, and the right is not limited to the life of the particular machine, but will include replacements so long as the carbon company continues in the manufacture of carbons. The scope of the license therefore includes the seventh machine, constructed after Barber was discharged, to occupy the place prepared for it under Barber's direction. By his conduct Barber has estopped himself from asserting that the use of his invention to this extent is an infringement of his right as a patentee. — Barber *v.* National, 129 Fed. 370; 64 C. C. A. 40.

Solomons *v.* U. S. 137 U. S. 342; Lane *v.* Locke, 150 U. S. 193; Gill *v.* U. S. 160 U. S. 426.

Facts: Complainant sold defendant 22 electric locomotives for use in its tunnels and consented to the installation, by a third party, of electric switches, without which the locomotives could not be operated. Subsequently defendant purchased other locomotives of another manufacturer and operated the same in its tunnels in connection with the electric switches installed. The infringement complained of consisted in the use of the patented electric switches with any locomotive not made by complainant, it being claimed that the right to use the switch was given only in connection with the purchase of complainant's locomotives. *Held:* Appellee having no notice of the restriction and not having dealt for the purchase of the locomotives with such restriction in mind, the license that the law raises upon the transactions between the parties is as broad as if no such restriction usually entered into the dealings of appellant (compl't.) with the purchasing world. The sole transaction disclosed here in the sale of locomotives to be operated without royalty, restriction (express or implied) or further license in connection with the trolley switching devices — a transaction that must be held to permit the use of the same devices in connection with other locomotives. — Thompson-Houston *v.* Illinois, 152 Fed. 631; 81 C. C. A. 473.

Edison *v.* Peninsular, 101 Fed. 836.

§ 757. Machines.

The purchase of a machine with the right to use the invention embraced therein carries with it no interest in the patent. — Mitchell *v.* Hawley, 83 U. S. 544; 21 L. Ed. 322.

When the patentee has himself constructed a machine and sold it without any conditions, or authorized another to construct, sell and deliver it, or to construct, use and operate it, without any conditions and for a consideration paid, he parts with his monopoly in that machine. — Mitchell *v.* Hawley, 83 U. S. 544; 21 L. Ed. 322.

Bloomer *v.* Millinger, 1 Wall. 350.

A machine made with the knowledge and consent of the inventor before his application, as provided in sec. 4899, carries with it an implied license from the inventor good to any purchaser. — Wade *v.* Metcalf, 129 U. S. 202; 32 L. Ed. 661; 9 S. Ct. 271.

McClurg *v.* Kingsland, 42 U. S. 202; Bloomer *v.* McQueewan, 55 U. S. 539; Bloomer *v.* Millinger, 68 U. S. 340; Adams *v.* Burks, 84 U. S. 453; Birdsall *v.* Shaliol, 112 U. S. 485.

§ 758. Non-Assignable.

A license, though usually not transferable, is transmissible by succession to a corporation formed by the union of two licensees succeeding to the obligations of both. — Lane *v.* Locke, 150 U. S. 193; 37 L. Ed. 1049; 14 S. Ct. 78.
Lightner *v.* Boston, 1 Law. Des. 338.

May be waived if the patentee ratifies the transfer of the license by otherwise treating the assignee as the licensee was entitled to be treated. — Lane *v.* Locke, 150 U. S. 193; 37 L. Ed. 1049; 14 S. Ct. 78.
Hammond *v.* Mason, 92 U. S. 724.

§ 759. Parol.

It is true that a license may be created by parol and be established by clear implication from proven facts and circumstances (Solomons *v.* U. S. 137 U. S. 342; McClurg *v.* Kingsland, 1 How. 202; Anderson *v.* Eiler, 50 Fed. 775; Withington *v.* Kinney, 68 Fed. 500) but it is also true that by like implication arising from facts and circumstances and the conduct of the parties a continuing assignable quality may be given to a license originally unassignable. That the proof thereof rests in parol is not material where no one is concerned except the parties and their privies. — Bowers *v.* Lake Superior, 149 Fed. 983; 79 C. C. A. 493.

As to the world at large, an assignment is not good unless put in writing and recorded; but as between parties to the transaction, a license by parol may be sustained, and enforced, if need be, by a decree for specific performance. — Cook *v.* Sterling, 150 Fed. 766; 80 C. C. A. 502.

§ 760. Royalties.

There was at least an implied license to use the improvement upon the same terms and royalties fixed for other parties from the time complainants left the employ of defendant, while defendant was entitled to use the invention without payment of any royalties during the continuance of such employment. And, apart from that, that the decree cannot be reversed on the ground that the circuit court erred in dismissing the bill because when it was filed complainants were not entitled to any relief resting on grounds of equity, while their remedy at law, then and thereafter, was plain, adequate and complete. — Keyes *v.* Eureka, 158 U. S. 150; 39 L. Ed. 929; 15 S. Ct. 772.

The contract embraces only what the parties reasonably may be understood to have expected to be patented. The provision for the cessation of payments on final adverse action must be applied to such claims as were rejected for want of novelty; and after such rejection, the licensor can make the defendant account only for the use of devices embodying what remained of his claims. The covenant to use due business diligence in pushing the sale did not preclude defendant from using any later invention, nor would it require him to enter upon a hopeless contest, and would not prevent him from avoiding such contest by purchase. In that event he would not be accountable to the licensor for royalties on the new machine. — Eclipse *v.* Farrow, 199 U. S. 581; 50 L. Ed. 317; 26 S. Ct. 150.
Thorn *v.* Washburn, 159 U. S. 423.

Complainant licensed the invention to defendant at a specific royalty and minimum selling price. This complainant violated, making and selling at a lower price. The defendant's ability to pay the royalty depended upon the

non-competition by complainant at reduced prices. This breach by complainant of his undertakings, when found to be unjustifiable by any previous conduct of defendant, relieved defendant from the obligation which it has assumed. — Brusie *v.* Peck, 54 Fed. 820; 4 C. C. A. 597.

Kingston *v.* Preston, Doug. 634; 2 Parson Con. 189.

Defendant gave a license to plaintiff providing for a minimum annual royalty so much per article and a fixed royalty per article in excess of that number. Defendant also agreed to make no other license on better terms, or if he did to give plaintiff the benefit of a like reduction. Defendant subsequently gave another license to other parties at the same rate per article but for a smaller minimum number and no royalty on articles over that number. Plaintiff sues. *Held:* That he was entitled to recover moneys paid, subsequent to said second agreement in excess of the royalty provided in the second contract whether the second contract had resulted in the production of the minimum number of articles or not. — Guggenheim *v.* Kirchhofer, 66 Fed. 755; 14 C. C. A. 72.

The parties made a contract containing the following clause: "And provided, further, and it is hereby distinctly understood and agreed, that if the said parties of the second part shall sell or lease, or cause to be sold or leased, for use, or shall cause to be used, in any foreign country any . . . machines at rates of royalty or rental less than those charged for the use of like machines in this country, then the royalty rate to be paid by said parties of the second part to said parties of the first part shall be forty-five per cent., in lieu of forty per cent., as herein above provided." The licensees subsequently began selling machines in foreign countries and offered to pay the increased per cent. from that time. Licensors brought suit for the difference between 40 and 45 per cent. for the time prior to the beginning of such foreign business. *Held:* That the contract could not be retroactive from its language and that the licensor was entitled to only 40 per cent. up to the time the foreign sales commenced. —National *v.* Willcox, 74 Fed. 557; 20 C. C. A. 654.

Unless the contrary appears to have been the intention of the parties, the presumption is that, under a license for the exclusive right to manufacture and sell under a patent, royalties are not payable upon articles manufactured and sold after the expiration of the life of the patent. Parties may, of course, contract as they choose; but, in the absence of some provision by which a promise for the continuing payment of royalties upon expired patents may be fairly incurred, the presumption is that the contract is upon the ordinary terms as to the duration of royalties. — Sproull *v.* Pratt & Whitney, 108 Fed. 963; 48 C. C. A. 167.

For a case covering license for several patents, capable both of conjoint and separate use, and a curious holding as to the effect of the expiration of one of the patents under the peculiar terms of that contract, see — Sproull *v.* Pratt & Whitney, 108 Fed. 963; 48 C. C. A. 167.

§ 761. Scope of.

Where one sells a machine to another and subsequently purchases the patent, or an interest therein, covering such machine, such subsequent purchase gives the purchaser of the machine a license as against his vendor, but whether such license by purchase would extend to and include other co-owners of the patent is not decided. — Gottfried *v.* Miller, 104 U. S. 521; 26 L. Ed. 851.

That a license for the invention of a patent cannot be construed to cover other devices made by the licensee which are not fairly within the terms of the patent, see—Eclipse *v.* Farrow, 199 U. S. 581; 50 L. Ed. 317; 26 S. Ct. 150.

The exclusive right granted to a person other than the patentee to use and sell a patented device within a named district of country, excludes the owner of the letters patent from selling the same or using the same in that region. A licensee does not use or sell in the name of the owner of the patent, but in his own name, and for his own benefit. Having an exclusive license to use and sell, no one has a right to use or sell in the country of such a licensee.—Brush *v.* California, 52 Fed. 945; 3 C. C. A. 368.

A license which provides that the licensee shall supply the market and pay royalties on all machines containing the patented improvement, when the invention licensed is not a monopoly and where it is no specific restriction, does not prohibit the licensee from making and selling devices not containing the patented devices without paying royalty. — Standard *v.* Leslie, 78 Fed. 325; 24 C. C. A. 107.

By its terms, the grant covers three separate or separable fields. The patentee may agree with one that he will not exclude him from making, with another from using, and with yet another from selling devices that exemplify the principles of his invention. Within the field of making, it has never been doubted, so far as we are aware, that he may subdivide as he pleases and offer to sell or lease in the most fanciful parcels on the harshest terms; that whether purchasers and tenants come or not is purely his own concern; and that, if purchasers or tenants do come, the courts will enforce the terms of the sale or lease. And how could it be otherwise? Owning the whole, he owns every part. The field being his property, and there being no law for seizing it and adjudging his damages, he cannot be compelled to part with his own except on inducements to his liking. The same conditions must prevail within the field of use, for how can it be distinguished? — Victor *v.* The Fair, 123 Fed. 424; 61 C. C. A. 58.

Heaton *v.* Eureka, 77 Fed. 288; Cortelyou *v.* Lowe, 111 Fed. 1005; Bement *v.* National, 186 U. S. 70; Edison *v.* Kaufman, 105 Fed. 960; Edison *v.* Pike, 116 Fed. 863.

The consideration upon which the defendant agreed to pay royalties was the privilege of using "the devices described and claimed." This must be interpreted as an agreement to pay for the use of such devices as the defendant would not otherwise have the right to use, namely, such as were covered by the claims of the patent, and not for such as were merely described and not claimed, or as were included as single elements only in a combination claimed as a whole. — Western *v.* Robertson, 142 Fed. 471; 73 C. C. A. 587.

§ 762. Termination of.

Defendant cannot force a termination of contract except by suit to set it aside, until which time he cannot say what he afterwards does is not under the contract provided the machine made embodied the patent in suit. — St. Paul *v.* Starling, 140 U. S. 184; 35 L. Ed. 404; 11 S. Ct. 803.

The truth seems to be that the proviso is a more or less well-known and conventional one in licenses, not a special contrivance for this special case, and that the fact alone is enough to invalidate attempts to twist the meaning of the words to the interest of either side. The proviso was inserted, no doubt,

on the assumption that a licensee, when sued for royalties, is estopped to deny the validity of the patent which he has been using, and to give him the benefit of litigation by or against third persons, notwithstanding that rule. — U. S. *v.* Harvey, 196 U. S. 310; 49 L. Ed. 492; 25 S. Ct. 240.

Charter *v.* Charter, 47 Ill. App. 36.

It is settled law that a license to use a patent is a personal privilege, which terminates with the life of the individual licensee to which it is granted, unless the grant contains words expressly confirming the power to sell or assign. In the absence of such power if the licensee be a natural person and dies, or an artificial person or partnership and ceases to exist, the license expires equally in either case. — Haffcke *v.* Clark, 50 Fed. 531; 1 C. C. A. 570.

Oliver *v.* Chemical Co. 109 U. S. 75; Nail Factory *v.* Corning, 14 How. 193; Gayler *v.* Wilder, 10 How. 477.

It is to be kept in mind that the license under consideration was not like that in St. Paul *v.* Starling, 140 U. S. 184, unlimited in duration, which requires mutual consent, or some positive act by one of the parties to terminate it. This license was of limited duration; it ran only for a year; and the positive act required was not one to end, but to extend, it. — Seal *v.* Bookkeeper, 130 Fed. 449; 64 C. C. A. 651.

§ 763. Territorial.

The right to use a machine or article made under a territorial license stands on a different ground from the right to make and sell them, and inheres in the nature of a contract of purchase which carries no implied limitation of the right of use within a given locality. — Adams *v.* Burks, 84 U. S. 453; 21 L. Ed. 700.

Where a patentee has assigned his right to manufacture, sell and use within a limited district an instrument, machine or other manufactured product, a purchaser of such instrument or machine, when rightfully bought within the prescribed limits, acquires by such purchase the right to use it anywhere without reference to other assignments of territorial rights by the same patentee. — Adams *v.* Burks, 84 U. S. 453; 21 L. Ed. 700.

A license to make and sell within a specified territory does not prevent the use of an article so made and sold rightfully within the territory from being used anywhere without the territory. — Adams *v.* Burks, 84 U. S. 453; 21 L. Ed. 700.

Defendant cannot terminate, without consent of plaintiff, the rights conferred by the license, and that, as there was no limitation on its face, the license continued until the expiration of the patent. — St. Paul *v.* Starling, 140 U. S. 184; 35 L. Ed. 404; 11 S. Ct. 803.

The sale of a patented article by an assignee within his territory carries the right to use it everywhere, notwithstanding the knowledge of both parties that a use outside the territory is intended. — Hobbie *v.* Jennison, 149 U. S. 355; 37 L. Ed. 766; 13 S. Ct. 879.

Adams *v.* Burks, 84 U. S. 453; Birdsall *v.* Shaliol, 112 U. S. 485; Wade *v.* Metcalf, 129 U. S. 202; Boesch *v.* Gräff, 133 U. S. 697.

One who buys patented articles of manufacture from one authorized to sell them becomes possessed of an absolute property in such articles, unre-

stricted in time or place. Whether a patentee may protect himself and his assignees by special contracts brought home to the purchasers is not a question before us, and upon which we express no opinion. It is, however, obvious that such question would arise as a question of contract, and not as one under the inherent meaning and effect of the patent laws.

The conclusion reached does not deprive a patentee of his just rights, because no article can be unfettered from the claim of his monopoly without paying its tribute. The inconvenience and annoyance to the public that an opposite conclusion would occasion are too obvious to require illustration. — Keeler *v.* Standard, 157 U. S. 659; 39 L. Ed. 848; 15 S. Ct. 738.

Dissenting: Justices Brown, Fuller and Field.

The grant was of the exclusive right to use and sell within the states named. This, under the authorities, was perhaps nothing more or less than a license. — Brush *v.* California, 52 Fed. 945; 3 C. C. A. 368.

Walk. Pat. sec. 296; Hamilton *v.* Kingsbury, 17 Blatchf. 264; Waterman *v.* Mackenzie, 138 U. S. 252.

§ 764. Miscellaneous.

The exclusive right to use a machine continues no longer than the term of the original patent. — Paper Bag Cases, 105 U. S. 766; 26 L. Ed. 959.

Wilson *v.* Rousseau, 4 How. 646.

An infringer does not by paying damages for making and using a machine in infringement of a patent, acquire any right himself to the future use of the machine. On the contrary he may, in addition to the payment of damages for past infringement, be restrained by injunction from further use, and, when the whole machine is an infringement of the patent, be ordered to deliver it up to be destroyed.— Birdsall *v.* Shaliol, 112 U. S. 485; 28 L. Ed. 768; 5 S. Ct. 244.

Suffolk *v.* Hayden, 3 Wall. 315; Root *v.* Ry. 105 U. S. 189; Needham *v.* Oxley, 8 L. T. N. S. 604; Frearson *v.* Loe, 9 Ch. Div. 48.

Note: The destruction of infringing machine is not based on any statute and has been denied in American *v.* Kitsell, 35 Fed. 521.

The licenses were never demanded by the defendants nor executed. If tender of the licenses were essential to recovery under the contract, we are of opinion that the conduct of the defendants operates as a waiver of performance. The proper licenses were tendered for execution. Failure of execution and delivery were due to the inattention or evasion of the defendants. They are not permitted to take advantage of their own wrong. The licenses contained mutual obligations. The duty of the parties to execute them was concurrent. — American *v.* VanNortwick, 52 Fed. 752; 3 C. C. A. 274.

U. S. *v.* Peck, 102 U. S. 64.

As a general rule, it may be said that a license is not divisible. The term "assigns" must be construed as the right to assign the license as an entirety. — Brush *v.* California, 52 Fed. 945; 3 C. C. A. 368.

Walk. sec. 310; Brooks *v.* Byam, 2 Story, 525.

Upon the defendants rests the burden of proof that Kendrick, though not an owner of record, had a right to license manufacture under the patent. — Denning *v.* Bray, 61 Fed. 651; 10 C. C. A. 6.

Although the agent exceeded his authority under his power of attorney, and although his authority might be revoked (under Willcox *v.* Ewing, 141 U.

S. 627) all acts previously done in pursuance of it remain in force. — Union *v.* Johnson, 61 Fed. 940; 10 C. C. A. 176.

A license from one member of a firm to the firm during the continuance of the partnership is not an assignable or purchasable asset, notwithstanding that the tools and patterns exclusively useful in the making of the patented device pass as an asset to an assignee or receiver. — Elgin *v.* Nichols, 65 Fed. 215; 12 C. C. A. 578.

Anderson *v.* Eiler, 50 Fed. 775.

That while a former licensee may be restrained by injunction from using the trade name which designated the article of the patent, in an action seeking such relief, the injunction order may not include restraint from using the patent, see — Stimpson *v.* Stimpson, 104 Fed. 893; 44 C. C. A. 241.

In an action by a licensor against a licensee to recover royalties upon sales made under an exclusive license upon an invalid patent, which was, at the time when the account accrued, apparently valid and in force, and from which there had been no eviction, the invalidity of which had not been declared by an adjudication under legal proceedings, and no notice had been given by the licensee of its refusal to pay on account of its defects, such invalidity is no defense to the suit. As long as the licensee continues to manufacture under a patent presumably valid, without giving notice of its invalidity and without eviction, he is presumed to manufacture in accordance with his license. — Holmes *v.* McGill, 108 Fed. 238; 47 C. C. A. 296.

Marston *v.* Swett, 66 N. Y. 211 and 82 N. Y. 526; Lawes *v.* Purser, 38 Eng. Law & Eq. Rep. 48; White *v.* Lee, 14 Fed. 789; Birdsall *v.* Perego, Fed. Cas. 1,435; Stott *v.* Rutherford, 92 U. S. 107; Eureka *v.* Bailey, 11 Wall. 488; 3 Rob. Pat. 696.

Kisinger Co. sued Bradford Co. on Morrison patent and Kisinger patent. Bradford Co. defended under Girard & Lawrence patent, a subsequent improvement to which it held license. Decree for Kisinger Co. on Morrison patent. Bradford Co. then brought this suit alleging that Girard & Lawrence had in the assignment of use to Bradford Co. guaranteed the patent against all prior patents, etc., and alleging that Kisinger Co. prior to suit had obtained by mesne assignments from Girard & Lawrence the full title to the patent under which the Bradford Co. held license and guaranty from Girard & Lawrence and that such purchase was with full knowledge. *Held:* No doubt the general rule is that the assignee takes the title subject to the equities of the other parties who have acquired rights therein, of which he had notice, express or implied. But he takes no other burden. He comes under no affirmative obligation to make good the previous contracts of his assignor. The claim of the appellant is that it is let into the enjoyment of the Morrison patent by a transaction which it had no right to compel or prevent. The appellant has been put in no worse situation by the transfer. What equity has supervened in its favor since the decree in the former suit? The appellee owed it no duty, and has not prejudiced the appellant. Nor has it acquired any right which it has not paid for, or which, owing no duty to the appellant, it had not equal right to purchase with any other person. — Bradford *v.* Kisinger-Ison, 113 Fed. 811; 51 C. C. A. 483.

The owner of an undivided part of the rights secured by a patent may, without the consent of his co-owners, grant a valid license to use the monopoly it protects. — Paulus *v.* Buck, 129 Fed. 594; 64 C. C. A. 162.

Bloomer *v.* McQueewan, 14 How. 539; Blackledge *v.* Weir, 108 Fed. 71.

The license so granted is personal in its nature, and unassignable, no intent being shown in the contract that it should be otherwise. — Standard *v.* Arrott, 135 Fed. 750; 68 C. C. A. 388.

Complainant's final letter, ordering defendants to "discontinue building said racks in cars without authority by me to do so under penalty of the law," coupled with the statement that, if he should "conclude to allow said racks built in cars, my standing price will be five dollars per car," was in entire accord with the understanding of both parties either that there had been no contract for a future license, or that, even if any such license might have been claimed, it was one terminable at the will of complainant's assignor, and the statements in his letter were acquiesced in by defendants as constituting a complete revocation of whatever rights or license they might otherwise have claimed. The contract, if any, was thereby rescinded by mutual agreement. — American *v.* Jones, 142 Fed. 974; 74 C. C. A. 236.

Hartell *v.* Tilghman, 99 U. S. 547; Walker on Pat. 266; White *v.* Lee, 14 Fed. 789; Ross *v.* Fuller, 105 Fed. 510; Schenectady *v.* Holbrook, 101 N. Y. 45; Denise *v.* Swett, 142 N. Y. 602.

Use of the invention cannot be had except on the inventor's terms. Without paying or doing whatever he exacts, no one can be exempted from his right to exclude. Whatever the terms, courts will enforce them, provided only that the licensee is not thereby required to violate some law outside of the patent law. — Rubber Tire *v.* Milwaukee, 154 Fed. 358; 83 C. C. A. 336.

LICENSOR AND LICENSEE.

Right to Sue § 765
Title § 766 (*see* § 925)
Miscellaneous § 767
See — Assignment § 165; *Copartnership* § 270; *Defenses* § 311; *Employer and Employee* §§ 367–8; *Estoppel* § 384; *Infringement* §§ 509–13; *Injunction* § 749; *Jurisdiction* § 722

§ 765. Right to Sue.

The conveyance was for neither an individual interest in the patent nor for an exclusive territory. It is therefore to be regarded as a license only, and under the act does not enable the assignee to maintain an action for infringement. — Gayler *v.* Wilder, 10 How. 477; 13 L. Ed. 504.

A mere licensee cannot sue strangers who infringe. In such cases redress is obtained through or in the name of the patentee or his assignee. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

The defendants first took a license from the patentee, and under it and under his directions erected substantially the same apparatus now used. Receiving what they regarded as additional light, they refused to continue payment of royalty and put the complainant to his legal remedy. — Tilghman *v.* Procter, 102 U. S. 707; 26 L. Ed. 279.

Licensees must enforce their rights through the name of the patentee (or assignee). — Paper Bag Cases, 105 U. S. 766; 26 L. Ed. 959.
Littlefield *v.* Perry, 88 U. S. 223.

See full discussion and settlement of the law in Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

If the licensee cannot use the name of its licensor in an action to protect its rights against an infringement of the patented device or improvement it

has the exclusive right to use and sell, we have a case of a person possessing important rights with no legal power to protect them; for a licensee cannot sue in his own name for an infringement of the patent concerning which he has a license. — Brush *v.* California, 52 Fed. 945; 3 C. C. A. 368.

Gayler *v.* Wilder, 10 How. 477; Waterman *v.* Mackenzie, 138 U. S. 252; 2 Washb. Real. Prop. 302; Rogers *v.* Cox, 96 Ind. 157; 2 Bl. Comm. 442; Littlefield *v.* Perry, 21 Wall. 205; Welch *v.* Mandeville, 1 Wheat. 233; Hammond *v.* Hart, 4 Ban. & A. 111; Huber *v.* Sanitary Depot, 34 Fed. 752; Goodyear *v.* Bishop, 4 Blatchf. 438; Brush *v.* Thomson, 48 Fed. 224.

A mere licensee cannot sue strangers who infringe. In such a case redress is obtained through or in the name of the owner of the patent. — Waterman *v.* Shipman, 55 Fed. 982; 5 C. C. A. 371.

A license amounting to a transfer of the title is not forfeited by a breach, in paying royalties, so as to enable the grantor to sue the grantee under the patent for infringement. — Atkins *v.* Parke, 61 Fed. 953; 10 C. C. A. 189.

Hartell *v.* Tilghman, 99 U. S. 547.

As licensee, the defendant in error has no authority to maintain the action. — Chauche *v.* Pare, 75 Fed. 283; 21 C. C. A. 329.

Birdsall *v.* Shaliol, 112 U. S. 486; Waterman *v.* Mackenzie, 138 U. S. 252.

There can be no doubt that a licensee can sue the patentee, who has granted the license, for infringing the patent within the field covered by the license, in the same manner and with like effect as though the patentee were a stranger. — Smith *v.* Ridgley, 103 Fed. 875; 43 C. C. A. 365.

Littlefield *v.* Perry, 21 Wall. 205; Adriance *v.* McCormick, 55 Fed. 288; Walk. Pat. sec. 409.

The complainant had a license to make and sell within certain territory, but the license was not exclusive. The defendant held a release or license for what it had done from the patentee. *Held:* Complainant could not recover. — Excelsior *v.* City of Seattle, 117 Fed. 140; 55 C. C. A. 156.

Waterman *v.* Mackenzie, 138 U. S. 256; Gayler *v.* Wilder, 10 How. 477; Mitchell *v.* Hawley, 16 Wall. 544; Hayward *v.* Andrews, 106 U. S. 672; Oliver *v.* Chemical, 109 U. S. 75.

§ 766. Title.

The fact that the licensor has undertaken to make an assignment which it had no authority to make, will not work any forfeiture of its rights. There is no stipulation in the contract of license that any such action shall work a forfeiture of the rights granted by it. Under such circumstances there is no forfeiture. — Brush *v.* California, 52 Fed. 945; 3 C. C. A. 368.

Walker, sec. 308; Purifier Co. *v.* Wolf, 28 Fed. 814.

In the terms of the grant of license, it was contemplated that the license should extend to any patents which the licensor should thereafter acquire. Under such circumstances, the licensor should be estopped to deny the validity of the license granted the licensee on the ground that it did not own said patent, or that it had no existence at the time the grant or license was made, or on the ground that it had no authority at that date to grant the license. To hold otherwise would work a most extensive fraud upon the licensee. The sale of a patent right contains an implied warranty as to title, and an after acquired title obtained by the vendor inures to the vendee. — Brush *v.* California, 52 Fed. 945; 3 C. C. A. 368.

Faulks *v.* Camp, 3 Fed. 898; Curran *v.* Birdsall, 20 Fed. 835; Gottfriedl *v.* Miller, 104 U. S. 520; Smith *v.* Sheley, 12 Wall. 358.

§ 767. Miscellaneous.

The recovery of nominal damages by a licensor without joining his licensee does not bar the licensee from recovering actual damages by a separate suit for the same infringement. — Birdsall *v.* Shaliol, 112 U. S. 485; 28 L. Ed. 768; 5 S. Ct. 244.

Defendants were licensees from plaintiffs, and an agreement based upon such license provided for an equal sharing of expenses of litigation affecting such patents. Defendants were sued, and plaintiffs intervened and defended. The licensed patent was held bad and defendants refused on that ground and on the ground that plaintiffs had intervened to pay their share of costs and expenses. *Held:* Neither the intervention nor the defeat of the patent excused the defendants. — Leicester *v.* Macon, 116 Fed. 196; 53 C. C. A. 621.

We are satisfied, in view of the radical departures from said licensed blocks, and from the patented construction, in defendant's later blocks, that it is not precluded from showing that said blocks are not covered by the claims in suit. — Western *v.* Robertson, 142 Fed. 471; 73 C. C. A. 587.

The patentee may grant, if he will, an unrestricted right to make or sell or use the device embodying his invention, or may grant only a restricted right in either the field of making, using or selling. To the extent that he restricted either one of these separable rights, the article is not released from the domain of the patent, and any one who violates the restrictions imposed by the patentee, with notice, is an infringer. — Park *v.* Hartman, 153 Fed. 24; 82 C. C. A. 158.

The licensor has the right not only to royalties, but also to the licensee's silence respecting the validity and prima facie scope of the patents. — Indiana *v.* Case, 154 Fed. 365; 83 C. C. A. 343.

Siemans *v.* Duncan, 142 Fed. 157.

MACHINE.

Statute and Definition § 768
Right to Use § 769
See — Anticipation § 100; *Designs* § 333; *Destruction of* § 338; *Infringement* §§ 514–5; *Invention* § 686; *License* § 767; *Machine and Process* § 770; *Machine and Product* § 771; *Process* § 817; *Secret Process or Machine* § 898

§ 768. Statute and Definition.

A machine is the second of the classes of patentable inventions named in sec. 4886. Brief reflection will reveal the insufficiency and inaccuracy of the following definitions. No one of them distinguishes, clearly, a machine from a tool — an article of manufacture. Take this simple example: A screw-driver of the ordinary sort is clearly a tool and not a machine; it is an article of manufacture, and if it were novel, would be patentable as such. Now add to this screw-driver a ratchet mechanism, so that when one rotates the handle one way the blade or bit must turn with the handle, and when rotated the other way the bit remains at rest and the ratchet permits the handle to turn independently of the bit. In the ordinary screw-driver there is no law of action imposed by the mind of the inventor; in the ratchet screw-driver there is the law imposed by the mind of the inventor, which law

is that, when the handle is rotated in one direction the bit is compelled, by the ratchet mechanism, to rotate with the handle, and when the handle is rotated in the other direction, the law is that the bit shall remain at rest. It will be seen that no one, nor all, of the following definitions distinctly classifies these two devices — the one as an article of manufacture and the other as a machine.

On the other hand, passing from matters of sharp distinction to those of broad construction, the law has never clearly distinguished between a machine and an aggregation or a so-called "system." Perhaps the nearest approaches have been in Dunbar *v.* Eastern, 81 Fed. 201 (§ 48) and Western *v.* Rochester, 145 Fed. 41 (§ 698). It is evident that the definition of a machine must be redrawn to mark the distinction between those true combinations patentable under the statute and the ever-increasing number of constructions which are the product of engineering skill, but which, however useful and however skillfully devised, are nevertheless aggregations and systems, and clearly non-patentable.

The term "machine" includes every mechanical device or combination of mechanical powers and devices to perform some function and produce a certain effect or result. But when the effect or result is produced by chemical action by the operation or application of some element or power of nature, or of one substance to another, such modes, methods or operations are called processes. — Corning *v.* Burden, 15 How. 252; 14 L. Ed. 683.

A machine is a concrete thing, consisting of parts, or of certain devices. The principle of a machine is properly defined to be "its mode of operation" or the peculiar combination of devices which distinguishes it from other machines. A machine is not a principle or an idea. The use of ill defined abstract phraseology is the frequent source of error. — Burr *v.* Duryee, 68 U. S. 531; 17 L. Ed. 750.

The doctrine which is applicable to a machine patent is of a kindred character with that applied in this country and in England to a patent for a process. — Morley *v.* Lancaster, 129 U. S. 263; 32 L. Ed. 715; 9 S. Ct. 299.

McCormick *v.* Talcott, 61 U. S. 402; Chicago *v.* Sayles, 97 U. S. 554; Clough *v.* Barker, 106 U. S. 166; Duff *v.* Sterling, 107 U. S. 636; Consolidated *v.* Crosby, 113 U. S. 157.

And comparing, Tilghman *v.* Proctor, 102 U. S. 707; Nelson *v.* Hartford, 1 Web. P. C. 295; O'Reilly *v.* Morse, 56 U. S. 62,115; Curtis *v.* Platt (note) L. R. 3 Ch. Div. 134; Badische *v.* Levinstein, L. R. 24 Ch. Div. 156, 171; Jupe *v.* Pratt, 1 Web. P. C. 146; Household *v.* Nelson, 1 Web. P. C. 685; Proctor *v.* Bennis, L. R. 36 Ch. Div. 740; Clark *v.* Adie, L. R. 2 App. Cas. 315, 320.

The argument that a machine must be automatic in order to be patentable is not sound. A piano is not automatic, nor is any tool or implement intended for use by hand. But improvements in any such tool used in an art or industry are patentable. — Weatherhead *v.* Coupe, 147 U. S. 322; 37 L. Ed. 188; 13 S. Ct. 312.

A machine or structure may embody several different inventions. There may be subcombinations in a machine which are new and useful, and operate conjointly to perform some subordinate function. Such a sub-combination, if not patented by a claim, might be appropriated by another without infringing a patent for a machine. Being for a different invention, it is the proper subject for a distinct patent. — Thompson-Houston *v.* Elmira, 71 Fed. 396; 18 C. C. A. 145.

§ 769. Right to Use.

When the patented machine passes rightfully to the hands of the purchaser from the patentee, or from any other person by him authorized to convey it, the machine is no longer within the limits of the monopoly. By a valid sale the machine becomes the private individual property of the purchaser, and is no longer protected by the laws of the U. S. but by the laws of the state in which it is situated. — Chaffee *v.* Boston, 63 U. S. 217; 16 L. Ed. 240.

The lawful purchase of a patented machine carries with it the right to use the machine, regardless of renewals or extensions of the patent, until it is worn out. — Bloomer *v.* Millinger, 68 U. S. 340; 17 L. Ed. 581.

Wilson *v.* Rousseau, 4 How. 640; Bloomer *v.* McQueewan, 14 How. 549; Chaffee *v.* Boston, 22 How. 223; Crane *v.* Price, Web. P. C. 413.

A license to use and operate during the life of the patent carries the right to repair and right to continue use after extension. — Mitchell *v.* Hawley, 83 U. S. 544; 21 L. Ed. 322.

Bloomer *v.* Millinger, 1 Wall. 350.

The lawful purchase of a machine carries with it the right to use the patented device embodied. — Adams *v.* Burks, 84 U. S. 453; 21 L. Ed. 700.

Right to patented machine carries with it the right to use and sell the product of that machine. — Morgan *v.* Albany, 152 U. S. 425; 38 L. Ed. 500; 14 S. Ct. 627.

MACHINE AND PROCESS.

General Rules § 770 | *See — Machine* § 768

§ 770. General Rules.

A machine may be new, and the product or manufacture proceeding from it may be old. In that case the former would be patentable and the latter not. The machine may be substantially old and the product new. In that event, the latter and not the former, would be patentable. In the former case both would be patentable; in the latter, neither. The same remarks apply to processes and their results. Patentability may exist as to either, neither or both, according to the fact of novelty, or the opposite. The patentability or the issuing of a patent as to one, in no wise affects the rights of the inventor or discoverer in respect to the other. They are wholly disconnected and independent facts. Such is the sound and necessary construction of the statute. — Rubber Co. *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

Undoubtedly a patentee may claim and obtain a patent for an entire combination or process, and also for such parts of the combination or process as are new and useful or he may claim and obtain a patent for both. — Railroad *v.* Dubois, 79 U. S. 47; 20 L. Ed. 265.

The driven well patent is for a process and not a machine, as the process is used whenever water is drawn. — Andrews *v.* Hovey, 124 U. S. 694; 31 L. Ed. 557; 8 S. Ct. 676.

McClurg *v.* Kingsland, 1 How. 202; Beedle *v.* Bennett, 122 U. S. 71.

It is upon its face "for an improved process of manufacture," and mechanism is shown and described simply for the purpose of ex-

hibiting its operation, which is described in detail. The result is a more perfect article, but it was not because the patentee had discovered anything new in the result produced, but because the mechanism was better adapted to produce that result than anything that had been known. As devices of that description had been produced before, doubtless, with great care in manufacture of them, one as perfect as plaintiff's might have been made. So that all that he invented in fact was a machine for the more perfect manufacture of such devices. The operation or function of such a machine however, is not patentable as a process. — Risdon *v.* Medart, 158 U. S. 68; 39 L. Ed. 899; 15 S. Ct. 745.

Neilson *v.* Harford, 1 Web. P. C. 331; O'Reilly *v.* Morse, 56 U. S. 62,115; Household *v.* Neilson, 1 Web. P. C. 673; Tilghman *v.* Proctor, 102 U. S. 708; Mowry *v.* Whitney, 81 U. S. 620; Cochrane *v.* Deener, 94 U. S. 780; New Process *v.* Maus, 122 U. S. 413; Telephone Cases, 126 U. S. 1; Bell Tel. *v.* Dolber, 15 Fed. 488; Weyeth *v.* Stone, 1 Story, 273; Corning *v.* Burden, 56 U. S. 252; McKay *v.* Jackman, 12 Fed. 615; Brainard *v.* Cramme, 12 Fed. 621; Gage *v.* Kellogg, 23 Fed. 891; Hatch *v.* Moffit, 15 Fed. 253; Sickles *v.* Falls, 4 Blatchf. 518; Excelsior *v.* Union, 32 Fed. 221.

Can it be said that a process and an apparatus are inevitably so independent as never to be "connected in their design and operation?" They may be completely independent. But they may be related. They may approach each other so nearly that it will be difficult to distinguish the process from the function of the apparatus. In such cases the apparatus would be the dominant thing. But the dominance may be reversed and the process carry an exclusive right, no matter what apparatus may be devised to perform it. — U. S. ex rel. Steinmetz *v.* Allen, 192 U. S. 543; 48 L. Ed. 555; 24 S. Ct. 416.

Cochrane *v.* Deener, 94 U. S. 780; Telephone Cases, 126 U. S. 1.

Whether such a process patent might have been valid for the steps in pill-dipping pointed out in the complainant's specifications, we need not discuss, because the complainant, as a condition of getting the patent in suit, expressly abandoned and withdrew an application for just such a process patent, and he is thereby estopped from contending for any construction of his present patent which would, in effect, secure him the same thing. — Stearns *v.* Russell, 85 Fed. 218; 29 C. C. A. 121.

Sutter *v.* Robinson, 119 U. S. 530; Shepard *v.* Carrigan, 116 U. S. 593; Leggett *v.* Avery, 101 U. S. 256.

MACHINE AND PRODUCT.

General Rules § 771

§ 771. General Rules.

Patents for a machine will not be sustained if the claim is for a result, the established rule being that the invention, if any, within the meaning of the Patent Act, consists in the means or apparatus by which the result is obtained, and not merely in the mode of operation, independent of the mechanical devices employed; nor will a patent be held valid for a principle or for an idea or any other mere abstraction. — Fuller *v.* Yentzer, 94 U. S. 288; 24 L. Ed. 103.

Dissenting: Strong, Waite, Miller, Bradley.

Burr *v.* Duryee, 1 Wall. 531.

A patent upon a machine may also cover a manufacture. — Miller *v.* Eagle, 151 U. S. 186; 38 L. Ed. 121; 14 S. Ct. 310.

Where right to use patented machine is acquired right to use and sell product goes with it. — Morgan *v.* Albany, 152 U. S. 425; 38 L. Ed. 500; 14 S. Ct. 627.

We do not think that an article manufactured in a machine in the manner and for the purposes contemplated when the machine itself was made, can be held to be a part of the machine which so produces it. — American *v.* Streat, 83 Fed. 700; 28 C. C. A. 18.
Morgan *v.* Albany, 152 U. S. 425.

MANUFACTURE.

Statute and General Statement § 772
Manufacture and Product § 773 (*see* § 771)
Novelty § 774
Patentability § 775

See — Aggregation § 46; *Art* § 146; *Composition of Matter* § 264; *Machine and Product* § 771; *Process* §§ 820–1; *Product* § 823

§ 772. Statute and General Statement.

Manufactures constitute the third class of patentable inventions under sec. 4886. The Supreme Court has held that a manufacture may mean either the process or the product. Merrill *v.* Yeomans, 94 U. S. 568. Shall we then say that the art of making carborundum by electrolytic decomposition and synthesis belongs in the same class with the invention of a new and useful tool? It is at once clear that, as in the case of an art (§ 147), the classification of patentable inventions as made by the statute and as made by the courts do not agree in terminology.

§ 773. Manufacture and Product.

After a patent is granted for an article described as made by causing it to pass through a certain method of operation to produce it, the inventor cannot afterwards, on an independent application, secure a patent for the method or process covered by the previous patent, which article was described in that patent as produced by the method or process sought to be covered by taking out the second patent. — Mosler *v.* Mosler, 127 U. S. 354; 32 L. Ed. 182; 8 S. Ct. 1148.

Where a patent upon an article of manufacture does not claim the composition of matter, though it describes it, such omission is public dedication of the said composition. — Underwood *v.* Gerber, 149 U. S. 224; 37 L. Ed. 710; 13 S. Ct. 854.

§ 774. Novelty.

But whether, within the meaning of the patent law, a device should be deemed to be a manufacture or a machine, in order to be patentable, it must be novel; and by the decided cases the test of novelty would seem to be essentially the same in the one instance as in the other. — Campbell *v.* Bayley, 63 Fed. 463; 11 C. C. A. 284.

Glue Co. *v.* Upton, 4 Cliff. 237 F. C. 9,607; Collar Co. *v.* Vandeusen, 23 Wall. 530; Wood Paper Pat. 23 Wall. 566; Cochrane *v.* Badische, 111 U. S. 293; Reckendorfer *v.* Faber, 92 U. S. 347.

This is for the constructed article and not for the art of constructing it. (That is, the claim.) All suggestions, therefore, about the economy of constructing the blanks by cutting them off widthwise from a strip of a plate of

metal, so that the wide and narrow ends of the plate shall alternate and thus utilize the whole of the metal are irrelevant. — Strom *v.* Weir, 83 Fed. 170; 27 C. C. A. 502.

§ 775. Patentability.

For general rules as to limitation of patentability of a manufacture, see Rubber Tip *v.* Howard, 87 U. S. 498; 22 L. Ed. 410.

Nothing short of invention or discovery will support a patent for a manufacture any more than for an art, machine or composition of matter. — Union *v.* Vandeusen, 90 U. S. 530; 23 L. Ed. 128.

Hotchkiss *v.* Greenwood, 11 How. 265; Phillips *v.* Page, 24 How. 167; Jones *v.* Morehead, 1 Wall. 162; Simpson *v.* Woodman, 10 Wall. 121.

Articles of manufacture may be new in the commercial sense when they are not new in the sense of the patent law. — Union *v.* Vandeusen, 90 U. S. 530; 23 L. Ed. 128.

Glue Co. *v.* Upton, 6 O. G. 840.

The Patent Office fully comprehends the rule that new articles of commerce are not patentable as new manufactures, unless it appears in the given case that the production of the new articles involved the exercise of invention or discovery beyond what was necessary to construct the apparatus for its manufacture or production. — Milligan *v.* Upton, 97 U. S. 3; 24 L. Ed. 985.

Ex parte Ackerson, C. D. 1869, 75; Ex parte Chatillon, 2 O. G. 115; Bates *v.* Serger, 2 O. G. 493; Ex parte Jerome, 3 O. G. 64; Ex parte Adams, 3 O. G. 150; Ex parte Wattles, 3 O. G. 291; Ex parte Leggett, 2 O. G. 199; Ex parte Baxter, 2 O. G. 470; Ex parte Beach, 3 O. G. 607; Draper *v.* Hudson, 3 O. G. 354; Sawyer *v.* Bixby, 1 O. G. 165; Merrill *v.* Yeomans, 5 O. G. 267.

A distinction must be observed between a new article of commerce and a new article which, as such, is patentable. Any change in form from a previous condition may render the article new in commerce; as powdered sugar is a different article in commerce from loaf sugar, and ground coffee is a different article in commerce from coffee in the berry. But to render the article new in the sense of the patent law, it must be more or less efficacious, or possess new properties by a combination with other ingredients; not from a mere change of form produced by a mechanical division. It is only where one of these results follows that the product of the compound can be treated as the result of invention or discovery and be regarded as a new and useful article. — Milligan *v.* Upton, 97 U. S. 3; 24 L. Ed. 985.

Approving, Hotchkiss *v.* Greenwood, 11 How. 265; Phillips *v.* Paige, 24 How. 167; Jones *v.* Morehead, 1 Wall. 162; Simpson *v.* Woodman, 10 Wall. 121; Knight *v.* R. R. Comp. (Taney C. C.) 109; Bean *v.* Smallwood, 2 Story, 411; Winans *v.* R. R. 2 Story, 416; Hicks *v.* Kelsey, 18 Wall. 670; Union *v.* Vandeusen, 10 Blatchf. 119; Langdon *v.* DeGroot, 1 Paine, 204; LeRoy *v.* Tatham, 14 How. 175.

Where certain properties are known to belong generally to classes of articles there can be no invention in putting a new species of the class in a condition for the development of its properties similar to that in which other species of the same class have been placed for similar development; nor can the changed form of the article from its condition in bulk to small particles, by breaking or crushing or slicing or rasping or filing or grinding or sifting, or other similar mechanical means, make it a new article, in the sense of the patent law. — Milligan *v.* Upton, 97 U. S. 3; 24 L. Ed. 985.

Where a manufacture is claimed without claiming the composition of matter, in view of the art the patent was held void. — Brigham *v.* Coffin, 149 U. S. 557; 37 L. Ed. 845; 13 S. Ct. 939.

Underwood *v.* Gerber, 149 U. S. 224.

A claim which does not describe an article differing at all in its completed state from prior articles is clearly invalid. — Risdon *v.* Medart, 158 U. S. 68; 39 L. Ed. 899; 15 S. Ct. 745.

The patent in suit is for a manufacture, and therefore entitled to a more liberal construction or treatment in respect to the question of aggregation of parts, than if the invention were a machine. This distinction is stated by Robinson on Patents, sec. 185, n., but the definition can hardly be deemed clear enough for practical application. — Campbell *v.* Bayley, 63 Fed. 463; 11 C. C. A. 284.

An article of manufacture must be patentable, if patentable at all, apart from the mechanical means employed in its production. — Andrews *v.* Thum, 67 Fed. 911; 15 C. C. A. 67.

It is only when a new process introduces new characteristics into the manufactured article by which it can be identified and distinguished from all preceding manufactures that the article itself becomes patentably new. — National *v.* New England, 151 Fed. 19; 80 C. C. A. 485.

If a lace front stocking is claimed as a patentable product, when made on a seamless machine with a single thread, in a continuous operation, every other well known form of stocking can be considered a patentable product when so made, which would amount to a practically indefinite extension of the monopoly originally granted by the patent for the seamless stocking. It must be admitted that it is somewhat difficult to properly define in general terms what is or is not a patentable "manufacture," and distinguish it from the mere effect or result of a process or machine. The difficulty possibly arises from what Robinson calls the want of technical language that will clearly express all that the words "new and useful manufacture" in the patent law connotes. But however this may be, the difficulty is best met, as in the interpretation of all statutes, by a close adherence to the ordinary and common sense meaning and usage of the words employed to express the legislative will. A new and useful product or manufacture must be differentiated from all other articles, by something that is fundamental and radical. In a machine-made, seamless, lace front stocking, we do not find this radical differentiation from the subject-matter of the patent in suit. — Kilborn *v.* Liveright, 165 Fed. 902; C. C. A.

Collar Co. *v.* Vandeusen, 23 Wall. 530; McCloskey *v.* Du Bois, 8 Fed. 710; Weierman *v.* Shaw, 157 Fed. 928.

MARKING "PATENTED."

The Statute § 776 | Rulings Under the Statute § 777

§ 776. The Statute.

It shall be the duty of all patentees, and their assigns and legal representatives, and of all persons making or vending any patented article for or under them, to give sufficient notice to the public that the same is patented; either by fixing thereon the word "patented," together with the day and year the patent was granted; or when, from the character of the article, this can not be done, by fixing to it, or to the package wherein one or

more of them is enclosed, a label containing the like notice; and in any suit for infringement, by the party failing so to mark, no damages shall be recovered by the plaintiff, except on proof that the defendant was duly notified of the infringement, and continued, after such notice, to make, use, or vend the article so patented. R. S. 4900.

§ 777. Rulings under the Statute.

In view of the fact that all letters patent are recorded, with their specifications, in the Patent Office, a record which is notice to all the world, it is not an unreasonable requirement that the defendant, who relies upon a want of knowledge upon his part of the actual existence of the patent, should aver the same in his answer, that the defendant may be duly advised of the defense. — Sessions *v.* Romadka, 145 U. S. 29; 36 L. Ed. 609; 12 S. Ct. 799.

Providence *v.* Goodyear, 79 U. S. 788; Allen *v.* Deacon, 10 Sawy. 210.

Failure to mark article " patented " or to give notice is a bar to the recovery of more than nominal damages; and where the question of notice is in dispute it should be left to the jury. — Coupe *v.* Royer, 155 U. S. 565; 39 L. Ed. 263; 15 S. Ct. 199.

Providence *v.* Goodyear, 76 U. S. 801; Sessions *v.* Romadka, 145 U. S. 50; Dunlap *v.* Schofield, 152 U. S. 247.

The contention of the appellants that there is no proof that complainant gave public notice of his patent by marking his machines relates only to the question of damages. — Inman *v.* Beach, 71 Fed. 420; 18 C. C. A. 165.

The question is not whether the rules of pleading required the allegation of notice in a bill in equity which asked for damages and profits (that question is settled in Dunlap *v.* Schofield, supra); but it is whether the neglect to take notice of the omission, either by answer or by any other form, until after the final decree, was not a waiver of the want of notice. It was so held in Rubber Co. *v.* Goodyear, 9 Wall. 811, where the point of want of notice did not appear until the hearing before the master, and the court held that the triable issue must be confined to the pleadings. This was affirmed in Sessions *v.* Romadka, 145 U. S. 29. In Dunlap *v.* Schofield, supra, (a bill in equity to recover damages), the bill and answer made the proper averments and denials, but no proof was given, and the court held that the burden of proof rested upon the complainant. In Coupe *v.* Royer, 155 U. S. 583, the pleadings were silent; but the question was actually litigated upon the trial by contradictory evidence, and the court thought that it should have been submitted to the jury. In this case the pleadings were silent. The question never became one actually in issue, and was never raised in the circuit court.

It is too late to raise for the first time in an appellate court technical questions of pleading or proof which are not jurisdictional in their character, and which were not raised either in the pleadings or before the trial courts, where defects might have been remedied, and which must therefore, be considered to have been waived. It is therefore not necessary to consider whether the provisions of section 4900 are applicable only to cases in law or in equity, in which damages, as distinguished from profits, are the subject of investigation. — Tuttle *v.* Claflin, 76 Fed. 227; 22 C. C. A. 138.

The defendants seem to place stress upon the fact that the complainant's boxes had been marked with the dates of other patents beside that of the patent in suit. This solitary fact is of no importance if the patents are of no importance. — National *v.* Elsas, 86 Fed. 917; 30 C. C. A. 487.

That the failure to mark the articles or packages with the word "patented," in order to be employed as a bar against recovery, the fact must be distinctly pleaded, see — Hart *v.* Anchor, 92 Fed. 657; 34 C. C. A. 606.

Sessions *v.* Romadka, 145 U. S. 29.

As a result of a neglect to mark, or to notify the defendants in the absence of it, damages are denied by the statute; the infringement being otherwise presumptively innocent. An issue being made by the answer, a compliance with the statute is required to be affirmatively shown in order to lay ground for an account. It is immaterial that in the present instance the complainants neither license nor sell their machines, reserving the benefit of the patent for the advantage of their own business. The fact still remains that without notice, either direct or constructive, the defendants are entitled to be regarded as acting innocently, and so not liable to damages, by the express provision of the statute. — American *v.* Mills, 162 Fed. 147; 89 C. C. A. 171.

Dunlap *v.* Schofield, 152 U. S. 244; U. S. Mitis *v.* Midvale, 135 Fed. 103.

Note: This decision is distinctly a step in the right direction. It only remains to make "notice, either direct or constructive," positively sufficient to meet the demands of the statute.

There is no evidence in the record which shows or tends to show any actual or constructive notice to the defendant of the patent in suit prior to the filing of the bill of complaint. Under circumstances like these, however, an accounting of profits and damages subsequent to the date of the filing of the bill was allowed by this court in American *v.* Mills, 162 Fed. 147. The mandate in that case, by implication at least, clearly permitted such an accounting, and we have not been referred to any controlling authority to the contrary. Turning to the statute upon this point (R. S. 4900), this goes no further than to prohibit the recovery of damages without proof of notice. It prescribes no particular form of notice or any particular time for the accounting. To permit an accounting, therefore, after notice is given by the filing of the bill, if the complainant shall establish his right thereto, does not contravene the statute, since, notwithstanding such notice, the complainant can recover no damages unless it affirmatively shows infringement after notice.

As the proofs now stand, the complainant can recover no damages; but if he shall be able to show infringement after the bill was filed, we see no reason why it should not be permitted to do so, and recover the amount so shown, and in this suit. If the complainant's proofs, when taken, shall not affirmatively disclose infringement subsequent to the filing of the bill, it will be mulcted with costs, and the defendant will not have been injured. — Maimen *v.* Union, 165 Fed. 440; C. C. A.

MORTGAGE.

General Statement and Rulings § 778 | *See — Assignment* § 149

§ 778. General Statement and Rulings.

A mortgage interest is an assignable and recordable interest under Sec. 4898. It is a curious fact that all of the appellate law bearing directly upon this subject centers about the Waterman Cases.

The right conferred by letters patent for an invention is limited to a term of years; and a large part of its value consists in the profits derived from royalties and license fees. In analogy to the rules governing mortgages to lands and chattels, and even with stronger reason, the assignee of a patent by a mortgage duly recorded, whose security is constantly wasting by the lapse of time, must be held, (unless otherwise provided in the mortgage) entitled

to grant licenses to receive fees and royalties, and to have an account of profits or an award of damages against infringers. There can be no doubt that he is "the party interested either as patentee, assignee or grantee," and as such entitled to maintain an action at law to recover damages for an infringement; and it cannot have been the intention of Congress that a suit in equity against an infringer to obtain an injunction and an account of profits, in which the court is authorized to award damages, when necessary to fully compensate the plaintiff, and has the same powers to treble the damages as in an action at law, should not be brought by the same person. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

Root *v.* Railway, 105 U. S. 189; U. S. R. S. sec. 4919.

A patent right is incorporeal property, not susceptible of actual delivery and possession, and the recording of a mortgage thereof in the Patent Office, in accordance with the Act of Congress is equivalent to a delivery of possession, and makes the title of the mortgagee complete towards all other persons, as well as against the mortgagor. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

This instrument being a conveyance made to secure the payment of a debt, upon condition that it should be avoided by the subsequent payment of that debt at a time fixed, was a mortgage, in apt terms and in legal effect. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

Conard *v.* Atlantic, 26 U. S. 386,446.

Whether the court at the suggestion of mortgagor or mortgagee will join the mortgagor to prevent multiplicity of suits or the miscarriage of justice, quaere. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

After the mortgagee has taken possession the mortgagor had no power to lease; and the mortgagor is entitled to have and is bound to account for the accruing rents and profits, and damages. — Waterman *v.* Mackenzie, 138 U. S. 252; 34 L. Ed. 923; 11 S. Ct. 334.

Keech *v.* Hall, 1 Doug. 21; Turner *v.* Cameron's, 5 Exch. 932; Dawson *v.* Johnson, 1 Fost. & F. 656; Fairclough *v.* Marshall, L. R. 4 Exch. Div. 37; Sniggs *v.* Memphis, 108 U. S. 368; Teal *v.* Walker, 111 U. S. 242; Hutchings *v.* King, 68 U. S. 53; Gove *v.* Jennes, 19 Me. 53; Bagnall *v.* Villar, L. R. 12 Ch. Div. 812; Stelle *v.* Carroll, 37 U. S. 201; Van Ness *v.* Hyatt, 38 U. S. 294; Brobet *v.* Brock, 77 U. S. 519.

The mortgage was subject to the license which had previously been granted to the complainant, and could in no manner operate to restrict or curtail the exclusive right of the complainant to make and sell the patented improvements, so long as the license should remain unrevoked. The recital in the mortgage of the existence of this license was notice of all its terms and conditions. — Waterman *v.* Shipman, 55 Fed. 982; 5 C. C. A. 371.

It is entirely clear upon the authority of Waterman *v.* Mackenzie, 138 U. S. 252, that by virtue of the mortgage, the whole title to the patents at the time of the execution of the instrument became vested in the mortgagees, subject only to be defeated by performance of the condition or by redemption within a reasonable time, and that the right of possession of the incorporeal property was in legal effect delivered to the mortgagees at the time of the recording of the mortgage in the Patent Office. — Waterman *v.* Shipman, 55 Fed. 982; 5 C. C. A. 371.

OATH.

Statutory Requirements and General Rule § 779
Supplemental Oath § 780

See — Amendment § 52; *Defenses* § 306

§ 779. Statutory Requirements and General Rule.

The applicant shall make oath that he does verily believe himself to be the original and first inventor or discoverer of the art, machine, manufacture, composition or improvement for which he solicits a patent; and that he does not know and does not believe that the same was ever before known or used, and shall state of what country he is a citizen. Such oath may be made before any person within the United States authorized by law to administer oaths, or, when the applicant resides in a foreign country, before any minister, charge d'affaires, consul, or commercial agent holding commission under the Government of the United States, or before any notary public, *judge, or magistrate having an official seal and authorized to administer oaths in the foreign country in which the applicant may be, whose authority shall be proved by certificate of a diplomatic or consular officer of the United States.*—R.S.4892, as amended Mar. 3, 1903.

By the Act 3 Mar. 1903, the clause in italics was substituted for the original clause which read: " of the foreign country in which the applicant may be."

Section 4895 provides for the granting of patents to assignees, and specifically provides that the application must be made and the oath sworn to by the inventor. It also provides that in cases of reissue the application must be made and the oath made by the inventor, if living.

Section 4896 provides for the making of oath by the representative of a deceased inventor or of an insane inventor.

The patent law makes it essential to the validity of a patent that it shall be granted on the application, supported by the oath of the original and first inventor (or of his executor or administrator) whether the patent is issued to him or to his assignee. A patent which is not supported by the oath of the inventor, but applied for by one who is not the inventor, is unauthorized by law, and void, and whether taken out in the name of the applicant or of any assignee of his, confers no rights against the public. — Kennedy *v.* Hazelton, 128 U. S. 667; 32 L. Ed. 576; 9 S. Ct. 202.

U. S. R. S. 4886, 4888, 4892, 4895, 4896, 4920.

The recitals upon the face of the patent, in the absence of fraud, are conclusive evidence that the necessary oaths were taken by the applicants before the letters patent were granted. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

That Warren believed himself to be the discoverer of his composition is presumed from his oath to that effect, and that presumption must stand until overthrown by very clear evidence. — Warren *v.* City, 166 Fed. 309; C. C. A.

Smith *v.* Goodyear, 93 U. S. 486; Elizabeth *v.* Pavement Co. 97 U. S. 126.

§ 780. Supplemental Oath.

If the application as amended were to be construed as embodying such an invention as is now claimed, it was another and different invention from that for which the patent was originally sought, and, if an amendment having the consequence was permissible, it should have been verified by the oath of the inventor. — American *v.* Steward, 155 Fed. 731; 84 C. C. A. 157.

Ry. Co. *v.* Sayles, 97 U. S. 554; Eagleton *v.* West, 111 U. S. 490; Kennedy *v.* Hazelton, 128 U. S. 667; Mich. *v.* Consolidated, 67 Fed. 121; Cleveland *v.* Detroit, 131 Fed. 853.

Note: A dangerous decision. See 128 Fed. 599.

OPERATIVENESS.

General Statement § 781
Decisions § 782
See — Anticipation § 87; *Defenses* § 314; *Reduction to Practice* § 860; *Reissue* § 884

§ 781. General Statement.

Operativeness relates directly to utility; and while it is true that an inoperative device is lacking in patentable utility, the reverse does not necessarily follow. A device may be operative and still lack patentable utility. Furthermore, operativeness relates to the matter of proper disclosure of the invention in the patent. One may have, for example, a machine which possesses both utility and operativeness, but if the patent fails to show an operative machine — fails to show that which would enable one skilled in the art to which it appertains or is most nearly related to make and use the same — the invention viewed within the four corners of the grant is inoperative. The authorities under *Invention — Evidence of — Utility* and *Invention — Utility* should be examined in connection with this subject.

§ 782. Decisions.

The very fact that a machine is patented is some evidence of its operativeness, as well as of its utility. — Dashiell *v.* Grosvenor, 162 U. S. 425; 40 L. Ed. 1025; 16 S. Ct. 805.

When a model is constructed after a design shown in a patent, which is not perfectly operative, the inference is that there was an error in working out the drawings, and not that the patentee deliberately took out a patent for an inoperative device. — Dashiell *v.* Grosvenor, 162 U. S. 425; 40 L. Ed. 1025; 16 S. Ct. 805.

We are even further from an ability to determine that a mechanic of ordinary skill in the art could not make the patented machine in issue, and, with the aid of the specification, overcome the minor difficulty to which the appellant refers. The law does not require more than this. Persons possessed of the most brilliant conceptions are sometimes the poorest mechanics. — Packard *v.* Lacing, 70 Fed. 66; 16 C. C. A. 639.

Pickering *v.* McCullough, 104 U. S. 310; Telephone Cases, 126 U. S. 1; Rob. Pat. sec. 128–129.

That so long as operative means are disclosed, commercial efficiency is not required, especially in a pioneer invention, see — Von Schmidt *v.* Bowers, 80 Fed. 121; 25 C. C. A. 323.

Mergenthaler *v.* Publishing Co. 57 Fed. 502.

But it is erroneous to suppose that because the element, or the combination of elements, in a claim, do not of themselves constitute an operative thing, or one capable of any use, the claim is therefore void. — Canda *v.* Michigan, 124 Fed. 486; 61 C. C. A. 194.

It is asserted that the Bradley process is not operative. Having found that the defendant is using the process and it appearing that the annual output

of its works is now over 7,000,000 pounds, it seems unnecessary to enter upon an extended discussion of this proposition. — Electric *v.* Pittsburg, 125 Fed. 926; 60 C. C. A. 636.

It is frequently a characteristic of generic inventions that their first embodiments work imperfectly, and where the imperfections may be remedied, as in this case, by what amounts to a mere readjustment of relative sizes, such change does not affect the character of the underlying creative conception. — Scott *v.* Fisher, 145 Fed. 915; 76 C. C. A. 447.

PATENT OFFICE.

The Statutes § 783
Arbitrary Conduct § 784
Decisions of § 785
Rules § 786
Miscellaneous § 787

See — Adjudication § 30; *Claims* §§ 207–10; *Commissioner of Patents* § 258; *Injunction* § 575; *Interferences* § 580; *Invention* § 630; *Res Judicata* § 895

§ 783. The Statutes.

The Secretary of the Interior is charged with the supervision of business relating to the following subjects:

* * * * * * * * * * *

Fifth. Patents for invention. — R. S. 441.

There shall be in the Department of the Interior an office known as the Patent Office, where all records, books, models, drawings, specifications, and other papers and things pertaining to patents shall be safely kept and preserved. — R. S. 475.

There shall be in the Patent Office a Commissioner of Patents, one Assistant Commissioner, and three examiners-in-chief, who shall be appointed by the President, by and with the advice and consent of the Senate. All other officers, clerks, and employees authorized by law for the Office shall be appointed by the Secretary of the Interior, upon the nomination of the Commissioner of Patents. — R. S. 476.

Section 440 specifies the salaries of these officers. Sec. 478 provides a seal. Sec. 486 creates the scientific library. Secs. 489 and 496 relate to printing and disbursements. While there are numerous other provisions for the conduct of the Office, they need not be quoted here.

No writer on the subject of patents would do his full duty who did not raise his voice in solemn protest against the present inefficient provision made by Congress for the needs of the Office.

§ 784. Arbitrary Conduct.

The statute gives the right to join inventions in one application in cases where the inventions are related, and it cannot be denied by a hard and fixed rule which prevents such joinder in all cases. Such a rule is not the exercise of discretion; it is a determination not to hear. The unity of the inventions claimed is not denied. It is manifest that if an appeal cannot be compelled from the decision of the primary examiner, an applicant is entirely without remedy. It was the duty of the primary examiner to accord a hearing or, refusing to do so, to grant an appeal. — Steinmetz *v.* Allen, 192 U. S. 543; 48 L. Ed. 555; 24 S. Ct. 416.

§ 785. Decisions of.

Controlling in subsequent suit between same parties in absence of other thoroughly convincing testimony. — Morgan *v.* Daniels, 153 U. S. 120; 38 L. Ed. 657; 14 S. Ct. 772.

That office employs the best experts in mechanics which it can secure in this and other countries. Its examinations are, indeed, ex parte in form, but they are nevertheless conducted under hot and skilled contestation in every case of importance; and its decisions, though not conclusive, are entitled to great respect. That ruling takes rank here as the testimony of experts of the highest experience, skill and knowledge in mechanics. — Boyden *v.* Westinghouse, 70 Fed. 816; 17 C. C. A. 430.

§ 786. Rules.

If there is a divergence of views between the courts and the Patent Office and the divergence proceeds from a different interpretation of the statute, the view of the courts ought to prevail.—Steinmetz *v.* Allen, 192 U. S. 543; 48 L. Ed. 555; 24 S. Ct. 416.

The Patent Office has not been consistent in its views in regard to the division of inventions. At times convenience of administration has seemed to be of greatest concern; at other times more anxiety has been shown for the rights of inventors. The policy of the office has been denominated that of "battledore and shuttlecock" and rule 41 as it now exists was enacted to give simplicity and uniformity to the practice of the office. Its enactment was attempted to be justified by the assumption that the patent laws gave the office a discretion to permit or deny a joinder of inventions. But, as we have already said, to establish a rule applicable to all cases is not to exercise discretion. Such a rule ignores the differences which invoke discretion, and which can alone justify its exercise, and we are of opinion therefore that rule 41 is an invalid regulation. — Steinmetz *v.* Allen, 192 U. S. 543; 48 L. Ed. 555; 24 S. Ct. 416.

If there is inconsistency between the (Patent Office) rules and Statute, the latter must prevail. — Steinmetz *v.* Allen, 192 U. S. 543; 48 L. Ed. 555; 24 S. Ct. 416.

§ 787. Miscellaneous.

The judgment of the patent office, the tribunal established by Congress to determine such questions, was adverse to the contention of the government, and such judgment cannot be reviewed in this suit. — United States *v.* Am. Bell, 167 U. S. 224; 42 L. Ed. 144; 17 S. Ct. 809.

The six months within which the final fee for a patent must be paid as prescribed by R. S. sec. 4897 means six calendar months. — Economy *v.* Lamprey, 65 Fed. 1000; 13 C. C. A. 271.

Guaranty *v.* Green, 139 U. S. 137; Seemingly overruling Walk. Pat. sec. 125; Rob. Pat. sec. 585; 2 Bouv. Law. sec. 7.

Unless the Patent Office itself is satisfied of the patent's validity, the public should not be burdened with a monopoly, with the expectation that the courts will invalidate it. — Weissenthanner *v.* Dodge, 161 Fed. 915; 88 C. C. A. 388.

PLEADING AND PRACTICE.

General Statement § 788
Amendment § 789
Bill of Review § 790
Demurrer § 791
Infringement § 792 (*see* § 445)
Laches § 793
Multifariousness § 794 (*see* § 804)
Notice § 795
Parties
  Complainant § 796
  Defendant § 797
  Joinder § 798
Patentability § 799
Pleas § 800 (*see* § 21)
Profert § 801
Replication § 802
Sufficiency § 803
Suit on Plurality of Patents § 804 (*see* § 794)
Supplemental Bills § 805
Title § 806 (*see* § 925)
Miscellaneous Rules of Practice and Pleading § 807
See — Abatement § 21; *Actions* § 24; *Adjudication* § 28; *Appeals* § 109; *Arbitration* § 145; *Comity* § 250; *Costs* § 272; *Damages* § 278; *Decrees* § 301; *Defenses* § 306; *Demurrer* § 323; *Equity* § 370; *Estoppel* § 381; *Fraud* § 425; *Infringement* §§ 483–4, 516; *Injunction* § 533; *Interferences* §§ 582–3; *Interfering Patents* § 586; *Jurisdiction* § 713; *Laches* § 726; *Law Actions* § 733; *Marking "Patented"* § 776; *Profits* § 825; *Rehearings* § 868; *Reopening Case* § 890; *Res Judicata* § 893

§ 788. General Statement.

This work deals with the subjects of pleading and practice only so far as the appellate courts have ruled on those subjects in patent causes. The following sections, therefore, cover only a small portion of the law applicable to such actions, and should not be relied upon by the practitioner as being in any sense complete.

§ 789. Amendment.

A motion to amend, or file an answer after default, is generally addressed to the discretion of the court. — Dean *v.* Mason, 61 U. S. 198; 15 L. Ed. 876.

Defendants admitted making the patented device and justified under the plea of title. Becoming satisfied that their title was bad they moved to amend by denying validity of the patent and also denying infringement.

Held: that amendment denying validity could be made but that the admission of infringement must stand. — Jones *v.* Morehead, 68 U. S. 155; 17 L. Ed. 662.

It would be subversive of all sound practice, and tend largely to defeat the ends of justice, if the court should refuse to accept a fact as settled which is distinctly alleged in the bill and admitted in the answer. — Jones *v.* Morehead, 68 U. S. 155; 17 L. Ed. 662.

Crockett *v.* Lee, 7 Wheat. 523.

Issues not raised by the pleadings cannot be brought in when the case is before a master. — Rubber *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

The bill did not set up specifically the second reissue, but the case was tried on the theory that such reissue had been pleaded. Amendment setting forth such reissue was allowed after decree on the ground that the defendant was not injured and such pleading conformed to the proofs. — Tremain *v.* Hitchcock, 90 U. S. 518; 23 L. Ed. 97.

It is competent to allow an amendment to answer nunc pro tunc giving notice of prior use. — Roemer *v.* Simon, 95 U. S. 214; 24 L. Ed. 384.

Teese *v.* Huntington, 23 How. 2.

We have already found that, as the record stands, it contains no proof to sustain an allegation of this character. Therefore an amendment of this nature would require the opening of the record below for further proofs. It is not at all a case where a complainant has proved his case, but his allegations are found by the appellate court to be inapt. To grant this motion would, under the circumstances, violate all rules requiring diligence from parties complainant. — American *v.* U. S., 68 Fed. 542; 15 C. C. A. 569.

We think the distinction must be kept closely in view between amendments allowable before an appeal and those for which a case is to be kept along thereafter. This case comes within the closing remarks of our opinion in Am. Bell Tel. Co. *v.* U. S. 68 Fed. 542, 570, as follows: We have already found that, as the record stands, it contains no proof to sustain an allegation of this character. Therefore an amendment of this nature would require the opening of the record below for further proofs. It is not at all a case where a complainant has proved his case, but his allegations are found by the appellate court to be inapt. To grant this motion would, under the circumstances, violate all the rules requiring diligence from parties complainant. — Martin *v.* Martin, 71 Fed. 519; 18 C. C. A. 234.

The appellee now moves for leave to amend his brief in this court by introducing a prior patent, which he maintains, shows the improvement which the claims in issue would cover on the construction of them, which the appellant contends for. The appellee does not offer this as "proof," in the proper sense of the word, and, of course, if so offered, it could not be received in the court, unless by consent of both parties. — Parsons *v.* Seelye, 100 Fed. 452; 40 C. C. A. 484.

U. S. *v.* Hopewell, 51 Fed. 798; Nashua *v.* Boston, 61 Fed. 237.

The granting leave to file an amended and supplemental bill is within the discretion of the court. Railroad *v.* Newman, 77 Fed. 791. The granting or refusing leave to file an amended bill or plea is a matter within the discretion of the trial court, and will not be reviewed in an appellate court unless there has been gross abuse of this discretion. Chapman *v.* Barney, 129 U. S. 677; Gormley *v.* Bunyan, 138 U. S. 623; Marco *v.* Hicklin, 56 Fed. 549. As a general rule matters resting in the discretion of the court below cannot be re-examined in the appellate court. Cheang-Kee *v.* U. S. 3 Wall. 320. In the case at bar the court exercised its discretion after careful examination. A petition was filed asking leave to file the amended and supplemental bill. Notice was given. A day was fixed for the hearing, and full discussion was had. We see no abuse of discretion in the court. — Berliner *v.* Seaman, 113 Fed. 756; 51 C. C. A. 440.

Bates, Fed. Eq. Pr. sec. 637.

§ 790. Bill of Review.

New evidence, discovered after the hearing before the master is closed, may, in proper cases, be ground for bill of review, on which issue may be joined and evidence adduced by both parties in the usual way. — Thompson *v.* Wooster, 114 U. S. 104; 29 L. Ed. 105; 5 S. Ct. 788.

The subject matter of a litigation having been disposed of on appeal in another suit, after appeal in this suit, a supplemental bill in the form of a bill of review will be ordered. — Ballard *v.* Searles, 130 U. S. 50; 32 L. Ed. 846; 9 S. Ct. 418.

The case being affirmed on an issue not raised, but raised by the court, a special mandate will be made to allow a bill of review. — Woodward *v.* Boston, 63 Fed. 609; 11 C. C. A. 353.

The question has been made whether, ordinarily, equity requires that a bill of review should be permitted to be filed on a new issue which might have been presented in the principal cause, but was not. On general principles, it would seem that there would be no equity in this behalf, unless in very exceptional cases. Nevertheless later authorities do not permit a formulated rule of this character, and as no fixed formula can ever be laid down, limiting equity as to relief against error, fraud, or misfortune, all that can be said in this behalf is that, under the circumstances, the fact that the petitioner for the review was originally contented to rest his case on certain issues ought to bar him from calling on equity to aid him to present new issues after he has been defeated as the result of protracted litigation in the principal causes. — Boston *v.* Bemis, 98 Fed. 121; 38 C. C. A. 661.

The new matter should be such as if known, " might probably have produced a different determination;" and that there would be " a reasonable probability that the proofs if they sustained the allegations of the petition, would require reconsideration from us if the case should come here again." — Boston *v.* Bemis, 98 Fed. 121; 38 C. C. A. 661.

Story Eq. Pl. 10th ed. sec. 413; Daniell Chan. Prac. 6 ed. 1577; Re Gamewell, 73 Fed. 908.

With reference to the nature and degree of diligence which must be shown in a petition of this character, Lord Bacon's rule requires that the new proof " could not possibly have been used at the time when the decree was passed." Story says that it must be such as the party, by the use of reasonable diligence, could not have known. The necessity for enforcing this rule strictly, with reference to anticipatory matter, was stated in re Gamewell, 73 Fed. 908; and the new defence now sought to be raised is of the same family. — Boston *v.* Bemis, 98 Fed. 121; 38 C. C. A. 661.

Purcell *v.* Uliner, 4 Wall. 519; Story Eq. Pl. 10 ed. sec. 414; Young *v.* Keighly, 16 Ves. 348.

The record shows that not until after the patent had been long contested did the real defendant, the Brill Company, make any effort to discover prior use where it would be most likely to be found. When defendant did go to the residence of the inventor at the time he obtained his patent, it only required a single day to at once discover substantially all of the material evidence presented on the petition. It was held that in view of this fact, and in view of the fact that defendant was dealing with the railroad companies, constantly, by whom such prior use would have been had, presented a case where due diligence was palpably wanting. — Boston *v.* Bemis, 98 Fed. 121; 38 C. C. A. 661.

The question of laches is ordinarily for the court below. In the case at bar, however, we have a form of petition, setting out all the facts necessary to dispose of the question of laches, while, as already said, the affidavits are so contradictory that the court cannot properly dispose of that of materiality, although ordinarily it is for the appellate tribunal. — Boston *v.* Bemis, 98 Fed. 121; 38 C. C. A. 661.

The patent in suit, it was averred by the petitioner, expired pending appeal by reason of the expiration of a foreign patent. The petitioner did not inform the court of such fact at the time of argument on appeal; and the court held

that such conduct constituted sufficient laches to prevent the granting of the petition to lift the injunction or limit the accounting. — Westinghouse *v.* Stanley, 138 Fed. 823; 71 C. C. A. 189.

In re Gamewell, 73 Fed. 908; Boston *v.* Bemis, 98 Fed. 121; Mossberg *v.* Nutter, 124 Fed. 966; Kisinger-Ison *v.* Bradford, 123 Fed. 91; Ricker *v.* Powell, 100 U. S. 104; Story, Eq. Pl. sec. 406.

§791. Demurrer.

If it be suggested that the claim of the patent is for the boot described, and that the bill merely alleges that the defendant has made, used and sold boots containing and embracing the invention covered by the patent, instead of alleging that the defendant had made, used and sold the invention on the patented boot, we are of opinion that there is no force in the objection. The bill is entirely sufficient to put the defendant upon his answer. — McCoy *v.* Nelson, 121 U. S. 484; 30 L. Ed. 1017; 7 S. Ct. 1000.

Where demurrer was had to a bill on the ground that the invention was not patentable, we think that the demurrer should have been overruled, and that the defendants should have been put to answer the bill. Whether or not the design is new is a question of fact, which, whatever our impressions may be, we do not think it proper to determine by taking judicial notice of the various designs which may have come under our observation. It is a question which may and should be raised by answer and settled by proper proofs. — New York *v.* New Jersey, 137 U. S. 445; 34 L. Ed. 741; 11 S. Ct. 193.

§ 792. Infringement.

The circuit court held that the bill could not be maintained for several infringements by portions of the respondents because they are described as a copartnership. Nevertheless it sets out that they infringed "jointly and severally," so that the reference to them as copartners is merely descriptio personarum, which cannot override a positive allegation. — Hobbs *v.* Gooding, 111 Fed. 403; 49 C. C. A. 414.

Simonds *v.* Hathorn, 93 Fed. 958.

The averment of the bill charged the defendant with infringement "within the said Eastern District of Michigan, and since the first day of January, 1893." It is not fairly open to the construction that the infringement charged began on the 1st day of January, 1893, and has continued ever since. The natural and reasonable construction is that the infringement charged occurred after or subsequent to January 1, 1893, without specifying precisely when. — U.S. Mitts *v.* Detroit, 122 Fed. 863; 59 C. C. A. 589.

Kaolatype *v.* Hoke, 30 Fed. 444; Wycoff *v.* Wagner, 88 Fed. 515.

In some rare instances where the cases seem to have been exceptional, the plaintiff in an infringement suit has been required to specify in limine the claims relied on, but there is no such precedent in this circuit for such an order. Applications therefor were denied by the Circuit Court in Johnson *v.* Columbia and Johnson *v.* National, 106 Fed. 319. — Morton *v.* American, 129 Fed. 916; 64 C. C. A. 367.

The argument rests upon the omission to aver in the bill that infringement occurred "at New York City in the Southern District of New York and elsewhere" — the words "and elsewhere" being omitted. But the defendants denied that they had infringed at New York City or elsewhere, and the case was tried in all respects as if the question were properly presented

by the pleadings. It would be a hardship to all concerned to subject them to the expense and annoyance of a new action when the addition of the two words " and elsewhere " will make the bill criticism proof. — O'Rourke *v.* McMullen, 160 Fed. 933; 88 C. C. A. 115.

§ 793. Laches.

The defense of laches need not even be set up in the pleadings when it is apparent that the court may upon its own motion refuse relief on that ground. — Sullivan *v.* Railroad, 94 U. S. 806; 24 L. Ed. 324.

Laches is a defense which may be made by demurrer, or by plea, or by answer, or presented by argument, either upon a preliminary or final hearing. — Woodmansee *v.* Williams, 68 Fed. 489; 15 C. C. A. 520.

Keyes *v.* Eureka, 158 U. S. 150; McLaughlin *v.* Railway, 21 Fed. 574; Lane *v.* Locke, 150 U. S. 193; Maxwell *v.* Kennedy, 8 How. 222; Walker, 597; Curtis, 440.

§ 794. Multifariousness.

We do not regard a bill multifarious which seeks to enjoin an unauthorized person from using a patented article, and also from using the generic name of that article. — Adam *v.* Folger, 120 Fed. 260; 56 C. C. A. 540.

Animarium *v.* Neiman, 98 Fed. 14; Javos *v.* Fleece, 60 Fed. 622; Weir *v.* Gas Co. 91 Fed. 940; Dennison *v.* Thomas, 94 Fed. 651; Harper *v.* Holman, 84 Fed. 222; U. S. *v.* American, 128 U. S. 315; Oliver *v.* Piatt, 3 How. 333.

§ 795. Notice.

Defendants undertook to prove specific prior use by witness without statutory notice. *Held:* Inadmissible. — Railroad *v.* Stimpson, 14 Pet. 448; 10 L. Ed. 535.

The defendant gave notice of a prior publication by reference merely to a book of some 1300 pages, giving neither page nor topic. Rejected as insufficient. — Silsby *v.* Foote, 14 How. 218; 14 L. Ed. 394.

The notice merely gave the name and place of residence of the person alleged to have had prior knowledge and use; *Held:* that the notice should also have stated where the use was had. — Silsby *v.* Foote, 14 How. 218; 14 L. Ed. 394.

Prior invention cannot be set up and proved, unless properly pleaded under the statute of notice. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

A court order is not required either for the original or an amended notice under the statute. — Teese *v.* Huntington, 23 How. 2; 16 L. Ed. 479.

It is not necessary to state the time, in addition to the person and place, in the statutory notice, or if stated by the defendant, restricted in proof to the time specified. — Phillips *v.* Page, 65 U. S. 164; 16 L. Ed. 636.

When, in addition to the particular town or city, the name and residence of the witness by whom that use is to be proved is also given there is sufficient precision and certainty in the notice. — Wise *v.* Allis, 76 U. S. 737; 19 L. Ed. 784.

Phillips *v.* Page, 24 How. 164.

Nor do we think that a party giving notice is bound to be so specific as to relieve the other from all inquiry or effort to investigate the facts. — Wise *v.* Allis, 76 U. S. 737; 19 L. Ed. 784.

The purpose of the statutory notice is to apprise plaintiff fairly of what he may expect to meet. — Wise *v.* Allis, 76 U. S. 737; 19 L. Ed. 784.
Teese *v.* Huntington, 23 How. 10.

The defense of want of novelty can be raised only upon the statutory notice. — Blanchard *v.* Putnam, 75 U. S. 420; 19 L. Ed. 433.
Corning *v.* Burden, 15 How. 271; Teese *v.* Huntington, 23 How. 10; Agawam *v.* Jordan, 7 Wall. 583; R. R. *v.* Stimpson, 14 Pet. 459; Silsby *v.* Foote, 14 How. 222; Phillips *v.* Page, 24 How. 168.

The defendant must comply with the requirements of the statute to raise the defense of anticipation. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.
Wilton *v.* R. R. 1 Wall. Jr. 195; Teese *v.* Huntington, 23 How. 10.

It is an abuse of the privilege of giving such notice without some reason to suppose some defense can be successfully made and the proofs obtained, as it exposes the complainant to unnecessary expense and trouble in preparing for trial. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Parties defendant, such as infringers, are not allowed in an action at law to set up the defense of a previous invention, knowledge or use of the thing patented unless they have given notice of such a defense 30 days before the time, and have stated in the notice "the names and places of residence of those whom they intend to prove to have possessed a prior knowledge of the thing and where the same had been used;" and the settled practice in equity is to require the respondent, as a condition precedent to such a defense, to give the complainant substantially the same information in his answer. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.
Agawam *v.* Jordan, 7 Wall. 596; Teese *v.* Huntington, 23 How. 10.

In the absence of notice on pleading in equity, evidence to assail novelty cannot be considered. — Eureka *v.* Bailey, 78 U. S. 488; 20 L. Ed. 209.

The statute requiring notice was not intended to apply to cases involving matters of common knowledge. The court can take judicial notice of it and give it the same effect as if it had been set up as a defense in the answer and the proof were plenary. — Brown *v.* Piper, 91 U. S. 37; 23 L. Ed. 200.
Glue Co. *v.* Upton, 6 O. G. 843; Needham *v.* Washburn, 7. O. G. 651.

Parties defendant sued as infringers are not allowed, in an action at law, to set up the defense of a prior invention, knowledge or use of the thing patented unless they have given the statutory notice. — Roemer *v.* Simon, 95 U. S. 214; 24 L. Ed. 384.
R. S. sec. 4920; Seymour *v.* Osborne, 11 Wall. 516; Blanchard *v.* Putnam, 8 Wall. 420.

It is well settled law that the failure to interpose objection before the final hearing is a waiver of the required notice in an equity suit. — Roemer *v.* Simon, 95 U. S. 214; 24 L. Ed. 384.
Brown *v.* Hall. 6 Blatchf. 405.

The requirement as to names and residences of persons having prior knowledge etc. does not include names of witnesses called by the defense to make such proof. — Roemer *v.* Simon, 95 U. S. 214; 24 L. Ed. 384.

Teese *v.* Huntington, 23 How. 2.

Persons sued as infringers in a suit in equity, if they give the required notice in their answer, may prove at the final hearing the same matters in defense to the charge of infringement as those which the defendant, in an action at law, may set up under like conditions. — Bates *v.* Coe, 98 U. S. 31; 23 L. Ed. 68.

Section 4920 R. S. declares that the proofs of previous invention, knowledge or use of the thing patented, may be given upon notice, in the answer of the defendant, stating the names and residences of the persons alleged to have invented, or to have had the prior knowledge of the thing patented, and where and by whom it had been used. The statute does not declare that the names of the witnesses who may be called to testify to such prior invention or use shall be stated in the answer. It is only the names and residences of the persons alleged to have invented or to have had prior knowledge of the thing patented that are required. — Woodbury *v.* Keith, 101 U. S. 479; 25 L. Ed. 939.

Wilton *v.* R. R. 1 Wall. Jr. 195; Many *v.* Jagger, 1 Blatchf. 376; Roemer *v.* Simon, 95 U. S. 218.

When the answer admitted and the proofs showed defendant had made and sold the device of the patent in suit five years, four years of said time being prior to the date of the patent, it was held such answer was sufficient as to notice and the proofs as to prior use. — Anderson *v.* Miller, 129 U. S. 70; 32 L. Ed. 635; 9 S. Ct. 224.

These two patents were not set up in the answer, and cannot, therefore, be availed of as an anticipation to invalidate the claim upon the ground of want of novelty. Grier *v.* Wilt, 120 U. S. 429. But they are admissible in evidence as showing the state of the prior art; and when the court, advised as to the prior art, reaches the conclusion that the improvement on such prior art described in the patent sued on did not embody or require invention, and was not patentable, it is the duty of the court to dismiss the cause on that ground. "The question whether the invention which is the subject-matter in controversy is patentable, or not, is always open to the consideration of the court, whether the point is raised by answer or not." — Jones *v.* Cyphers, 126 Fed. 753; 62 C. C. A. 21.

Slawson *v.* Grand, 107 U. S. 652; Mahn *v.* Harwood, 112 U. S. 358; Hendy *v.* Miners', 127 U. S. 375.

The law is well settled that the defendant to a suit for infringement must give notice in his answer of any defense by way of prior patents, publications, or public use, if he desires to prove any of such defenses to show want of novelty or invention in the patent sued on. Otherwise such defenses are receivable in evidence only to show the state of the art, and to aid in the proper construction of the patent. — Morton *v.* Llewellyn, 164 Fed. 693; C. C. A.

Grier *v.* Wilt, 120 U. S. 412; Vance *v.* Campbell, 1 Black, 427; Railroad *v.* Dubois, 12 Wall. 47; Brown *v.* Piper, 91 U. S. 37; Eachus *v.* Broomall, 115 U. S. 429.

§ 796. Parties — Complainant.

Grants as well as assignments must be in writing, and they must carry the exclusive right under the patent, to make, use and vend to others to be

used, the thing patented, within and throughout some specified district or portion of the U. S. and such right must be exclusive of the grantee, as well as of all others except the grantee. Suits for infringement in such districts, if committed subsequent to the grant, can only be brought in the name of the grantee, as it is clear that no one can maintain such an action until his rights have been invaded, nor until he is interested in the damages to be recovered. — Moore *v.* Marsh, 74 U. S. 515; 19 L. Ed. 37.

Assignee of territorial right, for a particular district, could not bring an action on the patent in his own name; but the Act of Congress having made him a party interested in the patent, it is now equally well settled that he may sue in his own name for invasion of the patent in that territorial district, as no one else is injured by any such infringement. — Moore *v.* Marsh, 74 U. S. 515; 19 L. Ed. 37.

Tyler *v.* Tuel, 6 Cranch, 324; Gayler *v.* Wilder, 10 How. 477; Curt. Pat. 346.

When the patentee has assigned his whole interest, either before or after the patent has issued, the action must be brought in the name of the assignee, because he alone was interested in the patent at the time the infringement took place; but when the assignment is of an undivided part of the patent, the action should be brought for every infringement committed subsequent to the assignment in the joint names of the patentee and assignee, as representing the entire interest. — Moore *v.* Marsh, 74 U. S. 515; 19 L. Ed. 37.

Herbert *v.* Adams, 4 Mas. 15; Curt. Pat. 347; Gayler *v.* Wilder. 10 How. 477; Whittemore *v.* Cutter, 1 Gall. 430; Woodworth *v.* Wilson, 4 How. 712.

Correct interpretation of the words "person or persons interested" is, that the words mean the person or persons interested in the patent at the time when the infringement was committed, which is the cause of action for which the damages may be recovered. — Moore *v.* Marsh, 74 U. S. 515; 19 L. Ed. 37.

Dean *v.* Mason, 20 How. 198.

Licensees must enforce their rights through the name of the patentee (or assignee). — Paper Bag Cases, 105 U. S. 766; 26 L. Ed. 959.

Littlefield *v.* Perry, 88 U. S. 223.

A licensee of a patent cannot bring a suit in his own name at law or in equity, for its infringement by a stranger; an action at law for the benefit of the licensee must be brought in the name of the patentee alone; a suit in equity may be brought by the patentee and the licensee together. — Birdsall *v.* Shaliol, 112 U. S. 485; 28 L. Ed. 768; 5 S. Ct. 244.

Gayler *v.* Wilder, 10 How. 477; Littlefield *v.* Perry, 21 Wall. 205; Paper Bag Cases, 105 U. S. 766.

The objection that the plaintiff is not entitled to maintain this suit because it does not itself manufacture is without force. Its right to sue for the protection of its licensees is unquestionable. — Adams *v.* Tannage, 81 Fed. 178; 26 C. C. A. 326.

That the granting of a license carries with it the right for the licensee to join the licensor as co-complainant, see — Excelsior *v.* Allen, 104 Fed. 553; 44 C. C. A. 30.

Nor is a court of equity divested of its power to decree appropriate and final relief from the fact, if it be a fact, that the patentee has conspired with

the defendant to infringe the rights of the licensee. The former practice of courts of Chancery which required the dismissal of a bill in case of the joinder of complainants whose interests were antagonistic, has given place to a more equitable procedure, which recognizes the power of the court to so arrange the parties to the suit as their interests demand, to make a complainant a defendant, and to decree relief to all parties before it, whether they appear as complainants or defendants so long as they are all the necessary parties to the controversy. — Excelsior *v.* Allen, 104 Fed. 553; 44 C. C. A. 30.

Boughton *v.* Allen, 11 Page 321; Osgood *v.* Franklin, 2 John. Ch. 1; Bowen *v.* Ibley, 1 Edw. Ch. 148; LeFort *v.* Delafield, 3 Edw. Ch. 22; Parkman's Admr. *v.* Aicardi, 34 Ala. 393; Snydam *v.* Dequidre, Har. Rep. 347; U. S. *v.* Union, 98 U. S. 569.

§ 797. Parties — Defendant.

The suit was brought against the company and three individual defendants. The court below limited its decree in favor of the complainant to the joint infringement of all the defendants. We see no sufficient reason, under the present bill, why the defendant Hathorn should not account for his several or individual infringements. We understand this to be the general rule. — Simonds *v.* Hathorn, 93 Fed. 958; 36 C. C. A. 24.

Herring *v.* Gage, Fed. Cas. 6,422; Tatham *v.* Lowber, Fed. Cas. 13,765; New York *v.* American, 42 Fed. 455.

Maxwell was properly enjoined as an infringer by reason of his connection with the two corporations. — National *v.* Polk, 121 Fed. 742; 58 C. C. A. 24.

Rob. Pat. sec. 897; Trent *v.* Risdon, 102 Fed. 635; Toppan *v.* Tiffany, 39 Fed. 420.

An injunction against the corporation restrains all its officers, agents and servants and there is little justification for making these persons defendants except in rare instances where it is shown that they have infringed the patent as individuals or have personally directed infringement. The courts of this circuit have frequently had occasion to criticise this practice and have, in some instances, imposed costs upon the complainant as a penalty for thus subjecting innocent parties to the expense and annoyance of defending themselves against an unwarrantable accusation. (Costs were imposed in this case.) — Hutter *v.* De Q. Bottle, 128 Fed. 283; 62 C. C. A. 652.

Farmers' *v.* Spruks, 119 Fed. 594; Consolidated *v.* Columbian, 79 Fed. 795; Bowers *v.* Atlantic, 104 Fed. 887; King *v.* Anderson, 90 Fed. 500; Greene *v.* Buckley, 120 Fed. 955; Rowbotham *v.* Iron, 71 Fed. 59; Linotype *v.* Ridder, 65 Fed. 853; Howard *v.* Plow, 35 Fed. 743.

The facts recited in the statement of the case satisfy us that the company is simply an incorporation of Duncan. Therefore the corporation should be enjoined, just as its officers, directors, and stockholders would be, if, as individuals and without resorting to the corporate form, they were aiding and abetting Duncan in the infringement. — Siemens-Halske *v.* Duncan, 142 Fed. 157; 73 C. C. A. 375.

Telegraph *v.* Himmer, 19 Fed. 322; Parker *v.* McKee, 24 Fed. 808; Burr *v.* Kimbark, 28 Fed. 574; Burdsall *v.* Curran, 31 Fed. 918; Woodward *v.* Boston, 60 Fed. 283; National *v.* Connecticut, 73 Fed. 491; Daniel *v.* Miller, 81 Fed. 1000; Alvin *v.* Scharling, 100 Fed. 87.

§ 798. Parties — Joinder.

One holding the exclusive right to a specific territory may be joined as party plaintiff in a suit for infringement within his territory in an action

by the holder of the superior title. — Woodworth *v.* Wilson, 4 How. 712; 11 L. Ed. 1171.

It is the rule that none should be made parties plaintiff or defendant in equity who have no interest in the controversy or who cannot be affected by the decree. In cases where the want of interest applies it is equally fatal when applicable to plaintiffs or defendants. In the former case it is fatal to the whole suit; in the latter it is fatal, if taken in due time, only against the defendant improperly joined. Objection ought to be taken by demurrer, for if not so taken, and the court proceeds to a hearing on the merits it will be disregarded, at least if it does not materially affect the propriety of the decree. In the case before us the objection of misjoinder appears nowhere upon the pleadings, and is urged for the first time after final decree. As to this objection, therefore, it comes too late. — Livingston *v.* Woodworth, 15 How. 546; 14 L. Ed. 809.

Story Eq. ch. 4, sec. 231; Raffity *v.* King, VI L. J. 93; Morley *v.* Hawkes, Y. & J. 520; Alywin *v.* Bray, Y. & J. 518.

In an equity suit by the patentee, the court may order the joinder of a licensee. — Birdsall *v.* Shaliol, 112 U. S. 485; 28 L. Ed. 768; 5 S. Ct. 244.

Hammond *v.* Hart, 4 Ban. & A. 111.

The O. S. Co. brought this action against defendant S. P. Co. for infringement in transporting cars made by Whittier, Fuller & Co. which were alleged to infringe complainant's patent. Preliminary injunction issued on $5000 bond filed by complainant. Defendant answered setting up fact of ownership of the cars in Whittier, F. & Co. and the fact that defendant as a common carrier was obliged to transport the cars. Thereupon Whittier, Fuller & Co. petitioned to intervene and defend. Petition was granted and complainant ordered to file a new bond for $20,000. *Held:* We find no difficulty, under the circumstances, in determining that Whittier, Fuller & Co. were properly admitted as defendants in the action, and that the court had authority, under its equitable jurisdiction, to require a new bond of the complainant, to meet the new conditions of the case. — Standard *v.* Southern, 54 Fed. 521; 4 C. C. A. 491.

The patent was assigned conveying the entire right, title and interest of the assignor, but with a license fee provision, and conditions subsequent by which the title might revert to the assignor. The assignor was made a party to the action. On demurrer it was *held:* That the so-called license was an absolute grant, and that the assignor was not a necessary party to the action. — Sichler *v.* Deere, 113 Fed. 285; 51 C. C. A. 242.

It is true that a licensee cannot prosecute a suit in equity in his own name against a third party for infringement, but must at least join the patentee as co-complainant, who may be so joined whether willing or unwilling. — Excelsior *v.* City of Seattle, 117 Fed. 140; 55 C. C. A. 156.

Birdsall *v.* Shaliol, 112 U. S. 485; Littlefield *v.* Perry, 21 Wall. 205; Paper Bag Cases, 105 U. S. 766; Brush *v.* California, 52 Fed. 945.

This is a petition presented after this cause was reached on the regular call of the calendar and is ready for argument, asking that the petitioner be permitted to intervene, and that the cause be remanded to the circuit court to take testimony on the question of complainant's laches. The petitioner was fully informed of the pendency of this action, and declined an opportunity to intervene when the case was pending in the circuit court. The proof is wholly insufficient to warrant the extraordinary relief asked for

by the petitioner, assuming the power of the court to grant such relief. — Thomson-Houston *v.* Western, 158 Fed. 813; 86 C. C. A. 73.

§ 799. Patentability.

The patentability of the device in suit can be attacked without setting it up in an answer. — Hendy *v.* Golden, 127 U. S. 370; 32 L. Ed. 207; 8 S. Ct. 1275.

Dunbar *v.* Myers, 94 U. S. 187; Slawson *v.* Grand, 107 U. S. 649; Mahn *v.* Harwood, 112 U. S. 354.

Want of patentability is a defense, though not set up in an answer or plea. — May *v.* Juneau, 137 U. S. 408; 34 L. Ed. 729; 11 S. Ct. 102.

Brown *v.* Piper, 91 U. S. 37; Dunbar *v.* Myers, 94 U. S. 187; Slawson *v.* Grand, 107 U. S. 649; Hendy *v.* Golden, 127 U. S. 370.

§ 800. Pleas.

As the case was decided on the sufficiency of the plea, its allegations must be taken as true. — Hammond *v.* Mason, 92 U. S. 724; 23 L. Ed. 767.

The only issue upon the plea and replication was as to the sufficiency of the testimony to support the plea as pleaded; and as the plea was not supported by the testimony, it should be overruled, and the defendant ordered to answer the bill. — Dalzell *v.* Dueber, 149 U. S. 315; 37 L. Ed. 749; 13 S. Ct. 886.

Stead *v.* Course, 8 U. S. 403; Farley *v.* Kittson, 120 U. S. 303; Equity rule. 34.

The hearing was upon the plea, a general replication, and the evidence taken in support of the plea. Such a plea is a special answer to the bill, and nothing is put in issue, so far as the plea extends, but the truth of the matter pleaded. — Hartz *v.* Cleveland, 95 Fed. 681; 37 C. C. A. 227.

Farley *v.* Kittson, 120 U. S. 303; Dalzell *v.* Mfg. Co. 149 U. S. 315.

By setting the pleas down for argument the complainant has admitted the facts but not the conclusions pleaded therein. — General *v.* New England, 128 Fed. 738; 63 C. C. A. 448.

Farley *v.* Kittson, 120 U. S. 303; Burrell *v.* Hackley, 35 Fed. 833.

The establishment of a license was all that was required to constitute a defense, and there was no necessity for pleading more than that. — Barber *v.* National, 129 Fed. 370; 64 C. C. A. 40.

That the defense that the patent was illegally issued may be raised by plea, see — Western *v.* North, 135 Fed. 79; 67 C. C. A. 553.

That the defense of noninfringement cannot be raised by plea, see — Western *v.* North, 135 Fed. 79; 67 C. C. A. 553.

§ 801. Profert.

"The weight of authority is that the profert of any recorded instrument is equivalent to annexing a copy. And if a party avers that he holds title to anything by a certain instrument which he annexes, and that that instrument both grants the title and describes the full extent of the rights conferred, it is equivalent to an averment that he has title to all the rights

specifically described in such instrument." — Germain *v.* Wilgus, 67 Fed. 597; 14 C. C. A. 561.

Quoting American *v.* Southern, 34 Fed. 803.

Bogart *v.* Hinds, 25 Fed. 484; Post *v.* Hardware, 26 Fed. 618.

If it were so, such profert were unnecessary to be made, as none of the assignments of the patent referred to are required to be under seal. If profert is made of any document, of which it is not necessary, it will be treated as mere surplusage, and will not entitle the defendant to oyer. Walk. Pat. sec. 433. The complainant was entitled to stand upon its prima facie case as to title, and the failure to set out the assignments referred to could not, under the circumstances, be taken advantage of by demurrer. — Atherton *v.* Atwood-Morrison, 102 Fed. 949; 43 C. C. A. 72.

§ 802. Replication.

Where replication was not filed, but proofs were taken and the case treated as at issue the court on appeal will not seriously consider such omission. — Tilghman *v.* Procter, 102 U. S. 707; 26 L. Ed. 279.

The replication cannot perform the function of exceptions. A replication recognizes the sufficiency of the answer and takes issue on the facts charged. — Robinson *v.* American, 135 Fed. 693; 68 C. C. A. 331.

§ 803. Sufficiency.

No objection was made to the sufficiency of the pleading when the final decree was stipulated in evidence. We are well satisfied that thereby the appellant waived the defective nature of the pleading, if the plea is to be taken as a plea of res adjudicata. — Bradley Mfg. Co. *v.* Eagle Mfg. Co. 58 Fed. 721; 7 C. C. A. 442.

Parties are no longer turned out of court because their i's are not dotted or their t's crossed, and courts are diligent rather to search for the substantial justice of a case, than to insist upon strict conformity to pleading. And, while the rule remains, courts at the present day are not inclined to permit parties, for the first time upon appeal, to assert the objection that the testimony, which has been taken without objection in the court below, supports an issue not comprehended within the allegations of the pleading. — Bradley Mfg. Co. *v.* Eagle Mfg. Co. 58 Fed. 721; 7 C. C. A. 442.

Wasatch *v.* Crescent, 148 U. S. 293.

The bill states the number of the patent, and the answer denies that the complainant was the original and first inventor of the improvement specified in the letters patent so numbered; thus making certain the invention spoken to. It is a sufficient denial of the novelty of the alleged invention. — Robinson *v.* American, 135 Fed. 693; 68 C. C. A. 331.

§ 804. Suit on Plurality of Patents.

Several patents may be joined and sued on together when they are conjointly related. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

More than one patent may be included in one suit. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

Gill *v.* Wells, 22 Wall. 27.

In an action to annul two patents, the Government may join them in one suit where they relate to the same subject matter and where the defendants and their interests are the same. — United States *v.* Am. Bell, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

The bill assails two patents, issued nearly a year apart, but they were issued to the same party and relate to the same subject, the latter patent being supposed to be for an improvement upon the earlier one. Both are held by the same defendant, and are used by it in the same operations. The principle of multifariousness is very largely in evidence, and is more often applied where two parties are attempted to be brought together by a bill in chancery who have no common interest in the litigation, whereby one party is compelled to join in the expense and trouble of a suit in which he and his co-defendants have no common interest, or in which one party is joined as complainant with another party with whom in like manner he either has no interest at all, or no such interest as requires the defendant to litigate it in the same action.

In the present case there is no such difficulty. The Company and Mr. Bell are the only parties defendant, and their interest in sustaining the patents is the same. So also there is no such diversity of the subject matter embraced in the assault on the two patents that they cannot be conveniently considered together, and although it may be possible that one patent may be sustained and the other may not, yet it is competent for the court to make a decree in conformity with such finding. It seems to us in every way appropriate that the question of the validity of the two patents should be considered together. — United States *v.* Am. Bell, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

Oliver *v.* Piatt, 44 U. S. 333; Walker *v.* Powers, 104 U. S. 245.

A failure of the complainant either to establish its title to one of the patents, or show an infringement of one or more of the patents, would not affect its right to an injunction and an accounting with respect to the other patents. — Kansas City *v.* Devol, 81 Fed. 726; 26 C. C. A. 578. Reversed, 84 Fed. 463.

Nourse *v.* Allen, Fed. Cas. 459; Gillespie *v.* Cummings, Fed. Cas. 5,434; Herman *v.* Brooklyn, Fed. Cas. 6703; Seymour *v.* Osborne, 11 Wall. 516; Hayes *v.* Dayton, 8 Fed. 702.

§ 805. Supplemental Bills.

An application may be entertained by the appellate court, after judgement and the issue of mandate and after the close of the term, subject to certain limitations arising out of laches. — In re Gamewell, 73 Fed. 908; 20 C. C. A. 111.

Ricker *v.* Powell, 100 U. S. 109.

That after decision and decree on appeal the Appellate Court may, upon motion, pass down an order for the Circuit Court to allow a party to file a supplemental bill, see — Bliss *v.* Reed, 106 Fed. 314; 45 C. C. A. 304.

Steel Co. *v.* Vermilya, 90 Fed. 493.

We deem this the better practice (to allow a supplemental bill rather than supplemental proof of infringement of other types before the master) because, if an accounting before the master is extended to devices that have not been adjudged by the court to be infringements, a very great and unnecessary consumption of time and burden of costs may be imposed upon the parties. — Murray *v.* Orr, 153 Fed. 369; 82 C. C. A. 445.

§ 806. Title.

An averment of title in the complainant must necessarily be made, and is the necessary foundation for all rights asserted or litigated by the complainant. It is an averment without which complainant has no proper standing in court. It matters not whether the title be that of the patentee, derived directly from the grant made by the government, or that of an assignee of the patentee or the assignee of an assignee. In either case it is the statement of a prima facie qualification, to institute the suit, and such title, whether direct to the patentee, or derivative from him by assignment or assignments, is the creature of the patent law, and not of the common law; and, whether admitted or attacked by the opposing party, the questions raised are raised under the patent laws, and are, therefore, within the meaning of the Revised Statutes of the United States, justiceable in the circuit courts. — Atherton *v.* Atwood-Morrison, 102 Fed. 949; 43 C. C. A. 72.

§ 807. Miscellaneous Rules of Practice and Pleading.

The principles involved having been decided upon their merits in a previous case, this court will not review the subject upon mere technical points of pleading. — Smith *v.* Ely, 15 How. 137; 12 L. Ed. 634.

An action for infringement may be tried before a referee by consent. — Heeker *v.* Fowler, 69 U. S. 123; 17 L. Ed. 259.

Yates *v.* Russell, 17 Johns. 468; Hall *v.* Mister, Salk. 84; Bank *v.* Widner, 11 Paige Ch. 533; Green *v.* Pathen, 13 Wend. 295; Caldwell, Arb. 359; Felter *v.* Heath, 11 Wend. 482; Graves *v.* Fisher, 5 Me. 70; Miller *v.* Miller, 2 Pick. 570; Com. *v.* Props. 7 Mass. 417.

Proofs without the requisite allegations are as unavailing as such allegations would be without the proofs requisite to support them. — Rubber *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

Foster *v.* Goddard, 1 Black, 518; Tripp *v.* Vincent, 3 Barb. Ch. 613; Boone *v.* Chiles, 10 Pet. 178; Harrison *v.* Nixon, 9 Pet. 483.

Persons owning reissued letters patent, and seeking redress from those who have invaded their exclusive rights, are not obliged to introduce in evidence the surrendered patent, and if the old patent is not introduced by the party sued, he cannot have the benefit of such defense. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

It is possible that this objection to the evidence would have been available if it had been taken in season, (that the prior invention set up in the answer did not comply with the statute). But we are not referred to anything to show that it was taken in the court below or before the examiner when the witnesses were examined. In Roemer *v.* Simon, 95 U. S. 220, we held that the failure to interpose such objection before the final hearing is a waiver of the required notice in an equity suit. — Loom Co. *v.* Higgins, 105 U. S. 580; 26 L. Ed. 1177.

Practice under our rules defined and distinguished from the English rule. — Thompson *v.* Wooster, 114 U. S. 104; 29 L. Ed. 105; 5 S. Ct. 788.

It was not necessary to show a recovery at law to warrant jurisdiction in equity, for an injunction and account. — McCoy *v.* Nelson, 121 U. S. 484; 30 L. Ed. 1017; 7 S. Ct. 1000.

Root *v.* Railway, 105 U. S. 189.

It is a mistake to suppose that in stating the facts which constitute a fraud, where relief is sought in a bill in equity, all the evidence which may be adduced to prove the fraud must be recited in the bill. It is sufficient if the main facts or incidents which constitute the fraud against which relief is desired shall be fully stated, so as to put the defendant upon his guard and apprise him of what answer may be required of him. — United States *v.* Am. Bell, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

Story Eq. Pl. sec. 252; Harding *v.* Handy, 24 U. S. 103; St. Louis *v.* Knapp, 104 U. S. 658.

It is doubtless necessary, when special pleading is required, that a former recovery should be pleaded in bar. But if the record be properly before us in evidence, although not well pleaded, we are not only at liberty to consider it, but are bound to give full effect to it. — Bradley *v.* Eagle, 57 Fed. 980; 6 C. C. A. 661.

The matter charged is merely additional evidence in support of the issue presented and determined in the former suit. It was competent evidence in that suit without any statement of it in the pleading, if the objection of the statute was not timely urged. The proposed evidence comes too late to be availing. The decree of a court is not the less conclusive because a party has failed to produce all the evidence at command, or because of newly-discovered evidence. — Bradley *v.* Eagle, 57 Fed. 980; 6 C. C. A. 661.

Loom Co. *v.* Higgins, 105 U. S. 580; Zane *v.* Soffe, 110 U. S. 200.

It is said, and is apparently true, that the parties did not wish to raise this question (estoppel). But that, if successful, would, in effect, result in submitting to the court a moot patent cause, which, on account of the public interests involved, the court is ordinarily disinclined to permit. As a general rule, the court, before passing on the question of patentability, is entitled to require that it should be properly presented by parties legally competent and interested to do it. — Woodward *v.* Boston, 63 Fed. 609; 11 C. C. A. 353.

A settlement made after final decree should be brought before the court in supplemental proceedings in order to be a bar to a final decree. — Marden *v.* Campbell, 79 Fed. 653; 25 C. C. A. 142.

See, Gamewell *v.* Municipal, 77 Fed. 490.

The complainant has not pleaded the estoppel he claims, and defendant was without the notice in the pleadings to which he was entitled. Notwithstanding the 45th equity rule, the complainant was at liberty, and should have availed himself thereof, to plead by way of anticipation the estoppel to the defense of non-validity of the patent. — Newark *v.* Ryan, 102 Fed. 693; 42 C. C. A. 594.

It, however, took another course that was clearly open to it to take, and that was to state the defense of this pretended assignment by way of anticipation in the bill, in order that it might make special answer thereto, and thus avoid the disadvantageous position in which it would be placed by the forty-fifth equity rule, by which special replications are prohibited. If the bill sets forth a case within the jurisdiction of the court, the jurisdiction cannot be ousted by the anticipation and denial of possible defenses that may or may not be made. Even if the title of complainant, as set forth in the bill, were put in issue by plea or answer, the question would still be one arising under the patent laws of the United States. Such an issue would be incidental and collateral to the main purpose of the suit. In this case the

patentee and original assignor is not a party to the suit, and the suit could not, therefore, be said to be upon the contract with him. This is not a suit to enforce a contract or to avoid one, but is a claim of ownership under the laws of the United States, which is properly justiceable in the federal circuit courts. — Atherton *v.* Atwood-Morrison, 102 Fed. 949; 43 C. C. A. 72.

If, on the hearing of the motion, or after its decision, the plaintiff had made timely offer to amend the petition by alleging that the acts of infringement complained of were committed in the district in which the suit was brought, the court should have allowed the amendment. — Shaw *v.* American, 108 Fed. 842; 48 C. C. A. 68.

The discovery feature of the bill will be disregarded; first, because an answer under oath is expressly waived in the bill; second because the bill propounds no interrogatories. — Excelsior *v.* City of Seattle, 117 Fed. 140; 55 C. C. A. 156.

Huntington *v.* Saunders, 120 U. S. 78; 6 Enc. Pl. & Prac. 732.

That the requirement of Sec. 4921 and amendment of Mar. 3, 1897, does not require that the complainant in equity or the plaintiff at law shall specially allege that the infringement charged took place during the six years immediately preceding, see — Peters *v.* Hanger, 134 Fed. 586; 67 C. C. A. 386.

We hold that where, in a suit in equity as in this case, testimony as to facts, upon which an estoppel is contended for, is introduced, not only without objection but contentious testimony disputing such facts is produced on the other side, the contention for an estoppel may be made at the hearing without having been pleaded. — Standard *v.* Arrott, 135 Fed. 750; 68 C. C. A. 388.

The fact that an invention was not in public use or on sale in this country for more than two years prior to the application for the patent is an indispensable condition to its validity, and an averment of that fact is essential to the statement of a good cause of action for its infringement. — Hayes-Young *v.* St. Louis, 137 Fed. 80; 70 C. C. A. 1.

R. S. sec. 4886; Walker on Pat. sec. 425; Krick *v.* Jansen, 52 Fed. 823; Nathan *v.* Craig, 47 Fed. 522; Blessing *v.* Copper, 34 Fed. 753.

We dismiss without notice other partial defenses which are not established by the evidence, or which if sustained by any proof, were not pleaded. Rubber Co. *v.* Goodyear, 9 Wall. 788. — Indiana *v.* Case, 154 Fed. 365; 83 C. C. A. 343.

Assuming that the defendant, having alleged and attempted to establish the invalidity of the patent, is in a position to claim a license under it, we find no evidence which convinces us that, as to the digesters in controversy, such a license was given. — American *v.* DeGrasse, 157 Fed. 660; 87 C. C. A. 260.

PRIORITY.

General Statement § 808
Evidence § 809 (*see* § 288)
Interference § 810 (*see* § 580)
Reduction to Practice § 811 (*see* § 860)
Miscellaneous Holdings § 812
See — Anticipation § 58; *Divisional Patenting* § 348; *Double Patenting* § 356; *Evidence* §§ 389–93; *Experiment* § 412; *Foreign Patent* § 423; *Improvement* § 439; *Interferences* § 580; *Interfering Patents* § 586; *Invention* § 613; *Reduction to Practice* § 860

§ 808. General Statement.

Priority is a question arising between two pending applications, a pending application and an issued patent, or between two issued patents. The first two conditions are subjects for interference proceedings; the third is a condition which may be met either by an action under 4918 R. S. (see *Interfering Patents*, § 587), or it may be met and settled in an action for infringement. The subject of interference has been considered under §§ 582–585.

§ 809. Evidence.

An invention relating to machinery may be exhibited in a drawing or in a model, so as to lay the foundation of the claim to priority, if it be sufficiently plain to enable those skilled in the art to understand it. — Loom Co. *v.* Higgins, 105 U. S. 580; 26 L. Ed. 1177.

After defendant had introduced in evidence earlier patents, it was proper for plaintiff to show that prior to the date of any of them he had reduced his invention to a working form. — St. Paul *v.* Starling, 140 U. S. 184; 35 L. Ed. 404; 11 S. Ct. 803.

Elizabeth *v.* Nicholson, 97 U. S. 126; Webster *v.* Higgins, 105 U. S. 580.

Where a patent is introduced in suit showing with certainty the date of its publication and prior to the date of the patent in suit, it is incumbent upon complainant to show, if not with equal certainty, yet to the satisfaction of the court that the invention of the patent in suit preceded that date. — Clark *v.* Willimantic, 140 U. S. 481; 35 L. Ed. 521; 11 S. Ct. 846.

St. Paul *v.* Starling, 140 U. S. 184.

The defendant's patent having been issued before that of the complainant, upon an application filed in advance of the latter's application, the burden of proof is upon complainant to establish a prior use of the machine by a preponderance of testimony over that of defendant to the contrary. — Ashton *v.* Coale, 52 Fed. 314; 3 C. C. A. 98.

If the evidence in its favor were fortified by the presumption of validity afforded by the patent in ordinary cases, we might think it right that that should turn the scale, and that this claim in the patent should be held valid. But the presumption does not apply in such circumstances, and the burden of proof is on the other side. — Michigan *v.* Consolidated, 67 Fed. 121; 14 C. C. A. 232.

Eagleton *v.* West, 2 Fed. 774; Eagleton *v.* West, 111 U. S. 490.

§ 810. Interference.

Is controlling in a subsequent suit between same parties in absence of other thoroughly convincing testimony. — Morgan *v.* Daniels, 153 U. S. 120; 38 L. Ed. 657; 14 S. Ct. 772.

The complainant withdrew from the interference proceeding, permitted the contestant to make his case, and took a license from the contestant. We regard it as an admission of the contestant's priority and his consequent right to a patent. — Shoemaker *v.* Merrow, 61 Fed. 945; 10 C. C. A. 181.

It may be observed, too, that the features of the later patents are all described and illustrated in the patent to Barter, a copy of which is made an exhibit in the bill. If, therefore, they were not included in the interference (with Barter) and did not so become the established property of Smith under

the three patents mentioned (the prior patent in interference) then they belong to Barter, if included in his claims, and if not to him, then to the public, because of his failure to claim them. — Russell *v.* Kern, 69 Fed. 94; 16 C. C. A. 154.

§ 811. Reduction to Practice.

It is impossible to examine them, and look at the process and the machinery and the results of each, so far as the facts are before us, without perceiving at once the substantial and essential difference between them and the decided superiority of the one invented by Morse (This was a comparison of the alleged foreign devices with those of Morse; and the line of reasoning here pursued is substantially the same as that in the Telephone Cases, 126 U. S. 1, in comparing Bell and Reis.) — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

He is the first inventor and entitled to the patent, who, being an original discoverer, has first perfected and adapted the invention to actual use. — Whiteley *v.* Swayne, 74 U. S. 685; 19 L. Ed. 199.

Curt. Pat. 43 notes.

He is the first inventor in the sense of the patent law, and entitled to a patent for his invention, who first perfected and adapted the same to use, and it is well settled that until the invention is so perfected and adapted to use it is not patentable. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Washburn *v.* Gould, 3 Story, 122; Cahoon *v.* Ring, 1 Cliff. 612.

We do not doubt that Drawbaugh may have conceived the idea that speech could be transmitted to a distance by electricity and that he was experimenting upon the subject; but to hold that he had discovered the art of doing it before Bell did would be to construe testimony without regard to "the ordinary laws that govern human conduct." — Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

Atlantic *v.* Brady, 107 U. S. 192.

In the law of patents it is the last step that counts. — Washburn *v.* Beat Em All, 143 U. S. 275; 36 L. Ed. 154; 12 S. Ct. 443.

Loom Co. *v.* Higgins, 105 U. S. 580; Safety Valve Co. *v.* Crosby, 113 U. S. 157; Smith *v.* Goodyear, 93 U. S. 486; Magowan *v.* N. Y. 141 U. S. 332.

It is obvious that the man who first reduces an invention to practice, is prima facie the first and true inventor, but that the man who first conceives, and, in a mental sense, first invents a machine, art or composition of matter, may date his patentable invention back to the time of its conception, if he connects the conception with its reduction to practice by reasonable diligence on his part, so that they are substantially one continuous act. The burden is on the second reducer to practice to show the prior conception, and to establish the connection between that conception and his reduction to practice by due diligence. It has sometimes been held, in the decisions in the patent office, that the necessity for diligence on the part of the first conceiver does not arise until the date of the second conception; but this, we think, cannot be supported on principle. — Christie *v.* Seybold, 55 Fed. 69; 5 C. C. A. 33.

Rob. Pat. sec. 384–386; Millward *v.* Banes, 11 O. G. 1060; Christie *v.* Seybold, 54 O. G. 957; Bedford *v.* Hunt, 1 Mason, 302; Agawam *v.* Jordan, 7 Wall. 583; Whiteley *v.* Swayne, 7 Wall. 685; Reed *v.* Cutter, 1 Story, 590; White *v.* Allen, 2 Cliff. 224; Wright *v.* Postal, 44 Fed. 352.

Having thus abandoned any attempt to make his idea practically available and to develop his theory, in fact, the subsequent inventor conceived the idea, embodied it in means by which it could be carried out, proceeded to make articles, and thereby first perfected it, and is entitled to be recognized as the real inventor. — Ecaubert *v.* Appleton, 67 Fed. 917; 15 C. C. A. 73.

Woolen *v.* Jordan, 7 Wall. 583; Whiteley *v.* Swayne, 7 Wall. 687; Reed *v.* Cutter, 1 Story, 590; Howe *v.* Underwood, 1 Fish. P. C. 166.

If the inventor conceived the improvements, and actually gave such substantial expression to the invention as that, without further exercise of the inventive faculty, one familiar with the construction and operation of the old machine could construct a new machine embodying the novel features, and made a full disclosure of the same to a subsequent inventor, the latter is not entitled to the attitude of one whose conception is later, but who first constructed an organized machine, and first applied for a patent. — Standard *v.* Peters, 77 Fed. 630; 23 C. C. A. 367.

It was said by this court in Christie *v.* Seybold, heretofore cited:

"That the man who first reduces an invention to practice is prima facie the first and true inventor, but that the man who first conceives, and in a mental sense, first invents, a machine, art, or composition of matter, may date his patentable invention back to the time of its conception, if he connects the conception with its reduction to practice by reasonable diligence on his part, so that they are substantially one continuous act. The burden is on the second reducer to practice to show the prior conception, and to establish the connection between that conception and his reduction to practice by proof of due diligence."

That burden may be met by the exhibition of drawings, and by oral explanations of his conception antedating the first reduction to practice by another. — Standard *v.* Peters, 77 Fed. 630; 23 C. C. A. 367.

Railroad *v.* Stimpson, 14 Pet. 448; Reed *v.* Cutter, Fed. Cas. 11,645; McCormick *v.* Minn. 42 Fed. 152.

If ineffectual efforts were made to give the idea form, through drawings, models, or machines, but were abandoned before reaching such a stage of completion as to require only ordinary mechanical skill to carry the conception to success, the claim of priority of invention could not be sustained against a later independent conception, carried into practical form at an earlier date. — Standard *v.* Peters, 77 Fed. 630; 23 C. C. A. 367.

Reed *v.* Cutter, Fed. Cas. No. 11,645.

The failure of an inventor to push his invention to completion at an earlier date or file an application for a patent does not avail a subsequent reducer to practice and applicant for a patent who derived his knowledge of the invention from the prior inventor. — Standard *v.* Peters, 77 Fed. 630; 23 C. C. A 367.

For a full, complete and detailed statement of the law upon this subject, see the quotation under § 860 from Automatic *v.* Pneumatic, 166 Fed. 288; C. C. A.

§ 812. Miscellaneous Holdings.

When defendant claimed to have invented the device in suit, not having made an application for a patent, the right of the complainant to his patent is not disturbed even by priority of invention by the defendant unless he could show more than two years public use prior to plaintiff's application. — Loom Co. *v.* Higgins, 105 U. S. 580; 26 L. Ed. 1177.

The date of application is controlling over two applications made by the same inventor, and date of application and not date of patent determines legal effect of the two patents. — Washburn *v.* Beat Em All, 143 U. S. 275; 36 L. Ed. 154; 12 S. Ct. 443.

The fact that a subsequent inventor devised the same thing without knowledge of the former invention avails nothing in view of R. S. sec. 4884–4886. — United States *v.* Berdan, 156 U. S. 552; 39 L. Ed. 530; 15 S. Ct. 420.

Rob. on Pat. sec. 58.

Faure's French patent was dated Oct. 20, 1880, and, inasmuch as he was a citizen of France, he is not permitted to claim his invention before that date, as against a citizen of the United States, who, being also an original inventor, subsequently received a patent for his own invention in this country. — Elec. *v.* Brush, 52 Fed. 130; 2 C. C. A. 682.

Brown's disclaimer, in taking his patent, of itself, is a sufficient answer to the claim now made in his favor. — Brown *v.* Stonemetz, 58 Fed. 571; 7 C. C. A. 374.

If it is permissible, as contended, to maintain his patent upon evidence, dehors the proceedings in the patent office, that he had made the invention at an earlier date than is to be presumed from his application and patent, so as to carry it back to antedate the public use, the proof should be clear and unequivocal that he was the original inventor. — Michigan *v.* Consolidated, 67 Fed. 121; 14 C. C. A. 232.

Eagleton *v.* West, 2 Fed. 774; Eagleton *v.* West, 111 U. S. 490; Robinson, 1026 n. 14.

Where a disclaimer was filed with special reference to a pending application in favor of such application, such disclaimer establishes priority of invention of the matter disclaimed in favor of the application referred to, see North Jersey *v.* Brill, 134 Fed. 580; 67 C. C. A. 380.

PROCESS.

General Statement § 813
Claims § 814 (*see* § 184)
Definitions § 815
Equivalents § 816 (*see* § 373)
Mechanical § 817
Old Elements, New Result § 818
Patentability § 819
Process and Product
  Claims for § 820 (*see* § 184)
  Patentability § 821
Miscellaneous Rulings § 822
See — Anticipation §§ 100–2; *Art* § 146; *Claims* § 243; *Composition of Matter* § 264; *Equivalents* § 373; *Infringement* §§ 518–20; *Invention* §§ 676–7, 685–8; *Machine and Process* § 770; *Manufacture* § 772; *Secret Process or Machine* § 897; *Specification* § 914

§ 813. General Statement.

There never has been any question as to the patentability of a process. While the statute does not employ the term, undoubtedly the terms "art" and "manufacture," as used in Sec. 4886, are sufficient. The definitions found under § 815 will be found unsatisfactory. Probably those found in Cochrane *v.* Deener and in Tilghman *v.* Proctor are the most satisfactory. Since the decision of Expanded *v.* Bradford (see § 817), mechanical processes are patentable, provided that the process is independent of any particular mechanism for carrying it out; otherwise the rule of Westinghouse *v.* Boyden

(see § 686) is controlling, and a purely mechanical method is patentable only as a mechanical combination.

Rulings bearing on this subject will be found under *Infringement — Process*, and *Invention — Process*.

§ 814. Claims.

Where the patent is for a specific process, not being generic, it must be shown that the defendants used all the different steps of that process, or there could be no infringement. — Royer *v.* Coupe, 146 U. S. 524; 36 L. Ed. 1073; 13 S. Ct. 166.

Merely to describe the use of heated acid, without any information whatever as to the extent of the required dilution of the acid, was to add nothing to the stock of common knowledge. Mitchell's invention, it will be observed, rested upon an original discovery, and he was bound to disclose fully to the public, in and by his patents, his modus operandi. Upon this the provisions of section 4888 of the Revised Statutes are imperative. — Chemical *v.* Raymond, 71 Fed. 179; 18 C. C. A. 31.

Wood *v.* Underhill, 5 How. 1; Tyler *v.* Boston, 7 Wall. 327; Electric *v.* McKeesport, 73 O. G. 1289.

§ 815. Definitions.

The invention related to the casting of cylinders. By constructing a tangential hole or gate a centrifugal action was produced, carrying the heavy iron to the periphery and the dross to the center. This was clearly a process as all of the devices employed were old. — McClurg *v.* Kingsland, 1 How. 202; 11 L. Ed. 102.

A new process is usually the result of discovery; a machine of invention. — Corning *v.* Burden, 15 How. 252; 14 L. Ed. 683.

An art may require one or more processes on machines in order to produce a certain result or manufacture. The term "machine" includes every mechanical device or combination of mechanical powers and devices to perform some function and produce a certain effect or result. But where the effect or result is produced by chemical action, by the operation or application of some element or power of nature, or of one substance to another, such modes, methods or operations are called processes. — Corning *v.* Burden, 15 How. 252; 14 L. Ed. 683.

The Whitney process for annealing car wheels, though consisting of several parts, is a process, and not a mere combination. — Mowry *v.* Whitney, 81 U. S. 620; 20 L. Ed. 860.

That a process may be patentable, irrespective of the particular form of the instrumentality used, cannot be disputed. If one of the steps of a process be that a certain substance is to be reduced to a powder, it may not be at all material what instrument or machinery is used to effect that object, whether a hammer, a pestle and mortar, or a mill. Either may be pointed out; but if the patent is not confined to that particular tool or machine, the use of the others would be an infringement, the general process being the same. A process is a mode of treatment of certain materials to produce a given result. It is an act or a series of acts, performed upon the subject matter to be transformed and reduced to a different state or thing. If new and useful it is just as patentable as is a piece of machinery. In the language of the patent law, it is an art. The machinery pointed out as suitable to

perform the process may or may not be new or patentable; whilst the process itself may be altogether new; and produce an entirely new result. The process requires that certain things should be done with certain substances, and in a certain order; but the tools to be used in doing this may be of secondary consequence. — Cochrane *v.* Deener, 94 U. S. 780; 24 L. Ed. 139.

That a patent can be granted for a process, there can be no doubt. The patent law is not confined to new machines and new compositions of matter, but extends to any new and useful art or manufacture. A manufacturing process is clearly an art, within the meaning of the law. Goodyear's patent was for a process, namely, the process of vulcanizing India rubber by subjecting it to a high degree of heat when mixed with sulphur and a mineral salt. The apparatus for performing the process was not patented, and was not material. The patent pointed out how the process could be effected, and that was deemed sufficient. Nelson's patent was for the process of applying the hot blast to furnaces by forcing a blast through a vessel or receptacle situated between the blowing apparatus and the furnace, and heated to a red heat; the form of the heated vessel being stated by the patent to be immaterial. These patents were sustained after the strictest scrutiny and against the strongest opposition. — Tilghman *v.* Proctor, 102 U. S. 707; 26 L. Ed. 279.

Corning *v.* Burden, 56 U. S. 267; Nelson *v.* Thompson, Web. P. C. 275, 371; Household *v.* Nelson, Web. P. C. 715; O'Reilly *v.* Morse, 56 U. S. 62.

A patent for a process and a patent for an implement or a machine are very different things. Where a new process produces a new substance, the invention of the process is the same as the invention of the substance, and a patent for the one may be reissued so as to include both, as was done in the case of Goodyear's vulcanized rubber patent. But a process and a machine for applying the process are not necessarily one and the same invention. They are generally distinct and different. — James *v.* Campbell, 104 U. S. 356; 26 L. Ed. 786.

Powder *v.* Powder, 98 U. S. 126.

The doctrine which is applicable to a machine patent is of a kindred character with that applied in this country and in England to a patent for a process. — Morley *v.* Lancaster, 129 U. S. 263; 32 L. Ed. 715; 9 S. Ct. 299.

McCormick *v.* Talcott, 61 U. S. 402; Chicago *v.* Sayles, 97 U. S. 554; Clough *v.* Barker, 106 U. S. 166; Duff *v.* Sterling, 107 U. S. 636; Consolidated *v.* Crosby, 113 U. S. 157.

And comparing,

Tilghman *v.* Proctor, 102 U. S. 707; Nelson *v.* Hartford, 1 Web. P. C. 295; O'Reilly *v.* Morse, 56 U. S. 62. 125; Curtis *v.* Platt, (note) L. R. 3 Ch. Div. 134; Badische *v.* Levinstein, L. R. 24 Ch. Div. 156.171; Jupe *v.* Pratt, 1 Web. P. C. 146; Household *v.* Nelson, 1 Web. P. C. 685; Proctor *v.* Bennis, L. R. 36 Ch. Div. 740; Clark *v.* Adie, L. R. 2 App. Cas. 315.320.

§ 816. Equivalents.

When substitution is not infringement, see Seabury *v.* Am Ende, 152 U. S. 561; 38 L. Ed. 553; 14 S. Ct. 683.

The patentee of an invention of a process is entitled to the benefit of all which his process will accomplish. — Cowles *v.* Lowrey, 79 Fed. 331; 24 C. C. A. 616.

If a metallic salt of any kind was previously used, the substitution of another metallic salt which produced the same result would be the employment merely of an equivalent. — National *v.* New England, 153 Fed. 184; 82 C. C. A. 359.

§ 817. Mechanical.

That a claim for a mechanical process cannot be maintained, see — Westinghouse *v.* Boyden, 170 U. S. 537; 42 L. Ed. 1136; 18 S. Ct. 707.

The utterances of the Supreme Court upon the question of whether or not a mechanical process is patentable are not in clear harmony; but it would seem that processes, which are to be effected wholly by mechanical means, in order to be patentable must be capable of being distinguished from the method of operation or mere function of the mechanism necessary for their accomplishment. — Appleton *v.* Star, 60 Fed. 411; 9 C. C. A. 42.

Corning *v.* Burden, 15 How. 267; O'Reilly *v.* Morse, 15 How. 62; Tilghman *v.* Proctor, 102 U. S. 707; Lawther *v.* Hamilton, 124 U. S. 1; Cochrane *v.* Deener, 94 U. S. 788; Brown *v.* Piper, 91 U. S. 37.

The process is purely mechanical. The devices and machinery necessary for its accomplishment are illustrated by drawings and minutely described in the specification. The application for the patent was rejected in the first instance on the ground that "the alleged method is, as presented, the necessary function or operation of the mechanism described," and notwithstanding the amendments made we are of opinion that the objection was not obviated, and that the patent should not have been granted. In Appleton *v.* Star, 60 Fed. 411 where it was necessary to consider the question of the patentability of mechanical processes, we were unable to deduce from decided cases a definite rule; but whatever uncertainty there had been, or lack of harmony in the dicta and decisions of the Supreme Court, on the subject, was removed by the recent opinion of that court in Locomotive *v.* Medart. —. Wells *v.* Henderson, 67 Fed. 930; 15 C. C. A. 84.

Corning *v.* Burden, 15 How. 252.

The method may be practised by the employment of any means adapted to the purpose, and then known to the art, or which might thereafter become known. To be sure, if the mechanical means employed are the subject of a patent, the party who uses the process may have to secure the right to use the patented method. Assuming for the moment that claim 2 was for a combination of generic means, such a claim would cover all known means of the kind enumerated. And it would cover all equivalents which might thereafter be discovered by the ordinary skill of the art, and were not the fruit of invention; and it would dominate the latter, if the latter was of an improvement merely of the means covered by the former invention. But the invention of means hitherto unknown would be an independent invention, not covered by the patent, and, according to the well-settled rule, would of itself be entitled to a patent. — Dayton *v.* Westinghouse, 118 Fed. 562; 55 C. C. A. 390.

Such a process (the mechanical separation of cotton hulls and lint) may be wholly independent of the particular machinery or appliance used, and is something more than the functions of the machine which is employed. — Johnson *v.* Foos, 141 Fed. 73; 72 C. C. A. 105.

American *v.* Buckskin, 72 Fed. 508.

The means, method, or process constitutes a patentable process, consisting, as it does, of a series of treatments of a peculiarly obstinate material

(cotton hulls), each treatment having relation to the character of the material acted upon and the condition produced by the preceding treatment. — Johnson *v.* Foos, 141 Fed. 73; 72 C. C. A. 105.

Mowry *v.* Whitney, 14 Wall. 620; Cochrane *v.* Deener, 94 U. S. 780; Carnegie *v.* Cambria, 185 U. S. 403; American *v.* Buckskin, 72 Fed. 508.

The first and second claims are for a process. They seem to us to be nothing else than claims for the function of the apparatus described. No doubt it is competent, when the circumstances permit it, for an inventor in describing a machine or apparatus which he has devised, to make a claim for a process which his patented device is capable of carrying out. But to entitle him to do this the process must be one capable of being carried out by other means than by the operation of his patented machine, and, unless such other means are known or within the reach of ordinary skill and judgement, the patentee is bound to point them out; for, unless the public are informed by what other means the process can be carried out, the process is to them nothing else than the operation of the machine — in other words the exercise of its functions. In the present case no other means or way of practising the process are suggested by the patentee than the particular device on which his claims for the apparatus rests. And it is impossible for us to see how the process which is the subject of these claims could be worked out by any other means than the particular means described by the apparatus. Certainly it is not explained how else it could be done. Moreover, if the apparatus is not new its functions are not new. — American *v.* Steward, 155 Fed. 731; 84 C. C. A. 157.

Westinghouse *v.* Boyden, 170 U. S. 537; Wessel *v.* United, 139 Fed. 11; American *v.* Sexton, 139 Fed. 564.

Note: This is refusal to follow same patent decided in 2nd Cir. C. C. A., 128 Fed. 599.

The patent was for a "method of making expanded sheet metal." It had been held void in the Third Circuit (Bradford *v.* Expanded, 146 Fed. 984). *Held:* Nor can we agree to the suggestion that the patent was for the function only of a machine. No doubt the function or principle of a machine cannot be the subject of a patent. It is not a distinct entity, but a mere property of the machine, and inseparable from it, and is developed by its normal use. But Golding was not here seeking to patent a machine, or the operation of a machine. It was a matter of indifference to him by what particular means his method could be practised, but only that certain things should be done in a certain order. The apparatus he suggests would not by any known method of use be of any value. True, he could slit and bend sheets and strands of metal with it. That was the function of it. But still, and unless he invented a specific method of use, his apparatus was of no account. The material and the apparatus were mere disjecta membra until the light of more than ordinary intelligence pointed the way to the subjection of the one to the operation of the other to a useful purpose. We think the invention may rightly and aptly be characterized as an improvement in the art of expanding sheet metal, and is within the letter and spirit of the statute. To hold otherwise would be to adopt a rule which would operate to exclude from the benefits of the law many valuable inventions of things new and useful, and this, not by resting upon any exception found in the statute, but upon an artificial graft of error alien to its spirit and purpose. — Expanded *v.* General, 164 Fed. 849; C. C. A.

Mowry *v.* Whitney, 14 Wall. 620; Cochrane *v.* Deener, 94 U. S. 780; Telephone Cases, 126 U. S. 1; Carnegie *v.* Cambria, 185 U. S. 403. Distinguishing Risdon *v.* Medart, 158 U. S. 68.

Note: This opinion and that of Bradford *v.* Expanded, supra, quoted and criticized under § 682, present the two sides of a most difficult and unsettled problem. The opinion of Judge Gray in Kilborn *v.* Liveright, 165 Fed. 902, may be read with interest in connection with these cases. It is my opinion that Judge Gray was right in the stocking case and wrong in concurring in the decision of Bradford *v.* Expanded.

A process patent can only be anticipated by showing an earlier similar process. It is not enough to show that the Enzinger filter might have been operated according to the process of Stockheim, but that his process had been actually used in its practical operation, or that the character of the structure was such as to plainly indicate to one called upon to operate it that its intended mode of operation was similar to that now claimed by Stockheim. — Loew *v.* German-American, 164 Fed. 855; C. C. A.

Carnegie *v.* Cambria, 185 U. S. 421.

§ 818. Old Elements, New Result.

A process to obtain a product from a substance from which it has never been taken may be creative of invention, but the thing itself, when obtained, cannot be called a new manufacture. It may have been in existence and in common use before the new means of obtaining it was invented, and possibly before it was known that it could be extracted from the subject to which the new process is applied. — American *v.* Fiber Co. 90 U. S. 566; 23 L. Ed. 31.

The public cannot be deprived of an old process because someone has discovered that it is applicable to a wider range of use and capable of producing a better result, than was before known. — Lovell *v.* Cary, 147 U. S. 623; 37 L. Ed. 307; 13 S. Ct. 472.

Smith *v.* Nichols, 88 U. S. 112; Roberts *v.* Ryer, 91 U. S. 150.

§ 819. Patentability.

It is when the term " process " is used to represent the means or method of producing a result that it is patentable, and that it will include all methods or means which are effected by mechanism or mechanical combination. — Corning *v.* Burden, 15 How. 252; 14 L. Ed. 683.

" Whoever discovers that a certain useful result will be produced in any art by the use of certain means is entitled to a patent for it, provided he specifies the means." But everything turns on the force and meaning of the word " means." It is very certain that the means need not be a machine, or an apparatus, it may, as the court says, be a process. A machine is a thing. A process is an act, or a mode of acting. The one is visible to the eye; an object of perpetual observation. The other is a conception of the mind, seen only when being executed or performed. Either may be the means of producing a useful result. — Tilghman *v.* Proctor, 102 U. S. 707; 26 L. Ed. 275.

Explaining O'Reilly *v.* Morse, 15 How. 62.

We think that the method or art covered by the patent is patentable as a process, irrespective of the apparatus or instrumentality for carrying it out. — New Process *v.* Maus, 122 U. S. 413; 30 L. Ed. 1193; 7 S. Ct. 1304.

Corning *v.* Burden, 56 U. S. 252; Cochrane *v.* Deener, 94 U. S. 780; Tilghman *v.* Proctor, 102 U. S. 707.

It is not a patentable process to apply heat within a barrel of wine by old and well known means to produce the same result attained by applying heat

to the outside of the barrel. — Dreyfus *v.* Searle, 124 U. S. 60; 31 L. Ed. 352; 8 S. Ct. 390.

And why is not such new method a process? There is no new machinery. The rollers are an old instrument, the mixing machinery is old, the hydraulic press is old; the only thing that is new is the mode of using and applying these old instrumentalities. And what is that but a new process? This process consists of a series of acts done. It is a mode of treatment. Why should it be doubted that such a discovery is patentable? It is highly useful, and it is shown by the evidence to have been the result of careful and long continued experiments and the application of much ingenuity. — Lawther *v.* Hamilton, 124 U. S. 1; 13 L. Ed. 325; 8 S. Ct. 342.

For general rule on patentability of an art or an art and process, see Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

Full discussion of in light of the leading cases which are cited. — Risdon *v.* Medart, 158 U. S. 68; 39 L. Ed. 899; 15 S. Ct. 745.

The question now concerns the prima facie validity of the claim. Owing to the natural qualities which distinguish the constituents of a grain of corn, namely, the germ, the starchy portion, and the hull, and the natural qualities of water, the characteristic process of the claim is attained under the conditions named therein; that is, when the apparatus specified, or some equivalent apparatus, is supplied. Without the forces inevitably and naturally brought into play by the water and the ingredients of the corn grains, the apparatus would accomplish nothing. The apparatus is functional, towards the result intended, only as supplying conditions under which movements and changes of structure due to the natural qualities of the substance treated take place. If the process be new, if it were first reduced to practice by the apparatus proposed or indicated in the claim when read in the light of the specification, then the claim sets forth a new means. If the operation, namely, the automatic separation of an increasing mass of corn into germs, hulls, and starch by means of starch milk, itself continuously and automatically formed in the course of the operation, be new, then the claim would seem to be valid and patentable. — Chicago *v.* Pope, 84 Fed. 977; 28 C. C. A. 594.

Rob. Pat. 1 256 n.; Corning *v.* Burden, 15 How. 247; Locomotive *v.* Medart, 158 U. S. 68; Eames *v.* Andrews, 122 U. S. 41; Cochrane *v.* Deener, 94 U. S. 780.

There is, in fact, a difference in the material of the two pavements, and we are inclined to differ from the circuit court, and to regard the Perkins patent as patentable, because it was an application of an old process of intense heating, by means of a movable furnace, to different and dissimilar materials. The two processes were not exactly alike. Crochet treated the surface by vivid heat, removed the damaged part, roughened the remaining surface, and added new material. Perkins heated in the same way, reduced the old material to a soft, pliable state, agitated it with a rake, and mixed it with enough new material to fill up the spot to be repaired. — U. S. Repair *v.* Standard, 95 Fed. 137; 37 C. C. A. 28.

As it involves not merely the function of a mechanical device, but certain elemental action, we think it the proper subject of a process patent. It is, in fact, a series of acts performed with molten glass and wire-gauze, by which they are transformed into a separate manufacture, within the definition of a process patent. — Streator *v.* Wire-glass, 97 Fed. 950; 38 C. C. A. 573.

Cochrane *v.* Deener, 94 U. S. 780.

That in the process of hydrating lime, where the only novel feature was supplying the exact amount of water to complete the hydration, all the other steps of the process being old, and knowledge of the fact that such exact amount might be determined, did not involve invention, see — Lauman *v.* Urschel, 136 Fed. 190; 69 C. C. A. 206.

The hand and machine methods are essentially the same. The fact that in one case the work is done by a hand tool, and in the other by a machine, does not influence, much less control, the decision of the question. The complainant did not discover a new method of chipping glass. It is rather the old method performed by a new tool. It is impossible to demonstrate wherein the claims of this patent set forth anything not methodically pursued in the hand operation. — Penn *v.* Conroy, 159 Fed. 943; 87 C. C. A. 149.

We are satisfied that Cameron was the first one to subject a flowing current of sewage to the action of anaerobes and aerobes under conditions which secured their separate and successive action. This certainly involved "the use of one of the agencies of nature for a practical purpose." The process was one which puts a force of nature into a certain specified condition and then uses it in that condition for a practical purpose. — Cameron *v.* Saratoga, 159 Fed. 453; 86 C. C. A. 483.

Risdon *v.* Medart, 153 U. S. 77; Bell Telephone, 126 U. S. 1.

§ 820. Process and Product — Claims for.

The contention that, in the patent, the product inheres in the process, and that, therefore, the claim of the one necessarily includes the other, cannot be sustained on principle or authority. The claim is single and is either for a process or product; otherwise, if the claim is divisible, one part being for a process and the other for a product, it would be a double claim, and as such in danger of being held void for ambiguity. The applicant for a patent may separately claim both a process and a product, but cannot properly claim them in one claim. They are the proper subjects of separate and distinct claims. — Durand *v.* Schulze, 61 Fed. 819; 10 C. C. A. 97.

Merrill *v.* Yeomans, 1 Ban. & A. 55; Goodyear *v.* Rubber Co. 2 Cliff. 371.

If the complainant had included in his patent no claims except the product claims, he could not have obtained thereafter another patent for the process, for the reason that the process and the product are substantially one invention or discovery. — Downes *v.* Teter-Heany, 150 Fed. 122; 80 C. C. A. 76.

Mosler *v.* Mosler, 127 U. S. 361.

§ 821. Process and Product — Patentability.

Explaining and distinguishing Goodyear *v.* Day, 2 Wall. Jr. 283, and Goodyear *v.* R. R. Co. 2 Wall. Jr. 356. — Powder *v.* Powder, 98 U. S. 126; 25 L. Ed. 77.

The patent in suit was for a product, viz. a hard rubber plate for artificial teeth, and the product was described and claimed in terms of the process. *Held* that another product for performing the same function, but produced from different material and by a different process was not infringement. — Goodyear *v.* Davis, 102 U. S. 122; 26 L. Ed. 149.

The original patent was for a process; the reissue was for the product. Although there are two patents, one for a process and the other for a product, there is in fact but one invention; and it may be assumed that the new article of manufacture is a product which results from the use of the

process described in the patent, not one which may be produced in any other way. — Plummer *v.* Sargent, 120 U. S. 442; 30 L. Ed. 737; 7 S. Ct. 640.

One and the same patent may cover both a process and product, but, if the patentee choose to restrict himself to one by his claim, he cannot include the other also by a reference to other parts of his specification. — Durand *v.* Schulze, 61 Fed. 819; 10 C. C. A. 97.

The patent also describes a process for making it which was new, and up to the present time is the only known process by which it can be produced. Since, then, there was novelty both in the process and product, Hinsberg might have had one claim for the process and another claim for the product. — Maurer *v.* Dickerson, 113 Fed. 870; 51 C. C. A. 494.

Rubber *v.* Goodyear, 9 Wall. 788; Merrill *v.* Yeomans, 94 U. S. 568.

The original specifications and drawings disclose the envelope construction of air-passages surrounding the jet of gas. In these circumstances, we conclude that there is no substantial conflict between the statements of the original and amended specifications; that the original specification sufficiently disclosed the nature of the invention claimed in the patent, and sufficiently suggested the process involved therein; and that as the invention or discovery of the process involved the product, and the product was the result of the process, the claims for the process were properly included in the patent in suit. — Kirchberger *v.* American, 128 Fed. 599; 64 C. C. A. 107. See 215 U. S. 161.

Powder *v.* Powder, 98 U. S. 126; Wing *v.* Anthony, 106 U. S. 142.

That there may coexist both a patentable process and product is plain. In such case both the process and the product must be new and useful. So it may be conceded that a process may be old, but the product new, or the product old and the process new. In such case one will be patentable and the other not. In Providence *v.* Goodyear, 9 Wall. 788 it was said: "The patentability, or the issuing of a patent as to one, in no wise affects the rights of the inventor or discoverer in respect to the other. They are wholly disconnected and independent facts." Nevertheless it does not follow that a single patent may issue for both a process and a product when the latter is wholly independent of the other. The Goodyear patent, referred to above, originally issued for both a process and a manufacture. It was surrendered, and two patents taken, one for the process and one for the product. — Sanitas *v.* Voigt, 139 Fed. 551; 71 C. C. A. 535.

That the abandonment of an application for a patent upon the product of a process does not in any way argue invalidity of the process patent, see — Mica Insulator *v.* Commercial, 166 Fed. 440; C. C. A.

§ 822. Miscellaneous Rulings.

In cases of chemical inventions, when the manufacture claimed as novel is not a new composition of matter, but an extract obtained by the decomposition or disintegration of material substances, it cannot be of importance from what it has been extracted. — American *v.* Fiber, 90 U. S. 566; 23 L. Ed. 31.

It is quite obvious that a manufacture or a product of a process, may be no novelty, while, at the same time, the process or agency by which it is produced may be both new and useful — a great improvement on any previ-

ously known process and therefore patentable as such. — American *v.* Fiber, 90 U. S. 566; 23 L. Ed. 31.

If, however, he had in his own mind only a claim for the process of manufacture by which the article was made, his use of the term is intelligible. — Merrill *v.* Yeomans, 94 U. S. 568; 24 L. Ed. 235.

Another person might invent a better apparatus for applying the process than that pointed out by Nelson, and might obtain a patent for such improved apparatus; but he could not use the process without a license from Nelson. His improved apparatus would, in this respect, stand in a relation to the process analogous to that which an improvement on a patented machine bears to the machine itself. — Tilghman *v.* Proctor, 102 U. S. 707; 26 L. Ed. 279.

It is clear that both patents must stand or fall together. If the patent for the process is invalid so must be the patent for the product. — Western *v.* Ansonia, 114 U. S. 447; 29 L. Ed. 210; 5 S. Ct. 447.

The fact that by careful workmanship the products are indistinguishable by mere inspection does not establish the identity of the processes; and as the patent for the product must be limited to an article made by the particular process, the inquiry must be determined by a comparison between the methods actually employed. — Plummer *v.* Sargent, 120 U. S. 442; 30 L. Ed. 737; 7 S. Ct. 640.

After a patent is granted for an article described as made by causing it to pass through a certain method of operation to produce it, the inventor cannot afterwards, on an independent application, secure a patent for the method or process covered by the previous patent, which article was described in that patent as produced by the method or process sought to be covered by taking out the second patent. — Mosler *v.* Mosler, 127 U. S. 354; 32 L. Ed. 182; 8 S. Ct. 1148.

True, if the process were the mere function of a machine, another machine capable of performing the same function might be an anticipation; but this is not because a process can be anticipated by a mechanism, but because, as we have held in several cases, the mere function of a machine is not patentable as a process at all. — Carnegie *v.* Cambria, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.

The description being addressed to those skilled in the art, the statement being made that variation is necessary according to the quality of the element used, it is sufficient if its application in a specific instance be given. — Schwarzwalder *v.* N. Y. 66 Fed. 152; 13 C. C. A. 380.

It may be that the variance results from some immaterial change in the process from the use of starting material, which is within the fair range of equivalents; but, having failed to prove identity by the prescribed tests, the burden is on the holder of the patent to show that the variances in process are immaterial, or the starting materials equivalents of those of the patents. — Matheson *v.* Campbell, 78 Fed. 910; 24 C. C. A. 284.

Whether the success of the operation under the patent in suit is due to the superiority of its process for economical production or to the changed conditions referred to, or to both combined, is not material, in view of the

fact that the product, and not the process, is the claim of discovery. — National *v.* Swift, 104 Fed. 87; 43 C. C. A. 421.

It is necessary to read them (product claims) in connection with the process described in the patent and to limit the scope of the claims to a product which is the result of that process. — Downes *v.* Teter-Heany, 150 Fed. 122; 80 C. C. A. 76.

PRODUCT.

Patentability § 823
Miscellaneous Rules § 824
See — Composition of Matter § 261; *Infringement* §§ 521, 690; *Machine and Product* § 771; *Manufacture* § 772; *Sale of Patented Article* § 899

§ 823. Patentability.

A machine may be new, and the product or manufacture proceeding from it may be old. In that case the former would be patentable and the latter not. The machine may be substantially old and the product new. In that event, the latter, and not the former, would be patentable. Both may be new or both may be old. In the former case, both would be patentable; in the latter neither. — Rubber *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

Where a new process produces a new substance, the invention of the process is the same as the invention of the substance, and a patent for the one may be reissued so as to include both as was done in the case of Goodyear's vulcanized India rubber patent. — James *v.* Campbell, 104 U. S. 356; 26 L. Ed. 786.

While a new process for producing it was patentable, the product itself could not be patented, even though it was a product made artificially for the first time, in contradistinction to being eliminated from the madder root. Calling it artificial alizarine did not make it a new composition of matter, and patentable as such, by reason of its having been prepared artificially for the first time from anthracine, if it was set forth as alizarine, a well known substance. — Cochrane *v.* Badische, 111 U. S. 293; 28 L. Ed. 433; 4 S. Ct. 455.

Wood Paper Patent, 23 Wall. 566.

The fifth claim of the patent is obviously an attempt by the patentee to obtain a monopoly of the product of the apparatus described in the patent, so that in the event it should turn out that his apparatus was not patentable, or the product could be made by apparatus not infringing his, he could nevertheless enjoy the exclusive right of making it. A claim for an article of manufacture is not invalid merely because the article is the product of a machine, whether the machine is patented or unpatented; but it is invalid unless the article is new in a patentable sense, — that is, unless its original conception or production involved invention, as distinguished from ordinary mechanical skill. If it is new only in the sense that it embodies and represents superior workmanship, or is an improvement upon an old article in degree and excellence, the claim is invalid. — Edison *v.* American, 114 Fed. 926; 52 C. C. A. 546.

Hatch *v.* Moffitt, 15 Fed. 252; Wooster *v.* Calhoun, 11 Blatchf. 215; Excelsior *v.* Union, 32 Fed. 221; Smith *v.* Nichols, 21 Wall. 112; Locomotive *v.* Medart, 158 U. S. 79.

Whatever novelty in a patentable sense there may be in flakes of cooked wheat which are thin, crisp, and slightly brown, must be found in some

superior efficaciousness, or some new properties which they possess, and not in any mere change of form produced by mechanical division of the cooked grain either before or after the last step in cooking. Cooked grain thus prepared, and having all the characteristics called for by the claim, may constitute a new article of commerce. But do they render the article new in a patentable sense? If so, it must be due to some new properties or improved efficacy as a food. — Sanitas *v.* Voigt, 139 Fed. 551; 71 C. C. A. 535.

Glue Co. *v.* Upton, 97 U. S. 3; Cerealine *v.* Bates, 101 Fed. 272; Maryland *v.* Dorr, 46 Fed. 773.

A mere difference in the proportions of the constituents of an alloy, however useful the result may be, does not entitle the originator to the monopoly of a patent, in the absence of other circumstances than those here disclosed. — Brady *v.* Ajax, 160 Fed. 84; 87 C. C. A. 240.

§ 824. Miscellaneous Rules.

When a new article, a new property in the composition of matter, is thus brought to light for the enrichment of the world's knowledge and uses, the statute intends that the discoverer may be rewarded with exclusive rights to make and sell the article during the moderate term for which the patent is granted. This broad monopoly can be granted for a true discovery only, and not for the mere improvement of a known composition. — National *v.* Swift, 104 Fed. 87; 43 C. C. A. 421.

Merrill *v.* Yeomens, 94 U. S. 568.

Given, two such propositions as the process in the prior patents, like ingredients, with coagulation of the albuminoids and resultant product clearly set forth, there was surely no pioneer discovery in chemistry on the part of Van Ruymbeke to authorize a patent for the identical product, however meritorious his advance may have proved in the process to that end. — National *v.* Swift, 104 Fed. 87; 43 C. C. A. 421.

That claim, in terms, is for the described product, having certain distinguishing characteristics which are set forth in the claim with great fullness. In our judgment it is very clear that the claim is not restricted to the product made by the described process, but covers the chemical individual, however produced. We know of no rule requiring a construction limiting a claim for a chemical product to the described process, because the evidence shows that it cannot be made in any other way than by the process recited. No warrant for such a rule is to be found either in the statute or in the decisions. — Maurer *v.* Dickerson, 113 Fed. 870; 51 C. C. A. 494.

In general, when the patent is for a product of manufacture, it is not material by what means or by what process it is manufactured. But it is obvious that there must be an exception to this rule to cover cases where the identity or specific character of the thing patented is affected by the means or method of its manufacture. Thus it is easy to understand that a glove made up of knitted material is a different thing from one made from cloth or leather. Its qualities are dependent on the way in which it is made. — Lamb *v.* Lamb, 120 Fed. 267; 56 C. C. A. 247.

PROFITS.

Statutory Provision § 825
General Statement § 826
Accountings § 827
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Miscellaneous Rules Concerning Profits § 847
See — Damages § 278; *Designs* § 328; *Jurisdiction* § 719; *Marking "Patented"* § 776; *Reissue* § 887; *Royalties* § 897; *Statute of Limitations* § 921

§ 825. Statutory Provision.

The several courts vested with jurisdiction of cases arising under the patent laws shall have power to grant injunctions according to the course and principles of courts of equity, to prevent the violation of any right secured by patent, on such terms as the court may deem reasonable; and upon a decree being entered in any such case for an infringement the complainant shall be entitled to recover, in addition to the profits to be accounted for by the defendant, the damages the complainant has sustained thereby; and the court shall assess the same or cause the same to be assessed under its direction. And the court shall have the same power to increase such damages, in its discretion, as is given to increase the damages found by verdicts in actions in the nature of actions of trespass upon the case.

But in any suit or action brought for the infringement of any patent there shall be no recovery of profits or damages for any infringement committed more than six years before the filing of the bill of complainant or the issuing of the writ in such suit or action, and this provision shall apply to existing causes of action. — R. S. 4921.

The statute of limitation provision was added by the act of Mar. 3, 1897, and went into effect Jan. 1, 1898.

§ 826. General Statement.

Much that has been said by way of general statement under *Damages* applies here. Many of the rules under that title apply to profits. The difficulty in securing substantial recoupment in the nature of profits is hardly less difficult than in the nature of damages. It is unnecessary to add to what has been said upon that subject under damages, except to add the following statement, made under oath, by a lawyer of long experience:

"I have had the equity docket of the Southern District of New York examined and have found, as a fair average, that only four of the fifty-four patent causes wherein accountings were decreed, do any proceedings upon the accountings appear of record." (Compl'ts. Rec., Hall *v.* General, 153 Fed. 907.)

The statement of counsel in that case, also made under oath, may be of interest:

"It is my invariable practice founded upon my own experience in patent litigation, extending over the past eighteen years, and upon my knowledge of the experience of other patent counsel, to advise my clients that, in the absence of an established license fee, there is hardly any chance of recovering damages for infringement, and that in no event can they expect to be compensated either by damages or costs for the expense of litigation and the injury from infringement. I advise them that the one effective remedy is

injunction, and that where injunction cannot be obtained, the patentee is without remedy."

§ 827. Accountings.

The right to an account of profits is incident to the right to an injunction in copy- and patent-right cases. — Stevens *v.* Gladding, 58 U. S. 447: 15 L. Ed. 155.

See Stephens *v.* Cady, 14 How. 528.

Profits obtained by infringement after suit is begun can be reached only when such infringement is a continuation of former infringement. — Marsh *v.* Nichols, 128 U. S. 605; 32 L. Ed. 538; 9 S. Ct. 168.

Taking into account the fact that defendant did not make due effort to carry out his application (the application for the patent in suit), and that it certainly does not appear that the Morrow device was so much, if at all, better than the licensor's, that due business diligence did not require the company still to push the latter, we are of opinion that on this item it properly was held to account. — Eclipse *v.* Farrow, 199 U. S. 581; 50 L. Ed. 317; 26 S. Ct. 150.

Upon an accounting for an infringement commenced before the bill was filed, and continued afterwards, the complainant is entitled to recover profits derived by the defendant from his infringement to the date of the accounting. "The practice saves a multiplicity of suits, time and expense." — Untermeyer *v.* Freund, 58 Fed. 205; 7 C. C. A. 183.

Tatham *v.* Lowber, 4 Blatchf. 86; Rubber Co. *v.* Goodyear, 9 Wall. 788; Marsh *v.* Nichols, 128 U. S. 605; Robinson *v.* Bland, 2 Burrows, 1086; Holabird *v.* Burr, 17 Conn. 563.

In a patent case there can be no right to an accounting unless the infringement be made out; but the infringement may be found and the injunction awarded in favor of a complainant who, upon the proofs, has no right to an accounting. Upon the issue whether or not the complainant is entitled to the accounting, it may not appear that the defendant used or sold the patented device, but merely that he made it; or it may otherwise appear that there were, in fact, no profits, or that an account had already been stated, conditionally or otherwise, by the parties themselves, and that for want of notice, as provided in sec. 4900 of the Revised Statutes of the United States, no damages could be recovered. In such event there could be no award of an accounting in the decree, although the perpetual injunction would be awarded. Whittemore *v.* Cutter, Fed. Cas. No. 17,601; Elizabeth *v.* Pavement, 97 U. S. 127. In a patent case on the equity side the primary and essential contention relates to the ownership of the patent by complainant, the validity of the claims, and the infringement. The final adjudication in favor of complainant on this contention is a perpetual injunction. — Standard *v.* Crane, 76 Fed. 767; 22 C. C. A. 549.

If we could discover any theory upon which a substantial recovery might be had we would not hesitate to direct a reference, but it is plain that such a proceeding will prove abortive, after subjecting both parties to large additional expense and the defendants to unnecessary annoyance. The master would be involved in an inextricable tangle from which it will be impossible to emerge with a substantial recovery based upon a rational rule of damages. The boards sold by the defendants, and which they had a right to sell, were intended to be used in connection with a large number of games in the description of some of which the word "Carrom" might, in certain

aspects, be used innocently. An attempt to segregate the profits, if any, resulting from the illegitimate use of the word would require an excursion into the realms of conjecture and speculation without hope of any tangible result. — Ludington *v.* Leonard, 127 Fed. 155; 62 C. C. A. 269.

Note: It will be observed that this holding grew out of the infringement of a trademark involved in the suit, and not the infringement of the mechanical patent.

That an appellate court may correct the assessment of damages or account of profits (1) send the case back to the Circuit Court for further instruction, or (2) itself proceed to the assessment of profits by dealing with the master's report as affected by the defendant's exceptions, see — Doten *v.* City of Boston, 138 Fed. 406; 70 C. C. A. 308.

Cawood Patent, 94 U. S. 695.

The complaint was for infringement after the date of the assignment (the patent had been owned by one of complainants alone during part of the period of infringement, and was then assigned in part to the other complainants without an assignment of accrued choses in action. Complainants sought to recover for the period prior to assignment as well as after). Even if that were permissible the bill did not seek to recover a several decree in favor of one of the complainants for one part of the profits and a joint decree for another. On the contrary, the complaint was of infringement after the date of assignment. The courts below erred in including the profits for this period (prior to the assignment) in the recovery. — Canda *v.* Michigan, 152 Fed. 178; 81 C. C. A. 420.

Distinguishing Moore *v.* Marsh, 7 Wall. 515.

Adams *v.* Bellaire, 25 Fed. 270.

That the court having decreed infringement of a certain claim, it is not competent for the master on an accounting to include as contributory infringement elements of claims not found to be infringed, see — Canda *v.* Michigan, 152 Fed. 178; 81 C. C. A. 420.

When the order of reference was made, the only infringement established by the decree was defendant's sale of Columbia ladders. We think it better and cleaner-cut practice to require a complainant to set up alleged new infringements in a supplemental bill, (rather than to establish infringement by other types before the master on the accounting). Thereupon, if it should be found that the additional types contained only colorable departures from the adjudged infringing type, the decree for an injunction and an accounting and the order of reference could be extended to cover them specifically; or, if the changes should appear to be so radical that the pending suit ought not to be cumbered and delayed by practically a new issue, the supplemental bill could be dismissed with leave to the complainant to begin an independent suit. — Murray *v.* Orr, 153 Fed. 369; 82 C. C. A. 445.

It was not open to defendant on the question of additional infringements to refer to the prior art to limit the scope of invention to less than we had found it to be in determining the infringement of the Columbia ladder. As the changes from the Columbia type are only colorable, the fact of the decree that is questioned on this appeal must be reversed. — Murray *v.* Orr, 153 Fed. 369; 82 C. C. A. 445.

§ 828. Deductions — General Expenses — Not Proper.

The master's report was based altogether upon the profits actually realized by the defendant from his sales of infringing machines. The defendant

was charged with the amount received by him from sales as stated by himself. Besides a credit for the cost of manufacture, as found by the master, and a credit for advertising, the defendant was allowed for freight and cartage, and discounts to purchasers. We think the master was right in disallowing the lumping sum which the defendant claimed for " clerk hire, selling expenses, rent and insurance." That was a mere estimate unsupported by evidence. We do not see upon what principle the defendant is entitled to an allowance for the sum paid for other patents and the cost of his patterns. They remain his property. These credits were properly disallowed. — Sayre *v.* Scott, 55 Fed. 971; 5 C. C. A. 366.

Crosby *v.* Consolidated, 141 U. S. 441; Elizabeth *v.* Pavement, 97 U. S. 126.

This item in the exhibit filed by the defendant's bookkeeper may have been the general cost of carrying on the entire business of the defendant, including its manufacturing departments, or it may be a mere approximation of expenses of selling, which would include interest upon the general capital engaged. If this is the fact, this would be wrong. — Kisinger-Ison *v.* Bradford, 123 Fed. 91; 59 C. C. A. 221.

Rubber *v.* Goodyear, 9 Wall. 789.

§ 829. Deductions — Losses.

Losses incurred by the defendant through its wrongful invasion of the patent are not chargeable to the plaintiff, nor can their amount be deducted from the compensation which the plaintiff is entitled to receive. — Consolidated *v.* Crosby, 141 U. S. 441; 35 L. Ed. 809; 12 S. Ct. 49.

Cawood Pat. 94 U. S. 695; Elizabeth *v.* Nicholson, 97 U. S. 126; Tilghman *v.* Proctor, 125 U. S. 136.

The court below also erred in sustaining defendant's claim of a deduction of the losses incurred by said defendant during the third period of the reckoning and in deducting these losses from the profits which the complainants were otherwise entitled to recover. Cawood Pat. 94 U. S. 710, and Rubber Co. *v.* Goodyear, 9 Wall. 788 are cited as authority for the ruling; but these cases only hold that losses occurring concurrently with the gaining of the profits may be taken into account — that is to say, if they are losses directly resulting from the particular transaction on which the profits are allowed. (The fact here being that the loss period was subsequent to and distinguishable from the profit period.) The meaning and authority of such general statements should be limited to the facts of the case in which they were expressed. And it is necessary to impose such limitations in order to make the statements consistent with the law as since declared by the same court. Callaghan *v.* Myers, 128 U. S. 617; Crosby *v.* Safety, 141 U. S. 453; Walker on Pat. (4th ed.) sec. 713. — Canda *v.* Michigan, 152 Fed. 178; 81 C. C. A. 420.

§ 830. Deductions — Manufacturer's Profits.

The master correctly refused to allow " manufacturer's profits "and interest on the capital stock. The correct rule is the difference between cost and yield. — Rubber Co. *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

As no countervailing evidence was put in by the defendants and no specific exception was made to the master's calculations, that he made no allowance for a manufacturer's profit, we think there is no foundation on which to base such a claim now. — Warren *v.* Keep, 155 U. S. 265; 39 L. Ed. 144; 15 S. Ct. 83.

When the complainant's damages are measured by the profits of defendants, it is true that credits have been allowed to the latter "as a mere agency for producing a patented article for so-called 'manufacturer's profits.'" This rule has generally been applied in cases where the patented invention is a distinct invention and a part only of the entire structure which was made and sold. In a noted case, where the patent was for an entirely new product of a process, which was not separable into parts, and the infringing defendant made and sold the entire article, manufacturer's profits were not allowed upon the ground that the entire profits, which were the difference between the cost and yield, belonged to the owner of the patent. It is true that the principle of reduction of the profits of the defendant infringer by the deduction of manufacturer's profits, when the patented improvement was a separable part of the entire structure has been thought applicable in two cases to a reduction of damages based upon loss of the complainant's profits, when the patented improvement was a distinct and separable part of the whole structure which the complainant made. The facts of this case have no resemblance to those cases. There is no apparent reason why the loss which was suffered by the deliberate act of the defendant, which deprived the complainant of trade in the special articles of manufacture, every expense of its business going on as before to its full extent, should not be the actual profit which it would have made upon the sale of a number of boxes which it was prevented from selling. — National *v.* Elsas, 86 Fed. 917; 30 C. C. A. 487.

Warren *v.* Keep, 155 U. S. 265; Buerk *v.* Imhauser, Fed. Cas. 2,107; Rubber Co. *v.* Goodyear, 9 Wall. 788; Robertson *v.* Blake, 94 U. S. 728.

§ 831. Deductions — Rules for.

The proper rule for determining the profits of defendant upon a patented attachment is to deduct from the full profits arising therefrom a proportional amount of the expenses of the business. — Tremaine *v.* Hitchcock, 90 U. S. 518; 26 L. Ed. 97.

Complainant proved from testimony given by defendant in another case the profits that defendant had made in his business. Defendant neither proved any deductions therefrom nor in any way explained that testimony, but on the appeal undertook to show certain deductions. *Held:* The defendant could have made any explanation of his testimony he desired, and had the question been raised before the master the complainants would have had an opportunity to show that the profit was the same during the entire infringing period. — Cimiotti *v.* Bowsky, 143 Fed. 508; 74 C. C. A. 617.

§ 832. Deductions — Salaries.

The master properly refused to deduct extraordinary salaries which appeared on the books, being satisfied they were dividends of profit under another name. — Rubber *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

When and when not to be computed on accounting. — Seabury *v.* Am Ende, 152 U. S. 561; 38 L. Ed. 553; 14 S. Ct. 683.

§ 833. Deductions — Miscellaneous.

While repairs and wear and tear should be taken into account, value of materials bought for the purpose of the infringement are not deductible items. — Rubber *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

Defendants added a twenty per cent. profit to the cost of lumber used in the infringement, and the court said: It is only necessary to state the claims

to show its preposterousness. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

The complainant, as territorial assignee, was entitled to a certain proportion of the profit. Defendant, in mitigation of damages undertook to limit recovery to such proportion. *Held:* Not good. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

The defendant will not be allowed to diminish the show of profits by putting in the unconscionable claims for personal services or other inequitable deductions. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

Rubber Co. *v.* Goodyear, 9 Wall. 788.

Interest on plant when other manufacture conducted. — Seabury *v.* Am Ende, 152 U. S. 561; 38 L. Ed. 553; 14 S. Ct. 683.

The item of commissions paid on sales was a proper credit. The profits recoverable are only those which were actually made, and the general burden is upon the plaintiff to show what those profits were. The fair and reasonable expenses incident to the sale of the infringing devices should be deducted from the gross profit shown by the evidence. — Kisinger-Ison *v.* Bradford, 123 Fed. 91; 59 C. C. A. 221.

Tremaine *v.* Hitchcock, 90 U. S. 518; Tilghman *v.* Proctor, 125 U. S. 151.

§ 834. Definition.

" Profits " is the gain made upon any business or investment, when both the receipts and payments are taken into the account. — Rubber *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

People *v.* Super. Niag. 4 Hill, 23.

In patent nomenclature, what the infringer makes is " profits; " what the owner of the patent loses by such infringement is " damages." — Diamond *v.* Brown, 166 Fed. 306; C. C. A.

§ 835. Interest.

In making up the decree, interest was added from the date of the master's report on the balances found due after the ascertained deductions had been made and this is assigned as error. As a general rule, a patentee is not entitled to interest on profits made by an infringer. The reason is that profits are regarded in the light of liquidated damages. Parks *v.* Booth, 102 U. S. 106. But in many of the cases it is said that circumstances may arise in which it would be proper to add interest. Mowry *v.* Whitney, 14 Wall. 653; Littlefield *v.* Perry, 21 Wall. 230. Here, as has been seen, in effect, the original decrees rendered were affirmed to the extent of the present recoveries. The cases were only sent back to ascertain how much should be deducted from those decrees for errors in the accounts as then stated. If the decrees had been entered originally for the present amounts the patentee would have been entitled to interest from the date of the decree. R. R. *v.* Turrill, 101 U. S. 836. Under these circumstances, it seems to us not at all inequitable to allow interest on the corrected amounts from the date of the master's report. — Railroad *v.* Turrill, 110 U. S. 301; 28 L. Ed. 154; 4 S. Ct. 5.

Interest is allowed, in the absence of special circumstances from the date of filing the report of the master. — Consolidated *v.* Crosby, 141 U. S. 441; 35 L. Ed. 809; 12 S. Ct. 49.

Silsby *v.* Foote, 61 U. S. 378; Mowry *v.* Whitney, 81 U. S. 620; Littlefield *v.* Perry, 88 U. S. 205; Act July 8, 1870, Ch. 230, sec. 55; Parks *v.* Booth, 102 U. S. 96; Root *v.* Railway, 105 U. S. 189; Railroad *v.* Turrill, 110 U. S. 301.

§ 836. Master in Chancery.

The conclusions of the master have every reasonable presumption in their favor, and are not to be set aside or modified, unless there clearly appears to have been error or mistake on his part. — Tilghman *v.* Proctor, 125 U. S. 136; 31 L. Ed. 664; 8 S. Ct. 894.

Medsker *v.* Bonebrake, 108 U. S. 66; Donnell *v.* Columbia, 2 Sumn. 366; Mason *v.* Crosby, 3 Woodb. & M. 258; Paddock *v.* Commercial, 104 Mass. 521; Richards *v.* Todd, 127 Mass. 167.

The report of a master is merely advisory to the court, which it may accept and act upon in whole or in part, according to its own judgement as to the weight of the evidence. Yet in dealing with exceptions to such reports "the conclusions of the master, depending upon the weighing of conflicting testimony, have every reasonable presumption in their favor and are not to be set aside or modified unless there clearly appears to have been error or mistake on his part." — Boesch *v.* Gräff, 133 U. S. 697; 33 L. Ed. 787; 10 S. Ct. 378.

Kimberly *v.* Arms, 129 U. S. 512; Tilghman *v.* Proctor, 125 U. S. 136.

Exceptions to master's report raised for the first time in the Supreme Court will not be entertained. — Topliff *v.* Topliff, 145 U. S. 156; 36 L. Ed. 658; 12 S. Ct. 825.

McMicken *v.* Perin, 59 U. S. 507.

The findings of the referee were marked "approved" by counsel for both parties. *Held:* After all this, we perceive no standing ground for an exception to the admission of evidence embodied in the agreed statement of facts. — Deering *v.* Kelly, 103 Fed. 261; 43 C. C. A. 225.

If, in the progress of the references, the parties neglect or omit to bring before the master all the facts bearing upon the matters referred, and necessary to the correct conclusion by the court, they are in default. And by this default the court is deprived of the aid sought in ordering the reference. If the master omit or neglect to report all the facts produced before him bearing upon the matters referred to, he is in default. The parties are put to a disadvantage, and the report should be recommitted, unless the parties supply the omission by stipulation. It is true that in some of the circuit courts a loose practice has grown up, and exceptions to a master's report are entertained, dealing with facts to which his attention was never called. This practice does not commend itself. It frequently operates a surprise, and it shuts the door to any explanation. It gives room for the display of skill and strategy on the part of ingenious counsel. It may secure success at the expense of right. When there exists a rule of practice, inculcated and approved by recognized authority, it should be followed. To prevent misapprehension, it is best to state that we do not require the conclusions of the master on matters of law to be first excepted to before him. This is unnecessary. — Gay *v.* Camp, 68 Fed. 67; 15 C. C. A. 226.

2 Dan. Ch. Pr. 1314, and cases cited.

Every reasonable presumption is in favor of a master's report based on oral testimony, and it will not be set aside or modified unless there clearly

appears to have been error or mistake. — Fullerton *v.* Anderson-Barngrover, 166 Fed. 443; C. C. A.

Tilghman *v.* Proctor, 125 U. S. 136; Callaghan *v.* Myers, 128 U. S. 666; Camden *v.* Stuart, 144 U. S. 118; Walk. Pat. § 725.

The question whether a license fee was established is one of fact, and as the master has found a yearly license fee, and the Circuit Court has overruled defendant's exceptions, we are not disposed to disturb the finding. — Diamond *v.* Brown, 166 Fed. 306; C. C. A.

Warren *v.* Keep, 155 U. S. 265.

§ 837. Measure of — Actual Gains.

Under instruction from the circuit court, the master charged the defendant, not only with his actual savings, but with all he might possibly have made, and interest thereon. *Held:* that the profits in equity must be limited to the actual profits and must not be regarded as liquidated punitive damages. Livingston *v.* Woodworth, 15 How. 546; 14 L. Ed. 809.

It is clear that a patentee is entitled to recover the profits that have been actually realized from the use of his invention, although, from other causes, the general business of the defendant, in which the invention is employed, may not have resulted in profits, as where it is shown that the use of his invention produced definite saving in the expense of manufacture. On the contrary, though the defendant's general business be ever so profitable, if the use of the invention has not contributed to the profits, none can be recovered. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

Mowry *v.* Whitney, 14 Wall. 434; Cawood Pat. 94 U. S. 695.

The infringer is liable for actual, not for possible gains. The profits, therefore, which he must account for, are not those which he might reasonably have made, but those which he did make, by the use of plaintiff's invention; or, in other words, the fruits of the advantage which he derived from the use of that invention, over what he would have had in using other means then open to the public and adequate to enable him to obtain an equally beneficial result. If there was no such advantage in his use of the plaintiff's invention, there can be no decree for profits, and the plaintiff's only remedy is by an action at law for damages. But if the defendant gained an advantage by using the plaintiff's invention, that advantage is the measure of the profits to be accounted for, even if for other causes the business in which the invention was employed did not result in profits. — Tilghman *v.* Proctor, 125 U. S. 136; 31 L. Ed. 664; 8 S. Ct. 894.

Cawood Pat. 94 U. S. 710; Mevs *v.* Conover, 11 O. G. 1112; Elizabeth *v.* Pavement, 97 U. S. 138; Root *v.* Railway, 105 U. S. 189; Thomson *v.* Wooster, 114 U. S. 104.

Upon a bill in equity the plaintiff is entitled to recover the amount of gains and profits that the defendants have made by the use of the invention. — Tilghman *v.* Proctor, 125 U. S. 136; 31 L. Ed. 664; 8 S. Ct. 894.

Livingston *v.* Woodworth, 56 U. S. 546; Dean *v.* Mason, 61 U. S. 198; Rubber *v.* Goodyear, 76 U. S. 788; Mowry *v.* Whitney, 81 U. S. 620; Littlefield *v.* Perry, 88 U. S. 205; Mason *v.* Graham, 90 U. S. 261; Railroad *v.* Turrill, 94 U. S. 695; Mevs *v.* Conover, 11 O. G. 1111; Elizabeth *v.* Pavement, 97 U. S. 126; Root *v.* Railway, 105 U. S. 189.

It appearing that the defendant's valve derived its entire value from the use of the invention covered by the patent in suit, and that the entire value of the defendant's valve, as a marketable article, was properly and legally

attributable to the invention of plaintiff, he is entitled to recover the entire profit of the manufacture and sale of the valves. — Consolidated *v.* Crosby, 141 U. S. 441; 35 L. Ed. 809; 12 S. Ct. 49.

Elizabeth *v.* Nicholson, 97 U. S. 126; Root *v.* Railway, 105 U. S. 189; Garretson *v.* Clark, 111 U. S. 120; Callaghan *v.* Myers, 128 U. S. 617; Hurlbut *v.* Schillinger, 130 U. S. 456.

In equity the profits which the complainant seeks to recover must be shown to have been actually received by the defendant; in other words, the fruits of the advantage which he derived from the use of that invention over what he would have had in using other means open to the public and adequate to enable him to obtain an equally beneficial result. — Coupe *v.* Royer, 155 U. S. 565; 39 L. Ed. 263; 15 S. Ct. 199.

Tilghman *v.* Proctor, 125 U. S. 137; Keystone *v.* Adams, 151 U. S. 139.

In a suit in equity for infringement of a patent, the ground upon which profits are recovered is that they are the benefits which have accrued to the defendants from their wrongful use of the plaintiff's invention, and for which they are liable ex aequo et bono, to like extent as a trustee would be who had used the trust property for his own advantage. The defendants in any such suit are therefore liable to account for such profits only as they have accrued to themselves from the use of the invention, and not for those which have accrued to another, and in which they have no participation. — Belknap *v.* Schild, 161 U. S. 10; 16 L. Ed. 599; 16 S. Ct. 443.

Elizabeth *v.* American, 97 U. S. 126; Root *v.* Railway, 105 U. S. 189; Tilghman *v.* Proctor, 125 U. S. 136; Keystone *v.* Adams, 151 U. S. 139; Coupe *v.* Royer, 155 U. S. 565.

We think the evidence fully warrants the conclusion that the entire value of the infringing machine made and sold by the defendant, was due to the invention covered by the patent in suit, and therefore, the plaintiff was entitled to the whole profits realized. — Sayre *v.* Scott, 55 Fed. 971; 5 C. C. A. 366.

Elizabeth *v.* Pavement, 97 U. S. 126; Crosby *v.* Consolidated, 141 U. S. 441.

Was there evidence of the defendant's actual profit? There is nothing in the record to show that the master could take account in detail in the ordinary way in which accounts are taken, and so a general estimate was necessary. — Doten *v.* City of Boston, 138 Fed. 406; 70 C. C. A. 308.

Suffolk *v.* Hayden, 3 Wall. 315.

If every employee invariably worked with perfect memory, accuracy, and good judgment, labor-saving devices would be fewer and less important than they now are. That the value of a labor-saving device is based largely, or even wholly, upon the fact that those who work are frail and imperfect human creatures, and not beings of perfect efficiency, wisdom and honesty, does not lessen the value of the device or the profit arising therefrom. The cash register and the watchman's time clock, for example, are deemed patentable, yet they are used to protect an employer not only from negligence, but from the dishonesty, of his employees. A labor-saving device is deemed patentable if the weakness or carelessness or dishonesty of the employee, against which the patented device is effective, is recognized as a common failing, and an appreciable source of danger to employers in like case. In the Cawood Patent, 94 U. S. 695, the patentee was allowed to recover as profits the saving in repairing broken rails by the patented device; yet these rails had doubtless been damaged by improper operation as well as by ordinary wear and tear. Probably no sharp line can be drawn between

the two cases. Giving the master's report its fair interpretation, his statement that the cause of the defendant's damage was based upon carelessness, imperfect operation, and miscalculation, amounts to a statement that it was based upon human frailty. Under the old system the damage was caused by ordinary wear and tear, sometimes the result of negligence or miscalculation, sometimes the result of wind, current, or tide, setting the ferryboat into an unexpected position or giving it unexpected speed. This damage was frequent and usual, and could be most cheaply prevented by the patent in suit. For these reasons we think that the saving thus made by the defendant was recoverable in this accounting. — Doten *v.* City of Boston, 138 Fed. 406; 70 C. C. A. 308.

For a most remarkable holding on what is not a sufficient showing that, but for the infringement of a defendant, the complainant would have made the actual gains of the defendant, this opinion is commended. The arguments as to " awareness " and that " the field was full of competition selling the drill of other infringers " are supremely unique. Any attempt to excerpt from this opinion of 18 pages would be futile. Attention should be called to the fact that Judge Richards dissents, and also to the opinion of Judge Severens in Brennan *v.* Dowagiac, 162 Fed. 472. — McSherry *v.* Dowagiac, 160 Fed. 948; 89 C. C. A. 26.

Possibly in a case like this, where there have been a number of infringers, in view of the difficulty of proving in a suit against one that the sales made by him were lost to the patentee, if a reasonable royalty is recoverable, the prudent course is to sue for such royalty instead of the profits which would have accrued to the patentee had he made the sales. This course was not taken by the appellee. It staked its case on the right to recover profits lost by it and prepared it along that line. — McSherry *v.* Dowagiac, 163 Fed. 34; 89 C. C. A. 512.

Note: This is from opinion by Cochran, D. J., denying petition for rehearing in McSherry *v.* Dowagiac, 160 Fed. 948, supra. So far as appears from the report of the case, this opinion is by Judge Cochran sitting alone; and it would therefore seem that this pronouncement of a new rule of profits lacks the weight of an appellate decision. The statement above quoted is startling. How a patentee who has preserved his monopoly, granting no licenses, who has been most wantonly and persistently infringed, could " sue for such royalty instead of the profits," is a proposition quite without the experience of the ordinary practitioner.

A patentee may withhold the exploiting of his patent in a particular territory, or he may not be able at the time to extend his business therein. But this gives no right to the infringer to invade the territory and anticipate the sales which the patentee might make when he should desire and be able to carry his invention there for a profit which is legitimately his own. But this, while it might be an answer to the suggestion made by the master, is not relevant to such a proceeding as this. The fact that the owner of a patent does not exercise his right or cannot at the time do so to the full, gives no license to another, and the latter is liable for infringement, to the same extent as if the owner were exercising his right to the utmost. The owner has the same right as he has to any other property, which he may put to use or not as he chooses; and in such case the rule is always that, if a stranger without right seizes and uses it, he is bound to pay for such use, and it is no answer to him to say that the owner was doing nothing with it. If it be true, as has often been declared, that the exclusive right of a patentee is property, for the protection of which the public faith is pledged, it should have the same immunity from invasion, and its violation should be attended

with the same consequences as in the case of other species of property. — Brennan *v.* Dowagiac, 162 Fed. 472; 89 C. C. A. 392.

It seems to have been contended before the master by the appellant, while engaged in the endeavor to ascertain the profits, that in manufacturing and selling the infringing drills it had employed other patents, which had enhanced the value of the drills and the price at which they were sold, and reference was made to certain patents belonging to the plaintiff. These patents had been set out in the bill and infringement thereof charged. But they had been declared void by the circuit court, by a decree which remains unreversed and not appealed from. They should, therefore, have been regarded as a part of the patented art. There was no proof which could have justified the master in the conclusion that any other invention than that of the Peckham patent was present in the drills which constituted the infringement. Nor did the master find that there was any other patent involved in the infringing drills which was entitled to share in the profits than those belonging to the plaintiff which had been held void. He specified those as laying the foundation for applying the doctrine of Garretson *v.* Clark, 111 U. S. 120, and other like cases. The fact is that the conditions assumed for the statement of the rule in the case referred to did not exist. The present case in its facts is in closer analogy to Elizabeth *v.* Pavement, 97 U. S. 126; Goulds *v.* Cowing, 105 U. S. 253; Crosby *v.* Safety Valve, 141 U. S. 441; Canda *v.* Michigan, 152 Fed. 178. — Dowagiac *v.* Superior, 162 Fed. 479; 89 C. C. A. 399.

Wilson *v.* Rousseau, 4 How. 646; Grant *v.* Raymond, 6 Pet. 218; Bement *v.* National, 186 U. S. 70; Heaton *v.* Eureka, 77 Fed. 288.

§ 838. Measure of — Entire Profits.

When the entire profits of a business or undertaking result from the use of the invention, the patentee will be entitled to recover the entire profits, if he elects that remedy. And in such a case the defendant will not be allowed to diminish the show of profits by putting in unconscionable claims for personal services or other inequitable deductions. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

Rubber Co. *v.* Goodyear, 9 Wall. 788.

If the profits upon the whole article are clearly due to the patented part, which gives to the article its marketable value, they are the measure of recovery. — Untermeyer *v.* Freund, 58 Fed. 205; 7 C. C. A. 183.

Mfg. Co. *v.* Cowing, 105 U. S. 253.

Two rules governing the question of profits are laid down by the Supreme Court. The first of these rules (Elizabeth *v.* Nicholson, 97 U. S. 126) is as follows: Where profits are made by an infringer, by the use of an article patented as an entirety, the infringer is responsible to the patentee for the whole of such profits, unless it can show — and the burden is on the infringer to show it — that a portion of such profits is the result of some other thing used by him. And the second rule (Garretson *v.* Clark, 111 U. S. 120) is as follows: That where the patent is for an improvement, and not for an entirely new article or product, the burden is on the patentee to show what portion of the infringer's profits is due to the particular patented feature.

Inasmuch as appellant offered no proof, other than the patent itself, tending to show that the profits made by it upon the ladders sold by it were the result of anything else than the use of the ladder patented as an entirety, and inasmuch as no proof was offered by appellee, other than the patent itself, tending to separate or apportion the profits made by the appellant,

by the use of the patent in question, from such profits as might have been due to other features, neither party has attempted to take these cases out of the rule contended for by his adversary — leaving it as the determinative question in these cases whether (the patent only being before us) the rule laid down in the Nicholson case or the rule laid down in the Garretson case, is applicable to the case before us, as the patent has already been upheld and construed by this court.

The new thought in the art of ladder building, embodied in the Murray patent, was the utilizing of the man's weight to adjust the center of gravity. It was a unitary thought, to carry out which the elements already named were only agents; and a unitary thought, though thus carried, makes the ladder thus built a new article within the meaning of the Nicholson case. — Orr *v.* Murray, 163 Fed. 54; 89 C. C. A. 492.

Note: It is thought that this clear and logical statement should prove a contributing factor in the much-needed settlement of the present status of the rule of profits, or, more properly, the rule of evidence of profits.

§ 839. Measure of — Rules.

The decree was entered on the report of the master, for the estimated amount of profits which the defendant, with reasonable diligence, might have realized; not what, in fact he did realize. This instruction was erroneous. The rule in such a case is, the amount of profits received by the unlawful use of the machine, as this in general, is the damage done to the owner of the patent. It takes away the motive of the infringer of patented rights, by requiring him to pay the profits of his labor to the owner of the patent. Generally this is sufficient to protect the rights of the owner; but where the wrong has been done, under aggravated circumstances, the court has the power, under the statute, to punish it adequately, by an increase of the damages. — Dean *v.* Mason, 61 U. S. 198; 15 L. Ed. 876.

Livingston *v.* Woodworth, 15 How. 546.

The circuit court decreed that the defendant was liable "for all the profits made in violation of the rights of the complainants under the patent aforesaid, by respondents, by the manufacture, use or sale of any of the articles named in said bill." This was in accordance with the rule in equity cases established by this court. — Rubber *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

Livingston *v.* Woodworth, 15 How. 546; Dean *v.* Mason, 20 How. 198.

For history of rule see Root *v.* Ry., 105 U. S. 189; 26 L. Ed. 975.

The rule in equity requiring an infringer to account for gains and profits which he has made from the use of a patented invention, instead of limiting the recovery to the amount of royalties paid to the patentee by third persons, has been constantly upheld under the Act of 1870, which expressly affirms the defendant's liability to account for profits, as well as authorizes a court sitting in equity to award and to treble any damages that the plaintiff has sustained in excess of the defendant's profits. — Tilghman *v.* Proctor, 125 U. S. 136; 31 L. Ed. 664; 8 S. Ct. 894.

R. S. 4921; Birdsall *v.* Coolidge, 93 U. S. 64; Marsh *v.* Seymour, 97 U. S. 348; Root *v.* Railway, 105 U. S. 189; Goulds *v.* Cowing, 105 U. S. 253; Garretson *v.* Clark, 111 U. S. 120; Black *v.* Thorne, 111 U. S. 122; Birdsall *v.* Shaliol, 112 U. S. 485; Thomson *v.* Wooster, 114 U. S. 104.

§ 840. Measure of — Savings by Use.

In the ascertainment of profits made by an infringer of a patented invention, the rule is a plain one. The profits are not all he made in the business

in which he used the invention, but they are the worth of the advantage he obtained by such use; or in other words, they are the fruits of that advantage. Nor does it follow that the unprofitableness of the defendant's business in any degree lessens that saving, for without it his loss would have been so much the more. — Mevs *v.* Conover, 131 U. S. cxlii, App.; 23 L. Ed. 1008.

Mowry *v.* Whitney, 14 Wall. 651.

Method of computation stated and approved in U. S. *v.* Berdan, 156 U. S. 552; 29 L. Ed. 530; 15 S. Ct. 420.

In proving profits, it is necessary to show a saving by the use of the infringing tool over the cost of operating any other tool which defendant was free to use. — Hohorst *v.* Hamburg-American, 91 Fed. 655; 34 C. C. A. 39.

§ 841. Measure of — Trustee ex Maleficio Rule.

An infringer is a trustee ex maleficio for the owner of the exclusive rights protected by the patent; and a trustee who has confused the profits made by the use of the trust property with those made from his own property, and commingled them so that they cannot be segregated, must account for the whole. On the other hand, such a rule would work unjustly in many cases, — as where the patented feature is of an insignificant part of the machine or article; and it is probably because of its manifest inequity in such cases that the courts have placed upon the complainant the burden of proof. — Wales *v.* Waterbury, 101 Fed. 126; 41 C. C. A. 250.

Lupton *v.* White, 15 Ves. 432; Hart *v.* Ten Eyck, 2 Johns. Ch. 108, Central *v.* Connecticut, 104 U. S. 54.

In the present case the infringer's conduct has been such as to preclude the belief that it has derived no advantage from the use of the plaintiff's invention, as the master well said. In these circumstances, upon whom is the burden of loss to fall? We think the law answers this question by declaring that it shall rest upon the wrongdoer, who has confused his own with that of another so that neither can be distinguished. It is a bitter response for the court to say to the innocent party, "You have failed to make the necessary proof to enable us to decide how much of these profits are your own;" for the party knows, and the court must see, that such a requirement is impossible to be complied with. — Brennan *v.* Dowagiac, 162 Fed. 472; 89 C. C. A. 392.

Hart *v.* Ten Eyck, 2 Johns. Ch. 62; Wales *v.* Waterbury, 101 Fed. 126; Wyllie *v.* Ellice, 6 Hare, 505; Bailey *v.* Bailey, 67 Vt. 494; Mast *v.* Superior, 154 Fed. 45; The Idaho, 93 U. S. 575; Smith *v.* Township, 150 Fed. 257; Smith *v.* Motley, 150 Fed. 266.

Note: This is distinctly and properly a cancellation of the holding of this court in McSherry *v.* Dowagiac, 160 Fed. 948.

The infringement was not accidental. The defendant was all the while informed of the patent, and knew that, if he did not succeed in defeating the patent, it would be obliged to account for the profits and damages. It took the risk of confusion, and the loss must fall upon the wrongdoer, rather than the innocent party. It is as clear a case as could be instanced for the application of the rule stated and applied by this court in previous cases and by other courts in a great variety of instances where the facts indicated the fitness of its application. In another case decided at this session (Brennan *v.* Dowagiac, 162 Fed. 472) we referred to several cases upon this subject, and others are cited in our opinion in Smith *v.* Motley, 150 Fed. 266. — Dowagiac *v.* Superior, 162 Fed. 479; 89 C. C. A. 399.

The defendant put every obstacle in the way of arriving at any measure of profits, failed to produce records and books, and withheld all information possible on examination. The master made the best computation possible, and made all deductions that the evidence disclosed. The appellate court revised these figures, materially increased the amount of the profits found, decreased the allowances for selling, and *held:* His failure or refusal to produce the most satisfactory evidence leaves his case exposed to the presumption that if produced it would tell against him, and compels the court to rely on the less definite and certain evidence which the record may supply. This is a rule by which the courts are governed. If they fail to observe it, the rights of parties may utterly fail of protection. — Yesbera *v.* Hardesty, 166 Fed. 120; C. C. A.

Rubber Co. *v.* Goodyear, 9 Wall. 788; Lupton *v.* White, 15 Ves. 432; Hart *v.* Ten Eyck, 2 Johns. Ch. 62; Mast *v.* Superior, 154 Fed. 45; Brennan *v.* Dowagiac, 162 Fed. 472; Dowagiac *v.* Superior, 162 Fed. 479; Wales *v.* Waterbury, 101 Fed. 126.

§ 842. Measure of — Miscellaneous Rules.

The profits arising from the infringement of the combination are those of the entire combination, and are not mitigated by the fact of certain elements being old. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

It was quite right for the circuit court, when these cases were sent back, to direct the master to ascertain from the old evidence, if possible, and, if not, from new, how much should be deducted from the old decrees on account of the erroneous recoveries. The true way of determining this clearly was to find out what part of the profits for which the original decrees were rendered had been made by the use of the non-infringing machines. — Railroad *v.* Turrill, 110 U. S. 301; 28 L. Ed. 154; 4 S. Ct. 5.

Payments made for infringement are incompetent proof of a fixed royalty. — Cornley *v.* Marckwold, 131 U. S. 159; 33 L. Ed. 117; 9 S. Ct. 744.

Rude *v.* Westcott, 130 U. S. 152.

If a prior patent existed covering substantially the invention in suit and it was held by a third party, whether it could be regarded as open to the infringer the court declined to say. — McCreary *v.* Pennsylvania, 141 U. S. 459; 35 L. Ed. 817; 12 S. Ct. 40.

Where plaintiff ued on later of two patents covering substantially the same device it held that the earlier patent must be deemed open to defendant. — M. y *v.* Pennsylvania, 141 U. S. 459; 35 L. Ed. 817; 12 S. Ct. 40.

In estimating ofits made by an infringer the comparison must be between the patented invention and what was known and open to the public at and before the date of the patent. — McCreary *v.* Pennsylvania, 147 U. S. 459; 35 L. Ed. 817; 12 S. Ct. 40.

The profits made by the defendant cannot be increased or diminished by any act on the part of the plaintiff; and the amount of them is not affected by the question whether during the same time the plaintiff did or did not use the patented invention. — Consolidated *v.* Crosby, 141 U. S. 441; 35 L. Ed. 809; 12 S. Ct. 49.

Profits of other manufacturers cannot be taken as a measure between parties to suit. — Keystone *v.* Adams, 151 U. S. 139; 38 L. Ed. 103; 14 S. Ct. 295.

No time for payment being named, payment is due for each article as delivered. — U. S. *v.* Berdan, 156 U. S. 552; 39 L. Ed. 530; 15 S. Ct. 420.

Citing and discriminating, Packet Co. *v.* Sickles, 51 U. S. 440.

When a contract establishing a license fee has been considered and abandoned, and a subsequent agreement is made fixing no license fee the former abandoned contract does not determine the terms or conditions of the new contract entered into. — U. S. *v.* Berdan, 156 U. S. 552; 39 L. Ed. 530; 15 S. Ct. 420.

That evidence to show the difference in cost between a manufacturer using the patent and one not using it, is not competent proof to establish a measure of profits, see — Robbins *v.* Illinois, 81 Fed. 957; 27 C. C. A. 21.

Mfg. Co. *v.* Adams, 151 U. S. 139; Coupe *v.* Royer, 155 U. S. 565; Belknap *v.* Schild, 161 U. S. 10.

The witness was the president of the complainant and the cost estimate was one made by him as the result of his experience in his own factory; and the principal objection now urged is that the estimate of what the cost would be at the complainant's factory is no criterion of the cost in defendant's factory. Perhaps it would not be the best criterion if the actual cost to defendant had been shown; but the defendant did not offer to prove that, although the proof was under his own control, nor did it offer any evidence to prove that the estimate given by the complainant's witness was incorrect. Under such circumstances we think the proof was admissible. — Mast *v.* Superior, 154 Fed. 45; 83 C. C. A. 157.

The total amount of appellant's crop during the years of infringement was definitely shown by its own books. The market prices during those years were ascertained. Here were definite figures upon which to calculate the profits. The law requires no more than reasonable certainty in such a case. — Fullerton *v.* Anderson-Barngrover, 166 Fed. 443; C. C. A.

Suffolk *v.* Hayden, 3 Wall. 315; Doten *v.* City, 138 Fed. 406; Bigelow *v.* Dobson, 10 Fed. 386.

In order that the royalty found by the master may be accepted as a measure of damages against a defendant who is a stranger to the license proved before the master, the royalty must be paid before the infringement took place. — Diamond *v.* Brown, 166 Fed. 306; C. C. A.

Rude *v.* Westcott, 130 U. S. 152.

§ 843. Segregation — Burden of Proof.

The master refused to allow the profits due to elements not patented which entered into the composition of the patented articles. There may be cases in which such an allowance would be proper. This is not one of them. The manner in which defendant's books were kept renders such an account impossible. — Rubber *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

In disallowing the profits upon the combined buckle and lever, he did so apparently in deference to the rule that, where the articles which have been made and sold by the infringer contain not the patented invention alone, but other inventions and improvements, the profits for which he is to account

are not the total profits but those only which are attributable to the presence of the patented invention. This has always been the rule, and it is manifestly a just one upon principle; but it is often difficult of practical application, and the courts have sometimes applied it so that it has not produced an equitable result. In many cases, where it is obvious that the patented invention has contributed a great part of the profits realized from selling the infringing article or apparatus embodying unpatented features, it is practically impossible for the complainant to establish affirmatively the proportionate part. The present case is an illustration. Yet there is no way by which the complainant can establish the proportion. As the rule has been applied in some of the adjudged cases, there could be no recovery against the infringer to account for the whole profits, even though it could not be proved that the commercial value of the article was wholly due to the patented feature. — Wales *v.* Waterbury, 101 Fed. 126; 41 C. C. A. 250.

The respondents urge that these complainants are not entitled to recover the entire profits thus ascertained, because these infringing devices may be said to be not only infringements of complainants' patent but also the Mayo patent, and the burden is on the complainants to separate the profits attributable to respondents' infringements of the patent in suit from those attributable to the use of the Mayo invention. It has been the uniform practice of the courts to refuse to determine such collateral questions in suits where the validity and scope of a third party's patent are not directly put in issue. — Brinton *v.* Paxton, 134 Fed. 78; 67 C. C. A. 204.

McCreary *v.* Pennsylvania, 141 U. S. 459.

The complainants failed to establish just what portion of the profits were due to the infringing mechanism. — Brinton *v.* Paxton, 134 Fed. 78; 67 C. C. A. 204.

Garretson *v.* Clark, 111 U. S. 121.

How much of the twenty-eight and one-half cents, the difference between the cost and selling price of defendant's new appliance, was due to the improvement covered by claim 1? The record fails to show. This was necessary. — Baker *v.* Crane, 138 Fed. 60; 70 C. C. A. 486.

Seymour *v.* McCormick, 16 How. 480; Garretson *v.* Clark, 111 U. S. 120; Keystone *v.* Adams, 151 U. S. 139.

There is no evidence that the improvements introduced any new function or result, nor any satisfactory proof that the machines were by reason thereof more convenient or practical for the user or more commercially successful. In short, there is no evidence that the patented improvements were a dominant feature of the machine, or contributed to its sale, or created a new article, or obviated prior objections in practical operation, or which shows that the sales may not have depended upon advertising, charged accounts, and other mere business methods. Furthermore, there is evidence that other machines, not containing these patented improvements, were on the market, and were salable. In these circumstances, the defendant is only liable for profits realized from the use of that part of the patented invention which is new, and which he has wrongfully appropriated, and the complainant must furnish evidence from which the profits may be thus apportioned, or he cannot recover. — Force *v.* Sawyer-Boss, 143 Fed. 894; 75 C. C. A. 102.

Ingels *v.* Mast, 6 Fish. P. C. 415; McCreary *v.* Pennsylvania, 141 U. S. 459; Brickill *v.* Mayor, 112 Fed. 65.

But before it (the rule of segregation) can be applied, it is incumbent on the defendant to prove that some substantial part of the peculiarities of

the former patents (prior art) were embodied in the patented articles sold, and that they were of such a character that they probably contributed to the profits. Elizabeth *v.* Pavement Co. 97 U. S. 126. On this being shown, the burden of proof is devolved upon the party seeking to recover the profits to prove what part of the entire profits are due to the use of his own invention. He must make the separation of values and show to the court how much is his rightful proportion. — Canda *v.* Michigan, 152 Fed. 178; 81 C. C. A. 420.

That while the burden is upon complainant to prove that the entire profit upon an infringing article is due to the patented improvement, when such proof has been adduced and the burden of rebutting such proof is taken by the defendant, a finding of a master upon such proofs will not be disturbed in the absence of obvious error, see — McSherry *v.* Dowagiac, 160 Fed. 948; 89 C. C. A. 26.

§ 844. Segregation — Failure to Make.

The bill was taken pro confesso. Defendants made no proofs. Plaintiff failed to segregate or to eliminate common matters under the ordinary rules. Defendant merely objected to master's report and assigned errors. The court seems to hold that the defendant having had his day in court and having failed to defend his rights he is bound by the proofs of plaintiff if they are within the pleadings and pursuant to the decree and not manifestly erroneous; and that affidavits to the contrary will not be heard in this court. — Thomson *v.* Wooster, 114 U. S. 104; 29 L. Ed. 105; 5 S. Ct. 788.

Complainant may show profits of defendant to prove his damages, but where infringed device was only a part of defendant's machine, in the absence of proof and segregation, only nominal damages can be assessed. — Keystone *v.* Adams, 151 U. S. 139; 38 L. Ed. 103; 14 S. Ct. 295.

Seymour *v.* McCormick, 57 U. S. 480; Rubber Co. *v.* Goodyear, 76 U. S. 788; Mowry *v.* Whitney, 81 U. S. 620; Elizabeth *v.* Nicholson, 97 U. S. 126; Garretson *v.* Clark, 111 U. S. 120; Tilghman *v.* Proctor, 125 U. S. 136.

The complainant claimed as damages the entire profit of defendant and failed and refused to segregate any portion, although he well understood defendant's position. Having taken such position and insisted upon such theory of damages he cannot have the matter referred back to prove his damages under a different theory. — Mosher *v.* Joyce, 51 Fed. 441; 2 C. C. A. 322.

That failure to segregate according to the rule in Garretson *v.* Clark, is fatal, see — Robbins *v.* Illinois, 81 Fed. 957; 27 C. C. A. 21.

§ 845. Segregation — General Rules.

When a patent is for an improvement and not for an entirely new machine or contrivance, the patentee must show in what particular his improvement has added to the usefulness of the machine or contrivance. He must separate its results distinctly from those of the other parts, so that the benefits derived from it may be distinctly seen and appreciated. The rule on this head is aptly stated by Mr. Justice Blatchford in the court below: "the patentee" he says, "must in every case give evidence, tending to separate or apportion the defendant's profits and the patentee's damages between the patented feature and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative; or, he must show, by equally reliable and satisfactory evidence, that the profits and damages are to be calculated on the whole machine, for the reason that the entire

value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature." — Garretson *v.* Clark, 111 U. S. 120; 28 L. Ed. 371; 4 S. Ct. 291.

Where patent covers only a part of an improvement upon a general machine profits must be segregated. — McCreary *v.* Pennsylvania, 141 U. S. 459; 35 L. Ed. 817; 12 S. Ct. 40.

Seymour *v.* McCormick, 57 U. S. 480; Mowry *v.* Whitney, 81 U. S. 620; Littlefield *v.* Perry, 88 U. S. 205; Elizabeth *v.* Nicholson, 97 U. S. 126; Garretson *v.* Clark, 111 U. S. 120.

The present is a case where the defendant would not, and, as we think, could not, have made any profits from manufacturing the holders if it had not used the patented buckle to command a sale for them; and upon the facts is within the second branch of the rule stated in Garretson *v.* Clark, and within other authorities sanctioning a recovery of the total profits derived from the sale of an infringing article embodying unpatented features, when, but for the patented features, it would not have been a marketable article. — Wales *v.* Waterbury, 101 Fed. 126; 41 C. C. A. 250.

Mfg. *v.* Cowing, 105 U. S. 255; Hurlbut *v.* Schillinger, 130 U. S. 456; Crosby *v.* Consolidated, 141 U. S. 441; Mosher *v.* Joyce, 51 Fed. 441; Holmes *v.* Truman, 67 Fed. 542.

The complainants established that respondents made a certain profit upon the infringing devices of certain amount upon each and every one of them, separate and apart from the mechanism to which it is intended to be attached, and, it appearing that no other picker mechanism upon the market was open to the respondents to use, the master, under the circumstances, was justified from this evidence, together with other facts and circumstances before him, in finding that the total amount of these profits was the amount of complainants' damages. — Brinton *v.* Paxton, 134 Fed. 78; 67 C. C. A. 204.

Mason *v.* Graham, 90 U. S. 261; Lattimore *v.* Hardsocg, 121 Fed. 986; Rob. on Pat. sec. 1062.

The final rule which renders the recovery of substantial damages or material profits a practical impossibility in the great majority of cases.

The master found that the profits derived by the defendant from the sale of train equipments in connection with the patented quick-action valve (the device infringed) were the sum of $49,533. He also found that the sale of the defendant diverted an equal number of train equipments from the complainants, upon which the complainants would have realized a profit of $193,978, and the complainants were entitled to that amount as damages caused by the infringement. Exceptions were filed, and the case recommitted to the master "for the purpose of making a computation of profits and damages based upon the sales by the defendant of the quick-action valves of the patent only, separated from those upon the complete equipments." The master interpreted Judge Wheeler's decision as meaning only that the accounting was to be confined to complainant's profits and damages based upon the sales of the "triple-valve structure dissociated from the accessories necessary to constitute a train equipment." Upon this theory the master found that the profits made by the defendant upon these sales were $36 945, and that the damages sustained by the complainants by loss of profits on diverted sales were $128,737. This report was confirmed by the circuit judge, and on appeal the entire recovery was swept aside, and nominal damages only awarded, with the following statement of the law:

The proofs show that there was comparatively little demand by railroad

companies for complete automatic air-brake equipments that were not provided with quick-action triple-valves during the period of the infringement. But it is clear that the quick-action attachment was one of secondary importance in automatic brake equipments. It is apparent that the complainants could not have sold any of the patented valves if there had not been embodied in them the devices of the quick-action triple-valve of the earlier Westinghouse patent, or equivalent devices such as the defendant and the Boyden Brake Co. employed in their quick-action valves, and which did not infringe the earlier patent.

The general rule governing recoveries in infringement cases is stated in Garretson *v.* Clark, 111 U. S. 120, in the following language:

"The patentee must in every case give evidence tending to separate or apportion the defendant's profits and the patentee's damages between the patented features and the unpatented features, and such evidence must be reliable and tangible, and not conjectural and speculative; or he must show by equally reliable and satisfactory evidence that the profits and damages are to be calculated on the whole machine, for the reason that the entire value of the whole machine as a marketable article is properly and legally attributable to the patented feature."

Referring to the first branch of this rule, this court said in Wales *v.* Waterbury, 101 Fed. 126:

"This has always been the rule, and it is a satisfactory and just one upon principle; but it is often difficult of practical application, and the courts have sometimes applied it so that it has not produced an equitable result. In many cases, where it is obvious that the patented invention has contributed a great part of the profits realized from selling the infringing article or apparatus embodying unpatented features, it is practically impossible for the complainant to establish affirmatively the proportionate part."

Referring to the theory that an infringer is a trustee ex maleficio, and the rule that a trustee who has confused the profits made by the use of a trust property with those made from his own property, and commingled them so that they cannot be segregated, must account for the whole, this court in that case also said:

"Such a rule would work unjustly in many cases, as where the patented feature is of an insignificant part of a machine or article; and it is probably because of its manifest inequity in such cases that the courts placed upon the complainant the burden of proof."

The adjudications in which the latter branch of the rule in Garretson *v.* Clark has been applied are cited in Wales *v.* Waterbury. In all of them, in which the question was as to the basis of profits upon sales, the rule applied was that the profits upon the whole machine or article were allowable only when, but for the patented feature, the machine or article sold by the infringer would not have commanded a market.

The question whether a machine would or would not have been marketable without the patented part is of course a question of fact, but it is one which depends largely upon opinion evidence. The most satisfactory evidence upon the question is that which is afforded by the nature and intrinsic value of the improvement which it introduces into the art or industry in which the machine is employed. . . .

Inasmuch as the complainants did not attempt to separate or apportion the defendant's profits and their own damages between the patented and the unpatented features of the quick-action triple-valve, it was incumbent upon them to prove that the entire value of the defendant's quick-action valve as a marketable article was properly and legally attributable to the patented features. What they did prove, and all they proved was that purchasers of triple-valves generally demanded some form of quick-action valves, and that, except to a very limited extent, purchasers could not be found for

valves without these features. This falls short of proof that only the patented form could supply the demand, and does not meet the requirements of the second branch of the rule. — Westinghouse *v.* New York, 140 Fed. 545; 72 C. C. A. 61.

Note: As above indicated, this decision brings the rule in Garretson *v.* Clark to its last limit, and practically inhibits a substantial recovery for infringement. In fact, it may now be said that, in most cases, if the complainant cannot secure protection by injunction, he has no remedy against piracy. For note the situation in the present case: There were but two successful emergency valves of the type demanded by the railroads — the Westinghouse and the Boyden. The defendant could use neither. Consequently and perforce the railroads, when they needed the quick-action triple valve equipment, must buy from either Westinghouse or Boyden — or from this defendant who was an infringer of Westinghouse. The railroads *did* buy the number of quick-action valves reported by the master; and the court holds that, because railroads did buy some air-brakes *without* the quick-action valves, the complainant has not made out a case. It is to be noted that the record in this case was made by one of the greatest patent attorneys in this country; and in these circumstances it is evident that with such a rule, a substantial recovery upon an infringed improvement is next to impossible.

In Westinghouse *v.* New York, 140 Fed. 545, Judge Wallace, delivering the opinion of this court, reviewed the authorities on the question of recoveries in infringement cases, and distinguished between those where the patented part was of such paramount importance that it really created the value of the whole article, and those where such part was relatively an unimportant factor in the normal value of the whole, or where such value depended chiefly upon the presence of the unpatented parts. There the court recognized the well-settled rule that in cases of the former class the infringer should be held accountable for all profits, as trustee ex maleficio, by reason of having confused profits made by the use of a trust property with those from his own property, and commingled them so that they could not be separated. The court, however, quoted from the opinion in Wales *v.* Waterbury, 101 Fed. 126 as follows: "Such a rule would work unjustly in many cases — as where the patented feature is of an insignificant part of a machine or article; and it is probably because of its manifest inequity in such cases that the courts have placed upon complainant the burden of proof." — Force *v.* Sawyer-Boss, 143 Fed. 894; 75 C. C. A. 102.

Garretson *v.* Clark, 111 U. S. 120.

We do not by any means impugn the general rules laid down in Garretson *v.* Clark, 111 U. S. 120, and the cases which have followed it, one of which is that, when the infringement consists in making or using articles improved by his own invention, the plaintiff must prove the extent of the enhancement of profits by the use of his own, as distinguished from those due to the article improved. But we are of opinion that the circumstances of this case, first, in that in the patented combination no other invention inheres, and that the combinations are not for improvements merely, but substitutes for essential congeries in a drill, and, secondly that the infringement has been so conducted as to render a distinction of profits impossible, are controlled by principles quite independent of those involved in Garretson *v.* Clark, and that the plaintiff was entitled to a decree for the profits for the sales of the infringing drills. — Brennan *v.* Dowagiac, 162 Fed. 472; 89 C. C. A. 392.

Note: This is a plain and proper reversal of the holding of this court in McSherry *v.* Dowagiac, 160 Fed. 948.

Mr. Justice Blatchford * * * formulated the rule laid down in Garretson *v.* Clark, 111 U. S. 120. — Brennan *v.* Dowagiac, 162 Fed. 472; 89 C. C. A. 392.

Note: It may be an item of minor interest that this common supposition is not well founded. The rule as stated by Justice Blatchford was copied by him from the report of the master, George J. Sicard, Esq., a law-partner of the late President Cleveland; and Mr. Sicard previously copied the same, almost verbatim, from a written request to find submitted to him by the late Justice Francis A. Macomber, who was at that time counsel for Clark.

For a most sane and salutory construction and limitation of the rule of Garretson *v.* Clark, see Yesbera *v.* Hardesty, 166 Fed. 120; C. C. A.

§ 846. Segregation — Miscellaneous Rules.

The true inquiry is, as to the profits which the defendants have realized as the consequence of the improper use of these improvements. Such profits belong to the plaintiff and should be accounted for to him. — Littlefield *v.* Perry, 88 U. S. 205; 22 L. Ed. 577.

Where the patent covers only a part of or an improvement upon a general device, profits must be segregated. — McCreary *v.* Pennsylvania, 141 U. S. 459; 35 L. Ed. 817; 12 S. Ct. 40.

Seymour *v.* McCormick, 57 U. S. 480; Mowry *v.* Whitney, 81 U. S. 620; Littlefield *v.* Perry, 88 U. S. 205; Elizabeth *v.* Nicholson, 97 U. S. 126; Garretson *v.* Clark, 111 U. S. 120.

Where defendants did not manufacture and sell the infringing device as a separate article, but manufactured and used it in the manufacture and sale of the article to which it was applicable, obviously the entire profits upon the article sold would not be a proper measure of damages, since the patented device was only an inconsiderable part of such article, and profits upon the entire article are only allowable where such article is wholly the invention of the patentee, or where its entire value is properly and legally attributable to the patented feature. — Sessions *v.* Romadka, 145 U. S. 29; 36 L. Ed. 609; 12 S. Ct. 799.

Seymour *v.* McCormick, 57 U. S. 480; Mowry *v.* Whitney, 81 U. S. 620; Littlefield *v.* Perry, 88 U. S. 205; Garretson *v.* Clark, 111 U. S. 120.

In the absence of proof showing that the defendant's infringing device derived its whole commercial value from the use of the patented improvement, the court could not have made an order directing the master to find the profits on the entire device. — Mosher *v.* Joyce, 51 Fed. 441; 2 C. C. A. 322.

Littlefield *v.* Perry, 21 Wall. 205; Dobson *v.* Dornan, 118 U. S. 15.

The well settled doctrine of the Supreme Court was and is, that the profits to be assessed under section 4921 R. S. in suits in equity for the infringement of a patent, are those only which are properly attributable to the patented feature, and that the evidence of the patentee must "apportion the defendant's profits and also the patentee's damages between the patented and unpatented feature." — Untermeyer *v.* Freund, 58 Fed. 205; 7 C. C. A. 183.

Garretson *v.* Clark, 111 U. S. 120; Dobson *v.* Carpet Co. 114 U. S. 439.

It is also immaterial that a spring bearing plate was superadded to the patented features of the buckle of the defendant, as we are satisfied the organized device did not derive its commercial value to any appreciable extent

from that addition, and would have sold as readily without it. — Wales *v.* Waterbury, 101 Fed. 126; 41 C. C. A. 250.

In such case the infringer is not liable to the patentee for the profit he has made by the use of the entire apparatus. He is liable only for such as has accrued from the use of that part of it which was new, and which he has used without right. — Brickill *v.* Mayor, 112 Fed. 65; 50 C. C. A. 1.

McCreary *v.* Canal, 141 U. S. 462.

This is not a case where the entire or any considerable value of the article sold is attributable to the patented feature, and profits upon the entire article are only allowable where such article is wholly the invention of the patentee, or where its entire value is properly and legally attributable to the patented feature. — Lattimore *v.* Hardsocg, 121 Fed. 986; 58 C. C. A. 287.

Sessions *v.* Romadka, 145 U. S. 29; McCreary *v.* Penn. 141 U. S. 459; Warren *v.* Keep, 155 U. S. 265; Garretson *v.* Clark, 111 U. S. 120; Mowry *v.* Whitney, 14 Wall. 620; Seymour *v.* McCormick, 16 How. 480; Dobson *v.* Hartford, 114 U. S. 439; Littlefield *v.* Perry, 21 Wall. 205.

The complainant insists that the strap could not have been sold without the reels (the patented part), and for this reason that it should have been awarded the profits which the defendant made upon the strap sold by him during the period of infringement, together with the damages accruing from loss of complainant's profits upon diverted sales of strap during that period. If the proofs had shown that the strap could not have been sold except with the patented reels, the contention for the appellant would be supported by the authority of cases like Wales *v.* Waterbury, 101 Fed. 126. But the proofs do not show this, and not only the direct evidence, but also presumptions deducible from the small utility of the patented invention, authorize and require a contrary conclusion. That the strap was salable independently of the reels is shown by the fact that during the period of infringement and subsequently the defendant sold it in considerable quantities without reels, as well as with reels which did not infringe the patent. — Cary *v.* De Haven, 139 Fed. 262; 71 C. C. A. 388.

Some of it he treated as the patent directed, and sold the proceeds. Why did he do so? Why did he take the additional trouble to follow the patented process, and risk being prosecuted as an infringer? Why, under those circumstances, he should not account for the profits he made by the patented process we fail to see, and we are referred to no authority which denies such profits to the patentee. — Hemolin *v.* Harway, 166 Fed. 434; C. C. A.

§ 847. Miscellaneous Rules Concerning Profits.

The invalidity of the patent does not render the sales of machines illegal, so as to taint with illegality the obligation of the defendants to account for them, as they had acted under a contract. — Kinsman *v.* Parkhurst, 59 U. S. 289; 15 L. Ed. 385.

The conduct of the defendants has not been such as to commend them to a court of equity. Under the circumstances, every doubt and difficulty should be resolved against them. — Rubber *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

Lupton *v.* White, 15 Vesey, 432; Copeland *v.* Crane, 9 Pick. 79; Dexter *v.* Arnold, 2 Sumn. 109; Miller *v.* Whittier, 36 Me. 585.

In the reissue, the applicant stated what his improvement would save. If he was correct in this statement, it is not an unfair presumption that if

the profit to the patentee was no greater than he claimed it was, it could not have been more when the invention was used by an infringer. — Mowry *v.* Whitney, 81 U. S. 620; 20 L. Ed. 860.

Where no profits are shown to have accrued, a court of equity cannot give a decree for profits by way of damages, or as a punishment for the infringement. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

Livingston *v.* Woodworth, 15 How. 559.

If an infringer of a patent has realized no profits from the use of the invention, he cannot be called upon to respond for profits; the patentee in such case, is left to his remedy for damages. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

The burden of proving the amount of profits that the defendants have made by the use of his invention is upon plaintiff. — Tilghman *v.* Proctor, 125 U. S. 136; 31 L. Ed. 664; 8 S. Ct. 894.

Blake *v.* Robertson, 94 U. S. 728; Elizabeth *v.* Pavement, 97 U. S. 126; Dobson *v.* Hartford, 114 U. S. 439; Mowry *v.* Whitney, 81 U. S. 620.

The bill cannot be maintained for an account of profits received by the defendant from the use of this patent, because a decree for profits can only proceed upon the ground that the plaintiff is at least the equitable owner of the patent, and there can be neither legal nor equitable ownership of a void patent. — Kennedy *v.* Hazelton, 128 U. S. 667; 32 L. Ed. 576; 9 S. Ct. 202.

The question is whether there was a contract for the use, and not whether all the conditions of the use were provided for in such contract. This is the ordinary rule in respect to the purchase of property or labor. The fact that there was no agreed price was immaterial. — U. S. *v.* Berdan, 156 U. S. 552; 39 L. Ed. 530; 5 S. Ct. 420.

U. S. *v.* Palmer, 128 U. S. 262; U. S. *v.* Russell, 80 U. S. 623.

That the findings by the lower court are conclusive unless from other findings there was apparent error, see — U. S. *v.* Berdan, 156 U. S. 552; 39 L. Ed. 530; 15 S. Ct. 420.

The invasion of the complainant's right having been established, and an injunction ordered, it may be presumed that there are some profits or damages to be recovered. — American *v.* Crosman, 61 Fed. 888; 10 C. C. A. 146.

The defendants are liable to account for such gains and profits only as accrued to themselves, and not for those which accrued to the manufacturers from whom they bought. — Kisinger-Ison *v.* Bradford, 123 Fed. 91; 59 C. C. A. 221.

Elizabeth *v.* Pavement, 97 U. S. 126; Root *v.* Railway, 105 U. S. 189; Tilghman *v.* Proctor, 125 U. S. 136; Coupe *v.* Royer, 155 U. S. 565; Belknap *v.* Schild, 161 U. S. 11.

PROTESTS.

General Statement § 848 | *See — Interferences* § 580

§ 848. General Statement.

The practice of filing protests against the allowance of claims, either by a party then or formerly in interference or by a party having knowledge of the content of certain pending claims, is without direct statutory sanction.

and without sanction under the rules of the Patent Office, excepting Rule 12, which says:

No attention will be paid to unverified ex parte statements or protests concerning pending applications to which they are not parties, unless information of the pendency of such applications shall have been voluntarily communicated by the applicants.

It is a proceeding which can be entertained only with reference to a pending application. A protest cannot be heard with reference to an issued patent, since the Commissioner, having no power to cancel or repeal a patent (McCormick *v.* Aultman, 169 U. S. 606; § 26), is not at liberty to put a cloud on the grant after having issued the same. Moreover, a person aggrieved by the issuance of a patent containing claims which he considers as interfering with his activities has the following remedies: First, the right to raise an interference, if he is a competing inventor, by the filing of proper claims; secondly, he has the right under Sec. 4918, if he has a patent which he thinks is interfered with, to obtain a judicial determination of the question; thirdly, he has the right to go about his business, and if he is sued for the infringement of such claims, to defeat them, if he is able, in the courts provided for that purpose.

Protest proceedings appear to relate to questions of non-patentability by reason of prior publication or patent, while a public use proceeding (see § 859), though similar in character, relates to prior use of the subject-matter of the claim. While the Patent Office appears to rest authority for this proceeding upon an office rule, it is thought that the power originates in the general provisions of the statute charging the Commissioner with certain duties and with the determination of questions of novelty and utility in addition to the settlement of priorities; and for the obtaining of that knowledge of the state of the art which will enable him to perform his duty toward the public as well as toward the inventor, such proceedings as protests and public use proceedings are not to be discouraged.

The only instance in which an appellate court has directly considered the subject of protests is the following:

The protest filed by Hall in the Patent Office against the reissue, and the long contest made by him and his attorneys against it, are in the nature of a confession. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

PUBLIC USE.

The Statute and General Statement § 849
Evidence of § 850 (*see* § 388)
Experiment § 851 (*see* § 412)
Foreign Use § 852
General Rules § 853
Publicity § 854
Secret Use § 855
Single Use § 856
Two Years Use § 857
Miscellaneous Rules § 858
See — Abandonment § 18; *Anticipation* §§ 94, 103–4; *Defenses* § 321; *Experiment* § 415; *Judicial Notice* § 710; *Priority* § 808; *Public Use Proceedings* § 859; *Reissues* § 869; *Secret Process or Machine* § 898; *Unpatented Invention* § 930

§ 849. The Statute, and General Statement.

Section 4886 provides that the invention, in order to be patentable, must not have been in public use or on sale in this country for more than two years prior to the application; and Sec. 4923 provides that a patent shall not be held void by reason of it or any part thereof having been known or used in a foreign country, before the domestic invention or discovery thereof, if it had not been patented or described in a printed publication.

Public use is one of the statutory defenses, which may be made on proper

notice. See *Defenses.* But it is a defense which, like anticipation resting on parol evidence, must be clear and indubitable. See *Evidence.*

§ 850. Evidence of.

No patent shall be held to be invalid on account of sale and public use for more than two years prior to the application, except on proof that the invention was on sale and in public use more than two years before the application thereof was filed in the Patent Office. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.

McClurg *v.* Kingsland, 1 How. 209; Stimson *v.* R. R. 4 How. 380.

Evidence to establish prior use must not leave "room for very grave doubt." There must be satisfactory evidence that the article went into public use. — Hanifen *v.* Godshalk, 84 Fed. 649; 28 C. C. A. 507.

Cantrell *v.* Wallick, 117 U. S. 689.

Proof of public use rests upon the defendant, and every reasonable doubt should be resolved against it. — Penn *v.* Conroy, 159 Fed. 943; 87 C. C. A. 149.

Barbed Wire Pat. 143 U. S. 275.

§ 851. Experiment.

Whilst the supposed machine is in such experimental use, the public may be incidentally deriving a benefit from it. If it be a grist mill, or a carding machine, customers from the surrounding country may enjoy the use of it by having their grain made into flour, or their wool into rolls, and still it will not be in public use, within the meaning of the statute. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

When the subject of invention is a machine, it may be tested and tried in a building, either with or without closed doors. In either case, such use is not public use, within the meaning of the statute, so long as the inventor is engaged, in good faith, in testing its operation. He may see cause to alter it and improve it or not. His experiments will reveal the fact whether any and what alterations may be necessary. If durability is one of the qualities to be attained, a long period, perhaps years, may be necessary to enable the inventor to discover whether his purpose is accomplished. And though, during all that period, he may not find that any changes are necessary, yet he may be justly said to be using his machine only by way of experiment; and no one would say that such a use, pursued with a bona fide intent of testing the qualities of the machine, would be a public use within the meaning of the statute. So long as he does not voluntarily allow others to make it and use it, and so long as it is not on sale for general use, he keeps the invention under his own control, and does not lose his title to a patent. — Elizabeth *v.* American, 97 U. S. 126; 24 L. Ed. 1000.

A use by the inventor, for the purpose of testing the machine, in order by experiment to devise additional means for perfecting the success of its operation is admissible; and where, as incident to such use, the product of its operation is disposed of by sale, such profit from its use does not change its character; but where the use is mainly for the purposes of trade and profit and the experiment is merely incidental to that, the principal and not the incident must give character to the use. The thing implied as excepted out of the prohibition of the statute is a use which may be properly characterized as substantially for the purposes of experiment. Where the additional use is not for that purpose, but is otherwise public, and for more than two years

prior to the application, it comes within the prohibition. — Smith *v.* Sprague, 123 U. S. 249; 31 L. Ed. 141; 8 S. Ct. 122.

The use of the invention by the inventor himself, or by another person under his direction, by way of experiment, and in order to bring the invention to perfection, has never been regarded in this court as such a public use as under the statute defeats his right to a patent. — Smith *v.* Sprague, 123 U. S. 249; 31 L. Ed. 141; 8 S. Ct. 122.

Shaw *v.* Cooper, 32 U. S. 292; Elizabeth *v.* Nicholson, 97 U. S. 126; Egbert *v.* Lippmann, 104 U. S. 333.

Where the evidence shows use for more than two years prior to application for a patent, the proofs that such use were purely experimental should be full, clear, unequivocal and convincing. — Smith *v.* Sprague, 123 U. S. 249; 31 L. Ed. 141; 8 S. Ct. 122.

Where a machine is in the process of legitimate experiment and reduction to practice it is not public use to sell the product of such machine so long as the product is the incident and not the principal factor. — Smith *v.* Sprague, 123 U. S. 249; 31 L. Ed. 141; 8 S. Ct. 122.

Putting an invention into general use to test its utility is not within the statute and cases giving right of experiment. — Root *v.* Third Ave R. 146 U. S. 210; 36 L. Ed. 946; 13 S. Ct. 100.

Elizabeth *v.* Nicholson, 97 U. S. 126; Smith *v.* Sprague, 23 U. S. 249; Hall *v.* MacNeale, 107 U. S. 90; Egbert *v.* Lippmann, 104 U. S. 333.

But the mere intention of the patentee is not sufficient. Experimental use or sale for experimental purposes is a fact to be proved, and cannot reside in mere intention. If Swain had supplemented his testimony by showing that he at once proceeded, after the Modus machine was installed, to test its efficiency as compared with outward-discharge machines, or inward-discharge machines without his central partition; if he had made such experiments as he has conducted since this suit was begun, or the best tests he was able to under the circumstances, — the case would be different. But it does not appear that the patentee ever conducted any experiments to determine the comparative efficiency of the patented machine until after the beginning of the present suit. Under all the circumstances, there is total failure of proof that the sale of the Modus machine was for such experimental trial as the law contemplates, and which is sufficient to bring the case outside the statutory prohibition. — Swain *v.* Holyoke, 109 Fed. 154; 48 C. C. A. 265.

If the machine, under the circumstances presented in this case, contained the invention in its finished form, the inventor cannot relieve himself from the consequences which follow by showing that it was installed by him with imperfect connections. — Swain *v.* Holyoke, 109 Fed. 154; 48 C. C. A. 265.

In an art requiring extensive experiment to determine results, public experimental use for that purpose does not necessarily work dedication. — Westinghouse *v.* Saranac, 113 Fed. 884; 51 C. C. A. 514.

It is contended that no public use can be a bar to a patent unless there is an element of profit involved or unless the inventor allows the invention to go out of his control. The object of evidence on these points is to distinguish between a use by the public, as in Elizabeth *v.* Pavement Co. 97 U. S. 126, for the purpose of experiment, and a use by any part of the public, as in Egbert *v.* Lippmann, 104 U. S. 333, which is not experimental. The

ultimate question is not whether the public used the invention, but whether the use was directed to a development of the invention or test of its practicality. For the purpose of proving the ultimate fact, evidence as to whether the inventor derived a profit from the use or retained control may be important, but it is not necessarily conclusive. But where a use known to the public is shown, the proof on the part of the patentee who contends that it is not a bar, "because it was for the purpose of perfecting an incomplete invention by tests and experiments . . . should be full, unequivocal, and convincing." — Thomson-Houston *v.* Lorain, 117 Fed. 249; 54 C. C. A. 281.

Mfg. Co. *v.* Sprague, 123 U. S. 249.

That the unrestricted use of a machine which from its first operation is a mechanical and commercial success cannot be declared to be a secret and experimental use, even though certain minor improvements are subsequently made; and that the rule in Elizabeth *v.* Pavement Co. 97 U. S. 126 does not apply, see — Jenner *v.* Bowen, 139 Fed. 556; 71 C. C. A. 540.

Mr. Edison testified that "so far as the process is concerned, it is just the same now, in a broad sense, that it was" in 1888. The patent application was not filed until 1898. Between 1889 and 1898 duplicates to the number of 6,000 or 7,000 were made and used commercially. *Held:* Public use continuing more than nine years in commercial operations must be presumed from the testimony, and such fact is neither controverted nor modified by other proof, so that it is immaterial whether experimental use occurred at any stage. The statute invalidates the patent if the invention described therein was in public use or on sale earlier than two years before the application was filed. The use so established was public use, in violation of the statute, and not within the well-defined meaning of experimental use for testing the invention. — National *v.* Lambert, 142 Fed. 164; 73 C. C. A. 382.

Worley *v.* Tobacco, 104 U. S. 340; Smith *v.* Sprague, 123 U. S. 249; Eastman *v.* Mayor, 134 Fed. 844.

There was, no doubt, an earlier machine (one made and used for more than two years prior to application) more or less complete, which was being experimented with. But the use made of it was purely experimental, and does not count. Nor is it affected by the fact that caramels cut on it were sold. The caramels did not have to be thrown away to escape the charge of public use. — American *v.* Mills, 149 Fed. 743; 79 C. C. A. 449.

Elizabeth *v.* Pavement, 97 U. S. 126; Bryce *v.* Seneca, 140 Fed. 161.

For a public use which was similar to that in Elizabeth *v.* Pavement Co. 97 U. S. 126, and held not to be abandonment, see Warren *v.* City, 166 Fed. 309; C. C. A.

§ 852. Foreign Use.

It is clear that prior use in a foreign country will not supersede a patent granted here, unless the alleged invention was patented in some foreign country. — Roemer *v.* Simon, 95 U. S. 214; 24 L. Ed. 384.

§ 853. General Rules.

If an inventor should be permitted to hold back from the knowledge of the public the secrets of his invention; if he should for a long period of years retain the monopoly, and make and sell his invention publicly, and thus gather the whole profits of it, relying upon his superior skill and knowledge of the structure and then, and then only, when the danger of competition

should force him to secure the exclusive right he should be allowed to take out a patent, and thus exclude the public from any further use than what would be derived under it during his fourteen years; it would materially retard the progress of science and the useful arts, and give a premium to those who would be least prompt to communicate their discoveries. — Pennock *v.* Dialogue, 2 Pet. 1; 7 L. Ed. 327.

It is not a public knowledge of his invention that precludes the inventor from obtaining a patent for it, but a public use or sale of it. — Elizabeth *v.* American, 97 U. S. 126; 27 L. Ed. 1000.

It is not public knowledge of an invention but public use or sale which precludes an inventor from obtaining a valid patent. — Root *v.* Third Ave. R. 146 U. S. 210; 36 L. Ed. 946; 13 S. Ct. 100.

Quoting Elizabeth *v.* Nicholson, 97 U. S. 126.

A mechanical invention can be put to use only when embodied in a concrete machine, and it is as much embodied in one such machine, as in a thousand. Whether, when thus put to use, it is put "in public use," is a fact to be determined not by the number of machines in which it is so embodied, nor by the length of time they are run, but by the extent of use to which such inventor allows such embodiment to be put. He may retain his control over the machine which embodied such inventions and reserve to himself the right to select the individuals who shall use it, or secure to himself right of access to it for the purpose of conducting his experiments; but when he parts with such machine unreservedly, so that thenceforth the right to take, and hold, and use, and sell it is free to the public, that machine, and the invention it embodies, is by him put in public use. And he does so part with it when he sells it under a contract which not only allows the individual purchaser to use it, but leaves him free to transfer machine and use to whom he will. Whether the purchaser chooses to resell it or not, is immaterial; he has the power to do so, and that is enough. If the inventor wishes to keep control of the machine which embodies his invention, to secure his own access to it for examination, and to keep it in the friendly hands of those who, he intends, shall aid him by practical experiment, he must make such restrictions a part of the contract of sale and the court cannot assume them to exist in the absence of proof. — DeLamater *v.* Heath, 58 Fed. 414; 7 C. C. A. 279.

Egbert *v.* Lippmann, 104 U. S. 333.

Instead of laying down a fixed rule, it seems to us that in each case the court should direct its attention to the fundamental inquiry: Under what circumstances and for what purpose did the public use or sale take place? And, where it appears that there has been a public use or sale for more than two years before the application, the burden is thrown upon the patentee to establish, by full, clear, and convincing proofs, that such use or sale was principally and primarily for experimental purposes, and that such purposes were not merely incidental or subsidiary. — Swain *v.* Holyoke, 109 Fed. 154: 48 C. C. A. 265.

Fruit-Jar Co. *v.* Wright, 94 U. S. 94; Egbert *v.* Lippmann, 104 U. S. 337; Hall *v.* Macneale, 107 U. S. 96; Elizabeth *v.* Pavement, 97 U. S. 126; Mfg. Co. *v.* Sprague, 123 U. S. 256.

A person may obtain his knowledge of an invention direct from the inventor and may practise it publicly without his knowledge or consent, and such use will invalidate a patent unless the application is filed within the statutory period thereafter. In order to relieve the inventor from the consequences of such use, assuming that relief is possible, it must appear that

the knowledge was obtained by deception, and that the use was fraudulent or piratical. The meaning of "fraudulent" is too well known to require definition, but it may be wise to refer to the meaning of the other adjectives used by the Supreme Court. "Surreptitious" means, "Fraudulently obtained. Falsely crept in. Obtained by falsehood, fraud or stealth, by suppression or concealment of facts." "Piratical" means, "Acquired by piracy or robbery." It is entirely clear that when the courts have used these words in patent causes they intended them to apply to acts done mala fide, clandestinely, treacherously and by means of falsehood, fraud or breach of trust. It is equally clear that they have never been used to characterize knowledge obtained openly and in the due course of business or applied to any act which is neither malum prohibitum nor malum in se.

The question, what constitutes a fraudulent, piratical or wrongful appropriation, sale or use of the invention, is left very much as the earlier authorities leave it, in obscurity. We have been referred to no case since the clear exposition of the law in Andrews *v.* Hovey where a plain case of public use earlier than two years before the application for the patent has been held to be ineffectual as a defense because the use was surreptitious. When the question is fairly presented it may be that the courts will hesitate to introduce exceptions to the rule as broadly stated by the Supreme Court, with the confusion and uncertainty incident thereto. — Eastman *v.* Mayor, 134 Fed. 844; 69 C. C. A. 628.

The patent was applied for and granted in May, 1864. At that time the act of 1839 — explaining, supplementing and superseding the act of 1836 — was in force. The seventh section of that act is as follows:

"Sec. 7 . . . That every person or corporation who has, or shall have purchased or constructed any newly invented machine, manufacture, or composition of matter, prior to the application by the inventor for a patent, shall be held to possess the right to use, and vend to others to be used, the specific machine, manufacture, or composition of matter so made or purchased, without liability therefor to the inventor, or any other person interested in such invention; and no patent shall be held to be invalid by reason of such purchase, sale, or use prior to the application for a patent as aforesaid, except on proof of abandonment of such invention to the public; or that such purchase, sale, or prior use has been for more than two years prior to such application for a patent."

The last clause of this section, which is particularly applicable to this controversy, has been condensed and tersely stated by Mr. Walker as follows:

"A patent is void for the invention covered thereby when in public use or on sale earlier than two years before the application for the patent" (sec. 93).

The entire subject has been thoroughly examined and the conclusion of the Supreme Court stated in Andrews *v.* Hovey, 123 U. S. 267, and reaffirmed after a second exhaustive examination in the same case, 124 U. S. 694. The question now at issue was directly involved in that case. The court says, speaking of the numerous defenses:

"It is necessary to consider only one of them, which, in our view, is fatal to the validity of the patent, and that is, that the invention was used in public at Cortland, in the State of New York, by others than Green (the inventor) more than two years before the application for the patent."

The court says, in construing the section quoted supra:

"The evident intention of Congress was to take away the right (which existed under the act of 1836) to obtain a patent after an invention had for a long time been in public use without the consent or allowance of the inventor; it limited that period to two years, whether the inventor had or had not consented to or allowed the public use."

After an examination of every reported case upon the rehearing the court was confirmed in its opinion that its former decision was correct and closes the elaborate discussion in the following language:

"The second clause of the seventh section seems to us to clearly intend, that, where the purchase, sale, or prior use referred to in it has been for more than two years prior to the application, the patent shall be held to be invalid, without regard to the consent or allowance of the inventor. Otherwise the statute cannot be given its full effect and meaning."

Among the authorities thus examined and overruled was Campbell *v.* Mayor, 9 Fed. 500, which was the original decision holding the patent in this suit valid. — Eastman *v.* Mayor, 134 Fed. 844; 69 C. C. A. 628.

Note: This case, perhaps, holds the record for long and laborious conflict. The first device was completed and delivered for use March 28, 1860. The application was not filed until May 13, 1864. This action was commenced Nov. 13, 1877; and the decision herein was filed Jan. 16, 1905. The litigation covered, in round numbers, 28 years; between the filing of the application and the final decree of the Circuit Court of Appeals 41 years; a final decree on an invention put in use 45 years before that decree was reached.

The patent was governed by the act of Mar. 3, 1839, as to public use. That act provided that "A patent is void if the invention covered thereby was in public use or on sale earlier than two years before the application for the patent." (Walker's paraphrase.) The act was without qualification. The public use was instituted by the inventor on March 28, 1860. Notwithstanding the fact that it was a perfect working device on that day, application was not made until four years, two and one-half months had elapsed. The excuses of experimental use and surreptitious use, to my mind, were the most flimsy. That a case like this could remain in the courts for more than a quarter of a century serves to show the utter inadequacy of our patent courts and the laws governing the trial of patent causes.

§ 854. Publicity.

Whether the use of an invention is public or private, does not necessarily depend upon the number of persons to whom its use is known. If an inventor, having made his device, gives or sells it to another, to be used by the donee or vendee without limitation or restriction, or injunction of secrecy, and it is so used, such use is public, within the meaning of the statute, even though the use and knowledge of the use may be confined to one person. — Egbert *v.* Lippmann, 104 U. S. 333; 26 L. Ed. 755.

Some inventions are by their very character only capable of being used where they cannot be seen or observed by the public eye. An invention may consist of a lever or spring, hidden in the running gear of a watch, or of a ratchet, shaft or cog-wheel covered from view in the recesses of a machine for spinning or weaving. Nevertheless, if its inventor sells a machine of which his invention forms a part; and allows it to be used without restriction of any kind, the use is a public one, within the meaning of the law. So, on the other hand, a use necessarily open to public view, if made in good faith solely to test the qualities of the invention, and for the purposes of experiment is not a public use within the meaning of the patent law. Elizabeth *v.* Paving Co. 97 U. S. 126; Shaw *v.* Cooper, 7 Pet. 292. — Egbert *v.* Lippmann, 104 U. S. 333; 26 L. Ed. 755.

Note: In this case, Justice Woods held that where the inventor had made an improved corset steel and presented it to his ladylove, who used it; and where said inventor subsequently married the donee and subsequently made her a second corset steel — the two articles combined covering more than two years before patent—such use was public and constituted abandonment. To this Justice Miller wisely dissented.

The fact that the improvement was concealed within the safe and could be seen only by the destruction of the safe does not avoid public use. — Hall *v.* Macneale, 107 U. S. 90; 27 L. Ed. 367; 2 S. Ct. 73.

Egbert *v.* Lippmann, 104 U. S. 333.

The fact that the anticipating device was concealed from view and could not have come to public notice does not constitute a secret device such as would take it outside the law of public use. — Brush *v.* Condit, 132 U. S. 39; 33 L. Ed. 251; 10 S. Ct. 1.

The process was practised by Pettigrew and Gleason, and those who assisted, and was open to the observation of the employees generally, and of all who passed through the plant. We think there was abundant publicity. — U. S. Mineral *v.* Manville, 125 Fed. 770; 60 C. C. A. 288.

Coffin *v.* Ogden, 18 Wall. 120; Brush *v.* Condit, 132 U. S. 39; Fornerook *v.* Root, 127 U. S. 180; Peters *v.* Active, 129 U. S. 530.

§ 855. Secret Use.

Inventors may, if they can, keep their invention secret; and if they do for any length of time, they do not forfeit their right to apply for a patent, unless another, in the meantime, has made the invention, and secured by patent the exclusive right to make, use and vend the patented improvement. Within that rule and subject to that condition, inventors may delay to apply for a patent. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

Inventors may, if they can, keep their inventions secret, but if they do not, and suffer the same to go into public use for a period exceeding what is allowed by the patent act they forfeit their right to a patent. — Parks *v.* Booth, 102 U. S. 96; 26 L. Ed. 54.

The unrestricted use of a device, without injunction to secrecy, constitutes public use. — Manning *v.* Cape Ann, 108 U. S. 462; 27 L. Ed. 793; 2 S. Ct. 860.

Egbert *v.* Lippmann, 104 U. S. 333.

The inventor built and set up and licensed to another a machine, without restriction as to secrecy. Later minor improvements were made, but the machine was a successful one from the start. *Held:* The licensee understood its mechanism and its method of use, and was under no restriction as to the place and manner of operation, and under no obligation of secrecy. When the object of the use is the perfecting of an invention, the sale of the product, if strictly incidental to an experimental use, is not a public use under sec. 4886 R. S., and will not defeat a patent. A use which is impliedly excepted out of the prohibition of the statute is a use which may be properly characterized as substantially for the purposes of experiment. "When the substantial use is not for that purpose, but is otherwise public, and for more than two years prior to the application, it comes within the prohibition."— Jenner *v.* Bowen, 139 Fed. 556; 71 C. C. A. 540.

Smith *v.* Sprague, 123 U. S. 249; International *v.* Gaylord, 140 U. S. 55; Root *v.* Third Ave. 146 U. S. 210; Eastman *v.* Mayor, 134 Fed. 844.

Distinguishing Elizabeth *v.* Pavement Co. 97 U. S. 126.

§ 856. Single Use.

It follows that a single instance of sale or of use by the patentee may, under the circumstances, be fatal to the patent. — Consolidated *v.* Wright, 94 U. S. 92; 24 L. Ed. 68.

Pitts *v.* Hall, 2 Blatchf. 235; Am. *v.* Am. 4 Fish. 291; McMillin *v.* Barclay, 5 Fish. 189; McClurg *v.* Kingsland, 1 How. 202; Agawam *v.* Jordan, 7 Wall. 583.

To constitute public use of a patent it is not necessary that more than one of the patented articles should be publicly used. The use of a great number may tend to strengthen the proof of public use, but one well defined case of public use is just as effectual to annul the patent as many. — Egbert *v.* Lippmann, 104 U. S. 333; 26 L. Ed. 755.

Not dependant upon the number of persons using it. — Root *v.* Third Ave., 146 U. S. 210; 36 L. Ed. 946; 13 S. Ct. 100.

Egbert *v.* Lippmann, 104 U. S. 333.

A single unrestricted sale proved is sufficient to establish the defense of prior public use. — DeLamater *v.* Heath, 58 Fed. 414; 7 C. C. A. 279.

Fruit Jar Co. *v.* Wright, 94 U. S. 92; Egbert *v.* Lippmann, 104 U. S. 332; Hall *v.* MacNeale, 107 U. S. 90; Mfg. Co. *v.* Sprague, 123 U. S. 249; Elizabeth *v.* Pavement Co. 97 U. S. 126.

The sale of this machine was absolute, unconditional and for a valuable consideration. As a general rule, a single unrestricted sale by the patentee of his patented device, embodying his completed invention, is a public use or sale within sec. 4886 of the Revised Statutes. — Swain *v.* Holyoke, 109 Fed. 154; 48 C. C. A. 265.

Egbert *v.* Lippmann, 104 U. S. 333; Fruit-Jar Co. *v.* Wright, 94 U. S. 92; Hall *v.* MacNeale, 107 U. S. 90; Henry *v.* Soapstone Co. 2 Fed. 78; Sinclair *v.* Backus, 4 Fed. 539; Mfg. Co. *v.* Mellon, 58 Fed. 705; DeLamater *v.* Heath, 58 Fed. 414; Mfg. Co. *v.* Sprague, 123 U. S. 249.

We should hesitate to lay down the broad proposition that a single sale of a patented device for experimental purposes works a forfeiture under the statute. We do not understand that it has ever been so expressly decided by the Supreme Court. It is certainly doubtful whether, under such circumstances, the device can be said to be "on sale" within the fair meaning of the statute. It does not follow that, because a machine has been sold, it has passed the experimental stage. — Swain *v.* Holyoke, 109 Fed. 154; 48 C. C. A. 265.

Hall *v.* MacNeale, 107 U. S. 96.

There are undoubtedly cases where the strict application of this rule (a single unrestricted sale) works great hardship. Some inventions are for large and costly structures, others require a long period of time to test their practical utility, and still others are for small devices which are attached to large machines. It follows that an inventor, from lack of means or other circumstances, may be forced to sell his patented device in order to test its utility or efficiency. For these reasons the courts in some instances have declined to enforce the strict rule where the sale was attended by some exceptional circumstance. — Swain *v.* Holyoke, 109 Fed. 154; 48 C. C. A. 265.

Graham *v.* McCormick, 11 Fed. 859; Graham *v.* Mfg. Co. 11 Fed. 138; Harmon *v.* Struthers, 57 Fed. 637; Innis *v.* Boiler Works. 22 Fed. 780; Eastern *v.* Standard, 30 Fed. 63; Draper *v.* Wattles, 3 Ban. & A. 618.

§ 857. Two Years Use.

Is fatal to the validity of the patent. — Worley *v.* Loker, 104 U. S. 340; 26 L. Ed. 821.

McClurg *v.* Kingsland, 1 How. 202; Consolidated *v.* Wright, 94 U. S. 92; Egbert *v.* Lippmann, 104 U. S. 333.

While the act of 1836 made any public use fatal, the act of 1870 makes a public use of two years prior to the application fatal to the granting of a valid patent. — Manning *v.* Cape Ann, 108 U. S. 462; 27 L. Ed. 793; 2 S. Ct. 860.

McClurg *v.* Kingsland, 1 How. 202; Egbert *v.* Lippmann, 104 U. S. 333; Fruit *v.* Wright, 94 U. S. 92; Worley *v.* Tobacco, 104 U. S. 340.

An invention which has been in public use more than two years, whether with or without the inventor's consent is abandoned. — Andrews *v.* Hovey, 123 U. S. 267; 31 L. Ed. 160; 8 S. Ct. 101.

Statutes and authorities construed. — Andrews *v.* Hovey, 124 U. S. 694; 31 L. Ed. 557; 8 S. Ct. 676.

McClurg *v.* Kingsland, 42 U. S. 202; Pierson *v.* Eagle, 3 Story, 402; Hovey *v.* Stevens, 1 Wood & M. 290; Pitts *v.* Hall, 2 Blatchf. 233; McCormick *v.* Seymour, 2 Blatchf. 240; Seymour *v.* McCormick, 57 U. S. 480; Sargent *v.* Seagrave, 2 Curt. 553; Kendall *v.* Winsor, 62 U. S. 322; Pennock *v.* Dialogue, 27 U. S. 1; Shaw *v.* Cooper, 32 U. S. 292; Sanders *v.* Logan, 2 Fish. P. C. 167; American *v.* American, 4 Fish. P. C. 284; McMillin *v.* Barclay, 5 Fish. P. C. 189; Russell *v.* Mallory, 10 Blatchf. 140; Jones *v.* Sewall, 3 Cliff. 563; Klein *v.* Russell, 86 U. S. 433; Henry *v.* Francestown, 2 B. & A. 221; Consolidated *v.* Wright, 94 U. S. 92; Kelleher *v.* Darling, 4 Cliff. 424; Henry *v.* Providence, 3 B. & A. 501; Draper *v.* Wattles, 3 B. & A. 618; Bates *v.* Coe, 88 U. S. 31; Graham *v.* McCormick, 10 Biss. 39; Brickill *v.* Mayor, 18 Blatchf. 273; Campbell *v.* Mayor, 20 Blatchf. 67; Davis *v.* Fredericks, 21 Blatchf. 556.

If an inventor applies for his patent within two years from the time that he first exhibits his completed invention in public, no amount of public use within that two years, either by the inventor or others, will work any forfeiture of his right to a patent or constitute any evidence of abandonment. — Haines *v.* McLaughlin, 135 U. S. 584; 22 L. Ed. 241; 10 S. Ct. 876.

Where an inventor puts his invention into public use for more than two years without controlling his invention and in good faith seeking to perfect the same, such use avoids the patent. — Root *v.* Third Ave., 146 U. S. 210; 36 L. Ed. 946; 13 S. Ct. 100.

Elizabeth *v.* Nicholson, 97 U. S. 126; Smith *v.* Sprague, 123 U. S. 249; Hall *v.* MacNeale, 107 U. S. 90; Egbert *v.* Lippmann, 104 U. S. 333.

§ 858. Miscellaneous Rules.

The acquiescence of an inventor in the public use of his invention can in no case be presumed, where he has no knowledge of such use. But this knowledge may be presumed from the circumstances of the case. — Shaw *v.* Cooper, 7 Pet. 292; 8 L. Ed. 699.

Where the employee invents under hire and employer uses, such use, if for more than two years is public use and is not avoided by any part ownership by the employer. — Worley *v.* Loker, 104 U. S. 340; 26 L. Ed. 821.

An inventor cannot relieve himself of the consequences of the prior public use of his patented invention by assigning an interest in his invention or patent to the person by whom the invention was used. — Worley *v.* Loker, 104 U. S. 340; 26 L. Ed. 821.

What constitutes. — Hall *v.* MacNeale, 107 U. S. 90; 27 L. Ed. 367; 2 S. Ct. 73.

Coffin *v.* Ogden, 18 Wall. 120.

It follows from this principle (rule in Penna. *v.* Locomotive, 110 U. S. 490) that, where the public has acquired in any way the right to use a machine or device for a particular purpose, it has the right to use it for all the like purposes to which it can be applied, and no one can take out a patent to cover the application of the device to a similar purpose. — Blake *v.* San Francisco, 113 U. S. 679; 28 L. Ed. 1070; 5 S. Ct. 692.

It will hardly be contended that the mistaken advice of a patent solicitor can override a statute of the United States. — Eastman *v.* Mayor, 134 Fed. 844; 69 C. C. A. 628.

PUBLIC USE PROCEEDINGS.

General Statement § 859
See — Interference § 580; *Public Use* § 849

§ 859. General Statement.

These proceedings are similar to protests (see § 848), and appear to have grown up in much the same way. While a protest proceeding may inform the Commissioner as to prior publication, these proceedings are to inform him as to public use. Both proceedings have as their object the assistance of the Commissioner in performing his duties under sec. 4893. As appears from the case quoted from below, it is not a proceeding which a contestant before the Office can institute without some risk to himself; for the establishment of a prior use to defeat an opponent may operate to defeat both parties.

The public use, therefore, carried back more than two years prior to Beckert's application, antedates the new application of Currier for a still longer period, and prevents not only Beckert's fourth claim, but the claim of the patent in suit, from covering needles with headed pins. — Dodge *v.* Jones, 159 Fed. 715; 86 C. C. A. 191.

REDUCTION TO PRACTICE.

General Statement § 860
Diligence § 861
Essential to Patentability § 862
Experiment § 863 (*see* § 412)
Last Step Rule § 864
Operativeness § 865
Priority § 866
What Constitutes § 867
See — Experiment § 412; *Operativeness* § 781; *Priority* § 811; *Public Use* § 849

§ 860. General Statement.

What has been said with reference to operativeness (§ 781) applies largely to this subject. The statute (sec. 4886) requires that an invention, in order to be patentable, shall not only be new but useful. It is self-evident that an invention which cannot be reduced to practice without further invention is not patentable by reason of non-utility. Moreover, the statute requires that the specification shall recite the manner and process of making, constructing, compounding and using the invention, in such full, clear, concise and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle. R. S. 4888.

Since the furnishing of a model (sec. 4891) is not mandatory, and the requirement has fallen into desuetude, the Commissioner has no means of knowing, in many cases, whether the invention is operative, or has been reduced to practice to any extent whatever. One who has had any con-

siderable experience in patent soliciting well knows that many inventions pass directly from the drafting board to the patent specification, without ever having been embodied in a machine. Many of these paper patents are never reduced to practice—many never could be. There is evidently a tendency on the part of the courts, in some cases, to limit the application of such paper patents as showing anticipation (§ 92). It must be borne in mind that failure to reduce to practice or inoperativeness are not questions within the rule of non-user as laid down by the Supreme Court in Continental *v.* Eastern, 210 U. S. 405 (§ 574), but are within the rules stated in Automatic *v.* Pneumatic, under § 613.

The following summary of the law by Judge Holt is instructive:

This is a bill in equity under 4920 R. S. for infringement. The only defense is priority of invention. Under sec. 4920 the defendant contends, first, that Watson was the original and first inventor of the thing patented, and, second, that Thomas unjustly obtained his patent for that which was in fact invented by Watson, who was using reasonable diligence in adapting and perfecting the same. The first defense turns upon the respective dates of the Thomas and Watson inventions, and the second defense raises a question of fact as to Watson's diligence in adapting and perfecting his invention. Thomas filed his application Dec. 17, 1896, and his patent issued July 26, 1904. Watson conceived his invention, illustrated it by a drawing, and disclosed it to others as early as Jan. 10, 1896. He reduced his invention to practice by the building of a machine in Apr., 1897. He filed his application Mar. 11, 1898, and his patent issued Sept. 26, 1899. It may be noted, first, that Thomas' application antedates Watson's reduction to practice by 4 months, and Watson's application by 15 months; and second, that Watson's conception antedates Thomas' application by 11 months. The main controversy with respect to the Thomas invention is whether the date of his invention is the date of his application, Dec. 17, 1896, and the main controversy with respect to the Watson invention is whether the date of his invention is the date of his conception, Jan. 10, 1896.

Under a rule of the Patent Office, the filing of an allowable application is a constructive reduction to practice. In accordance with this rule, the date of the Thomas invention was fixed as of Dec. 17, 1896, the date of his application; and the burden of proof was thrown upon Watson to establish the fact of reasonable diligence from the date of his prior conception, Jan. 10, 1896, to the time Thomas filed his application. Upon this issue of diligence on the part of Watson, the Examiner of Interferences and the Commissioner of Patents, and the Court of Appeals, D. C., found against Watson, and adjudged Thomas the prior inventor, and accordingly a patent was issued to Thomas under sec. 4904. As a result of the interference proceedings, there are two outstanding patents for the same invention issued to independent inventors.

The decision in interference proceedings is not conclusive on the question of priority of invention. The same question may arise in subsequent suits instituted under secs. 4915, 4918 and 4920, R. S. In the present suit, the question of priority is raised under paragraphs 2 and 4 of sec. 4920. In order to determine the question of priority under these paragraphs, we must ascertain the respective dates of the Thomas and Watson inventions. If we find the date of the Thomas invention is prior to the date of the Watson invention, then Thomas is the original and first inventor, unless Watson was using reasonable diligence in adapting and perfecting his invention from the time of his conception. On the other hand, if we find that the date of the Watson invention is prior to the date of the Thomas invention, then Watson is the original and first inventor. No question of diligence arises regarding the Thomas invention, because the complainant does not under-

take to carry the date of the Thomas invention back of his application, while in the case of Watson it is sought to carry the date of invention back to his conception.

In patented inventions there are several distinct stages of the invention. Some patented inventions comprise only three stages, namely, conception (evidenced by drawings, disclosures, or models), application, patent; while other patented inventions comprise four stages, namely, conception, reduction to practice, application, patent.

The date of the first class of patented inventions must be either (1) the date of the patent, or (2) the date of the application, or (3) the date of the conception; while the date of the second class must be either (1) the date of the patent, or (2) the date of the application, or (3) the date of the reduction to practice, or (4) the date of the conception.

When two patents for the same invention have been issued to independent inventors, we understand the rule to be that the dates of their respective inventions are, (1) the dates of the patents; (2) the dates of the applications, provided the application sufficiently describes the invention; (3) the dates of actual reduction to practice; (4) the dates of conception; with this qualification, that, if either patentee seeks to carry the date of his invention back to the date of his conception, he must show reasonable diligence in adapting and perfecting his invention, either by actual reduction to practice or by filing his application.

Applying this rule, it appears that Thomas' application of Dec. 17, 1896, carries the date of his invention back of Watson's application, Mar. 11, 1898, and back of Watson's conception, Jan. 10, 1896. It follows, therefore, that Watson, in order to establish an earlier date than Thomas, must show that between the date of his conception, Jan. 10, 1896, and the date of his actual reduction to practice, Apr., 1897, he was "using reasonable diligence in adapting and perfecting" his invention.

The defendant contends that the courts have adopted another and a different rule for determining the dates of inventions under the patent laws, and that rule is as follows: Inventions are divided into two classes, simple and complicated. Simple inventions may be completed by drawings or disclosure which sufficiently describe the invention, while complicated inventions require for their completion actual reduction to practice. With respect to this theory of the defendant, it is sufficient to say that it is novel and plainly unsound. No such distinction between inventions is found in the statutes, or has ever been recognized by the courts in any adjudicated cases. It may be further observed that any such artificial distinction would lead to hopeless confusion and great injustice.

In the present case the question of priority of invention involves two fundamental inquiries: First, is the date of the patented invention as early as the date of the application? In other words, can Thomas carry back the date of his invention to the date of his application? Second, is the date of a patented invention as early as the date of conception? In other words, can Watson carry back the date of his invention to the date of his drawing and disclosure?

First. With respect to the first proposition it may be said that the law is well settled that the date of a patented invention is at least as early as the date of the application, provided it sufficiently describes the invention to enable those skilled in the art to understand it; and we have found no decision in which this rule is questioned. (Quoting and reviewing Walk. Pat. 4th ed. § 70; Kearney *v.* Railroad, 32 Fed. 320; National *v.* Brown, 36 Fed. 317; Prindle *v.* Brown, 155 Fed. 531; Bates *v.* Coe, 98 U. S. 31; Barnes *v.* Walworth, 51 Fed. 88, affd. 60 Fed. 605; Barbed Wire Case, 143 U. S. 275; Miller *v.* Eagle, 151 U. S. 186; Westinghouse *v.* Chartiers, 43 Fed. 582.)

The rule of the Patent Office that the filing of an allowable application is constructive reduction to practice is only the expression in another form of the rule that the application for a patented invention, if it sufficiently describes the invention, is conclusive evidence that the invention was made at least as early as that date. Lorraine *v.* Thurmond, 51 O. G. 1781.

The rule of the Federal courts respecting an application which has resulted in a patent, and the rule of the Patent Office respecting an allowable application, simply mean that such applications are conclusive evidence of the completeness of the invention. In other words, they are conclusive evidence that the stage of the invention has been reached where it is evidenced by reduction to practice.

The rule of the Patent Office, as pointed out by Commissioner Mitchell in Lorraine *v.* Thurmond, *supra*, is based upon two well-established principles of the patent law:

(1) We have, in the first place, the principle that a statutory invention (except as modified by the doctrine of "diligence in adapting and perfecting") is a completed invention; that is, an invention which is perfected and adapted to use, or, as otherwise expressed, reduced to practice; and an inventor is not entitled to a patent — in other words, has not made an invention in the legal sense — until he has reduced his invention to practice. Agawam *v.* Jordan, 7 Wall. 583; Seymour *v.* Osborne, 11 Wall. 516; Clark *v.* Willimantic, 140 U. S. 481; Woodcock *v.* Parker, Fed. Cas. 1813; Bedford *v.* Hunt, Fed. Cas. 1217; Reed *v.* Cutter, Fed. Cas. 11,645; Washburn *v.* Gould, Fed. Cas. 17,214; White *v.* Allen, Fed. Cas. 17,535; Winans *v.* New York, Fed. Cas. 17,864.

(2) At the same time we have the equally well settled rule that an invention need not be perfected and adapted to use, or reduced to practice, in order to obtain a valid patent, since no such condition is contained in the statute. Wheeler *v.* Clipper, Fed. Cas. 17,493; Telephone Cases, 126 U. S. 1.

From these established and seemingly contradictory principles of the patent law, first, that an invention in order to be patentable must be reduced to practice, and, second, that, under the statutes, reduction to practice is not essential either before or after the grant of a patent, it follows that there must be some stage of an invention when it must be presumed as a matter of law that the inventor has reduced his invention to practice; and that stage is presumed to have been reached when he has done all that he is required to do to obtain a valid patent, namely, when he has filed a complete and allowable application; and hence the Patent Office has adopted the rule that the filing of such an application is constructive reduction to practice, and the Federal courts have adopted the rule that such an application is conclusive evidence that the patentee made his invention — that is, reduced his invention to practice — at least as early as that date.

The cases which hold that a rejected application is not sufficient to establish priority of invention under the statutes have no bearing on the question of the legal effect of a complete and allowable application which will result or has resulted in the granting of a patent. Corn Planter Pat. 23 Wall. 181; Lyman *v.* Lalor, Fed. Cas. 8632; Northwestern *v.* Philadelphia, Fed. Cas. 10,337.

Second. We have now to consider the question whether Watson can carry the date of his invention back to the time of his conception, Jan. 10, 1896. This question must be viewed from two standpoints: First, can it be said that Watson's conception, drawings and disclosure to others, of themselves, or without regard to his subsequent acts, can constitute a complete invention within the meaning of the patent laws? Second, can Watson as a patentee carry back the date of his invention to the time of his conception?

(1) The law appears to be well established that a conception evidenced

by disclosure, drawings, and even a model, confers no rights upon an inventor unless followed by some other act, such as actual reduction to practice, or filing an application for a patent. A conception of this character is not a complete invention under the patent laws. If it did constitute an invention under the statutes, then an inventor might stop with his drawings and disclosure, and hold the field for all time against a subsequent inventor who had reduced his invention to practice, or who had obtained a patent. The law will not permit this. An inventor must not stop with this stage of his invention, but he must proceed with reasonable diligence to perfect his invention, either by actual reduction to practice, or by filing his application for a patent. (Quoting and reviewing Detroit *v.* Renchard, 9 Fed. 293; Reeves *v.* Keystone, Fed. Cas. 11,660; Pennsylvania *v.* Simpson, 29 Fed. 288; Winans *v.* New York, Fed. Cas. 17,864; Electric *v.* Hall, 6 Fed. 603; Draper *v.* Potomska, Fed. Cas. 4072; Ellithorp *v.* Robertson, Fed. Cas. 4408.)

(2) The next question we have to consider is whether Watson as a patentee can carry back the date of his invention to the date of his conception; that is, to his drawing and disclosure of Jan. 10, 1896. It is conceded that a patentee who has used "reasonable diligence in adapting and perfecting" his invention can carry the date back to his drawings and disclosure; and the only question which arises is whether the law will permit him to do this in the absence of such reasonable diligence. In other words, can a patentee stop with his drawings and disclosure for an unreasonable time, and then, by virtue of his subsequently obtaining a patent, hold this field of invention against a rival inventor whose conception of the same invention was later, and who proceeded with diligence to build a practical machine, or to file an application for a patent? In our opinion, he cannot do this under the patent laws. We understand the true rule to be that a patentee who undertakes to carry back the date of his invention to his drawings and disclosure must show reasonable diligence in adapting and perfecting his invention, either by actual reduction to practice or by filing his application. This rule is supported by the great weight of authority, and we have found no cases which directly hold that this is not the law, though there are some cases in which a patentee has been permitted to carry back his invention to his drawings and disclosure, where the question of diligence was not raised or passed upon. Loom Co. *v.* Higgins, 105 U. S. 580; Dodge *v.* Porter, 98 Fed. 624; Westinghouse *v.* Stanley, 133 Fed. 167. No sound reason has been advanced why the doctrine of diligence should not apply to a patentee as well as an inventor who has not secured a patent. On the other hand, any such distinction in favor of patentees is not in harmony with the patent laws. We have seen that an invention in the sense of the patent law signifies a completed invention, and that the earliest date of an invention is the time of its completion. We have also seen that an invention may be completed either by actual reduction to practice or by filing a complete and allowable application in conformity with the statutes.

This general principle, however, is subject to this qualification: (Here follows a discussion of the acts of July 4, 1836, sec. 15; Feb. 21, 1793, sec. 6; [and a review of the cases bearing thereon: Reed *v.* Cutter, *supra;* Loom Co. *v.* Higgins, *supra;* Odell *v.* Stout, 22 Fed. 159; Reeves *v.* Keystone, *supra;* Christie *v.* Seybold, 55 Fed. 69; Merrow *v.* Shoemaker, 59 Fed. 120; Detroit *v.* Renchard, *supra;* Pennsylvania *v.* Simpson, *supra;* Electric *v.* Hall, *supra;* Morgan *v.* Daniels, 153 U. S. 120).

We come now to the remaining question, whether Watson was reasonably diligent in adapting and perfecting his invention. Upon this question of fact the decision of the Patent Office tribunals and the Court of Appeals, D. C. is entitled to great weight, if it is not absolutely controlling.

In Morgan *v.* Daniels, 153 U. S. 120, a suit was brought under § 4915,

R. S. by the party who was refused a patent in interference proceedings, to determine the question whether he should not be adjudged entitled to a patent. In this case the court used the following language:

"Upon principle and authority, therefore, it must be laid down as a rule that, where the question decided in the Patent Office is one between contesting parties as to priority of invention, the decision there made must be accepted as controlling upon the question of fact in any subsequent suit between the same parties, unless the contrary is established by testimony which in character and amount carries thorough conviction." — Automatic *v.* Pneumatic, 166 Fed. 288; 92 C. C. A. 206.

§ 861. Diligence.

The settled rule of la is, that whoever first perfects a machine is entitled to the patent, and is the real inventor, although others may have had the idea and made some experiments toward putting it in practice. He is the inventor and is entitled to the patent who first brought the machine to perfection and made it capable of useful operation. — Agawam *v.* Jordan, 74 U. S. 583; 19 L. Ed. 177.

Washburn *v.* Gould, 3 Story, 133.

A complicated invention, requiring many experiments and much study to give it practical form, would reasonably delay a reduction to practice after the first conception for a greater length of time than where the idea and the machine embodying it were simple in character. Then, too, the sickness of the inventor, his poverty and his engagements in other inventions of a similar kind, are all circumstances which may affect the question of reasonable diligence. — Christie *v.* Seybold, 55 Fed. 69; 5 C. C. A. 33.

Bradford *v.* Corbin, 6 O. G. 223; Webster *v.* Carpet Co. 5 O. G. 522; Cox *v.* Griggs, 1 Biss. 362; Munger *v.* Connell, 1 O. G. 491; Proctor *v.* Ackroyd, 6 O. G. 603; Cushman *v.* Parkam, 9 O. G. 1108.

§ 862. Essential to Patentability.

Original and first inventors are entitled to the benefit of their inventions if they reduce the same to practice, and seasonably comply with the requirements of the patent law in procuring letters patent for the protection of their exclusive rights. Crude and imperfect experiments are not sufficient to confer a right to a patent; but in order to constitute an invention, the party must have proceeded so far as to have reduced his idea to practice and embodied it in some distinct form. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

An invention in order to be patentable must be more than a mere experiment; its utility must have been established by reduction to practice. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

This was a problem of the reconciliation of antagonisms, which so often occurs in mechanics and without which practically successful results are not attained. — Consolidated *v.* Crosby, 113 U. S. 157; 28 L. Ed. 939; 5 S. Ct. 513.

A conception of the mind is not an invention until represented in some physical form, and unsuccessful projects or experiments, abandoned by the inventor, are equally destitute of character. — Clark *v.* Willimantic, 140 U. S. 481; 35 L. Ed. 521; 11 S. Ct. 846.

§ 863. Experiment.

What constitutes legitimate experiment in reducing to practice, see — Smith *v.* Sprague, 123 U. S. 249; 31 L. Ed. 141; 8 S. Ct. 122.

§ 864. Last Step Rule.

In the law of patents it is the last step that counts. — Washburn *v.* Beat Em All, 143 U. S. 275; 36 L. Ed. 154; 12 S. Ct. 443.

Loom Co. *v.* Higgins, 105 U. S. 580; Safety Valve Co. *v.* Crosby, 113 U. S. 157; Smith *v.* Goodyear, 93 U. S. 486; Magawan *v.* N. Y. 141 U. S. 332.

§ 865. Operativeness.

All we know is that he found out that, by changing the intensity of a continuous current so as to make it correspond exactly with the changes in density of air caused by sonorous vibrations, vocal and other sounds could be transmitted and heard at a distance. This was the thing to be done, and Bell discovered the way of doing it. — Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

Although at the time Bell applied for his patent he had never actually transmitted spoken words so that they could be distinctly understood, so long as he had described the device with sufficient precision to enable one skilled in the art thereafter to produce a speaking telephone, it was sufficient. "Where the question is whether a thing can be done or not, it is always easy to find persons ready to show how not to do it." — Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

Loom *v.* Higgins, 105 U. S. 580.

The law does not require that a discoverer or inventor, in order to get a patent for a process, must have succeeded in bringing his art to the highest degree of perfection. It is enough if he describes his method with sufficient clearness and precision to enable those skilled in the matter to understand what the process is, and if he points out some practical way of putting it in operation. — Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

The patent laws were not designed for the benefit of the man who attempts to originate a useful thing, but rather to reward the one who first achieves success in the production of it. It would be a perversion of the law to hold a machine which can do certain kinds of work to be an infringement of a patent for a different machine, which cannot do the same work. — Norton *v.* Jensen, 49 Fed. 859; 1 C. C. A. 452.

His patent should not be declared void because he was in doubt as to which of the compositions would prove the most satisfactory in a commercial sense, or because he had not practically and finally tested and chemically isolated all the matter or material containing the required cohesive, adhesive and acid resisting qualities. — American *v.* Howland, 80 Fed. 395; 25 C. C. A. 500.

Telephone Cases, 126 U. S. 1.

§ 866. Priority.

However brilliant the discovery of the new principle may be, to make it useful it must be applied to some practical purpose. Short of this no patent can be granted. And it would not seem to be a work of much labor for a man of ingenuity to describe what he had invented. The principle may be

the new and valuable discovery, but the practical application of it to some useful purpose is the test of its value. — LeRoy *v.* Tatham, 63 U. S. 132; 16 L. Ed. 366.

LeRoy *v.* Tatham, 14 How. 156, 176.

He is the first inventor and entitled to the patent, who, being an original discoverer, has first perfected and adapted the invention to actual use. — Whitely *v.* Swayne, 74 U. S. 685; 19 L. Ed. 199.

Curt. Pat. 43 and notes.

He who first publishes his device, puts it upon record, makes use of it for a practical purpose, and gives it to the public, by which it is eagerly seized upon should have doubts of invention resolved in his favor. — Washburn *v.* Beat Em All, 143 U. S. 275; 36 L. Ed. 154; 12 S. Ct. 443.

§ 867. What Constitutes.

A machine is said to be complete when the apparatus is attached substantially complete in its operative parts. And it is not necessary that it should be doing work, so long as it is capable of it. — Troy *v.* Odiorne, 58 U. S. 73; 15 L. Ed. 37.

A patentable invention is a mental result. It must be new and shown to be of practical utility. Everything within the domain of the conception belongs to him who conceived it. The machine, process or product is but its material reflex and embodiment. — Smith *v.* Nichols, 88 U. S. 112; 22 L. Ed. 566.

It can hardly be claimed that the rough sketch made by Seybold of his proposed press was a reduction to practice. It has been held in many cases, that drawings much more complete than the one here testified to, are not reductions to practice, as against a subsequent conceiver who first made an actual operative machine. — Christie *v.* Seybold, 55 Fed. 69; 5 C. C. A. 33.

Reeves *v.* Bridge Co. 5 Fish. P. C. 456; Lubricator *v.* Renchard, 9 Fish. 293; Drill Co. *v.* Simpson, 29 Fed. 288; Ellithorpe *v.* Robertson, 4 Blatchf. 307; Draper *v.* Mills, 13 O. G. 276; Odell *v.* Stout, 22 Fed. 159.

Expression of the means of an alleged invention, in a drawing or sketch, is frequently the best attainable evidence of the needful "representation in physical form," and may rightly be accepted as satisfactory proof of such fact, when fairly authenticated, definite, and reasonable under the circumstances. — Consolidated *v.* Adams, 161 Fed. 343; 88 C. C. A. 355.

REHEARINGS.

General Statement § 868
See — Adjudication § 35; *Appeals* §§ 138–9; *Pleading and Practice* § 788; *Reopening Case* § 890

§ 868. General Statement.

Rules regarding rehearings are rules of practice not peculiar to patent causes. As will be seen from the following citations, the courts apply these general rules to patent causes with no substantial variation.

After the case has been heard and decided upon its merits, the plaintiff could not file a disclaimer in court, or introduce new evidence upon that or any other subject, except at a rehearing granted by the court, upon such terms as it saw fit to impose. The granting or refusal, absolute or conditional, of a rehearing in equity, as of a new trial at law, rests in the discretion of the

court in which the case has been heard or tried, and is not a subject of appeal. The terms imposed are a condition precedent to a rehearing not having been complied with, the disclaimer was not in the case. — Roemer *v.* Neumann, 132 U. S. 103; 33 L. Ed. 277; 10 S. Ct. 12.

In reaching our conclusions of fact in this case, we have not been unmindful of the abuses which the strict rules enforced in the allowing of the rehearings were adopted to prevent. Where an elaborate opinion of the court of last resort upon the evidence is published, and the weaknesses of the losing side are clearly brought out, and the defeated party is thereafter given an opportunity to strengthen the defects of his case by evidence as to transactions long past and machinery long since cast into the scrap heap, there is great danger that the exigencies of the case may lead witnesses to round out evidence beyond that which exact truth would permit. Such evidence must be taken with great caution, and weighed in the light of this danger. — Potts *v.* Creager, 97 Fed. 78; 38 C. C. A. 47.

REISSUES.

The Statute § 869
Abandoned Claim § 870 (*see* § 1)
Broadening
Not Permissible — In General § 871
Not Permissible — Omitting Elements § 872
When Permissible § 873
Miscellaneous Rules § 874
Delay
Excusable § 875
Fatal § 876
General Rules § 877
Intervening Rights § 878
Miscellaneous Rules § 879
Decision of Commissioner § 880
Different Invention § 881
Disclaimer § 882 (*see* § 339)
General Rules § 883
Grounds for § 884
Inadvertence, Accident, or Mistake § 885
Scope of § 886
Surrender — Effect of § 887
Tests of Validity § 888
Miscellaneous Rules § 889
See — Assignment § 173; *Commissioner of Patents* § 258; *Defenses* § 310; *Disclaimer* § 339; *Divisional Patenting* § 348; *Double Patenting* § 356; *Fraud* § 425; *Infringement* § 522; *Laches* § 731

§ 869. The Statute.

Whenever any patent is inoperative or invalid, by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention or discovery more than he had a right to claim as new, if the error has arisen by inadvertence, accident or mistake, and without any fraudulent or deceptive intention, the Commissioner shall, on the surrender of such patent and the payment of the duty required by law, cause a new patent for the same invention, and in accordance with the corrected specification, to be issued to the patentee, or, in case of his death or of an assignment of the whole or any undivided part of the original patent, then to his executors, administrators, or assigns, for the unexpired part of the term of the original patent. Such surrender shall take effect upon the issue of the amended patent. The Commissioner may, in his discretion, cause several patents to be issued for distinct and separate parts of the thing patented, upon demand of the applicant, and upon payment of the required fee for a reissue for each of such reissued letters patent. The specifications and claim in every such case shall be subject to revision and restriction in the same manner as original applications are. Every patent so reissued, together with the corrected specifications, shall have the same effect and operation in law, on the trial of all actions for causes thereafter arising, as if the same had been originally filed in such corrected form; but no new matter shall be introduced into the specification, nor in case of a machine patent shall the model or drawings be amended, except each by the other; but when there is neither model nor

drawing, amendments may be made upon proof satisfactory to the Commissioner that such new matter or amendment was a part of the original invention, and was omitted from the specification by inadvertence, accident, or mistake, as aforesaid. R. S. 4916.

Patents may be granted and issued or reissued to the assignee of the inventor or discoverer; but the assignment must be first entered of record in the Patent Office. And in all cases of an application by an assignee for the issue of a patent, the application shall be made and the specification sworn to by the inventor or discoverer; and in all cases of an application for a reissue of any patent, the application must be made and the corrected specification signed by the inventor or discoverer, if he is living, unless the patent was issued and the assignment made before the eighth day of July, 1870. R. S. 4895.

§ 870. Abandoned Claim.

Indeed we have heretofore expressed doubts whether reissued letters patent can be sustained in any case where they contain claims that have once been formally disclaimed by the patentee, or rejected with his acquiescence and he has consented to such rejection in order to obtain his letters patent. — Goodyear *v.* Davis, 102 U. S. 222; 26 L. Ed. 149.

Leggett *v.* Avery, 101 U. S. 256.

When applicant abandoned a claim under pressure of rejection it does not follow that such rejection implies that the claim is otherwise covered. — Yale *v.* James, 125 U. S. 447; 31 L. Ed. 807; 8 S. Ct. 967.

Swain *v.* Ladd, 102 U. S. 408.

A claim once abandoned in the Patent Office and restored in the reissue cannot be admitted in consistency with numerous decisions by this court. — Yale *v.* Berkshire, 135 U. S. 342; 34 L. Ed. 168; 10 S. Ct. 884.

§ 871. Broadening — Not Permissible — In General.

The practice of the art of broadening claims by reissue to cover subsequent invention is to be condemned, and the reissue to be limited. — Burr *v.* Duryee, 68 U. S. 579; 17 L. Ed. 660.

The new art of expanding patents for machines into patents for " a mode of operation," a function, a principle, a result, so that by an equivocal use of the term " equivalent " a patentee of an improved machine may suppress all further improvements, is to be condemned. — Case *v.* Brown, 69 U. S. 320; 17 L. Ed. 817.

Burr *v.* Duryee, 1 Wall. 535; McCormick *v.* Talcott, 20 How. 405.

It is clear that the commissioner has no jurisdiction to grant a reissue except for the same invention as the original. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Cahart *v.* Austin, 2 Cliff. 536; Curt. Pat. 276; Woodworth *v.* Stone, 3 Story, 753.

We think it proper to reiterate our disapprobation of these ingenious attempts to expand a simple invention of a distinct device into an all-embracing claim, calculated by its wide generalizations and ambiguous language to discourage further invention in the same department of industry and to cover antecedent inventions. — Carlton *v.* Bokee, 84 U. S. 463; 21 L. Ed. 517.

It appears on the face of the reissue that it is for a different invention, for the reissue is attempted to be sustained only on the ground that it is for a single stage process. — American *v.* Fiber, 90 U. S. 566; 23 L Ed. 31.

A reissue could only be granted for the same invention embraced in the original patent, the specification could not be substantially changed, either by addition of new matter or the omission of important particulars, so as to enlarge the scope of the invention. — Russell *v.* Dodge, 93 U. S. 460; 23 L. Ed. 973.

Morey *v.* Lockwood, 8 Wall. 230.

The original covered only the process. In the reissue division was made, one patent covering the process and the other the product. *Held:* Invalid. — Powder *v.* Powder, 98 U. S. 126; 25 L. Ed. 77.

Burr *v.* Duryee, 1 Wall. 575; Seymour *v.* Osborne, 11 Wall. 516; Gill *v.* Wells, 22 Wall. 1; Wood Paper Pat. 23 Wall. 566.

A reissue for a broader claim than the original, especially when it embraces matter previously rejected and disclaimed by amendment or in obtaining an extension, is invalid. — Leggett *v.* Avery, 101 U. S. 256; 25 L. Ed. 865.

Here is a sweeping generalization, which reissue claims taken literally, would give to the patentee a monopoly of all water wheels having simultaneously an effective inward and downward flow and discharge, whatever might be the shapes of the floats, or of the crown.

The mistake of the patentee, or his assigns, seems to have been in supposing that he was entitled to have inserted in a reissue patent all that he might have applied for and had inserted in his original patent. A reissue can be granted only for the same invention which was originally patented. If it were otherwise, a door would be opened to the admission of the greatest frauds. — Swain *v.* Ladd, 102 U. S. 408; 26 L. Ed. 184.

This court has repeatedly held that if, on comparing a reissue with the original, the former appears on its face to be for a different invention from that described or indicated in the latter, it must be declared invalid. — Ball *v.* Langles, 102 U. S. 128; 26 L. Ed. 104.

Seymour *v.* Osborne, 78 U. S. 516; Russell *v.* Dodge, 93 U. S. 460.

If the reissued patent is to be construed as appellant insists it should be and as it must be to include the defendant's devices it is broader than the original patent and therefore void. — Hopkins *v.* Corbin, 103 U. S. 786; 26 L. Ed. 610.

Wood Paper Patent, 90 U. S. 566; Powder *v.* Powder, 98 U. S. 126; Ball *v.* Langles, 102 U. S. 128; Russell *v.* Dodge, 93 U. S. 460; Swain *v.* Ladd, 102 U. S. 408; Wicks *v.* Stevens, 2 Woods, 312.

The general rule and leading case (quoted § 873) — Miller *v.* Brass Co. 104 U. S. 350; 26 L. Ed. 783.

General rule followed. — Guidet *v.* Brooklyn, 105 U. S. 550; 26 L. Ed. 1106.

General rule applied and followed. — Johnson *v.* Flushing, 105 U. S. 539; 26 L. Ed. 1162.

Giant *v.* California, 6 Sawy. 508; Powder *v.* Powder, 98 U. S. 126; Ball *v.* Langles, 102 U. S. 128; James *v.* Campbell, 104 U. S. 356.

A reissue for a broader claim than warranted by the original is void. — Bantz *v.* Frantz, 105 U. S. 160; 26 L. Ed. 1013.

Miller *v.* Brass Co. 104 U. S. 350.

Broadening claim voids patent. — Matthews *v.* Boston, 105 U. S. 54; 26 L. Ed. 1022.

Miller *v.* Brass Co. 104 U. S. 350.

The specification and first claim of the reissued patent is a plain attempt to include a device which was not and could not be fairly covered by the original patent. The claim is, therefore, for that reason void. — Moffitt *v.* Rogers, 106 U. S. 423; 37 L. Ed. 76; 1 S. Ct. 70.

Gill *v.* Wells, 22 Wall. 1; Wood Paper Pat. 23 Wall. 566; Powder *v.* Powder, 98 U. S. 126; Ball *v.* Langles, 102 U. S. 128; Miller *v.* Brass Co. 104 U. S. 350; James *v.* Campbell, 104 U. S. 356; Heald *v.* Rice, 104 U. S. 737; Bantz *v.* Frantz, 105 U. S. 160; Johnson *v.* R. R. 105 U. S. 539.

It is quite clear that the original patent covered a mechanism to accomplish a specific result, and that the reissued patent covers the process by which the result is attained, without regard to the mechanism used to accomplish it. The reissue is therefore much broader than the original patent, and covers every mechanism which can be contrived to carry on the process. — Wing *v.* Anthony, 106 U. S. 142; 27 L. Ed. 110; 1 S. Ct. 93.

Powder *v.* Powder, 98 U. S. 126; Campbell *v.* James, 104 U. S. 356; Heald *v.* Rice, 104 U. S. 737; Gill *v.* Wells, 22 Wall. 1; Wood Paper Pat. 23 Wall. 566; Ball *v.* Langles, 102 U. S. 128; Miller *v.* Brass Co. 104 U. S. 350; Johnson *v.* R. R. 105 U. S. 539; Bantz *v.* Frantz, 105 U. S. 160.

If so construed it is invalid as being for a different invention from any invention found in the original patent. And if it is so limited as to be no broader than the claim of the original patent, there has been no infringement of it. — Gosling *v.* Roberts, 106 U. S. 39; 27 L. Ed. 61; 1 S. Ct. 26.

The expansions in the reissue were afterthoughts, developed by the subsequent course of improvement, and intended to cover matter appearing in subsequent patents. No excuse is given for the delay and no inadvertence, accident or mistake is shown. — Clements *v.* Odorless, 109 U. S. 641; 27 L. Ed. 1060; 3 S. Ct. 525.

Miller *v.* Brass Co. 104 U. S. 350; James *v.* Campbell, 104 U. S. 356.

The original patent was issued July 7, 1863. Eleven years after, in 1874, the competition of the appellant's device became apparent and was felt. In 1875, application was made for the reissue; the original patent was surrendered and the patent reissued July 13, 1875. Here is a delay of nearly 12 years, without the offer of an explanation or excuse, without even the suggestion of inadvertence or mistake in the original application. The only inference that can be drawn is, that the discovery and experience of successful competition in 1874 suggested first and led to the discovery that the original claim did not cover everything that might have been embraced and was not broad enough to maintain the monopoly desired but not secured. — Turner *v.* Dover, 111 U. S. 319; 28 L. Ed. 442; 4 S. Ct. 401.

Miller *v.* Brass Co. 104 U. S. 350; Clements *v.* Odorless, 109 U. S. 641.

If the claim is to be construed so broadly as to cover the defendant's article, it is wider in scope than the original actual invention, and wider than anything indicated in the specification of the original patent, and that, if it is to be so construed as to cover only the product which the process described

in it will produce it is not shown that the defendant's article is that product or can be practically produced by that process. — Cochrane *v.* Badische, 111 U. S. 293; 28 L. Ed. 433; 4 S. Ct. 455.

It is plain that the claims mentioned include many devices not covered by the original patent, and are void. — McMurray *v.* Mallory, 111 U. S. 97; 28 L. Ed. 365; 4 S. Ct. 375.

Gill *v.* Wells, 22 Wall. 1; Wood Paper Pat. 23 Wall. 566; Powder *v.* Powder, 98 U. S. 126; Ball *v.* Langles, 102 U. S. 128; Miller *v.* Brass Co. 104 U. S. 350; James *v.* Campbell, 104 U. S. 356; Heald *v.* Rice, 104 U. S. 737; Johnson *v.* R. R. 105 U. S. 539; Bantz *v.* Frantz, 105 U. S. 160; Wing *v.* Anthony, 106 U. S. 142.

It is clear on the face of the patent that the only object of the reissue was to enlarge the claims. The description was not altered in the least. The claims in the original patent were clear and explicit, one of these being substantially retained in the reissue. Nothing was altered, nothing was changed, but to multiply the claims and to make them broader. And this was done, not for the benefit of the original patentee but for that of his assignee; and was done after the lapse of nearly four years. — Mahn *v.* Harwood, 112 U. S. 354; 28 L. Ed. 665; 5 S. Ct. 174.

Miller *v.* Brass Co. 104 U. S. 350.

The rule in Miller *v.* Brass Co. 104 U. S. 350, and James *v.* Campbell, 104 U. S. 356, followed and approved. — Coon *v.* Wilson, 113 U. S. 268; 28 L. Ed. 963; 5 S. Ct. 537.

Mahn *v.* Harwood, 112 U. S. 354.

The first claim of the reissue is bad, not only because it was for something the patentee had expressly disclaimed in the original patent, but because, as the evidence clearly shows, there was nothing new in the dies themselves. — Beecher *v.* Atwater, 114 U. S. 523; 29 L. Ed. 232; 5 S. Ct. 1007.

The suggestion in the second reissue of its adaptability to a certain use, not found in the original patent or in the first reissue is new matter, so far as anything in it can be invoked to confer patentability on the article. — Gardner *v.* Herz, 118 U. S. 180; 30 L. Ed. 158; 6 S. Ct. 1027.

The alterations, it is said in argument, had the effect only of giving a more full, complete, and accurate description of the same mechanism; but, in point of fact, the alterations changed the shape of the specification in such a way as to admit the new and enlarged claim in a manner in which it could not have been made upon the original description. — Hartshorn *v.* Saginaw, 119 U. S. 664; 30 L. Ed. 539; 7 S. Ct. 421.

Broadening by claiming a different thing voids the patent. — Ives *v.* Sargent, 119 U. S. 652; 30 L. Ed. 544; 7 S. Ct. 436.

Broadening the claims voids the patent. — Newton *v.* Furst, 119 U. S. 373; 30 L. Ed. 442; 7 S. Ct. 369.

As the patent is not susceptible of a broad construction, the reissue is a material expansion and enlargement of it. As such expansion appears to be the only object of the reissue, and as the application for the reissue was not made until nearly five years after the original was granted, the case comes within the ruling of Miller *v.* Brass Co. 104 U. S. 350. — White *v.* Dunbar, 119 U. S. 47; 30 L. Ed. 303; 7 S. Ct. 72.

The design manifest is to cover such a structure as that of the defendants. No inadvertence, accident or mistake is shown. This reissue patent is invalid. — Worden *v.* Searls, 121 U. S. 14; 30 L. Ed. 853; 7 S. Ct. 814.

The court adheres strictly to the view, that, under the statute, the commissioner has no jurisdiction to grant a reissued patent for an invention substantially different from that embodied in the original patent, and that a reissue granted not in accordance with that rule is void. — Parker *v.* Yale, 123 U. S. 87; 31 L. Ed. 100; 8 S. Ct. 38.

Burr *v.* Duryee, 68 U. S. 531; Seymour *v.* Osborne, 71 U. S. 516; Gill *v.* Wells, 87 U. S. 1; Giant *v.* California, 98 U. S. 126; Mahn *v.* Harwood, 112 U. S. 354; Coon *v.* Wilson, 113 U. S. 268; Ives *v.* Sargent, 119 U. S. 652; Corn Planter Patent, 90 U. S. 181.

The drawings cannot be used, even on an application for a reissue, much less on a disclaimer, to change the patent and make it embrace a different invention from that described in the specification. — Hailes *v.* Albany, 123 U. S. 582; 31 L. Ed. 284; 8 S. Ct. 262.

Parker *v.* Yale, 123 U. S. 87.

General rule followed. — Dryfoos *v.* Wiese, 124 U. S. 32; 31 L. Ed. 362; 8 S. Ct. 354.

The general rules of recent cases followed. — Yale *v.* James, 125 U. S. 447; 31 L. Ed. 807; 8 S. Ct. 967.

Miller *v.* Brass Co. 104 U. S. 350; Mahn *v.* Harwood, 112 U. S. 354; Parker *v.* Yale, 123 U. S. 87; Matthews *v.* Iron, 123 U. S. 347; Swain *v.* Ladd, 102 U. S. 408.

When it does not appear that any attempt has been made to secure by the original patent the inventions covered by the new claims in the reissue, those inventions must be regarded as having been abandoned or waived, so far as the reissue was concerned. — Hoskin *v.* Fisher, 125 U. S. 217; 31 L. Ed. 759; 8 S. Ct. 834.

Parker *v.* Yale, 123 U. S. 87.

The enlargement of the claims in the reissue, so as to embrace machines not containing that feature, is void. — Farmer's *v.* Challenge, 128 U. S. 506; 32 L. Ed. 529; 9 S. Ct. 146.

It is well settled that a reissue can only be granted for the same invention intended to be embraced in the original patent; and the specification cannot be substantially changed, either by the addition of new matter or the omission of important particulars, so as to enlarge the invention as intended to be originally claimed. — Pattee *v.* Kingman, 129 U. S. 294; 32 L. Ed. 700; 9 S. Ct. 389.

Where it appears that the original specification was not defective or insufficient and that the patent was not inoperative; and where it was apparent that the sole object of the reissue was to obtain an enlarged claim; and where the subject-matter of the renewal had been adjudicated in the Patent Office on the original application and the applicant had acquiesced in such adverse action by the Department, the effect of such an abandonment of a claim upon the validity of a reissue has been often adjudged by this court as fatal. — Yale *v.* Berkshire, 135 U. S. 342; 34 L. Ed. 168; 10 S. Ct. 884.

Leggett *v.* Avery, 101 U. S. 256; Mahn *v.* Harwood, 112 U. S. 354; Union *v.* U. S. 112 U. S. 624; Shepard *v.* Carrigan, 116 U. S. 593; Roemer *v.* Peddie, 132 U. S. 313.

A reissue is an amendment and cannot be allowed unless the imperfections in the original patent arose without fraud, and from inadvertence, accident or mistake. R. S. 4916. Hence the reissue cannot be permitted to enlarge the claims of the original patent by including matter once intentionally omitted. Acquiescence in the rejection of a claim, its withdrawal by amendment, either to save the application or to escape interference, the acceptance of a patent containing limitations imposed by the Patent Office, which narrow the scope of the invention as at first described and claimed — an instance of such omission. — Dobson *v.* Lees, 137 U. S. 258; 34 L. Ed. 652; 11 S. Ct. 71.

Union *v.* U. S. 112 U. S. 624; Shepard *v.* Carrigan, 116 U. S. 593; Roemer *v.* Peddie, 132 U. S. 313; Yale *v.* Berkshire, 135 U. S. 342.

The applicant having withdrawn a similar claim in his original application in order to obtain his original patent, and the present claim being for a different invention from that covered by the original patent, it is void. — Dobson *v.* Lees, 137 U. S. 258; 34 L. Ed. 652; 11 S. Ct. 71.

Giant *v.* California, 98 U. S. 126; Leggett *v.* Avery, 101 U. S. 256; Swain *v.* Ladd, 102 U. S. 408; Goodyear *v.* Davis, 102 U. S. 122.

Where only a single magnet and a single armature were shown, applicant cannot pluralize these terms in an amended claim. — Electric *v.* Boston, 139 U. S. 481; 35 L. Ed. 250; 11 S. Ct. 586.

A reissue where the claims are extended to cover new matter is invalid regardless of the promptness in applying for the reissue. — Freeman *v.* Asinus, 145 U. S. 226; 36 L. Ed. 685; 12 S. Ct. 821.

Mahn *v.* Harwood, 112 U. S. 354; Coon *v.* Wilson, 113 U. S. 268; Ives *v.* Sargent, 119 U. S. 652; Parker *v.* Yale, 123 U. S. 87; Matthews *v.* Ironclad, 124 U. S. 347; Hoskin *v.* Fisher, 125 U. S. 217; Flower *v.* Detroit, 127 U. S. 563; Yale *v.* Berkshire, 135 U. S. 342; Electric *v.* Boston, 139 U. S. 481; Topliff *v.* Topliff, 145 U. S. 156.

Unless a clear mistake had been made in the wording of the claim, a reissue cannot be had merely to enlarge the claim. — Huber *v.* Nelson, 148 U. S. 270; 37 L. Ed. 447; 13 S. Ct. 603.

Miller *v.* Brass Co. 104 U. S. 350; Mahn *v.* Harwood, 112 U. S. 354; Coon *v.* Wilson, 113 U. S. 268; Burr *v.* Duryee, 68 U. S. 531; Gill *v.* Wells, 89 U. S. 22.

Expansion of claim to embrace invention not specified in original patent renders claim invalid. — Leggett *v.* Standard, 149 U. S. 287; 31 L. Ed. 737; 13 S. Ct. 902.

Miller *v.* Brass Co. 104 U. S. 350; Mahn *v.* Harwood, 112 U. S. 354; Wollensak *v.* Reiher, 115 U. S. 96.

Applicant having withdrawn rejected claims and substituted narrow claims cannot insist on construction of reissue claim to cover original claim. — Corbin *v.* Eagle, 150 U. S. 38; 37 L. Ed. 989; 14 S. Ct. 28.

Shepard *v.* Carrigan, 116 U. S. 593; Roemer *v.* Peddie, 132 U. S. 313; Royer *v.* Coupe, 146 U. S. 524.

Patent Office having rejected a claim and rejection acquiesced in, applicant estopped to claim such construction. — Morgan *v.* Albany, 152 U. S. 425; 38 L. Ed. 500; 14 S. Ct. 627.

Leggett *v.* Avery, 101 U. S. 256; Shepard *v.* Carrigan, 116 U. S. 593; Crawford *v.* Heysinger, 123 U. S. 589; Union Cartridge Co. *v.* U. S. 112 U. S. 624.

Rule of Miller *v.* Brass Co. 104 U. S. 350 applied. — Dunham *v.* Dennison, 154 U. S. 103; 38 L. Ed. 924; 14 S. Ct. 986.

Miller *v.* Brass Co. 104 U. S. 350; Mahn *v.* Harwood, 112 U. S. 354; Topliff *v.* Topliff, 145 U. S. 156; Huber *v.* Nelson, 148 U. S. 270; Leggett *v.* Standard, 149 U. S. 287; Corbin *v.* Eagle, 150 U. S. 38.

Where in the reissue the construction is made alternative by employing the word "preferably" to cover structures in use, such alternative broadens the claims based thereon and defeats the patent. — Olin *v.* Timken, 155 U. S. 141; 39 L. Ed. 100; 15 S. Ct. 49.

Huber *v.* Nelson, 148 U. S. 270.

Had the plaintiff, in his reissue, confined himself to the correction of an error so manifest, we should have found little difficulty in sustaining it; but in his application, which was made four years after the original patent, he makes no claim that his patent "was inoperative or invalid, by reason of a defective or insufficient specification," or by reason of his having claimed "more than he had a right to claim as new," or that any error had arisen, "by inadvertence, accident or mistake," without which the commissioner has no right to grant a reissue, but simply prays that he may be allowed to surrender his original patent, and that, "letters patent may be reissued to him for the same invention, upon the annexed amended specification." He makes no reference at all to the obvious mistakes in his first claim, and although the point is not distinctly made in the briefs, we think it a serious question, whether the commissioner of patents had any jurisdiction under R. S. 4916 to consider the application upon the bare statement that the patentee desired to surrender his patent and obtain a reissue. — Eby *v.* King, 158 U. S. 366; 39 L. Ed. 1018; 15 S. Ct. 972.

By removing the limitation of the thickness of the material, contained in the original, the claim was broadened so as to void the patent. — American *v.* Johnston, 52 Fed. 228; 3 C. C. A. 53.

It must appear by the description in the original patent that it was the purpose of the patentee to secure the thing specified in the claim of the reissue, and a patent cannot be lawfully reissued unless there has been a clear mistake, inadvertently committed, in the wording of the claim. — Featherstone *v.* Bidwell, 57 Fed. 631; 6 C. C. A. 487.

Parker *v.* Yale, 123 U. S. 99; Hoskin *v.* Fisher, 125 U. S. 223; Flower *v.* Detroit, 127 U. S. 571; Mahn *v.* Harwood, 112 U. S. 354; Plow *v.* Kingman, 129 U. S. 299.

While in this case it is true, that the fifth claim contains four elements, while its predecessor contained but three, and therefore it is, in a certain sense, a narrower claim, that statement contains but half a truth. The remaining half is that the new claim is for a different and previously unrecognized invention. The patent had been in existence and under repeated examination for nine years, and individuals and the public had acquired adverse interests, which would be destroyed by a reconstruction of a void claim. — Carpenter *v.* Searle, 60 Fed. 82; 8 C. C. A. 476.

Parker *v.* Yale, 132 U. S. 87.

This case is thought to mark a new departure by the Supreme Court in the line of strict construction of the right of reissue. It must be interpreted in the light of the special circumstances which gave rise to it, of the evils that had grown up under the loose practice theretofore prevailing, and the remedy required in the interest of the public. The evil to be corrected was this: unscrupulous speculators, watching the development of successful inventions, could, in searching the records of prior inventions, find one which might

embody the same principles, and, availing themselves of the opportunity, given by the reissue law, embody in the older patent claims which it might have had but did not, and the result would be that the owner of the later patent, who had spent time and money in the development of a profitable business, would be confronted with a patent earlier in date than his, but reissued later, which would completely control his business. This evil certainly demanded correction. Again there was a presumption — and generally it was a fact — that what was not claimed was not invented by the patentee and the public had the right to use what was not claimed, either because it had not been invented by the patentee, or because by his own act he had made it public property, if it was not so before. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

The introduction in a reissued patent of claims for inventions which are described, but which the patentee neither claimed nor intended to claim by the original patent, is unauthorized by the acts of congress, and such claims are void. — Ide *v.* Trorlicht, 115 Fed. 137; 53 C. C. A. 341.

Topliff *v.* Topliff, 145 U. S. 156; Hubel *v.* Dick, 28 Fed. 132; Carpenter *v.* Searle, 60 Fed. 82.

It does not appear from the original specification that the patentee had any idea of any novel means for obviating the self-induction resistance of alternating currents. The claims in suit of the reissue cannot be sustained, because the description in the original patent fails to show that the invention covered by said claims was intended to be secured in the original patent. — Weston *v.* Stevens, 134 Fed. 574; 67 C. C. A. 374.

Walker on Pat. sec. 233; Hoskin *v.* Fisher, 125 U. S. 217; Pattee *v.* Kingman, 129 U. S. 294; Featherstone *v.* Bidwell, 57 Fed. 631.

A different doctrine (from that requiring prompt action for reissue upon defect discovered) would go far to defeat the object of the rule which requires the patentee to define his invention with such distinctness that other inventors, and the public as well, may know its scope and limitations. And it is not alone these persons who are shown to have taken action upon the faith that the patent defines the character of the invention who may raise the objection to a change in its claims which makes it cover other ground than that claimed before. The rule does not rest upon the ground of an estoppel in favor of particular persons. — Milloy *v.* Thomson-Houston, 148 Fed. 843; 78 C. C. A. 533.

White *v.* Dunbar, 119 U. S. 47; Walker on Pat. sec. 226.

§ 872. Broadening — Not Permissible — Omitting Elements.

The complainants have split up and divided the elements of their invention and claimed them separately and not in combination. Of course this enlarges the scope of their patent. The separate claims embrace fewer elements in combination than were embraced in the claim of the original patent. No one could infringe the original patent unless he used all the elements of the combination. Anyone will infringe the reissue who uses any of those elements which are now separately claimed. — Matthews *v.* Boston, 105 U. S. 54; 26 L. Ed. 1022.

The reissue was granted 13 years and 8 months after the date of the original patent. The new claim covered only five of the original seven elements. *Held*, invalid. — Gage *v.* Herring, 107 U. S. 640; 27 L. Ed. 601; 2 S. Ct. 819.

Prouty *v.* Ruggles, 16 Pet. 336; Vance *v.* Campbell, 1 Black. 427; Gould *v.* Rees, 15 Wall. 187; Miller *v.* Brass Co. 104 U. S. 350; James *v.* Campbell, 104

U. S. 356; Heald *v.* Rice, 104 U. S. 737; Matthews *v.* Machine, 105 U. S. 54; Bantz *v.* Frantz, 105 U. S. 100; Johnson *v.* R. R. 105 U. S. 539; Moffitt *v.* Rogers, 106 U. S. 423.

If the effect of omitting the words in question is to extend the claim, the claim is enlarged by omitting an essential element of the patentee's invention and the reissue is invalid. — Matthews *v.* Ironclad, 124 U. S. 347; 31 L. Ed. 477; 8 S. Ct. 639.

Miller *v.* Brass Co. 104 U. S. 350; Mahn *v.* Harwood, 112 U. S. 354; Parker *v.* Yale, 123 U. S. 87.

The original patent and the first reissue having been distinctly limited to a construction shown, the second reissue, obtained nearly seven years later, omitting such element specifically claimed, is an invarrantable enlargement. — Cornell *v.* Weidner, 127 U. S. 261; 32 L. Ed. 148; 8 S. Ct. 1152.

Yale *v.* James, 125 U. S. 447.

When every element of the combination claimed in the original patent is thereby made material to such combination, a reissue omitting one of such elements is for a different combination and void. — Huber *v.* Nelson, 148 U. S. 270; 37 L. Ed. 447; 13 S. Ct. 603.

Prouty *v.* Ruggles, 41 U. S. 336; Brooks *v.* Fiske, 56 U. S. 212; Burr *v.* Duryee, 68 U. S. 1; Reckendorfer *v.* Faber, 92 U. S. 347; Gas Light Co. *v.* Boston, 139 U. S. 481; Topliff *v.* Topliff, 145 U. S. 156; Fuller *v.* Yentzer, 94 U. S. 288; Railway Co. *v.* Sayles, 97 U. S. 554; Meter Co. *v.* Desper, 101 U. S. 332; Eames *v.* Godfrey, 68 U. S. 78; Case *v.* Brown, 69 U. S. 320; Gould *v.* Rees, 82 U. S. 187; Gill *v.* Wells, 89 U. S. 1; Powder Co. *v.* California, 98 U. S. 126; Leggett *v.* Avery, 101 U. S. 256; James *v.* Campbell, 104 U. S. 356; Coon *v.* Wilson, 113 U. S. 268; Parker *v.* Yale, 123 U. S. 87.

The reissue was saved from the fate of the original because its claims have but four elements whereas the claims of the original were construed to have five. We cannot now read into the claims the very element, the omission of which gave them vitality. If these claims are construed to include a tension device they are void for double patenting; if construed as containing but four elements, it is obvious that they are broader than the claims of the original. — Thomson-Houston *v.* Western, 158 Fed. 813 (2d case); 86 C. C. A. 73.

§ 873. Broadening — When Permissible.

It is the right of the patentee and his representatives to enlarge or restrict the claim so as to give it validity and secure the invention. — Rubber *v.* Goodyear, 76 U. S. 788; 19 L. Ed. 566.

Battin *v.* Taggart, 17 How. 84.

The general rules are (1) That the reissue cannot cover another invention than that of the original; (2) That the reissue cannot recover what was described but not claimed after long delay; (3) That while a reissue claim may be enlarged it can be done only when actual mistake has occurred and then only without delay; (4) That in reissues for enlarging the scope of a patent the rule of laches should be rigidly applied; (5) That the general purpose of the statute providing for reissues was to correct mistakes and errors, and not to enable the inventor from time to time to extend his monopoly so as to cover progress by others in his art. — Miller *v.* Brass Co. 104 U. S. 350; 26 L. Ed. 783.

If the amended specification does not enlarge the scope of the patent by extending the claim so as to cover more than was embraced in the original,

and thus cause the patent to include an invention not in the original, the rights of the public are not thereby narrowed, and the case is within the remedy intended by the statute. Those cases in which this court has held reissues to be invalid were of a different character, and were cases where by the reissued patent the scope of the original was so enlarged as to cover and claim as a new invention that which was either not in the original specification, as part of the invention described, or if described, was, by not being claimed, virtually abandoned, and dedicated to public use. — Eames *v.* Andrews, 122 U. S. 40; 30 L. Ed. 1064; 7 S. Ct. 1073.

Distinguishing, Russell *v.* Dodge, 93 U. S. 460; Morey *v.* Lockwood, 74 U. S. 230.

To warrant new and broader claims, such claims must not be merely suggested or indicated in original specification, drawings or model, but it must appear that they were constituent parts of the invention sought to be covered.

Nor is the applicant allowed to incorporate in his reissue claims embracing what has been rejected. — Corbin *v.* Eagle, 150 U. S. 38; 37 L. Ed. 989; 14 S. Ct. 28.

Bantz *v.* Frantz, 105 U. S. 160; Heald *v.* Rice, 104 U. S. 737; Miller *v.* Brass Co. 104 U. S. 350; James *v.* Campbell, 104 U. S. 356; Topliff *v.* Topliff, 145 U. S. 156.

The Supreme Court of the United States has held that while this section (4916) liberally construed, would only authorize reissue to correct specifications or claims defective or inoperative because too broad, it would construe the section liberally to give the commissioner of patents power to grant a reissue to expand claims which had been made too narrow by reason of accident, inadvertence or mistake, without fraud. But it has been held in a number of cases that the commissioner is without power to grant a reissue unless it shall clearly appear that the patent, as originally issued, was defective and inoperative for the invention intended; that this defect and inoperativeness arose through inadvertence and mistake; and, finally, that the patentee had not by lapse of time and laches, abandoned his right to have the correction made. — Peoria *v.* Cleveland, 58 Fed. 227; 7 C. C. A. 197.

A claim which made that which was no part of the invention one of its elements, and consequently essential to its infringement, was therefore clearly defective, which defect was properly cured by omitting the proper element from the reissue. — Gaskill *v.* Myers, 81 Fed. 854; 26 C. C. A. 642.

Where there has been an expansion of the patent to describe inventions substantially different from the original, covering nebulous combinations not exhibited therein, and where there has been protracted and unreasonable delay in face of the manufacture of articles not substantially covered by the original invention, the reissue has been held void; but the courts, recognizing the fact that the ordinary inventor is not usually skilled in technical rules of construction, and is apt to suppose that his claims protect him in the essential elements mentioned in them, and that these claims and specifications are usually drawn by men who are strangers to and ignorant of the art within which they lie, and that even skilled solicitors are not infallible in framing technical documents, have sanctioned reissues which permit the framing of claims adequate to secure the full benefits of the inventions designed to be protected by the patent laws. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

Grant *v.* Raymond, 6 Pet. 243.

This case (Miller *v.* Brass Co. 104 U. S. 350) did not deny that a claim might be enlarged, in a reissued patent, but held that there must be a bona fide mistake, and that there must not be unreasonable delay; any considerable lapse of time affording opportunities and temptations to commit fraud. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

The somewhat recent case of Topliff *v.* Topliff, 145 U. S. 56, stated that the power to reissue may be exercised when the patent is inoperative, because the claims were narrower than the actual invention, provided the error arose from inadvertence or mistake. The right, however, is subject to certain limitations, and among them that the reissue shall be for the same invention, as it appears from the specification and claims, and that there must be reasonable diligence in moving. It is also stated as something to be regarded as settled by the Supreme Court that the court will not review the decision of the Commissioner of Patents upon the question of inadvertence, accident or mistake, unless the matter is manifest from the record. The application was made in a little over four months, which ordinarily would be accepted as not an unreasonable time, provided public rights had not intervened. The specification of the original patent, when read in connection with the cuts, manifestly shows that the patentee intended a broader invention than that stated in the claims. — Houghton *v.* Whitin, 153 Fed. 740; 83 C. C. A. 84.

§ 874. Broadening — Miscellaneous Rules.

It would seem, under the old rule and former statute the question of construction of a reissue, whether for the same invention, was one of fact for the jury. — Battin *v.* Taggart, 58 U. S. 77; 15 L. Ed. 37.

When challenged in a court of justice as too broad, the words "substantially as herein described" may be resorted to as qualifying the claim. — Burr *v.* Duryee, 68 U. S. 531; 17 L. Ed. 750.

Parol testimony is not admissible in an application for a reissue to enlarge the scope or effect beyond what was described, suggested or substantially indicated in the original. — Union *v.* Vandeusen, 90 U. S. 530; 23 L. Ed. 128.

The fact that the patentee has not been able to establish royalties on his original patent, and after four years obtained a reissue with broader claims which did not enable him to establish such royalties does not take the case outside the rule of reissue patents. — Eby *v.* King, 158 U. S. 366; 39 L. Ed. 1018; 15 S. Ct. 972.

White *v.* Dunbar, 119 U. S. 47; Ives *v.* Sargent, 119 U. S. 652; Dunham *v.* Dennison, 154 U. S. 103.

The drawings and descriptions of the two patents are identical, as are all the original four claims, except the first, which, in the reissue, is broadened. The scope of the original patent is further broadened by the addition of seven new claims in the reissue. The bill alleges infringement of all the claims of the reissue patent, and the demurrer attacks the validity of the reissued patent as a whole. We are of opinion that the validity of the claims in the reissue which were identical with those of the original patent are not affected thereby. — Rawson *v.* Hunt, 147 Fed. 239; 77 C. C. A. 381.

Walker on Pat. sects. 201, 249; Gage *v.* Herring, 107 U. S. 640; Yale *v.* Sargent, 117 U. S. 536; Leggett *v.* Standard, 149 U. S. 287; International *v.* Maurer, 44 Fed. 618.

§ 875. Delay — Excusable.

The decision of the Patent Office upon the question of delay in applying for a reissue is not final. — Hoskin *v.* Fisher, 125 U. S. 217; 31 L. Ed. 759; 8 S. Ct. 834.

Wollensak *v.* Reiher, 115 U. S. 96.

The fact that reissue was applied for only 13 days after the grant of the original patent does not establish its validity, as held in Coon *v.* Wilson, 113 U. S. 268. — Yale *v.* Berkshire, 135 U. S. 342; 34 L. Ed. 168; 10 S. Ct. 884.

Ives *v.* Sargent, 119 U. S. 652; Parker *v.* Yale, 123 U. S. 87.

The part of a sentence which is added in the statement of the object of an invention, states nothing which was not previously obvious. The narrowed and truthful reissue is, therefore, unobjectionable except that it was belated; and upon the point of laches in obtaining a reissue, the Federal courts are now sensitive. Delay in this regard is obnoxious, because, as a rule, individuals and the public have acquired, during such delay, "adverse equities which would be destroyed by a re-construction of a void claim." In this case, the adverse interests, whatever they are, arose after the termination of the Gibson litigation, and as soon as they came into being, they were warned by the reissue of the existence of a patent which covered the attempted infringement. This reissue cannot be declared void by reason of the lapse of time after the original was issued, without establishing a new rule of law upon the subject of reissued patents. — Maitland *v.* Goetz, 86 Fed. 124; 29 C. C. A. 607.

In this class of cases there should not be applied a stricter rule of diligence than that applied by statute in case of public use before application for the patent, even if so strict a limitation as that is applicable. — Crown *v.* Aluminum, 108 Fed. 845; 48 C. C. A. 72.

§ 876. Delay — Fatal.

The patent on its face is notice of defects therein; and unreasonable delay will render the reissue void. — Wollensak *v.* Reiher, 115 U. S. 96; 29 L. Ed. 350; 5 S. Ct. 1137.

Miller *v.* Brass Co. 104 U. S. 350; Mahn *v.* Harwood, 112 U. S. 354.

The application for the reissue was made nearly eleven years after the original patent was granted, and after machines effecting the shifting by other means had gone into use subsequently to the date of the original patent, and no sufficient excuse is given for the laches and delay. — Brown *v.* Davis, 116 U. S. 237; 29 L. Ed. 659; 6 S. Ct. 379.

The Washington solicitor failed to claim the vital point of the invention although it had been distinctly stated to him in writing. (As a certain class of patent solicitors are liable to do.) The omission was plain and might have been discovered by a single reading of the patent. *Held*, that after three years and after the event of infringement the conduct of the Washington solicitor as an excuse for the fact and their confidence in him as an excuse for the delay in applying for the reissue was insufficient. — Ives *v.* Sargent, 119 U. S. 652; 30 L. Ed. 544; 7 S. Ct. 436.

The reissue was taken out seven years after the original patent, and a year or two after the patentee knew that the defendant was making such an

article as is now alleged to be infringed cannot avail complainant. — Matthews *v.* Ironclad, 124 U. S. 347; 31 L. Ed. 477; 8 S. Ct. 639.

Unexplained delay in applying for a reissue is fatal to its claims. — Electric *v.* Boston, 139 U. S. 481; 35 L. Ed. 250; 11 S. Ct. 586.

Miller *v.* Brass Co. 104 U. S. 350; Clements *v.* Odorless, 109 U. S. 641; Mahn *v.* Harwood, 112 U. S. 354; Wollensak *v.* Reiher, 115 U. S. 96; Ives *v.* Sargent, 119 U. S. 652; Hoskin *v.* Fisher, 125 U. S. 217.

While it was ruled in Railway *v.* Sayles, 97 U. S. 563; Clements *v.* Odorless, 109 U. S. 649, and Electric *v.* Boston, 139 U. S. 502, that in cases of reissue and enlargement of the claims could not avail against patents granted, or articles made and sold, between the time of the original application and the time of the final granting of the reissued patent, it does not cover a case of reissue where there were new or different claims or any substantial departure from the claims first made. — Hillborn *v.* Hale, 69 Fed. 958; 16 C. C. A. 569.

Every one is constructively bound with notice of the issue of a patent, and, if actual notice of the original issue is to be regarded as binding the possessor of that knowledge with notice of all possibilities of reissue, consistency requires that the same effect be allowed to that constructive notice which all are bound to take of the issue of a patent; and, this being so, there can be no protection for intervenors in an act against a subsequent reissue of a patent, except by license or by conditions which amount to an equitable estoppel. No such meaning is expressed in, or can be fairly implied from the opinion in Gaskill *v.* Myers. — American *v.* Swietusch, 85 Fed. 968; 26 C. C. A. 506.

The original patent was granted April 11, 1893. The application for the reissue was filed Sept. 28, 1900. In the meantime various persons had been acting upon the supposed invalidity of the patent, which was declared invalid by the Circuit Court of Appeals for the Second Circuit in July, 1897. As early as 1895 the attention of the patentee was directly challenged to the specifications of the patent, and they were elaborately canvassed. If any error had been committed in the language employed or in claiming more than was new, it was discoverable then as it ever became, unless, indeed, a patentee has the right to await results which the courts may reach after prolonged litigation and examination of the subject. We cannot think that a patentee may thus experiment with his patent. On the contrary, we think that, when the grounds are disclosed for thinking there may be an error or mistake, he is bound in duty to the public to correct it by obtaining a reissue or to adhere to his original patent; and, if he declines to correct it, he should be deemed to be standing upon it as the measure of his right. — Milloy *v.* Thomson-Houston, 148 Fed. 843; 78 C. C. A. 533.

Section 4916 of the Revised Statutes authorizes a reissue (quoting the words of the statute). But it has been held, on grounds of public policy, that this right must be promptly exercised upon the discovery of the error. — Milloy *v.* Thomson-Houston, 148 Fed. 843; 78 C. C. A. 533.

Miller *v.* Brass Co. 104 U. S. 350; Mahn *v.* Harwood, 112 U. S. 354; White *v.* Dunbar, 119 U. S. 47; Ives *v.* Sargent, 119 U. S. 652; Parker *v.* Yale, 123 U. S. 87; Dobson *v.* Lees, 137 U. S. 258; Wollensak *v.* Sargent, 151 U. S. 221; Walker on Pat. sec. 227.

That where the necessity for applying for a reissue became apparent from a decision of the circuit court of appeals on an appeal from an interlocutory decree granting an injunction, and the complainant waited for over three years until the question could be decided upon appeal from a final decree.

Held: We think the decree in question was, in everything but name, a final decree. The complainant could not have received a more definite or final information regarding the invalidity of the claims. If such reasons for delay as are now advanced are to be sanctioned, the rights of the public will be seriously jeoparded and the door opened to excuses limited only by the ingenuity of counsel. — Thomson-Houston *v.* Western, 158 Fed. 813 (2d case); 86 C. C. A. 73.

§ 877. Delay — General Rules.

The reissue was not applied for until nearly five years after the date of the original patent and not until another inventor had made a substantial advance in the art which was sought to be covered by the reissue. — Torrent *v.* Rodgers, 112 U. S. 659; 28 L. Ed. 842; 5 S. Ct. 501.

Gill *v.* Wells, 22 Wall. 1; Wood Paper Pat. 23 Wall. 568; Powder *v.* Powder, 98 U. S. 126; Ball *v.* Langles, 102 U. S. 128; James *v.* Campbell, 104 U. S. 356; Heald *v.* Rice, 104 U. S. 737; Miller *v.* Brass Co. 104 U. S. 350; Johnson *v.* R. R. 105 U. S. 539; Bantz *v.* Frantz, 105 U. S. 160; Wing *v.* Anthony, 106 U. S. 142; Clements *v.* Odorless, 109 U. S. 641; McMurray *v.* Mallory, 111 U. S. 97; Mahn *v.* Harwood, 112 U. S. 354.

A patent cannot lawfully be reissued for the mere purpose of enlarging the claim unless there has been a clear mistake inadvertently committed in the wording of the claim and the application for a reissue is sued within a reasonably short time. The granting of such reissues after the lapse of long periods of time is an abuse of the power and is founded on a total misconception of the law. The rights of the public here intervene, which are totally inconsistent with such tardy reissues, and the great opportunity and temptation to commit fraud after any considerable lapse of time, when the circumstances of the original application have passed out of mind, and the monopoly has proved to be of great value, make it imperative on the courts, as a dictate of justice and public policy, to hold the patentees strictly to the rule of reasonable diligence in making applications for this kind of reissues.

No precise limit of time can be fixed and laid down for all cases. The courts will always exercise a proper liberality in favor of the patentee. But in any case by such delay as the court may deem unnecessary and unreasonable, the right to a reissue will be regarded as having been abandoned and lost. In Miller *v.* Brass Co. by analogy to the law of public use before an application for a patent, we suggested that a delay of two years should be construed equally favorable to the public. But this was a mere suggestion by the way and was not intended to lay down any general rule. — Mahn *v.* Harwood, 112 U. S. 354; 28 L. Ed. 665; 5 S. Ct. 174; 6 S. Ct. 451.

Where the reissue is for the purpose of expanding the claims, and a delay of two years or more has taken place, which is unexplained, the question of laches is a question of law arising on the face of the bill, which avails as a defense, upon a general demurrer, for want of novelty. — Wollensak *v.* Reiher, 115 U. S. 96; 29 L. Ed. 350; 5 S. Ct. 1137.

When the reissue expands the claims, a delay of two years or more invalidates the reissue. — Wollensak *v.* Reiher, 115 U. S. 96; 29 L. Ed. 350; 5 S. Ct. 1137.

While no general rule can be laid down, an unexcused delay of two years, by analogy to the law of public use, will defeat a reissue. — Ives *v.* Sargent, 119 U. S. 652; 30 L. Ed. 544; 7 S. Ct. 436.

Wollensak *v.* Reiher, 115 U. S. 96; Mahn *v.* Harwood, 112 U. S. 354.

When there is delay of two years or more in applying for a reissue, the delay unless excused, invalidates the reissue. — Hoskin *v.* Fisher, 125 U. S. 217; 31 L. Ed. 759; 8 S. Ct. 834.

Wollensak *v.* Reiher, 115 U. S. 96.

The two year rule explained and modified. — Topliff *v.* Topliff, 145 U. S. 156; 36 L. Ed. 658; 12 S. Ct. 825.

Miller *v.* Brass Co. 104 U. S. 350; Johnson *v.* Flushing, 105 U. S. 539; Mahn *v.* Harwood, 112 U. S. 354; Matthews *v.* Boston, 105 U. S. 54; Bantz *v.* Frantz, 105 U. S. 160; Wing *v.* Anthony, 106 U. S. 142; Moffitt *v.* Rogers, 106 U. S. 423; Gage *v.* Herring, 107 U. S. 640; Clements *v.* Odorless, 109 U. S. 641; McMurray *v.* Mallory, 111 U. S. 97; White *v.* Dunbar, 119 U. S. 47; Parker *v.* Yale, 123 U. S. 87; Coon *v.* Wilson, 113 U. S. 268; Wollensak *v.* Reiher, 115 U. S. 96; Electric *v.* Boston, 139 U. S. 481; Newton *v.* Furst, 119 U. S. 373; Ives *v.* Sargent, 119 U. S. 652; Worden *v.* Searles, 121 U. S. 14; Matthews *v.* Iron, 124 U. S. 347.

It is declared to be settled that while no invariable rule can be laid down, a delay of two years by analogy to the law of public use should be construed equally favorably to the public. — Wollensak *v.* Sargent, 151 U. S. 221; 38 L. Ed. 137; 14 S. Ct. 291.

Ives *v.* Sargent, 119 U. S. 652; Wollensak *v.* Reiher, 115 U. S. 96; Mahn *v.* Harwood, 112 U. S. 354.

It is fair to presume, therefore, that the reissued patent was applied for and obtained because the patentee himself believed that the claims of his original patent, when fairly construed in connection with other parts of the specification, could not be made to embrace the new form of pump, with a chamber located above the cylinder, which had recently come into use, and that it was necessary to alter certain parts of the original specification, and to recast the original claims, to bring the new pump within the terms of his patent. If this was not the opinion of the patentee, or of those who acted as his advisers, when the reissued patent was taken out, then we fail to see what was the purpose which induced the application for the reissue. It is a self-evident proposition that the invention related to a simple structure, that it was clearly described in the original patent, as issued, was neither inoperative nor invalid by reason of any defect or insufficiency of the specification, but undoubtedly secured to the patentee the exclusive right to manufacture the kind of pump which he had described in his specification, and illustrated in his drawings. In short, if there was a substantial defect in the original specification, it consisted in the fact that it was not so drawn as to bring within its claims another kind of pump, that had come into use subsequent to the date of the original patent, which the patent might have been made to cover, if the patentee had foreseen the later mode of construction. For these reasons, and especially in view of the conduct of the patentee in applying for a reissue when there was no occasion for such application, unless he intended to enlarge the scope of his patent, we concur in the conclusion reached by the trial court touching the construction of the claims of the original Bean patent, and we further concur in the view that the claims of that patent were expanded in the reissue.

We are constrained to believe that the expansion of the claims of the original patent was the sole purpose of applying for a reissue.

It is not an insuperable objection to the validity of a reissued patent that the original claims have been enlarged in the reissue. Under some circumstances, it is doubtless true that a patent may be reissued in such a form as to extend its scope. But it has been held repeatedly that, to warrant such reissues, they must be applied for promptly, and that the application for the reissue must be accompanied with satisfactory proof that, solely through

accident or mistake, the patentee did not originally obtain all that he was fairly entitled to. — Mast *v.* Iowa, 76 Fed. 816; 22 C. C. A. 586.

Miller *v.* Brass Co. 104 U. S. 350; Mahn *v.* Harwood, 112 U. S. 354; Coon *v.* Wilson, 113 U. S. 268; Parker *v.* Yale, 123 U. S. 87; Huber *v.* Mfg. Co. 148 U. S. 270; Peoria *v.* Cleveland, 58 Fed. 227.

§ 878. Delay — Intervening Rights.

Where complainant delayed six months, and in the meantime the subject of the reissue claims has gone into general use, such reissue is an attempt to cover what had come into general use by others, and is therefore void. — Parker *v.* Yale, 123 U. S. 87; 31 L. Ed. 100; 8 S. Ct. 38.

Mahn *v.* Harwood, 112 U. S. 354; Coon *v.* Wilson, 113 U. S. 268; Ives *v.* Sargent, 119 U. S. 652.

We have here the case of an application for the reissue of a patent made after an acquiescence of more than 12 years. The public had been freely using the devices. Upon the facts disclosed by this record, it seems to us that, even if the first claim of the reissue were otherwise sustainable, yet it must be held to be invalid in view of the intervening private and public rights which have sprung up, and the unreasonable delay in the application for the reissue. — Horn *v.* Pelzer, 91 Fed. 665; 34 C. C. A. 45.

Miller *v.* Brass Co. 104 U. S. 350; Ives *v.* Sargent, 119 U. S. 652; Eby *v.* King, 158 U. S. 366; Hubel *v.* Dick, 28 Fed. 132; Peoria *v.* Cleveland, 58 Fed. 227; Machine Co. *v.* Searles, 50 Fed. 82.

The case would be different if Painter had unreasonably delayed to assert his rights to reissue after such notice was brought home to him, and where his silence and inaction had misled other parties to their injury; and the fact that the original patent contained a statement of his invention which covered the subject matter of the reissued claim, and that a reissue to fully secure the invention disclosed was authorized by law, was sufficient notice that this patent was subject to such right of reissue, which right was liable to be exercised at any time at least within two years. — Crown *v.* Aluminum 108 Fed. 845; 48 C. C. A. 72.

§ 879. Delay — Miscellaneous Rules.

The question whether the delay has been reasonable or unreasonable is for the court to determine; and it cannot substitute the decision of the patent office for its own. — Wollensak *v.* Reiher, 115 U. S. 96; 29 L. Ed. 350; 5 S. Ct. 1137.

The question of delay in applying for a reissue is a question of law for the court. — Hoskin *v.* Fisher, 125 U. S. 217; 31 L. Ed. 759; 8 S. Ct. 834.

Wollensak *v.* Reiher, 115 U. S. 96.

§ 880. Decisions of Commissioner.

Where the commissioner accepts a surrender of an original patent and grants a new patent, his decision in the premises, in a suit for infringement, is final and conclusive, and is not re-examinable in such a suit in the circuit court unless it is apparent upon the face of the patent that he has exceeded his authority, that there is such a repugnancy between the old and the new patent, that it must be held, as matter of legal construction, that the new patent is not for the same invention as that embraced and secured in the original patent. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Battin *v.* Taggart, 17 How. 83; O'Reilly *v.* Morse, 15 How. 111; Sickes *v.* Evans, 2 Cliff. 222; Allen *v.* Blunt, 3 Story, 744.

The action of the Commissioner is final except as to matters of legal construction. — Union *v.* Vandeusen, 90 U. S. 530; 23 L. Ed. 128.

The action of the commissioner is final as to question of fraud. — Brown *v.* Guild, 90 U. S. 181; 23 L. Ed. 161.

The Commissioner of Patents has no jurisdiction to grant a reissue for any other or different invention than that of the original. — Ball *v.* Langles, 102 U. S. 128; 26 L. Ed. 104.

We think it is a serious question whether the Commissioner of Patents had any jurisdiction, under R. S. 4916, to consider the application upon the bare statement that the patentee desired to surrender his patent and obtain a reissue. The Commissioner is authorized to reissue patents in certain specified cases, and if the petition makes no pretense of setting forth facts entitling the patentee to a reissue, it is exceedingly doubtful whether he obtain any jurisdiction to act at all. — Eby *v.* King, 158 U. S. 366; 39 L. Ed. 1018; 15 S. Ct. 972.

In the case under consideration the examiner acted upon the application as if it were a new proceeding, and dealt with it as the evidence before him seemed to warrant, but his action in rejecting some of the claims which had been repeated from the original patent did not affect the patent. It is true that it was within his power to reject any claims contained in the application for a reissue which he judged to be invalid, whether contained in the original patent or not. It is also true that the reasons given for the rejection of such claims might apply equally to the same claims contained in the original patent, but with respect to such claims he was functus officio. His opinion thereon was but his personal opinion, and, however persuasive it might be, did not oust the jurisdiction of any court to which the owner might apply for an adjudication of his rights, and, as the examiner had no authority to affect the claims of the original patent, no appeal was necessary from his decision. — McCormick *v.* Aultman, 169 U. S. 606; 42 L. Ed. 875; 18 S. Ct. 443.

If by reason of any inadvertence or mistake in the drawings or specifications a patent is rendered in part inoperative, and the patentee promptly applies for a reissue and no substantial rights are affected, or fraudulent intent charged, we think the commissioner has the right, under section 4916 R. S., to cause a new patent to issue, and that under the circumstances, his decision is conclusive. We know of no authority in conflict with this proposition. — Beach *v.* Hobbs, 92 Fed. 146; 36 C. C. A. 248.

It is said that the legal conclusion is closed in favor of the appellants, because it must be presumed that before the reissue was issued, there was before the Patent Office satisfactory evidence that, but for the inadvertence or mistake, the original letters would have taken the form that the reissue now employs. That some such presumption properly attaches itself to the reissue patent we may admit. At most, however, it is a prima facie presumption only. It is not a presumption that debars appellant from challenging the validity of the issue by showing facts that would overcome the presumption. The reissue is before us just as it was before the Patent Office before it was allowed, except that while the burden of proof then was upon the appellants, the burden is now upon the appellees. — Franklin *v.* Illinois, 138 Fed. 58; 70 C. C. A. 484.

§ 881. Different Invention.

A patent issued for a process cannot be reissued for a machine. — Heald *v.* Rice, 104 U. S. 737; 26 L. Ed. 910.

Powder *v.* Powder, 98 U. S. 134.

He entitled his original patent as for a new and useful machine, while with equal explicitness, in his reissue, he declared that he had invented a new and improved process. This is at least a prima facie departure from the original patent which would seem to be serious, if not fatal, under a law which limits the power of the Commissioner of Patents so as to issue a new patent only for the same invention. — Eachus *v.* Broomall, 115 U. S. 429; 29 L. Ed. 419; 6 S. Ct. 229.

Powder *v.* Powder, 98 U. S. 126.

Where the original patent was for a process and the reissue was for the article of manufacture, the new article of manufacture is a product which results from the use of the process described in the patent, and not one which may be produced in any other way. — Plummer *v.* Sargent, 120 U. S. 442; 30 L. Ed. 737; 7 S. Ct. 640.

§ 882. Disclaimer.

It is not competent for the patentee or his assignee, by merely disclaiming all the changes made in the reissue patent, to revive and restore the original patent. This could be done only, if it could be done at all, by surrender of the reissued patent and the grant of another reissue. — McMurray *v.* Mallory, 111 U. S. 97; 28 L. Ed. 365; 4 S. Ct. 375.

We do not think that the reissued patent as it stood after the filing of the disclaimer, was open to the objection that it was not for the same invention as that of the original patent. Whatever there was of objectionable matter inserted in the specification or the first claim of the reissue, when it was granted, was removed by the disclaimer. The reissue was granted within ten months of the original. The single claim of the original patent was repeated in the reissue as the second claim of the latter; and the first claim of the reissue, as it stood after the disclaimer did not expand beyond the claim of the original what was claimed in the reissue. — Hurlbut *v.* Schillinger, 130 U. S. 456; 32 L. Ed. 1011; 9 S. Ct. 584.

§ 883. General Rules.

Patents, when inoperative or invalid, may in certain cases, be surrendered and reissued; but the new patent in such case must be for the same invention as the original patent; and if it is for a different invention, the reissue is invalid, for the reason that it was granted without authority of law. — Marsh *v.* Seymour, 97 U. S. 348; 24 L. Ed. 963.

Sec. 4916 construed in Powder *v.* Powder, 98 U. S. 126; 25 L. Ed. 77.

Reissued letters patent must be for the same invention as that secured in the original patent. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

Seymour *v.* Osborne, 11 Wall. 546.

The general rules are, (1) that the reissue cannot cover another invention than that of the original; (2) that the reissue cannot recover what was described but not claimed after long delay; (3) that while a reissue claim may be enlarged, it can be done only when actual mistake has occurred and then

only without delay; (4) that in reissues for enlarging the scope of a patent, the rule of laches should be rigidly applied; (5) that the general purpose of the statute providing for reissues was to correct mistakes and errors, and not to enable the inventor from time to time to extend his monopoly so as to cover progress by others in his art. — Miller *v.* Brass Co. 104 U. S. 350; 26 L. Ed. 783.

The case of Gage *v.* Herring, 107 U. S. 640, holds that the invalidity of a new claim in a reissue does not impair the validity of a claim in it which is only a repetition and separate statement of a claim in the original patent. It also holds that a reissue patent is within the letter and spirit of sections 4917 and 4922; and that where a defendant has infringed such a restated valid claim of a reissue, the plaintiff, on filing a disclaimer of the new and invalid claims of the reissue, may have a decree, without costs, for the infringement of such valid claim, where there has been no unreasonable delay in entering the disclaimer. — Yale *v.* Sargent, 117 U. S. 536; 29 L. Ed. 954; 6 S: Ct. 934.

Reissues are subject to the following qualifications:

1. That it shall be for the same invention as the original patent, as such invention appears from the specification and claims of such original.

2. That due diligence must be exercised in discovering the mistake in the original patent, and that, if it be sought for the purpose of enlarging the claim, the lapse of two years will ordinarily, though not always, be treated as evidence of an abandonment of the new matter to the public to the same extent that a failure by the inventor to apply for a patent within two years from the public use or sale of his invention is regarded by the statute as conclusive evidence of an abandonment of the patent to the public.

3. That this court will not review the decision of the Commissioner upon the question of inadvertence, accident or mistake, unless the matter is manifest from the record; but that the question whether the application was made within a reasonable time is, in most, if not in all such cases, a question of law for the court. — Topliff *v.* Topliff, 145 U. S. 156; 36 L. Ed. 658; 12 S. Ct. 825.

It is a mistake to suppose that the case was intended to settle the principle that, under no circumstances, would a reissue containing a broader claim than the original be supported. We have no desire to modify in any respect the views expressed in that and subsequent cases. There is no doubt as was said in Giant *v.* California, 98 U. S. 126, that a reissue can be granted only for the same invention which formed the subject for the original, since the express words of the Act are "a new patent for the same invention." The specification may be amended so as to make it more clear and distinct; the claim may be modified so as to make it more conformable to the exact rights of the patentee, but the invention must be the same. — Topliff *v.* Topliff, 145 U. S. 156; 36 L. Ed. 658; 12 S. Ct. 825.

Explaining and limiting, Miller *v.* Brass Co. 104 U. S. 350; Giant *v.* California, 98 U. S. 126.

The plain purpose of this section is to give the patentee an opportunity to make valid and operative that which was before invalid and inoperative, — invalid, because it claimed as new that which had been previously invented or used by the public; inoperative because the specification was defective or insufficient. New matter cannot be introduced, nor can the scope of the invention be enlarged. All that the applicant can do is to so amend his patent as to enable him to receive some practical and beneficial result from his actual invention, of which he had been deprived by defects or omissions

in the original patent. The object of a patentee applying for a reissue is not to reopen the question of the validity of the original patent, but to rectify any error which may have been found to have arisen from inadvertence or mistake. But until the amended patent shall have been issued the original stands precisely as if a reissue had never been applied for. — McCormick *v.* Aultman, 169 U. S. 606; 42 L. Ed. 875; 18 S. Ct. 443.

Allen *v.* Culp, 166 U. S. 501.

§ 884. Grounds for.

When a patent was granted to the wrong person, an action by the rightful inventor will lie to compel a surrender and reissue. — Appleton *v.* Bacon, 67 U. S. 699; 17 L. Ed. 338.

Where the applicant has been led into an error or mistake by the commissioner it was ground for a reissue. — Morey *v.* Lockwood, 75 U. S. 230; 19 L. Ed. 339.

Now whilst, as before stated, we do not deny that a claim may be enlarged in a reissued patent, we are of opinion that this can only be done when an actual mistake has occurred; not from a mere error of judgment, for that may be rectified by appeal, but a real bona fide mistake, inadvertently committed; such as a court of chancery in cases within its ordinary jurisdiction will correct. — Miller *v.* Brass Co. 104 U. S. 350; 26 L. Ed. 783.

The patent has been the subject of an earnest contest in the Patent Office for four years; had been put in interference with five other devices, and it was scarcely possible that, after this long litigation, the patentee should not have detected defects in his original application, and have taken this opportunity of correcting them. His experience in this litigation had doubtless appraised him of the weak points in his prior specification and claims, and it was perfectly competent for him to restate them, provided his patent was not essentially broadened to cover intervening devices. — Hobbs *v.* Beach, 180 U. S. 383; 45 L. Ed. 586; 21 S. Ct. 409.

Defendant's argument against the validity of the reissue is ingenious, but the facts are plain, and not unusual. The device of the specification was recognized as an invention by the manufacturers of lighting fixtures. They became licensees, and the patent was acquiesced in and respected for a number of years. The Gibson litigation showed that the principal claim was fatally loose in the opinion of both the circuit and appellate courts. It was reissued so as to make the claim correspond with and be limited to the description in the specification. The claim was narrowed but narrowed to conform to the specification, and to state the same invention which it had described. The reissue is not one of the class of reissues of which Machine Co. *v.* Searle, 60 Fed. 82, is an example, which pretend to narrow a claim but which in fact describe an invention of an independent character and one which the patentee either did not make or omitted to describe, but which he now finds "lurking" somewhere in the structure. — Maitland *v.* Goetz, 86 Fed. 124; 29 C. C. A. 607.

§ 885. Inadvertence, Accident, or Mistake.

The applicant obtained his original, Apr. 14, 1863. He obtained his first reissue Aug. 23, 1864. He obtained his second reissue Aug. 3, 1869. He obtained his fourth reissue Oct. 4, 1870. The invention was a simple stamp cancelling tool. The court held that in view of the simplicity of the patent on the one hand and in view of the remarkable efforts of the inventor to make

his patent cover all future improvements from time to time, he had forfeited his right to what he had originally invented.

For a sharp rebuke to designing reissue applicants, see this case. — James *v.* Campbell, 104 U. S. 356; 26 L. Ed. 786.

An error due to inadvertence or mistake apparent on the face of the patent may be cured by prompt surrender and reissue, but such a right will be abandoned by unreasonable delay. — Miller *v.* Brass Co. 104 U. S. 350; 26 L. Ed. 783.

Two applicants some nine years after issue discover that their solicitor has "mixed those children up," the claims of the one being issued to the other. Therefore they obtained a reissue separately. *Held*, that, (1) As to the patent receiving the broadened claim under the reissue, it is void under the rule of Miller *v.* Brass Co. 104 U. S. 350; and (2) that as to the patent disclaiming the broader claims, that it covered as limited only a mechanical improvement upon the other. — Hartshorn *v.* Saginaw, 119 U. S. 664; 30 L. Ed. 539; 7 S. Ct. 421.

The misapprehension of the applicant as to the efficiency of a claim does not amount to inadvertence, accident or mistake. — Yale *v.* James, 125 U. S. 447; 31 L. Ed. 807; 8 S. Ct. 967.

Swain *v.* Ladd, 102 U. S. 408.

An alleged error of "omission of claims" where it was evident that the "error" was discovered in subsequent inventions is not ground for reissue. — Electric *v.* Boston, 139 U. S. 481; 35 L. Ed. 250; 11 S. Ct. 586.

Clements *v.* Odorless, 109 U. S. 641; Mahn *v.* Harwood, 112 U. S. 354; Coon *v.* Wilson, 113 U. S. 268; Newton *v.* Furst, 119 U. S. 373; Worden *v.* Searles, 121 U. S. 14; Matthews *v.* Iron, 124 U. S. 347.

If the petition does not set forth grounds for reissue under R. S. 4916 the Commissioner does not acquire jurisdiction. — Eby *v.* King, 158 U. S. 366; 39 L. Ed. 1018; 15 S. Ct. 972.

There are cases in which the description of an invention, and the claims sought to be founded upon it, by the applicant for a patent, are so plain and unequivocal upon the face of the application itself, that the judicial mind cannot be convinced that he intended to describe and claim any other invention than that for which the patent was granted; and in such cases the courts ought not to hesitate to review the decision of the commissioner upon the question of inadvertence, accident or mistake, and should refuse to be bound by it when the record upon the application for the reissue discloses that no explanatory facts or circumstances, adequate to account for the error, were brought to his attention. — Featherstone *v.* Bidwell, 57 Fed. 631; 6 C. C. A. 487.

With respect to the proof of inadvertence, accident or mistake, the action of the commissioner is conclusive, if there is any evidence before him tending to show such accident, inadvertence or mistake, as will, in law, warrant a reissue. With respect to whether the original patent is inoperative and defective, the court has always reserved the right to review the action of the commissioner. If it shall appear from an examination of the new and old patents that the old patent was not defective or inoperative but was for a complete invention, and that the reissue was taken out to secure another and different invention, lurking in the mechanical arrangement of parts, the Supreme Court has always held the reissue void. Parker *v.* Yale, 123 U. S.

87. Again, if an examination of the patent office record discloses that there was no evidence before the commissioner of accident, inadvertence or mistake, such as to warrant him in reissuing the patent, or that there was record evidence of a conclusive character, showing that there could have been no accident, inadvertence or mistake, the Supreme Court has not hesitated to hold a reissue void. — Peoria *v.* Cleveland, 58 Fed. 227; 7 C. C. A. 197.

Huber *v.* Mfg. Co. 148 U. S. 270; Huber *v.* Mfg. Co. 38 Fed. 836; Mahn *v.* Harwood, 112 U. S. 354.

§ 886. Scope of.

If he were the author of any other invention than that which he specifically describes and claims, though he might have asked to have it patented at the same time and in the same patent, yet if he had not done so, and afterwards desired to secure it, he is bound to make a new and distinct application for that purpose, and make it the subject of a new and different patent. When a patent fully and clearly, without ambiguity or obscurity, describes and claims a specific invention, complete in itself, so that it cannot be said to be inoperative or invalid by reason of a defective or insufficient specification, a reissue cannot be had for the purpose of expanding and generalizing the claim so as to make it embrace an invention not described and specified in the original. — James *v.* Campbell, 104 U. S. 356; 26 L. Ed. 786.

Burr *v.* Duryee, 68 U. S. 577; Miller *v.* Brass Co. 104 U. S. 350.

It would seem on the authority of the Goodyear vulcanized India rubber patent that a patent covering only the process, where both process and product were new, may be reissued to cover both process and product. — James *v.* Campbell, 104 U. S. 356; 26 L. Ed. 786.

It is clearly to be understood, from the entire language, that the things to be included are only the things which properly belonged to the invention as embodied in the original patent; that what the invention was is to be ascertained by consulting the original patent; and that, while the new description may properly contain things which are indicated in the original specification, drawings or patent office model (though not sufficiently described in the original specification) it does not follow that what was indicated in the original specification, drawings or patent office model is to be considered as a part of the invention, unless the court can see, from a comparison of the two patents, that the original patent embodied, as the invention intended to be secured by it, what the claims of the reissue are intended to cover. — Parker *v.* Yale, 123 U. S. 87; 31 L. Ed. 100; 8 S. Ct. 38.

It is well settled that no construction can be given to the claims of the reissue involved in this suit which will include what was covered by the rejected claims under either the original or reissue applications. — Fox *v.* Perkins, 52 Fed. 205; 3 C. C. A. 32.

Shepard *v.* Carrigan, 116 U. S. 597; Sutter *v.* Robinson, 119 U. S. 530; Dobson *v.* Lees, 137 U. S. 258; Roemer *v.* Peddie, 132 U. S. 313.

§ 887. Surrender — Effect of.

A surrender of the patent within the sense of the provision means, an act which, in judgment of law, extinguishes the patent. It is a legal cancellation of it and hence can no more be the foundation for the assertion of a right after the surrender than could a repealed act of Congress. — Moffitt *v.* Garr, 66 U. S. 273; 17 L. Ed. 207.

The surrender of a patent extinguishes pending suits. — Moffitt *v.* Garr, 66 U. S. 273; 17 L. Ed. 207.

Surrenders take effect when the amended patent is issued, and from that time the original patent ceases to be operative as a franchise to vest in the patentee the exclusive right to make and use the invention, and vend the same to others to be used. — Reedy *v.* Scott, 90 U. S. 352; 23 L. Ed. 109.

Surrendered patents cease to be operative when the new patent is issued; from which it follows that such a patent, after the surrender, is not the proper foundation for an action to recover either damages or profits for the infringement of the invention. — Reedy *v.* Scott, 90 U. S. 352; 23 L. Ed. 109.

The surrender of the patent in suit after final judgment and decree does not affect the judgment or decree. — Mevs *v.* Conover, 131 U. S. cxlii, app.; 23 L. Ed. 1008.

A patent after it is surrendered cannot be the foundation of any suit. The surrender of a patent pendente lite dismisses the suit. — Meyer *v.* Pritchard, 131 U. S. ccix, app.; 23 L. Ed. 961.

Moffitt *v.* Garr, 1 Black, 282; Reedy *v.* Scott, 90 U. S. 352; Cleveland *v.* Chamberlain, 1 Black, 426; Lord *v.* Veazie, 8 How. 255.

Under the Act of 1837 the surrender of a patent for the purpose of a reissue extinguished the original and all rights or claims thereunder. — Peck *v.* Collins, 103 U. S. 660; 26 L. Ed. 512.

A void reissue does not affect original application on which patent was granted. — Washburn *v.* Beat Em All, 143 U. S. 275; 36 L. Ed. 154; 12 S. Ct. 443.

Where a patent has been surrendered and reissued, and such reissue is held void, the patentee cannot proceed under his original patent nor recover damages thereunder. — Eby *v.* King, 158 U. S. 366; 39 L. Ed. 1018; 15 S. Ct. 972.

Moffitt *v.* Garr, 66 U. S. 273; Reedy *v.* Scott, 90 U. S. 352; Peck *v.* Collins, 103 U. S. 660; McMurray *v.* Mallory, 111 U. S. 97; Gage *v.* Herring, 107 U. S. 640.

It is true that in making his surrender the patentee declares that his patent is inoperative and invalid; but this is not necessarily so for all purposes, but for the purpose for which he desires to have it reissued. Such a patent might be inoperative and invalid as against certain persons who had pirated the underlying principle of the patent, and avoided infringing the exact language of the claim, and yet be perfectly valid as against others who were making machines clearly covered by their language. — Allen *v.* Culp, 166 U. S. 501; 41 L. Ed. 1093; 17 S. Ct. 644.

When a patent is thus surrendered there can be no doubt that it continues to be a valid patent until it is reissued, when it becomes inoperative; but, if a reissue be refused, it is entirely clear that the surrender never takes effect, and the patent stands as if no application had ever been made for a reissue. Whether, if the reissue be void, the patentee may fall back on his original patent has never yet been decided by this court, although the question was raised in Eby *v.* King, 158 U. S. 366; but, as the original patent was also held to be void, it did not become necessary to express an opinion upon the question. But if the original application for a reissue be rejected, the original patent stands precisely as though a reissue had never been applied for,

unless, at least, the reissue be refused upon some ground equally affecting the original patent. — Allen *v.* Culp, 166 U. S. 501; 41 L. Ed. 1093; 17 S. Ct. 644.

To attempt to cancel a patent upon an application for reissue when the first patent is considered invalid by the examiner would be to deprive the applicant of his property without due process of law, and would be in fact an invasion of the judicial branch of the government by the executive. — McCormick *v.* Aultman, 169 U. S. 606; 42 L. Ed. 875; 18 S. Ct. 443.

The Circuit Court of Appeals certified the following question to the Supreme Court, in McCormick *v.* Aultman, 69 Fed. 371:

If a patentee applies for a reissue of his patent, and includes among the claims under the new application the same claims as those which were included in the old patent, and the examiner of the patent office rejects some of such claims, and allows others, both old and new, does the patentee, by abandoning his application for a reissue, and by procuring a return of his original patent, hold his patent invalidated as to those claims which the examiner rejected?

The Supreme Court answered the question thus:

The fact that the rules of the patent office require that the original patent should be placed in its custody for the purpose of surrendering it upon the issue of an amended patent gives that department no right to the possession of it upon the rejection of the application for a reissue. If the patentee abandoned his application for a reissue, he is entitled to a return of his original patent precisely as it stood when such application was made, and the Patent Office has no greater authority to mutilate it by rejecting any of its claims than it had to cancel the entire patent. — McCormick *v.* Aultman, 169 U. S. 606; 42 L. Ed. 875; 18 S. Ct. 443.

When the patentee came to ask for a reissue, he was confronted with certain conditions on which only could the reissue be permitted. One was that the specifications of his patent, as it (they) stood, were inoperative. He was obliged to aver and prove that they were so. If this was true, the patentee had been exploiting a patent which, though it might have contained the germ of an invention, was practically useless to the public, for a patent which does not disclose a way to work or use the invention does not constitute the expected consideration for the grant. Having averred in a solemn manner, and to induce the granting of a reissue, that the fact was as just stated, he was estopped from claiming otherwise. — Coffield *v.* Fletcher, 167 Fed. 321; C. C. A.

Moffitt *v.* Garr, 1 Black, 273; Reedy *v.* Scott, 23 Wall. 352; Peek *v.* Collins, 103 U. S. 660; Gage *v.* Herring, 107 U. S. 640; Coon *v.* Wilson, 113 U. S. 268; Eby *v.* King, 158 U. S. 366; McCormick *v.* Aultman, 169 U. S. 606.

Note: This certainly is a holding which will be open to some criticism in view of the decision in McCormick *v.* Aultman, *supra*. To what extent the averments in an application for a reissue may be regarded as an estoppel is a serious question, and one which cannot be regarded as finally settled by this decision for all cases.

§ 888. Tests of Validity of.

The construction of a reissue in a court of equity is a question to be determined by a comparison of the original and reissue; and with the aid of expert testimony in cases where the specification is technical. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Sickles *v.* Evans, 2 Cliff. 203; Bischoff *v.* Wethered, 9 Wall. 812; Betts *v.* Menzies, 4 B. & S. Q. B. 999.

Equivalents are, doubtless, allowed to a patentee or owner of a patent to shut out infringements, but the patent act furnishes no support to the theory that the patentee may surrender a patent for an invention consisting of a combination of old ingredients and amend the descriptive parts of the specification by striking out the entire description of one of the ingredients of the combination and inserting in lieu thereof a full description of several other devices without any allegation that they are the equivalents of the one whose description is stricken out, or any explanation whatever showing the reason why the change was made. — Gill *v.* Wells, 89 U. S. 1; 22 L. Ed. 699.

When the reissue is clearly void by comparison with the original as a matter of law, extensive evidence is unnecessary; but where such evidence is required it is proper that it should be considered. — Heald *v.* Rice, 104 U. S. 737; 26 L. Ed. 910.

James *v.* Campbell, 104 U. S. 356; Miller *v.* Brass Co. 104 U. S. 350; Burr *v.* Duryee, 68 U. S. 531; Powder *v.* Powder, 98 U. S. 139; Battin *v.* Taggart, 58 U. S. 77; Bischoff *v.* Wethered, 76 U. S. 812; Seymour *v.* Osborne, 78 U. S. 545.

What was suggested in the original specification, drawings or patent office model is not to be considered as a part of the invention intended to have been covered by the original patent, unless it can be seen from a comparison of the two patents that the invention, which the original patent was intended to cover embraced the things thus suggested, or indicated in the original specification, drawings, or patent office model, and unless the original specification indicated that those things were embraced in the invention intended to have been secured by the original patent. — Flower *v.* Detroit, 127 U. S. 563; 32 L. Ed. 175; 8 S. Ct. 1291.

Parker *v.* Yale, 123 U. S. 87; Hoskin *v.* Fisher, 125 U. S. 217.

We are of opinion that the circuit court committed an error in excluding the original patent. It was relevant evidence upon the question whether the reissue was "for the same invention" as the original, and the issue on that subject was sufficiently raised by the averment of the complainant and the denial in the answer. — Oregon *v.* Excelsior, 132 U. S. 215; 33 L. Ed. 344; 10 S. Ct. 54.

§ 889. Miscellaneous Rules.

Under the general statute, which did not specifically provide for reissues, the government had the right, incident to its power to grant a patent, to grant a reissue in case of accident or mistake. — Grant *v.* Raymond, 6 Pet. 218; 8 L. Ed. 376.

The second patent being a continuation of the first one, the rights of the plaintiff must be ascertained by the law under which the original application was made. — Shaw *v.* Cooper, 7 Pet. 292; 8 L. Ed. 689.

Moneys recovered on judgments in suits or voluntary payment under the first patent, upon the surrender cannot be recovered back. — Moffitt *v.* Garr, 66 U. S. 273; 17 L. Ed. 207.

A reissue has no connection with or bearing upon antecedent suits; it has as to subsequent suits. — Moffitt *v.* Garr, 66 U. S. 273; 17 L. Ed. 207.

Upon an application for a reissue the commissioner should pass upon the sufficiency of applicant's title to apply for reissue. — Holloway *v.* Whiteley, 71 U. S. 522; 18 L. Ed. 335.

It was held by the court, in view of the Patent Act of 1832, that the fact of the granting of the reissued patent closed all inquiry into the existence of inadvertence, accident or mistake, and left open only the question of fraud to the jury. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

R. R. *v.* Stimpson, 4 How. 384.

Note: Under the later law and more recent rulings, this is regarded too broad.

Reissued patents, in order that they may be valid, must be for the same invention as the surrendered originals. The express provision in the new Patent Act is that no new matter shall be introduced into the specification, and that in the case of a patent for a machine neither the model nor drawings shall be amended, except each by the other. — Gill *v.* Wells, 89 U. S. 1; 22 L. Ed. 699.

Pending suits are defeated when it appears that the patent on which the suit is founded has been surrendered, nor is a supplemental bill setting up the reissued patent a proper pleading to revive such a suit in equity, as nothing can be recovered, either as damages or profits for infringement of the surrendered patent. — Reedy *v.* Scott, 90 U. S. 352; 23 L. Ed. 109.

Moffitt *v.* Garr, 1 Black, 273.

The reissue together with the corrected specification has the same effect and operation in law on the trial of all actions for causes hereafter (thereafter) arising, as though the same had been originally filed in such correct form. — Reedy *v.* Scott, 90 U. S. 352; 23 L. Ed. 109.

The defendant must overcome the presumption against him arising from the decision of the Commissioner of Patents in granting the reissue. — Smith *v.* Goodyear, 93 U. S. 486; 23 L. Ed. 952.

The statute in force at the time of the issue of the original patent authorized a surrender and reissue whenever any patent was "inoperative or invalid by reason of a defective or insufficient description or specification or by reason of the patentee claiming in his specification as his own invention more than he had a right to claim as new." The statute in force at the time of the reissue made no change in this except by striking out the words "description or" Stat. 4th July, 1836, Ch. 357, sec. 13 (5 Stat. at L, 117): R. S. sec. 4916. — Gage *v.* Herring, 107 U. S. 640; 27 L. Ed. 601; 2 S. Ct. 819.

It was never lawful to cover, by the claims of a reissue, an improvement made after the granting of the original patent. — Union *v.* U. S. 112 U. S. 624; 28 L. Ed. 828; 5 S. Ct. 475.

The combination covered by the claim in the reissued patent is, in law and in fact, merely a mechanical equivalent for that which was already covered by the C. patent, which had the priority of invention. For this reason we hold the reissue invalid. — Hartshorn *v.* Saginaw, 119 U. S. 664; 30 L. Ed. 539; 7 S. Ct. 421.

The patentee having imposed words of limitation upon himself in his claims, especially when so required by the patent office in taking out his reissue, is bound by such limitations, in subsequent suits on the reissued patents. — Crawford *v.* Heysinger, 123 U. S. 589; 31 L. Ed. 269; 8 S. Ct. 399.

Leggett *v.* Avery, 101 U. S. 256; Goodyear *v.* Davis, 102 U. S. 222; Fay *v.* Cordesman, 109 U. S. 408; Mahn *v.* Harwood, 112 U. S. 354; U. S. *v.* Union,

112 U. S. 624; Sargent *v.* Hall, 114 U. S. 63; Shepard *v.* Carrigan, 116 U. S. 593; White *v.* Dunbar, 119 U. S. 47; Sutter *v.* Robinson, 119 U. S. 530; Bragg *v.* Fitch, 121 U. S. 478; Snow *v.* Lake Shore, 121 U. S. 617.

A reissue applied for subsequent to the expiration of a foreign patent upon the original is invalid. — Commercial *v.* Fairbank, 135 U. S. 176; 34 L. Ed. 88; 10 S. Ct. 972.

Claims of a reissue patent must be limited to the specific mechanism claimed in the original patent. — Electric *v.* Boston, 139 U. S. 481; 35 L. Ed. 250; 11 S. Ct. 586.

Sutter *v.* Robinson, 119 U. S. 530.

Where an application was made on the ground of a defect in the "omission of claims," and it appears that the real object of the reissue was to cover apparatus covered by subsequent patents, the reissue claim was held invalid. — Electric *v.* Boston, 139 U. S. 481; 35 L. Ed. 250; 11 S. Ct. 586.

Does not invalidate original claim when it is repeated in reissue. — Leggett *v.* Standard, 149 U. S. 287; 37 L. Ed. 737; 13 S. Ct. 902.

Gage *v.* Herring, 107 U. S. 640

In that case (Gaskill *v.* Myers) too, there was no change whatever in the specification. In this case a change was introduced, which was not only different from, but essentially inconsistent with, the original specification. — American *v.* Swietusch, 85 Fed. 968; 29 C. C. A. 506.

Distinguishing Gaskill *v.* Myers, 81 Fed. 854.

In the original application a part was shown and described as a hole which should have been a slot. This rendered the device absolutely inoperative. The error was caused by oversight and was unconnected with the gist of the invention, though its adoption rendered the machine inoperative. No change was made or needed in the claim. If the patentee made a meritorious invention, he ought not to lose the benefit of it by reason of a defect so narrow and technical. — Hart *v.* Anchor, 92 Fed. 657; 34 C. C. A. 606.

It is urged that the success of the appellee in procuring the reissue is in the nature of a fraud. The defect of this argument is that it assumes that we have before us (on injunction proceeding), in this case, all the facts that the commissioner had before him in the application for a reissue; and that we can, in a collateral proceeding, declare the patent fraudulent, on account of the supposed imposition on the commissioner. — Justi *v.* Clark, 108 Fed. 659; 47 C. C. A. 565.

If the claims in a reissue are valid which were contained in the original, notwithstanding its new claims are invalid, it would seem to follow that, where there are no new claims in the reissue, all the claims should be valid, although in attempting to correct a mistake the commissioner has done nothing more than to introduce unimportant changes into the description. — Thomson-Houston *v.* Black River, 135 Fed. 759; 68 C. C. A. 461.

It suffices for present purposes that the patentee not only described the same invention as is described in the reissue (with amplification now omitted as to the details of construction and arrangement of the tension device) but also endeavored to claim the combination now claimed. Unless a reissue is invalid because unimportant changes are made in the descriptive matter and the language of the claims so as to express beyond any chance of mis-

apprehension what the patentee intended to claim in the original, there is nothing to militate against the present reissue. It is urged for the appellee that there was no statutory ground for a reissue, because the specification for the original was not in any sense defective. If it should be conceded that the changes in the description of the reissue are of no materiality, and that the claims are identically such as some of the claims of the original, the circumstances would not impeach their validity. In many cases where the new claims in a reissue have been held invalid, the claims repeated from the original have been sustained. — Thomson-Houston *v.* Black River, 135 Fed. 759; 68 C. C. A. 461.

Gage *v.* Herring, 107 U. S. 640; Mahn *v.* Harwood, 112 U. S. 354.

REOPENING CASE.

After Decree on Appeal § 890
Newly Discovered Evidence § 891
Miscellaneous Rules § 892

See — *Adjudication* § 35; *Appeals* § 109; *Decrees* § 301; *Pleading and Practice* § 788; *Rehearings* § 868

§ 890. After Decree on Appeal.

The question of due diligence, as well as the materiality of the newly discovered evidence, is, we think, a question for decision by this court upon an application for leave to review a decree of the Circuit Court, entered in pursuance of the decree of this court. — Kisinger-Ison *v.* Bradford, 123 Fed. 91; 59 C. C. A. 221.

Society *v.* Watson, 77 Fed. 512; Jourolmon *v.* Ewing, 85 Fed. 103; Rubber *v.* Ewing, 9 Wall. 805.

That where a case is on appeal, before final decree, the appellate court may dismiss the appeal without prejudice, on request of the court below, for the purpose of further pleading and proofs, see Mossberg *v.* Nutter, 124 Fed. 966; 60 C. C. A. 98.

Distinguishing Roemer *v.* Simon, 91 U. S. 149.

On an interlocutory decree, like the one now before us, the Circuit Court has the case in its own breast, and on the dismissal of an appeal without prejudice can reopen any interlocutory proceedings if justice requires it. — Greene *v.* United, 124 Fed. 961; 60 C. C. A. 93.

That a complainant-appellant may not ask the appellate court to instruct the circuit court to allow complainant to reopen the case and amend so as to bring in the proper parties defendant, see — National *v.* Stolts, 135 Fed. 534; 68 C. C. A. 84.

§ 891. Newly Discovered Evidence.

It is a settled rule in this class of cases "that the matter must not only be new, but such as the party, by the use of reasonable diligence, could not have known; for if there be any laches or negligence in this respect, that destroys the title to the relief." Story Eq. Pl. sec. 414. — Providence *v.* Goodyear, 76 U. S. 805; 19 L. Ed. 828.

Whether such an application shall be granted or refused, rests in the sound discretion of the court. — Providence *v.* Goodyear, 76 U. S. 805; 19 L. Ed. 828.

The decision and decree of this court did not amount, indeed, technically speaking, to a final judgment, because the matter of accounting still remained

to be disposed of. Humiston *v.* Stainthorp, 2 Wall. 106; Smith *v.* Iron Works, 165 U. S. 518. But they constitute an adjudication by this court of all questions, whether of law or of fact, involved in the conclusion that the letters patent of the plaintiff were valid, and had been infringed. Applying the rule stated at the beginning of this opinion, the questions of novelty and infringement were before this court, and disposed of by its decree, and must therefore be deemed to have been finally settled, and could not afterwards be reconsidered by the circuit court. When the merits of the case have been once decided by this court on appeal, the circuit court has no authority without express leave of this court to grant a new trial, a rehearing or a review, or to permit new defenses on the merits to be introduced by amendment of the answer. — In re Potts, 166 U. S. 263; 41 L. Ed. 994; 17 S. Ct. 520.

Ex Parte Story, 12 Pet. 339; Southard *v.* Russell, 16 How. 547; Ex Parte Du Buque, 1 Wall. 69; Stewart *v.* Solomon, 97 U. S. 361; Gaines *v.* Rugg, 148 U. S. 228.

The refusal of the court of leave to the defendants to take further proof is assigned for error, but this assignment has not been seriously pressed by counsel. The rebuttal proofs in the case had been closed, and leave was denied on the ground of lack of due diligence, and because it was not clear that the new evidence was material. The disposition of the motion was, however, in the discretion of the court, and in general such motions are not appealable. — Pittsburgh *v.* Roberts, 71 Fed. 706; 18 C. C. A. 302.

Stimes *v.* Franklin, 14 Wall. 22.

While the views which we have expressed in respect to stare decisis, public policy, and laches, do not operate strictly as an estoppel under the circumstances of this case, such considerations have operated to create and sustain the rule which requires that the newly discovered evidence, in order to be controlling, shall fully, clearly and unmistakably establish, in connection with the other evidence in the case, that the former decisions between the same parties were wrong. — Bresnahan *v.* Tripp, 99 Fed. 280; 39 C. C. A. 508.

The decisions (and there are many) all go at least to the extent of saying that the new evidence, to warrant it, must be so cogent and persuasive as to impress the court with the conviction that, if it had been presented and considered on the original hearing, it would have clearly produced a contrary conclusion from the one there reached. There are some cases where it is held that, if the claim is made that the newly discovered evidence or patents anticipate the patent previously sustained upon bona fide and strenuous contest, the anticipation must be described in full, clear and exact terms. — Bresnahan *v.* Tripp, 99 Fed. 280; 39 C. C. A. 508.

That a searcher was sent to examine the Patent Office for the purpose of obtaining all matter which was material to the defense of want of patentable novelty, and that this searcher did not come across these particular patents, is not such an extraordinary circumstance as would justify the review of a decree sustaining the validity of the patent. Such evidence is of a cumulative character. These patents were public records, and accessible if the search had been sufficiently diligent. The discovery of other patents bearing upon the question of anticipation should not be made the basis for a bill of review, in the absence of some very peculiar circumstance. — Kisinger-Ison *v.* Bradford, 123 Fed. 91; 59 C. C. A. 221.

Re Gamewell, 73 Fed. 908.

That a party is entitled to a reasonable time after the discovery of new evidence to verify and substantiate such evidence before moving to reopen the case, see — Kelley *v.* Diamond, 136 Fed. 855; 69 C. C. A. 599.

The petition seems to us to be for leave to open up the case, not so much to introduce evidence newly discovered, as to introduce old evidence the materiality of which has been newly discovered. The disturbance of a final judgment between given parties on such a ground would be contrary to all the adjudged cases. It would destroy the finality of nearly every decree handed down. — Lafferty *v.* Acme, 143 Fed. 321; 74 C. C. A. 521.

§ 892. Miscellaneous Rules.

The decree in this case under consideration is not final, within the decisions of this court. The injunction prayed for was made perpetual, but there was a reference to a master to ascertain the damages by reason of the infringement; the bill was not dismissed, nor was there a decree for costs. No point is better settled in this court, than that an appeal may be prosecuted only from a final decree. The cases are numerous where appeals have been dismissed, because the decree of the circuit court was not final. It is supposed there was a departure from this uniform course of decision, at the last term in case of Forgay *v.* Conrad, 6 How. 201. — Barnard *v.* Gibson, 7 How. 650; 12 L. Ed. 857.

The record contains no warrant for more than nominal damages at any time. We cannot reopen the taking of evidence simply because the complainant has failed to make a case. — Baker *v.* Crane, 138 Fed. 60; 70 C. C. A. 486.

Appellant, after the decision of the case, moved to reopen it, in order to show that it used fire-brick and did not use chamotte, within the meaning given to it by the court in its opinion. This motion was rightly denied. The new evidence sought to be introduced might have been brought before the court at the original hearing. — Panzl *v.* Battle Island, 138 Fed. 48; 70 C. C. A. 474.

RES JUDICATA.

Conclusiveness § 893
Former Suit § 894
Patent Office Decisions § 895
Miscellaneous Rules § 896

See — Adjudication § 28 *Comity* § 250; *Estoppel* § 381; *Injunction* §§ 561, 570, 575; *Interferences* § 580; *Pleading and Practice* § 788

§ 893. Conclusiveness.

The judgment rendered in that (the former) suit, while it remains in force, and for the purpose of maintaining its validity, is conclusive of all the facts properly pleaded by the plaintiffs. But when it is presented as testimony in another suit, the inquiry is competent whether the same issue has been tried and settled by it. — Packet Co. *v.* Sickles, 65 U. S. 333; 16 L. Ed. 650. Merriam *v.* Whittemore, 5 Gray, 316; Hughes *v.* Alexander, 5 Duer, 488.

A recovery for an infringement of one claim of the patent is not of itself conclusive of an infringement of that other claim and there was no extrinsic evidence offered to remove the uncertainty upon the record; it is left to conjecture what was in fact litigated and determined. The verdict may have been for an infringement of the first claim; it may have been for the infringe-

ment of the second; it may have been for an infringement of both. The validity of the patent was not necessarily involved, except with respect to the claim which was the basis of recovery. — Russell *v.* Place, 94 U. S. 606; 24 L. Ed. 214.

It is undoubtedly settled law that a judgment of a competent court of jurisdiction, upon a question directly involved in one suit, is conclusive as to that question in another suit between the same parties. But to this operation of the judgment it must appear, either upon the face of the record or be shown by extrinsic evidence, that the precise question was raised, and determined in, the former suit. If there be any uncertainty on this head in the record — as, for example, if it appear that several distinct matters may have been litigated, upon one or more of which the judgment may have passed without indicating which of them was thus litigated, and upon which the judgment was rendered — the whole subject-matter of the action will be at large and open to a new contention, unless this uncertainty be removed by extrinsic evidence. — Russell *v.* Place, 94 U. S. 606; 24 L. Ed. 214.

The jury did not find that the alleged infringing machines combined in their "structure and operation the substance of the invention" described in the letters patent. Curt, sec. 308; but found the identity of the three exhibits in the case. If the invention of the patent was not used, it is immaterial how similar the two machines were in other respects. The question whether the invention of the patent was used by the defendant was not actually determined by the state court, although it could have been; but it is only in respect to matters actually in litigation and determined that the judgment is conclusive in another action. — Brusie *v.* Peck, 54 Fed. 820; 4 C. C. A. 597.

Cromwell *v.* Sac, 94 U. S. 351.

A decision of another circuit court of appeals to be res judicata and a binding precedent must have been upon the merits of the same patent, and not upon others co-related with it. — Boyden *v.* Westinghouse, 70 Fed. 816; 17 C. C. A. 430.

The decree in the Toledo Case awarded a perpetual injunction, but with an order of reference to a master to ascertain the damages by reason of infringement, and for that purpose the suit, it is conceded, is still pending. It is therefore only an interlocutory decree, and not available as an estoppel in respect to any issue in these suits. Barnard *v.* Gibson, 7 How. 650; Humiston *v.* Stainthorp, 2 Wall. 106; McGourkey *v.* Ry. Co. 146 U. S. 545; Bradley *v.* Eagle, 57 Fed. 980; Jones *v.* Munger, 50 Fed. 785; Richmond *v.* Atwood, 52 Fed. 10; Marden *v.* Campbell, 67 Fed. 809; Bissell *v.* Goshen, 72 Fed. 545. — Brush *v.* Western, 76 Fed. 761; 22 C. C. A. 543.

The decision of this court in the case of Wheaton *v.* Norton, 70 Fed. 833, was upon the merits; and it was there adjudged that the same machine, the use of which constitutes the alleged infringement by the defendant in the present suit, was not an infringement of the patent sued on by the complainants; and the judgment of the trial court, entered in pursuance of the mandate of this court, was an adjudication conclusively binding, not only upon the parties to that suit, but upon their privies. Johnson Steel *v.* Wharton, 152 U. S. 252; Last Chance *v.* Tyler, 157 U. S. 683; Railroad *v.* National, 102 U. S. 14; Stout *v.* Lye, 103 U. S. 66. The judgment is affirmed. — Norton *v.* San Jose, 79 Fed. 793; 25 C. C. A. 194.

While we appreciate fully that the doctrine of res judicata is a salutary one, intended to mitigate the evils which follow prolonged and repeated

litigations, still the decisions show that the courts have always restricted its application to cases where, among other identities, the subject matter was the same. — Norton *v.* Jensen, 90 Fed. 415; 33 C. C. A. 141.

Cromwell *v.* Sac, 94 U. S. 351; Russell *v.* Place, 94 U. S. 606; Lumber Co. *v.* Buchtel, 101 U. S. 638; Wilson *v.* Deen, 121 U. S. 525; Bissell *v.* Spring, 124 U. S. 231.

The defendant here was a mere user. The infringing manufacturer, the Diamond Meter Co., was not a party to the prior adjudication but undoubtedly furnished the defense. *Held:* The proofs as a whole satisfy us that the purpose of the Diamond Meter Co. was to maintain such an attitude with reference to the prior suit that it might have the direct benefit of the decree if favorable to the defendants therein, and yet not be concluded should the decree be adverse to the defendant. But if the Diamond Meter Co. desired that the decree in the prior suit should operate as an estoppel in its favor, it was bound by avowal or open action to place itself in such an unequivocal position that the decree should be mutually binding as res adjudicata upon itself and upon the complainant. — Jefferson *v.* Westinghouse, 139 Fed. 385; 71 C. C. A. 481.

Litchfield *v.* Goodnow's, 123 U. S. 549; Andrews *v.* National, 76 Fed. 166; Cramer *v.* Singer, 93 Fed. 636; Lane *v.* Welds, 99 Fed. 286.

An adjudication that the patent was void would protect defendant against a new attack by plaintiff on the same patent. But an adjudication that the defendant was doing something that did not infringe a valid patent would not justify defendant in doing something else that does infringe. — Robinson *v.* American, 150 Fed. 331; 80 C. C. A. 127.

If courts are to examine defenses in patent cases de novo, as often as they are presented, litigation will continue until the resources of the defendants or the patience of the complainant, and possibly the patience of the court, are exhausted. — Consolidated *v.* Diamond, 162 Fed. 892; 89 C. C. A. 582.

§ 894. Former Suit.

It was not necessary as between parties and privies that the record should show that the question upon which the right of the plaintiff to recover, or the validity of the defense, depended for it to operate conclusively; but only that the same matter in controversy might have been litigated, and that extrinsic evidence would be admitted to prove that the particular question was material and was, in fact, contested and that it was referred to the decision of the jury. — Packet Co. *v.* Sickles, 65 U. S. 333; 16 L. Ed. 650.

Although one infringer may succeed in defeating a patent by one of the statutory defenses, such action does not prevent another from being sued, or mulcted, in case he fails to produce the requisite evidence to maintain his defense. — United States *v.* Am. Bell, 128 U. S. 315; 32 L. Ed. 450; 9 S. Ct. 90.

As the prior action was between the same parties, and was based in part at least, and principally, upon the same patent, it would appear that the judgment of the court dismissing the petition would operate as a complete estoppel to the present suit, unless the proceedings subsequent to the judgment in the former suit in some way deprived the judgment of its force and effect res judicata. — Hubbell *v.* U. S. 171 U. S. 203; 43 L. Ed. 136; 18 S. Ct. 828.

3 Rob. Pat. sec. 1017.

The presumption is that the issues were the same, and, if they were in part different, it was incumbent upon the claimant to show that the prior case was decided upon questions not involved herein. — Hubbell *v.* U. S. 171 U. S. 203; 43 L. Ed. 136; 18 S. Ct. 828.

The patentee cannot bring suit against an infringer upon a certain state of facts, and, after dismissal of his action, bring another suit against the same party upon the same state of facts, and recover upon a different theory. The judgment in the first action is a complete estoppel in favor of the successful party in a subsequent action upon the same state of facts. — Hubbell *v.* U. S. 171 U. S. 203; 43 L. Ed. 136; 18 S. Ct. 828.

Walker Pat. 468; DuBois *v.* Railroad, 5 Fish. 208, Fed. Cas. 4109; Bradley *v.* Eagle, 57 Fed. 989.

This is a second action upon the same claim or demand, to wit, upon the claim for a monopoly granted by patent; and that the former decree, the question being necessarily involved and at issue in that case, determines conclusively and for all time, as between the parties thereto and their privies, the validity of the patent. It can no more be made the subject of contention between them. — Bradley *v.* Eagle Mfg. Co. 57 Fed. 980; 6 C. C. A. 661.

Cromwell *v.* Sac, 94 U. S. 351; Davis *v.* Brown, 94 U. S. 423; Campbell *v.* Rankin, 99 U. S. 281; Block *v.* Commissioners, 99 U. S. 686; Wilson *v.* Deen, 121 U. S. 525; Bissell *v.* Spring Valley, 124 U. S. 225; Nesbit *v.* Independent, 144 U. S. 610; Railroad *v.* Alsbrook, 146 U. S. 279; McComb *v.* Frink, 149 U. S. 629; Lumber Co. *v.* Buchtel, 101 U. S. 638; Insurance Co. *v.* Bangs, 103 U. S. 780; Elgin *v.* Marshall, 106 U. S. 578.

The defendant there was the agent of the present appellant in the sale of the infringing machines. The defense of the suit then was assumed and prosecuted by the appellant here. The appellant was in fact the real party to that litigation, and so far as the decree there is res adjudicata is as effectively concluded thereby as if it were the actual defendant of record. — Bradley *v.* Eagle Mfg. Co. 57 Fed. 980; 6 C. C. A. 661.

Lovejoy *v.* Murray, 3 Wall. 1; Robbins *v.* Chicago, 4 Wall. 657.

That the decree was interlocutory at the bringing of this suit, and subsequently ripened into a final decree, does not impair its efficiency or conclusiveness when properly presented in this suit. The relative time of institution of suit, or the relative date of final decree, is not of consequence if the merits of the controversy be thereby fully and finally determined, and the record thereof is properly brought to the attention of the court. — Bradley *v.* Eagle Mfg. Co. 57 Fed. 980; 6 C. C. A. 661.

Duffy *v.* Lytle, 5 Watts. 120; Casebeer *v.* Mowry, 55 Pa. St. 422; Child *v.* Powder Works, 45 N. H. 547.

The rule of res judicata has never been disturbed that where, in a prior suit, it appears of record that any particular question has been actually adjudicated, the prior judgment is to that extent conclusive in any subsequent suit between the same parties or their privies, relating to an instrument which forms the basis of litigation in each. Here we find in the prior judgment a solemn and express adjudication in favor of the validity of the patent. If in that particular the court went beyond its province, its action was not void, and the remedy for the respondents was to apply to have its decree amended. As, therefore, we find in the record here, matter which, as far as we are concerned, conclusively establishes that the court having cognizance of the prior suit had expressly adjudicated the validity of the patent as between the parties in privity with those now before us, we have no power to permit

that question to be litigated again. — Empire *v.* American, 74 Fed. 864; 21 C. C. A. 152.

Bradley *v.* Eagle, 57 Fed. 980; Russell *v.* Place, 84 U. S. 351; Bissell *v.* Spring, 124 U. S. 225; Howlett *v.* Tarte, 10 C. B. N. S. 813; Roberts *v.* Railroad, 158 U. S. 1; DeSollar *v.* Hanscome, 158 U. S. 216; Last Chance *v.* Tyler, 157 U. S. 683; Lumber *v.* Buchtel, 101 U. S. 638.

The prior suit was brought against defendant company and its agent. The company had the bill dismissed against it for want of jurisdiction, but furnished the funds for the defense. That suit having been decided in favor of the agent, the defendant company now pleads that suit as estoppel on the ground that it sustained the expense of the former suit for its agent. *Held:* The open dismissal of the Singer Company from that suit upon its own motion was significant of its withdrawal from the litigation, and of its purpose not to be bound by the judgment to be rendered therein. — Singer *v.* Cramer, 109 Fed. 652; 48 C. C. A. 588. Reversed, 192 U. S. 265.

The plea does meet the declaration (that of infringement), for it alleges that the acts for which defendant is now sought to be held are merely a continuation of the very same acts which were involved in the former litigation and were adjudged not to constitute a cause of action. But this allegation was expressly denied in the replication. So an issue of fact was framed, for the determination of which plaintiff was entitled to a jury trial. — Robinson *v.* American, 150 Fed. 331; 80 C. C. A. 127.

In the former case Heller testified that he was interested in the defense financially and otherwise. Whether intended to be so or not, there is no doubt that the suit against the N. Y. Baking Powder Co. was, in fact, a test case and is controlling in this court upon all questions there decided. We are of the opinion that their participation in the defense of the test suit made the defendants Heller and the N. Y. Hygienic Co. parties privy to that suit and that the testimony of Clotworthy given therein may properly be read against these defendants — Clotworthy having died prior to the hearing. — Rumford *v.* Hygienic, 159 Fed. 436; 86 C. C. A. 416. Reversed, 215 U. S. 156.

Each plea states with abundant particularity the issues raised, heard, and decided in the prior equity suit referred to between the parties, and specifies their identity with the subject-matter in controversy here. The prior adjudication was clearly brought within the elementary rule which bars a second action upon the same claim or demand. — Robinson *v.* American, 159 Fed. 131; 86 C. C. A. 321.

Cromwell *v.* County, 94 U. S. 351.

§ 895. Patent Office Decisions.

It would seem that a defendant cannot set up an interference adjudication and rely upon it as res adjudicata when sued for infringement. — Garratt *v.* Siebert, 98 U. S. 75; 25 L. Ed. 84.

The question of judicial interpretation of a doubtful question before the Patent Office is not to be regarded as res judicata by that department. — Andrews *v.* Hovey, 124 U. S. 694; 31 L. Ed. 557; 8 S. Ct. 676.

In a subsequent suit between the same parties to the decision of the patent office upon the question of priority, the decision there made must be accepted as controlling upon the question of fact in a subsequent suit, unless the

contrary is established by testimony which, in character and amount, carries thorough conviction. — Ecaubert *v.* Appleton, 67 Fed. 917; 15 C. C. A. 73.
Morgan *v.* Daniels, 153 U. S. 120.

It has not been the tendency of the decisions either of the Supreme Court or of the circuit courts of appeal to extend the effect of interference decisions as final adjudications, and we concur with the circuit court in the conclusion that "while the decision in interference may be res judicata as to priority, it does not preclude defendant from raising other questions not in issue in said proceedings." — National *v.* Wheeler, 79 Fed. 432; 24 C. C. A. 663.

No intimation is intended that such decision is res adjudicata or conclusive in the present controversy (between the same parties on motion for preliminary injunction) or of other than persuasive effect in reference to the facts thus involved. — Scott *v.* Laas, 150 Fed. 764; 80 C. C. A. 500.

§ 896. Miscellaneous Rules.

To make the judgment available as a plea in bar or as conclusive evidence, it must appear that the parties were the same or in privity. The situation must have been such that the Hanks Dental Association (defendant below) would have been estopped from asserting the validity of the patent had the judgment been against Bennett. The mere fact that Bennett and defendant are members of an association which has contributed to the defense of each, does not warrant the conclusion that a judgment in favor of one inures to the benefit of the other in the absence of knowledge by the plaintiff of the true relations between them. The plaintiff must have known at the time that the Hanks Company was contributing to the defense of the Bennett suit. — Hanks *v.* International, 122 Fed. 74; 58 C. C. A. 180.

The defendant sought, by showing the invalidity of the patent, to terminate the contract. That issue having been raised and merged in the judgment, it is clear that in a suit between the same parties for subsequent installments under the same contract the same question cannot be raised and litigated a second time. — Wilcox *v.* Sherborne, 123 Fed. 875; 59 C. C. A. 363.

ROYALTIES.

General Statement and the Decisions § 897 | *See — Assignment* § 149; *Damages* § 294; *License* § 760; *Profits* § 825

§ 897. General Statement and the Decisions.

Royalties arise out of contract and agreement. A patent is personal property, and rights arising out of contract and agreement are subject to the general rules relating thereto. So long as it is borne in mind that, unless otherwise specified in the assignment, joint owners are tenants in common, and not by the entirety, there will be little difficulty in applying the general principles underlying contracts to the subject of royalties.
The question of an established royalty furnishes a measure of damages and a factor for the computation of profits. See *Damages* and *Profits*.

To occasionally take promissory notes from licensees in lieu of cash for accrued royalties would, if done in good faith, not be so far out of the course of ordinary business transactions as to render the licensee liable for losses occurring through the insolvency of any of its licensees. In the absence of

any guarantee only diligence and good faith are required. — Thorn *v.* Washburn, 159 U. S. 423; 40 L. Ed. 205; 16 S. Ct. 94.

That where the license is founded upon a pending application which is being prosecuted by the licensee, with the result that some of the claims are rejected by the Patent Office and the licensee notifies the licensor that the claims that can be secured are not "worth a pinch of snuff," but at the same time retains his license privilege and neither surrenders the contract nor the patent application, is bound to account for articles manufactured under the contract and embodying the invention as understood at the time the contract was made, see — Eclipse *v.* Farrow, 199 U. S. 581; 50 L. Ed. 317; 26 S. Ct. 150.

U. S. *v.* Harvey, 196 U. S. 310.

The decree declares in general terms the rights of the plaintiff to royalties upon all devices manufactured by the defendant and embodying the inventions mentioned in the contract, and directs an accounting in accordance with the decree. We are of opinion that these terms warranted the auditor in charging royalties upon any device found to come within the contract. — Eclipse *v.* Farrow, 199 U. S. 581; 50 L. Ed. 317; 26 S. Ct. 150.

Until the attorney's authority was revoked and the defendants had knowledge of it, their settlements with him were a discharge of liability. — Union *v.* Johnson, 61 Fed. 940: 10 C. C. A. 176.

That where the license contract covered a period extending beyond the term of the patent under which a part of the royalties arose, in the absence of specific agreement to the contrary, the royalties arising out of such patent cease with the expiration of that patent, although the contract continues in force as to other patents, see — Holmes *v.* McGill, 108 Fed. 238; 47 C. C. A. 296.

That the fact that a licensee has inextricably complicated and confused the profits or returns accruing from sub-letting or territorial sales under a specific royalty agreement with a licensor cannot defeat the right of the licensor to his royalties, see — Western Union *v.* Am. Bell, 125 Fed. 342; 60 C. C. A. 220.

Royalties are commonly understood as meaning something proportionate to the use of a patented device; in other words, a kind of excise. Bouvier's Law Dictionary, "Royalty." In its more ordinary meaning it would not literally include the shares of stock for which an accounting is demanded. In some of its uses it is a broader word than "rentals," and yet in other aspects "rentals" is a broader word than "royalties." Rentals in their ordinary signification are not limited as royalties in their ordinary signification; that is, something proportionate to the use of the patented device. The word "ordinarily" means specific sums paid annually, or at other stated periods, for the right to use a patented device, whether it is used much or little or not at all. — Western Union *v.* Am. Bell, 125 Fed. 342; 60 C. C. A. 220.

It is argued that although the contract requires the payment of royalties on all machines "sold or delivered," the intent of the parties was that payment should be limited to machines "sold and delivered" and that the court should have so interpreted the contract. We cannot accede to this view. There is no ambiguity about the contract; its language is perfectly plain. In the short clause providing for the payment of royalties the words "sold or delivered" are twice used. There is no room for interpretation. — Confectioners' *v.* Panoualias, 134 Fed. 393; 67 C. C. A. 391.

That in an action to recover royalties under a contract which confined the licensee to manufacture and sell the patented device and no other, it is not necessary for the licensor to prove that the devices made and sold conformed to the claims of the patent, see — Clifford *v.* Capell, 165 Fed. 193; C. C. A

SECRET PROCESS OR MACHINE.

General Rule § 898
See — Abandonment § 1; *Unpatented Invention* § 930

§ 898. General Rule.

One who makes or vends an article which is made by a secret process or private formula cannot appeal to the protection of any statute creating a monopoly in his product. He has no special property in either a trade secret or a private formula. The process or the formula is valuable only so long as he keeps it secret. The public is free to discover it if it can by fair and honest means, and, when discovered, anyone has the right to use it. — Park *v.* Hartman, 153 Fed. 24; 82 C. C. A. 158.

Chadwick *v.* Covell, 151 Mass. 190; Tabor *v.* Hoffman, 118 N. Y. 30; Peabody *v.* Norfolk, 98 Mass. 452; Vulcan *v.* American, 58 Atl. 290.

SALE OF PATENTED ARTICLE.

General Statement and Holdings § 899 | *See — Assignment* § 149; *License* § 749

§ 899. General Statement and Holdings.

The distinctions between the sale of a patented article and the sale of any right under a patent are to be noted. Since the owner of a patent has a close monopoly, he may, provided he gives the proper notice so that the public is not ensnared, sell or otherwise dispose of articles covered by his monopoly with such restrictions as he may impose. While this subject is related to that of *license*, it differs from it in that a license, generally speaking, deals with some right under the patent, while the sale and purchase of a patented article with restrictions deals with the product of the patent, rather than the patent itself.

The condition against sales to retail dealers who do not sign a similar agreement governing sales by them was imposed by complainant in the exercise of its property right in the monopoly, and for the purpose of rendering it valuable. The complainant had the same right to require that such an agreement be exacted from defendants' vendees that it had to demand it from defendants. Any sale by defendants outside of the terms of their under-license or contract was an invasion of complainant's lawful monopoly. — National *v.* Schlegel, 128 Fed. 733; 64 C. C. A. 594.

Undoubtedly, the general rule is that if a patentee make a structure embodying his invention, and unconditionally make a sale of it, the buyer acquires the right to use the machine without restrictions, and, when such machine is lawfully made and unconditionally sold, no restriction upon its use will be implied in favor of the patentee. By such unconditional sale the machine passes without the limit of the monopoly. Adams *v.* Burke, 17 Wall. 453; Mitchell *v.* Hawley, 16 Wall. 544. That the complainant has attempted to state a case not within this rule is very obvious, for it charges that every sale has been under an express restriction as to the use of the invention

embodied in the machine. In view of the conspicuous character of both the machine and the notice permanently affixed thereon, everyone buying must be conclusively presumed to have notice that the owners of the patents intended by the inscription on the machine to grant only a restricted license for its use, and it is difficult to see why such purchaser is not to be regarded as acquiring and accepting the structure subject to this restriction. The buyer of the machine undoubtedly obtains the title to the materials embodying the invention, subject to a reverter in case of violation of the conditions of the sale. But, as to the right to use the invention, he is obviously a mere licensee, having no interest in the monopoly granted by the letters patent. A license operates only as a waiver of the monopoly as to the licensee, "and estops the licensor from exercising its prohibitory powers in derogation of the privileges conferred by them upon the licensee." Rob. Pat. secs. 806–808. It has been said that the sole matter conveyed in a license is the right not to be sued. Hawks *v.* Swett, 4 Hun. 146. A licensee is one who is not the owner of an interest in the patent, but who has, by contract, acquired a right to make or use or sell machines embodying the invention. Gaylor *v.* Wilder, 10 How. 477; Oliver *v.* Chemical, 109 U. S. 75. All alienations of a mere right to use the invention operate only as licenses. It must follow, therefore, that the purchaser of one of complainant's machines subject to a restricted use takes the structure with a license to use the invention only with staples made by the patentee. That the complainant sells the machine through jobbers and not directly to those who buy or use is immaterial, under the facts stated on the face of the bill. The jobber buys and sells subject to the restriction, and both have notice of the conditional character of the sale, and of the restriction on the use. Supply Co. *v.* Bullard, Fed. Cas. 294; Cotton *v.* Simmons, 106 U. S. 89. That the buyer enters into an implied agreement that he will not use the machine contrary to the terms of his license, and that there is in the agreement a provision for the reverter of the title to the structures, may operate to give the patentee a remedy under general principles of law as for damages for breach of contract or for recovery of the machine. It may be that a suit for breach of contract would not be a suit depending on the patent laws, and would therefore be cognizable by the state courts, as intimated in Hartell *v.* Tilghman, 99 U. S. 547, and White *v.* Rankin, 144 U. S. 628. The remedy of complainant may be a double one; for liability may rest either upon the broken contract, or for the tortious use of the invention. Rob. Pat. secs. 1225–1250 & n. If a patentee may lawfully make and sell machines embodying his invention, and restrict the use of the invention in respect of territory or time or business, or purposes to which it may be put, or material to be used in conjunction therewith, it would seem very obvious that the effect of the restrictions and limitations on the use would operate to prevent the machine from passing, as in the case of an unconditional sale, beyond the monopoly of the patent. The control reserved by the patentee as to the use of the machine has the effect of continuing it within the prohibition of the monopoly. The license defines the boundaries of a lawful use, and estops the licensor from the assertion of his monopoly contrary to its terms. On the other hand, a use prohibited by the license is a use in defiance of the monopoly reserved by the patentee, and necessarily an unlawful invasion of the rights secured to him by his patent. The license would be no defense for a suit for infringement by a use in excess of its terms. The patentee has the exclusive right of use, except in so far as he has parted with it by his license. The essence of the monopoly conferred by the grant of letters patent is the exclusive right to use the invention or discovery described in the patent. This exclusive right of use is a true and absolute monopoly, and it is granted in derogation of the common right, and this right to monopolize the use of the invention or discovery is the substantial property

right conferred by law, and which the public is under obligation to respect and protect. "The rights to make and use or sell, are completely severable rights, and involve the right to confer on others such qualified privilege, whether of making, of selling to others or of using, as he sees fit, whether within specified limits, or under limitations of quantity or numbers, or restricted use." Dorsey *v.* Bradley, Fed. Cas. 4,015. In Adams *v.* Burke, 17 Wall. 453, the court said, "The right to manufacture, the right to sell, and the right to use, are each substantive rights, and may be granted separately, or conferred together by the patentee." — Heaton *v.* Eureka, 77 Fed. 288; 25 C. C. A. 267.

SPECIFICATION.

Statutory Requirements § 900
General Statement § 901
Amendment § 902 (*see* § 52)
Construction § 903
Defective § 904
Sufficiency
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Immaterial Error § 912
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Rules for Determining § 915
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Two Inventions, One Patent § 918
Miscellaneous Rules § 919
See — Amendment § 52; *Attorneys* § 178; *Claims* §§ 212, 223; *Defenses* §§ 309, 317; *Drawings* § 362; *Oath* § 779

§ 900. Statutory Requirements.

Before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the Commissioner of Patents, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of a machine he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery. The specification and claim shall be signed by the inventor and attested by two witnesses. R. S. 4888.

Every patent shall contain a short title or description of the invention or discovery, correctly indicating its nature and design, and a grant to the patentee, his heirs or assigns for the term of seventeen years, of the exclusive right to make, use and vend the invention or discovery throughout the United States and the Territories thereof, referring to the specification for the particulars thereof. A copy of the specification and drawings shall be annexed to the patent and be a part thereof. — R. S. 4884.

Sections 490 and 491 provide for the printing, publication and depositing of patent specifications in state capitols, district court clerk's offices and the Library of Congress.

§ 901. General Statement.

The term "specification" is used in a two-fold and confusing manner. As used in the statutes it means both the descriptive portion and the claims.

As commonly used by the Patent Office and by patent attorneys it means the descriptive portion alone. The courts use the term in both ways, but the tendency in the more recent decisions is to mark the distinction as the Patent Office has done. Instances will be found, moreover, where the courts have made the term cover description, claim, and drawings as well.

The relation of the descriptive portion — the specification in the more restricted sense — to the claims, may not be established in a brief statement. While it is a general rule that the claims may not be broadened by reference to the specification, it is none the less true that, in applying the doctrine of equivalents in the case of a patent for a generic invention, this rule is often winked at. On the other hand, the large service of the specification is to locate the invention with reference to the prior art, to enable the courts to delimit the claims.

In the examination of a patent it is always to be borne in mind that it is the common practice of patent solicitors to draw the specification in broad terms and to submit to the Patent Office claims of undue scope. The claims are amended, pruned and restricted, and often cover only a fragment of the subject-matter of the specification. The bad practice prevails in the Patent Office of allowing the specification to stand with its broad disclosure; so that it generally remains for the lawyer or the court to discover, by reference to the claims and to the file wrapper contents, the true scope of the specification.

This title, generally speaking, needs to be considered in connection with *Claims* (§§ 187–249) and *Equivalents* (§§ 374–380).

§ 902. Amendment.

The fact that there were changes made in the specification does not imply a different invention disclosed. (This applied to changes in specification on reissue under the old law and does not apply under the act of 1870). — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

A change in the specification as filed in the first instance, on the subsequent filing for a new one, whereby a patent is still sought for the substance of the invention as originally claimed, or a part of it, cannot in any wise affect the sufficiency of the original application or the legal consequence flowing from it. — Godfrey *v.* Eames, 68 U. S. 317; 17 L. Ed. 684.

§ 903. Construction.

Specifications are to be construed liberally, in accordance with the design of the constitution and patent laws, to promote the progress of the useful arts, and allow inventors to retain to their own use, not anything which is matter of common right, but what they have themselves created. — Winans *v.* Denmead, 15 How. 330; 14 L. Ed. 717.

Grant *v.* Raymond, 6 Pet. 218; Ames *v.* Howard, 1 Sumn. 482; Blanchard *v.* Sprague, 3 Sumn. 535; Davoll *v.* Brown, 1 Wood. & M. 53; Parker *v.* Haworth, 4 McLean, 372; LeRoy *v.* Tatham, 14 How. 181; Neilson *v.* Hartford, 1 Web. P. C. 341; Russell *v.* Cowley, 1 Web. P. C. 470; Burden *v.* Winslow, 15 How. 683.

Doubtless a claim is to be construed in connection with the explanation contained in the specification, and it may be so drawn as in effect to make the specification an essential part of it; but since the inventor must particularly specify and point out the part, improvement or combination which he claims as his own invention or discovery, the specification and drawings are usually looked at for the purpose of better understanding the meaning of the claim, and certainly not for the purpose of changing it and making it

different from what it is. — Howe *v.* National, 134 U. S. 388; 33 L. Ed. 963; 10 S. Ct. 570.
White *v.* Dunbar, 119 U. S. 47.

Change through disclaimer cannot change interpretation of invention. — Grant *v.* Walter, 148 U. S. 547; 37 L. Ed. 552; 13 S. Ct. 699.

The patent is not addressed to lawyers, or even to the public generally, but to the manufacturers of steel; and any description which is sufficient to apprise them in the language of the art of the definite feature of the invention, and to serve as a warning to others of what the patent claims as a monopoly, is sufficiently definite to sustain the patent. He may assume that what was already known in the art of manufacturing steel was known to them. — Carnegie *v.* Cambria, 185 U. S. 403; 46 L. Ed. 968; 22 S. Ct. 698.
Loom Co. *v.* Higgins, 105 U. S. 580.

In the reissue this function of the removable cap is omitted from the description. The drawings remain the same, but the retention there of the parts omitted from the description does not help the effect of the omission. — Adee *v.* Mott, 55 Fed. 876; 5 C. C. A. 288.
James *v.* Campbell, 104 U. S. 356.

While it is admitted, both as to the drawings and as to the written specifications, that such variations in an apparatus, in form, shape and proportions, as common sense or mechanical skill would suggest to one skilled in the art are inferred, still it carries the doctrine to its very verge; and, if the drawings and specifications fail to indicate the device to those conversant with the art and having the mechanical skill peculiar thereto they are insufficient and the patent does not include the device. — Michigan *v.* Consolidated, 67 Fed. 121; 14 C. C. A. 232.

It may not be denied that the specification and the first claim of the patent are couched in unskilful language; but in the case of a novel and useful invention, the terms employed should, if possible, receive a construction which will uphold and not defeat the patentee's right to that which he has in fact invented. — Red Jacket *v.* Davis, 82 Fed. 432; 27 C. C. A. 204.

The language of the Booth patent which we are called upon to consider is of easy comprehension. The following observations of the Supreme Court are here pertinent.
"The words used are not technical, either as having a special sense by commercial usage, nor as having a scientific meaning different from their popular meaning. They are the words of common speech, and, as such, their interpretation is within the judicial knowledge, and therefore matter of law." Marvel *v.* Merritt, 116 U. S. 11, 12, 6 Sup. Ct. 207.
In Norton *v.* Jensen, 49 Fed. 859, the circuit court of appeals for the Ninth circuit well said:
"If the reasons given by the expert witness are deemed reasonable and satisfactory, the court may adopt them; but, if they are unsatisfactory, the court will discard the testimony, and act upon its own knowledge and judgment. It is always the duty of the courts to construe the patent by reference to the language of the claims and an examination of the specification and drawings accompanying the same."
In National *v.* Belcher, 71 Fed. 876, this court speaking by Judge Butler, in refusing to give controlling effect to the testimony of a competent mechanic, who stated that, by following the directions of an earlier patent, he had made a device identical with the one in controversy, said:

"If a valuable patent might be overthrown in this manner by the testimony of an expert, without careful inquiry into, and virtual demonstration of, its correctness, the rights of patentees would rest upon the testimony of such witnesses, rather than the judgment of the court."— Hanifen *v.* Godshalk, 84 Fed. 649; 28 C. C. A. 507.

It is well settled that a description in a specification of details which the claim does not make elements of the combination, and which are not essential to it, is to be held as only pointing out the better method of using the combination. — Boston *v.* Allen, 91 Fed. 248; 33 C. C. A. 485.

In the construction of a patent, the omission of the patentee to point out or refer in his specifications or claims, to the special feature which he subsequently maintains is the most important part of his invention, is very significant, and should be carefully scrutinized. — MacColl *v.* Knowles, 95 Fed. 982; 37 C. C. A. 346.

Union *v.* Keith, 139 U. S. 530; McClain *v.* Ortmayer, 141 U. S. 419; Deering *v.* Harvester, 155 U. S. 286; White *v.* Dunbar, 119 U. S. 47; Burns *v.* Meyer, 100 U. S. 671.

A careful study of the great mass of words with which the draughtsman of the patent seems to have sought to magnify the invention, shows how extremely slight is the improvement upon which complainant relies. — Lyons *v.* Drucker, 106 Fed. 416; 45 C. C. A. 368.

The suggestion that the description commencing with the words "in carrying out my process practically I proceed as follows," is only one specific example of the invention is not to be accepted. There is nothing in the patent to support the suggestion. Undoubtedly the specification, as a whole, evinces that the invention is limited to the para product. We cannot see that Matheson *v.* Campbell, 78 Fed. 910, decides anything favorable to the contention of this appellant. The facts there differed radically from the facts in this case. The patent (in suit) unlike the patent involved in Matheson *v.* Campbell is distinctly limited to one individual product, fully described and unmistakably identified. — Maurer *v.* Dickerson, 113 Fed. 870; 51 C. C. A. 494.

Where an alleged element or characteristic feature of an invention is not necessarily inherent in the invention itself, the failure of the patentee to refer to such alleged feature is persuasive evidence that it is not within the scope of his invention, and, not being disclosed to the public, it should not be read into the patent. — Edison *v.* Crouse, 152 Fed. 437; 81 C. C. A. 579.

As he describes only one organization of means for that purpose, he is restricted to that, or substantially that. The liberality of construction which we think may be given to his claim for the purpose of interpreting it cannot be extended to include all means which might be devised to accomplish even a like result, without such a perversion of the rule applied as would disturb other well-settled doctrines of the patent law. — American *v.* Cleveland, 158 Fed. 978; 86 C. C. A. 182.

§ 904. Defective.

The principle is this: the omission to mention in the specification something which contributes only to the degree of benefit, providing the apparatus would work beneficially and be worth adopting without it, is not fatal,

while the omission of what is known to be necessary to the enjoyment of the invention is fatal. — Sewall *v.* Jones, 91 U. S. 171; 23 L. Ed. 275.

Curtis, sec. 248.

If this were a blunder of an ignorant solicitor, they had ample opportunity to correct it by reissue; but, having allowed it to stand in their patent, they must be held to their declaration that reducing agents will produce this result. It has been suggested that since the evidence shows that alpha-naphthaline would not be formed out of the product of the patent by reducing agents, and that persons skilled in the art would know that fact, the entire test may be rejected as nonsensical surplusage. But there must be some limit to a court's functions in rewriting patents. Assuming that all the imperfections in this patent were due to an ignorant solicitor, remote from his clients, — and it may be noted that there is no evidence of this, — it does not follow that all should be disregarded. We held, as to the error and omission of paragraph 4, that the omission was really supplied elsewhere in the patent; that the error was harmless, since the skilled workman would himself substitute "nitrite" for "nitrate;" and that, although the error must stand in the patent where the patentee's careless solicitor had placed it, we would not infer from its presence that it was due to a fraudulent design to mislead, formed and carried out by the patentees. But here there has been an identifying test put into the patent by the solicitor; the patentee accepts such patent, and applies for no reissue, alleging no mistake; and the court is asked to strike out the test altogether, as ridiculous surplusage. In the absence of any authority for such action, we are unwilling to establish the precedent. But what their solicitors do, patentees should abide. If they are dissatisfied with the letters patent their solicitors obtain, they may, in proper cases, apply for a reissue; but when they accept their original patents without objection, they must be assumed to have assented to such changes as were made by their solicitors in specification or claim while their application was on its way through the patent office. — Matheson *v.* Campbell, 78 Fed. 910; 24 C. C. A. 284.

The applicants for this patent were in Europe and their solicitor here evidently knew little, if anything, about the chemistry of azo products; and there is nothing in the record to suggest that the changes which the solicitor made were due to anything except his own ignorance, or that he had any intent to mislead or to conceal. It is not doubted that an applicant is bound by the acts of his solicitor, but this contention seems to go beyond this wholesome rule when it seeks to void a patent, upon the theory of a fraudulent concealment or fraudulent misrepresentation because, through the solicitor's ignorance, the specifications, when describing the process of manufacture, contain some immaterial error or omission, which could not mislead a person skilled in the art. — Matheson *v.* Campbell, 78 Fed. 910; 24 C. C. A. 284.

An immaterial error in the specification of a patent which would not mislead one skilled in the art will not invalidate the patent. — Matheson *v.* Campbell, 78 Fed. 910; 24 C. C. A. 284.

There is a lack of anything in the record showing what is the pith of the alleged invention or what was the real advance in the art, if any, which it accomplished. The specification of the patent was equally lacking. In holding the patent bad, the court said: whether these changes cover anything of a substantial character, or whether they relate to mere detail of form, or to mere convenience, or to mere matter of fancy, the proofs in this record do not show. — Nutter *v.* Brown, 98 Fed. 892; 39 C. C. A. 332.

Mfg. Co. *v.* Holtzer, 67 Fed. 907; Masten *v.* Hunt, 55 Fed. 78; Fastener Co. *v.* Edgarton, 96 Fed. 489.

No proportions are given, and, indeed, not a word is said in the patent from which any one desiring to use the process described therein can determine the "definite quantity" or the "exact quantity" referred to in the claims. In the absence of specific information upon the subject, the desired quantity can, in the nature of things, be determined only by experiment. — De Lamar *v.* De Lamar, 117 Fed. 240: 54 C. C. A. 272.

Mitchell *v.* Tilghman, 19 Wall. 287; Béné *v.* Jeantet, 129 U. S. 683; Howard *v.* Stove Works, 150 U. S. 164; Schneider *v.* Lovell, 10 Fed. 666; Welling *v.* Crane, 14 Fed. 571; Lockwood *v.* Faber, 27 Fed. 63; Chemical *v.* Raymond, 71 Fed. 179.

Note: On this proposition, as applied, both Gilbert and Morrow, JJ. dissented from the opinion of Ross, J. There is not the slightest doubt but that the dissent was well founded.

If this information (the volume of air required and what is meant by a practically closed grate) can be obtained only by experiment, as the experts all agree, the defect is fatal to the claim. — Germer *v.* Art, 150 Fed. 141; 80 C. C. A. 9.

Incandescent Lamp Pat. 159 U. S. 465; Goodyear *v.* Rubber, 116 Fed. 363.

If his had been the first of such burners, perhaps this would have been sufficient. But in the then state of the art he was bound to differentiate his structure from those which preceded him; and especially is this so when the whole merit of his invention depends upon some peculiarity in the elements he employs. We think it may be affirmed as a rule resting upon the fundamental principles of patent law that, when the essence of the invention is the location, form, size, or any other characteristic of the means employed, the patentee must distinctly specify the peculiarities in which his invention is to be found. — American *v.* Steward, 155 Fed. 731: 84 C. C. A. 157.

Store Co. *v.* Store Co. 150 Fed 141; Bullock *v.* Gen. Elect. 149 Fed. 409.

Note: A questionable decision — refusing to follow C. C. A. 2nd Circ. 128 Fed. 599.

§ 905. Sufficiency — Accuracy.

There are some further and laudable objects in having exactness, to this extent, so as, when the specification is presented, to enable the commissioner of patents to judge correctly whether the matter claimed is new or too broad; to enable courts, when it is contested afterwards before them, to form a like judgement; that the public may be able to understand what the patent is and refrain from its use. — Hogg *v.* Emerson, 6 How. 437; 12 L. Ed. 505.

3 Wheat. 454; 3 Brod. & Bingh, 5; 1 Starkie N. P. 199; 1 Starkie N. P. 192; Web. on Pat. 86; 11 East. 105; 3 Merivale. 161; Evans *v.* Eaton, 3 Wash. 453; 4 Wash. 9; Bovill *v.* Moore, Davis Cas. 361; Lowell *v.* Lewis, 1 Mas. 182.

When a man supposes he has made an invention or discovery useful in the arts and, therefore, the proper subject of a patent, it is, nine times out of ten, an improvement on some existing article, process or machine, and is useful only in connection with it. It is necesssary, therefore, for him, in his application to the Patent Office to describe that upon which he engrafts his invention, as well as the invention itself; and, in cases where the invention is a new combination of old devices, he is bound to describe with particularity all these old devices, and then the new mode of combining them, for which he desires a patent. It thus occurs that, in every application for a

patent, the descriptive part is necessarily largely occupied with what is not new, in order to an understanding of what is new. — Merrill *v.* Yeomans, 94 U. S. 568; 24 L. Ed. 235.

Inventors, before they can receive a patent, are required to file in the Patent Office a written description of their invention, and of the manner and process of making and using the same, in such full, clear, concise and exact terms as to enable a person skilled in the art to make, construct and use the same. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

Accurate description of the invention is required by law for several important purposes. (1) That the government may know what is granted and what will become public property when the monopoly expires. (2) That licensed persons desiring to practise the invention may know, during the term, how to make, construct and use the invention. (3) That other inventors may know what part of the field of invention is unoccupied. — Bates *v.* Coe, 98 U. S. 31; 25 L. Ed. 68.

Gill *v.* Wells, 22 Wall. 27.

When the question is whether a thing can be done or not, it is always easy to find persons ready to show how not to do it. But it stands composed that the thing has been done; that is to say, the contrivance which Webster claims in his patent has been applied and very successfully so. If the thing could not be understood without the exercise of inventive power, it is a little strange that it should have been so easily adapted to looms on which it has been used and produced such striking results. — Loom Co. *v.* Higgins, 105 U. S. 580; 26 L. Ed. 1177.

The direction given in the patent is, that the flange or lip is to be separated from the valve seat by about one sixty-fourth of an inch for an ordinary spring, with less space for a strong spring and more space for a weak spring, to regulate the escape of the steam, as required. As matter of law, this description is sufficient within the rule laid down in Wood *v.* Underhill, 5 How. 1, and it is not shown to be insufficient, as a matter of fact. — Consolidated *v.* Crosby, 113 U. S. 157; 28 L. Ed. 939; 5 S. Ct. 513.

The provisions of the law regulating the granting of patents, which require an inventor to advise the world of his invention by a specific description thereof, and, by a definite claim, to obtain property in just so much of the invention as he seeks to appropriate, are essential that it may be known how much he has acquired as his own, and how far the public are to be restricted in the use of the invention. This specific description is open to be examined by all having occasion to enter that field of use or invention. — Ross-Moyer *v.* Randall, 104 Fed. 355; 43 C. C. A. 578.

Fay *v.* Cordesman, 109 U. S. 420.

That in the description of a basic electrical process, mere relative statements of the amount of power required are sufficient, see — Electric *v.* Pittsburg, 125 Fed. 926; 20 C. C. A. 636.

Inasmuch as the term "fire-brick," if used in the patent, would not have sufficiently identified the peculiar product to enable one skilled in the art to produce the patented product, but would have obliged him to experiment with various materials known under said name, we think the patentee was justified in the use of the said word (chamotte); that it may even have been necessary to a full disclosure of his alleged invention; and that, in view of the evidence, the court correctly found that fire-brick was not necessarily

the equivalent of chamotte. — Panzl *v.* Battle Island, 138 Fed. 48; 70 C. C. A. 474.

§ 906. Sufficiency — Alternative Constructions.

Accordingly when the inventor says, " I recommend the following method " he does not thereby constitute such method a portion of his patent. His patent may be infringed though the party does not follow his recommendation, but accomplishes the same end and by another method. — Sewall *v.* Jones, 91 U. S. 171; 23 L. Ed. 275.

The fact that the inventor said he preferred one of two methods described and claimed does not limit him to that one method. — Telephone Cases, 126 U. S. 1; 31 L. Ed. 863; 8 S. Ct. 778.

It seems to have been the effort of the draftsman to frame the specifications and claims so that any desirable limited or broad construction may be placed upon several of the claims, and thus defeat a defense of anticipation or of noninfringement (a multiplicity of constructions are shown in the drawings). If their enumeration serves any purpose except to point out the adaptability of the cap to use with such parts, it can only be to so restrict the claim that the making of the cap, or its use without them, would not infringe the patent. — Crown *v.* Standard, 136 Fed. 841; 69 C. C. A. 200.

§ 907. Sufficiency — Ambiguity.

Although the specification may describe the invention in technical terms which would be understood only by one skilled in that particular art, and although the specification presupposes a familiarity with the class of machines to which the invention belongs, and does not describe the elements or functions of such machine so long as the specification is technically intelligible it is not open to the attack of ambiguity or insufficiency. — Loom Co. *v.* Higgins, 105 U. S. 580; 27 L. Ed. 1177.

§ 908. Sufficiency — Distinguishing New from Old.

In all cases where his claim is for an improvement on a machine it will be incumbent on him to show the extent of his improvement, so that a person understanding the subject may comprehend distinctly in what it consists. — Evans *v.* Eaton, 3 Wheat. 454; 4 L. Ed. 433.

While it is true that the patentee is not required to point out and describe in express language what he has invented that is new, or the principle of his invention, and that it is sufficient if they can be gathered by implication from what is not set forth, yet the implications ought to be clear, so that it may not be left in obscurity and doubt whether the patentee has in reality invented and produced something new if nothing appears by express declaration or reasonably clear implication, to show that the patentee has made some new and valuable discovery, has thrown a light into a place which before was dark, and illumined what was inert, there is nothing in the patent law to give him any standing. -- Wells *v.* Curtis, 66 Fed. 318; 13 C. C. A. 494. Rob. Pat. sec. 79.

A fatal defect in claim 2 arises out of the words " at or near." We have seen that there is nothing in the specification to limit the indefinite nature of these words. Consequently, there is not enough in the patent to meet the requirements of the statute, pointing out the method by which a successful last can be made in accordance with the claim, and no useful last without

a holder was ever made until the respondent came into the field. — Miller *v.* Mawhinney, 105 Fed. 523; 44 C. C. A. 581.

It is the duty of the patentee to disclose his invention, that the public may be able to practise it when the monopoly expires. This disclosure should include the mode of operation as well as a method of construction. — Goodyear *v.* Rubber, 116 Fed. 363; 53 C. C. A. 583.

Bates *v.* Coe, 98 U. S. 31; Wells *v.* Curtis, 66 Fed. 318; Kelly *v.* Clow, 89 Fed. 297.

If it was an essential part of his invention to so weaken the enclosing head that the entire head will yield, it was his duty under the statute to distinctly so state. — Neptune *v.* National, 127 Fed. 563; 62 C. C. A. 345.

Incandescent Lamp Pat. 159 U. S. 465; Chemical *v.* Raymond, 71 Fed. 179.

Suppose the artisan wishes to construct a device and does not wish to use that of the patent, how shall he know in what manner he shall avoid the patent? Or suppose a purchaser wishes to buy one. He must look out for the patent. By what test or comparison shall he be guided? These inquiries enforce the rule that the patentee must describe with sufficient certainty the particulars of his invention so that the artisan and the public may know the character and limits of it, and how it is to be distinguished from others which the one may name, or the other purchase in safety. — Bullock *v.* General, 149 Fed. 409; 79 C. C. A. 229.

Guidet *v.* Brooklyn, 105 U. S. 550; Preston *v.* Manard, 116 U. S. 661; Howard *v.* Detroit, 150 U. S. 168; Incandescent Lamp Pat. 159 U. S. 465.

§ 909. Sufficiency — Equivalents.

An inventor cannot "speculate on the equivalents of his claimed invention, and thereby oblige the public to resort to experiments in order to determine the scope of the claims of his patent." — Panzl *v.* Battle Island, 138 Fed. 48; 70 C. C. A. 474.

Matheson *v.* Campbell, 69 Fed. 597; Matheson *v.* Campbell, 78 Fed. 910.

The patentee took pains to point out that "the specific construction of the mechanism shown is not essential." This was unnecessary precaution; the law gave him ample protection in this regard. — International *v.* Dey, 142 Fed. 736; 74 C. C. A. 68.

Machine *v.* Murphy, 97 U. S. 120.

§ 910. Sufficiency — Excessive.

An excessive description does not injure the patent unless the addition be fraudulent. — Sewall *v.* Jones, 91 U. S. 171; 23 L. Ed. 275.

Curtis, sec. 248.

§ 911. Sufficiency — Function.

If any separate function had been performed by the combination it should have been pointed out in the specification. — Union *v.* Keith 139 U. S. 530; 35 L. Ed. 261; 11 S. Ct. 621.

It is not material that Gorham did not describe in full all the beneficial functions to be performed by the parts of his machine, if those functions are evident in the practical operation thereof, and are seen to contribute to the success of his device. It is difficult to believe that a man of Gorham's inventive genius did not perceive the useful functions which the parts of

his machine so well performed, even though he did not specifically mention them all. — McCormick *v.* Aultman, 69 Fed. 371; 16 C. C. A. 259.

Eames *v.* Andrews, 122 U. S. 40.

It is not material that the inventor did not describe in full all the beneficial functions to be performed by the parts of his machine, if those functions are evident in the practical operation thereof, and are seen to contribute to the success of his device. — McCormick *v.* Aultman, 69 Fed. 371; 16 C. C. A. 259.

Eames *v.* Andrews, 122 U. S. 40.

An inventor is not required to describe in full all the beneficial functions to be performed by his machine. If the thing accomplished is a necessary consequence of the improvement made and described, making it obvious that the inventor intended the thing accomplished, though not specifically pointed out, he is entitled to the benefit thereof in construing his patent — Stilwell-Bierce *v.* Eufaula, 117 Fed. 410; 54 C. C. A. 584.

Goshen *v.* Bissell, 72 Fed. 67; Dowagiac *v.* Superior, 115 Fed. 886.

It is objected that there is no reference in the specification to the fact that the object of the invention was to produce a fabric capable of being fleeced. But it is well settled that the patentee is not obliged to state all the objects of his invention, and that he is protected in all the beneficial uses thereof within its scope; and here no statement as to fleecing was necessary. — Scott *v.* Fisher, 145 Fed. 915; 76 C. C. A. 447.

§ 912. Sufficiency — Immaterial Error.

If the current moves and escapes just as the inventor provided it should, and by the means he had provided, and produces the useful result he intended, can it make any difference in the validity of the patent that he was mistaken in his explanation of the physical causes of the downward direction of the currents? — Emerson *v.* Nimocks, 99 Fed. 737; 40 C. C. A. 87.

§ 913. Sufficiency — Old Parts.

He need not describe particularly and disclaim all the old parts. — Hogg *v.* Emerson, 6 How. 437; 12 L. Ed. 505.

There is nothing in the patent law which compels the applicant to point out what elements are or are not new in the combination claimed. — Brown *v.* Guild, 90 U. S. 181; 23 L. Ed. 161.

§ 914. Sufficiency — Process.

The specification must be in such full, clear and exact terms as to enable one skilled in the art to which it appertains to compound and use the invention; that is to say, to compound and use it without making any experiments of his own. — Wood *v.* Underhill, 5 How. 1; 12 L. Ed. 23.

Now, a machine which consists of a combination of devices is the subject of invention, and its effects may be calculated a priori; while a discovery of a new substance by means of chemical combinations of known materials is empirical, and discovered by experiment. Where patent is claimed for such discovery, it should state the component parts of the new manufacture claimed with clearness and precision, and not leave the person attempting to use the discovery to find out by experiment. — Tyler *v.* Boston, 74 U. S. 327; 19 L. Ed. 93.

A process, though new and useful, in order that the patent thereon may be valid must describe the steps in such full and exact terms, avoiding unnecessary prolixity, as to enable a person skilled in the art to employ the same. — Mowry *v.* Whitney, 81 U. S. 20; 620 L. Ed. 860.

Every patent for a product or composition of matter must identify it so that it can be recognized aside from the description of the process for making it, or else nothing can be held to infringe the patent which is not made by that process. — Cochrane *v.* Badische, 111 U. S. 293; 28 L. Ed. 433; 4 S. Ct. 455.

It is immaterial that the philosophy of this process is better understood to-day than it was when the patent was issued, so long as the requirements of the patent would not be complied with by one skilled in the art unless he did in fact so use the process. — Edison *v.* U. S. 52 Fed. 300; 3 C. C. A. 83.

Patents (such as this) should be so plain under the statute as that an ordinary manufacturer of aniline colors, having such ordinary knowledge as would exist in this country at the date of the patent, should be enabled by the instructions of that patent to carry out successfully its processes. — Matheson *v.* Campbell, 78 Fed. 910; 24 C. C. A. 284.

The statement of a process upon the part of a patentee, to be sustainable, must not only clearly distinguish the old from the new, so that the novelty claimed is obvious, but must point out the new steps so definitely, that one wishing to use the process for the production of the desired product, will have a clear chart before his eyes. — Cerealine *v.* Bates, 101 Fed. 272; 41 C. C. A. 341.

The patentee having fully described one method of conducting the process, it is at least questionable whether that is sufficient to secure them against the invasion of the broad process set forth in the description by a resort to any other methods of practising it. — Electric *v.* Carborundum, 102 Fed. 618; 42 C. C. A. 537.

Tilghman *v.* Proctor, 102 U. S. 707.

It is well settled that when a patent contains a sufficient disclosure of the claimed invention, it will not be invalidated either by the failure of the patentee to state the causes which produce the operation, or by a mistaken statement as to the reasons therefor. The sufficiency of the disclosure and the novelty and utility of the result are the sufficient considerations for the grant. — Hemolin *v.* Hardway, 138 Fed. 54; 70 C. C. A. 480.

Inasmuch as the discovery of a new substance by means of chemical combination is empirical, and results from experiment, the law requires that the description in a patent should be specially clear and distinct. — Panzl *v.* Battle Island, 138 Fed. 48; 70 C. C. A. 474.

Tyler *v.* Boston, 7 Wall. 327; Moody *v.* Fiske, 2 Mason, 112; Matheson *v.* Campbell, 69 Fed. 597.

§ 915. Sufficiency — Rules for Determining.

We do not say that the party is bound to describe the old machine; but we are of opinion that he ought to describe what his own improvement is, and to limit his patent to such improvement. — Evans *v.* Eaton, 7 Wheat. 356; 5 L. Ed. 472.

The specification has two objects: one is to make known the manner of construction so as to enable the artisans to make and use it, and thus to give the public the full benefit of the discovery after the expiration of the patent. The other is to put the public in possession of what the party claims as his invention, so as to ascertain if he claims anything that is in common use, or is already known, and to guard against prejudice or injury from the use of an invention, which the party may otherwise innocently suppose not to be patented. It is therefore, for the purpose of warning an innocent purchaser, or other persons using a machine, of his infringement of the patent; and at the same time taking from the inventor the means of practising upon credulity, or the fears of other persons by pretending that his invention is for more than what it really is, or different from its ostensible objects. — Evans *v.* Eaton, 7 Wheat. 356; 5 L. Ed. 472.

The specification is an integral part of the letters patent under our system. — Hogg *v.* Emerson, 6 How. 437; 12 L. Ed. 505.

Whoever discovers that a certain useful result will be produced, in any art, machine, manufacture or composition of matter, by the use of certain means, is entitled to a patent for it; provided he specifies the means he uses in a manner so full and exact that anyone skilled in the science to which it appertains, can, by using the means he specifies, without any addition to or subtraction from them, produce precisely the results he describes. And if this cannot be done by the means he describes, the patent is void. — O'Reilly *v.* Morse, 15 How. 62; 14 L. Ed. 601.

It is evident that the definiteness of a specification must vary with the nature of its subject. Addressed as it is to those skilled in the art, it may leave something to their skill in applying the invention, but it should not mislead them. — Mowry *v.* Whitney, 81 U. S. 620; 20 L. Ed. 860.

It is required by R. S. 4888 that the application shall contain "a written description of the device and of the manner and process of making, constructing, compounding and using it in such full, clear, concise and exact terms as to enable any person skilled in the art or science to which it appertains or with which it is most nearly connected, to make, construct, compound and use the same." The object of this is to apprise the public of what the patentee claims as his own, the courts of what they are called upon to construe, and competing manufacturers and dealers of what they are bound to avoid. If the description be so vague and uncertain that no one can tell, except by independent experiments, how to construct the patented device, the patent is void. — Incandescent Lamp Pat. 159 U. S. 465; 40 L. Ed. 221; 16 S. Ct. 75.

Grant *v.* Raymond, 31 U. S. 218; Wood *v.* Underhill, 46 U. S. 1; Tyler *v.* Boston, 74 U. S. 327; Béné *v.* Jeantet, 129 U. S. 683; Howard *v.* Detroit, 150 U. S. 164; Schneider *v.* Lovell, 10 Fed. 666; Welling *v.* Crane, 14 Fed. 571.

It is true that by a practice which seems to have somewhat gained favor in the courts, and which appears to be preferred by some patent solicitors, a description is held sufficient, if from it, aided by the drawings, the model, and the other parts of the application, the invention can be fully ascertained. Rob. Pat. sec. 489, n. 1. In other words, the position seems to be that what can be made certain by any reasonable amount of skill is of itself certain. — B. & S. Fastener *v.* B. G. Fastener, 58 Fed. 818; 7 C. C. A. 498.

He had not, perhaps, discovered all the materials or all the matter, or all the compositions which contained this force, and which were capable of performing the necessary functions, but as to such as he had discovered and

put in operative form, and such as he could describe with reasonable clearness, he was entitled to protection. Some of these compositions stood the test better, made better linings and did the work more successfully than others; and as to such as he used, such as he described, and such as those skilled in the art could understand, he is entitled to protection. — American *v.* Howland, 80 Fed. 395; 25 C. C. A. 500.

§ 916. Sufficiency — Scientific Knowledge.

An inventor may be ignorant of the scientific principle, or he may think he knows it and yet be uncertain, or he may be confident as to what it is and others may think differently. All this is immaterial, if by the specification the thing to be done is so set forth that it can be reproduced. — Eames *v.* Andrews, 122 U. S. 40; 30 L. Ed. 1064; 7 S. Ct. 1073.

The improvement consisted in a successful attempt to simplify the machinery and lessen the large amount of breakage. It is perfectly true that the description in the specification is confined to the purely mechanical feature of construction, and other operative mechanisms, and that the patentee nowhere told why his improvement diminished breakage. He did not know, or he did not tell, why the new method would produce better results. He simply told how to construct a machine which accomplished the end; but he ought not to lose the statutory benefits which would certainly belong to him, if he had seen and described the philosophy of his machine accurately. — Dixon-Woods *v.* Pfeifer, 55 Fed. 390; 5 C. C. A. 148.

If the fact be that his construction does effect the results, and they are beneficial, he is none the less entitled to the benefit of his invention though he may not have correctly understood the principles of its operation. — Cleveland *v.* Detroit, 131 Fed. 853; 68 C. C. A. 233.

Andrews *v.* Cross, 19 Blatchf. 294; Eames *v.* Andrews, 122 U. S. 40.

The language of the patent fails to state any theory of the patentee as to the presence of air below the screen-plates. But where a patent discloses means by which a novel and successful result is secured, it is immaterial whether the patentee understands or correctly states the theory or philosophical principles of the mechanism which produces the new result. — Van Epps *v.* United, 143 Fed. 869; 75 C. C. A. 77.

Walker on Pat. sec. 175; Dixon-Woods *v.* Pfeifer, 55 Fed. 390; National *v.* Thomson, 106 Fed. 531.

§ 917. Sufficiency — Unambiguousness.

In patents for machines the sufficiency of the description must, in general, be a question of fact to be determined by the jury, and this must also be the case in compositions of matter. — Wood *v.* Underhill, 5 How. 1; 12 L. Ed. 23.

Modern inventions very often consist merely of a new combination of old elements or devices, where nothing is or can be claimed except the new combination. Such a combination is sufficiently described to constitute a compliance with the letter and spirit of the Act of Congress if the devices of which it is composed are specifically named, their mode of operation given, and the new and useful result to be accomplished is pointed out, so that those skilled in the art and the public may know the extent and nature of the claim and what the parts are which cooperate to do the work claimed for the invention. — Parks *v.* Booth, 102 U. S. 96; 26 L. Ed. 54.

Sufficiently clear and descriptive when expressed in terms intelligible to persons skilled in the art. — Seabury *v.* Am. Ende, 152 U. S. 561; 38 L. Ed. 553; 14 S. Ct. 683.

A specification is sufficiently clear and descriptive when expressed in terms intelligible to a person skilled in the art to which it relates. — Dowagiac *v.* Superior, 115 Fed. 886; 53 C. C. A. 36.

Loom Co. *v.* Higgins, 105 U. S. 580; Telephone Cases, 126 U. S. 1.

It is not necessary that the description should be clear to one not skilled in the art. — Wolff *v.* Du Pont, 134 Fed. 862; 67 C. C. A. 488.

Loom Co. *v.* Higgins, 105 U. S. 580.

§ 918. Two Inventions, One Patent.

That an inventor may include several separate inventions in a single patent — see Evans *v.* Eaton, 3 Wheat. 454; 4 L. Ed. 433.

A patent embracing more than one invention, if the inventions are kindred, is not void. — Hogg *v.* Emerson, 11 How. 587; 13 L. Ed. 824.

§ 919. Miscellaneous Rules.

The invention claimed is an improvement on an old machine, and it is properly taken for granted that the practical mechanic is acquainted with the machine in which the improvement is made. — Ives *v.* Hamilton, 92 U. S. 426; 23 L. Ed. 494.

The patentee did not show the court the real advantages and extent of his alleged improvement, and therefore the court was unable to find infringement in anything which did not respond precisely to the form and letter of the patent. — B. & S. Fastener *v.* Edgarton, 96 Fed. 489; 37 C. C. A. 523.

An inventor is not called upon to state in his specifications or claims for a patent all the functions of his device, or all the uses to which his invention may be put. When he has plainly described and claimed his machine or combination, and has secured a patent for it, he has the right to every use to which his device can be applied, and to every way in which it can be utilized to perform its function, whether or not he was aware of all these uses or methods of use when he claimed and secured his monopoly. — National *v.* Interchangeable, 106 Fed. 693; 45 C. C. A. 544.

Roberts *v.* Ryer, 91 U. S. 150; Miller *v.* Mfg. Co. 151 U. S. 186; Goshen *v.* Bissell, 72 Fed. 67; Stearns *v.* Russell, 85 Fed. 218; Mfg. Co. *v.* Neal, 90 Fed. 725; Tire Co. *v.* Lozier, 90 Fed. 732.

The specification fails to express the state of the art or the nature or purpose of the invention in any comprehensible manner. It deals with numerous small details of machinery, and points out the purpose in such general terms as not to be practically useful. The record also fails to explain in a clear manner what is thus omitted from the specification. (The patent was held substantially bad). — U. S. Peg-Wood *v.* Sturtevant, 125 Fed. 378; 60 C. C. A. 244.

The brevity and simplicity of his specification and claim do not detract from the merit and validity of his patent, and are a refreshing contrast to the verbosity of the patent in suit. — Crown *v.* Standard, 136 Fed. 841; 69 C. C. A. 200.

An inventor is not called upon to describe every use to which his invention may be put. If he discloses it fully and clearly in one environment, the change requiring no inventive skill, cannot escape infringement. — Sanitary *v.* Sprickerhoff, 139 Fed. 801; 71 C. C. A. 565.

It does not follow that, because the patentee did not state all the advantages of his invention, he was ignorant of them. But if he was, yet if those advantages were really present, they might properly be taken into account in estimating the novelty and utility of the invention. In a number of opinions of this court it has been held that it is not necessary for the patentee to describe in detail all the beneficial functions which he claims will result from his invention. It is enough if those functions are evident and obviously contribute to the success of the invention. — General *v.* Bullock, 152 Fed. 427; 81 C. C. A. 569.

McCormick *v.* Aultman, 69 Fed. 371; Goshen *v.* Bissell, 72 Fed. 67; Dowagiac *v.* Superior, 115 Fed. 886; Goodyear *v.* Rubber, 116 Fed. 363; Stilwell *v.* Eufaula, 117 Fed. 410.

STATE STATUTES AND REGULATIONS AFFECTING PATENT RIGHTS.

General Statement and Decisions § 920
See — Jurisdiction § 724; *Letters Patent* § 746; *Sale of Patented Article* § 899

§ 920. General Statement and Decisions.

Since the right to issue patents is specially delegated to the Federal Government by section eight of article one of the Constitution, it follows that no state may grant a patent. But it will be seen from the following decisions that the Supreme Court is generally disposed to leave to the state legislatures and courts the enactment and enforcement of regulations affecting the exercise of the patent monopoly in the protection of business and morals, so long as such action does not interfere with vested rights and the exercise of legitimate activity.

The right conferred upon the patentee and his assigns to use and vend the corporeal thing or article, brought into existence by the application of the patented discovery, must be exercised in subordination to the police regulations which a state has established. It is not to be supposed that Congress intended to authorize or regulate the sale within a state of tangible personal property which the state declares to be unfit and unsafe for use and by statute has prohibited from being sold or offered for sale within its limits. — Patterson *v.* Commonwealth, 97 U. S. 501; 24 L. Ed. 1115.

Gibbons *v.* Ogden, 9 Wheat. 1; License Cases, 5 How. 504; Gilman *v.* Philadelphia, 3 Wall. 713; Henderson *v.* Mayor, 92 U. S. 259; R. R. *v.* Husen, 95 U. S. 465; Beer Co. *v.* Mass. 95 U. S. 25; U. S. *v.* Dewitt, 9 Wall. 41; Com. *v.* Alger, 7 Cush. 53; Stephens *v.* Cady, 14 How. 530; Stevens *v.* Gladding, 17 How. 453; Miller *v.* Taylor, 4 Burr, 2303; Jordan *v.* Overseers, 4 Ohio, 295; Vasuini *v.* Paine, 1 Har. 64; Livingstone *v.* Van Ingen, 9 Johns, 507.

That a state may prohibit by statute the use or sale of an injurious or dangerous product, although the product of a patent is clear. — Patterson *v.* Commonwealth, 97 U. S. 501; 24 L. Ed. 1115.

It is only the right to the invention or discovery, the incorporeal right, which the State cannot interfere with. Congress never intended that the patent laws should displace the police powers of the states, meaning by that

term those powers by which the health, good order, peace and general welfare of the community are promoted. Whatever rights are secured to inventors must be enjoyed in subordination to this general authority of the State over all property within its limits. — Webber *v.* Virginia, 103 U. S. 344; 26 L. Ed. 565.

Patterson *v.* Kentucky, 97 U. S. 501.

The right conferred by the patent laws to inventors to sell their inventions and discoveries does not take the tangible property, in which the invention or discovery may be exhibited or carried into effect, from the operation of the tax and license laws of the State. The combination of different materials so as to produce a new and valuable product or result, or to produce a well known product or result more rapidly and better than before, which constitutes the invention or discovery, cannot be forbidden by the State, nor can the sale of the article or machine produced be restricted, except as the production and sale of other articles for the manufacture of which no invention or discovery is patented or claimed, may be forbidden or restricted. — Webber *v.* Virginia, 103 U. S. 344; 26 L. Ed. 565.

We can find no objection to the legislation of Virginia in requiring a license for the sale of sewing machines, by reason of the grant of letters patent for the invention; but there is no objection arising from its discriminating against non-resident merchants and their agents. — Webber *v.* Virginia, 103 U. S. 344; 26 L. Ed. 565.

We think the state has the power (certainly until Congress legislates on the subject) with regard to the provision which shall accompany the sale or assignment of rights arising under a patent, to make reasonable regulations concerning the subject calculated to protect its citizens from fraud. And we think Congress has not so legislated by the provisions regarding an assignment contained in the acts referred to. (R. S. 4898.) If there is a special evil, unusually frequent and easily perpetrated when parties are dealing in the sale of rights existing or claimed to exist under a patent, we do not see why a state may not, in the bona fide exercise of its powers, enact some special statutory provision which may tend to arrest such evil, and may omit to enact the same provision concerning the disposal of other property. There is no discrimination which can be properly so-called, against property in patent rights, exercised in such legislation. It is simply an attempt to protect the citizen against frauds and impositions, which can be more readily perpetrated in such cases than in cases of the sale or assignment of ordinary property. — Allen *v.* Riley, 203 U. S. 347; 51 L. Ed. 216; 27 S. Ct. 95.

Pinney *v.* Bank, 68 Kan. 223; Brechbill *v.* Randall, 102 Ind. 528; New *v.* Walker, 108 Ind. 365; Tod *v.* Wick, 36 Ohio 370; Haskell *v.* Jones, 86 Pa. 173; Herdic *v.* Roessler, 109 N. Y. 27; Wyatt *v.* Wallace, 67 Ark. 575; State *v.* Cook, 107 Tenn. 499. States in which similar legislation has been held unconstitutional, see, Holliday *v.* Hunt, 70 Ill. 109; Cranson *v.* Smith, 37 Mich. 309; Wilch *v.* Phelps, 14 Neb. 134; State *v.* Lockwood, 43 Wis. 405; Patterson *v.* Kentucky, 97 U. S. 501; Webber *v.* Virginia, 103 U. S. 344.

That a state has power to enact laws regulating the sale of patent rights and the giving of evidences of indebtedness therefor, see — Woods *v.* Carl, 203 U. S. 358; 51 L. Ed. 219; 27 S. Ct. 99.

Allen *v.* Riley, 203 U. S. 347.

That the provisions of a state law cannot affect rights acquired under a patent of the United States, is too plain to require discussion. — U. S. Consolidated *v.* Griffin, 126 Fed. 364; 61 C. C. A. 334.

Columbia *v.* Freeman, 71 Fed. 302.

A state cannot subtract from the right conferred upon a patentee and his assigns by the Federal laws. Columbia *v.* Freeman, 71 Fed. 302; U. S. *v.* Griffin, 126 Fed. 364. For the protection of the physical or moral health of its citizens a state may restrain the use of "the corporeal thing or article brought into existence by the application of the patented discovery." Patterson *v.* Kentucky, 97 U. S. 501, but such a laying on of hands does not touch the monopoly of the Federal grant. — Rubber Tire *v.* Milwaukee, 154 Fed. 358; 83 C. C. A. 336.

STATUTE OF LIMITATIONS.

General Statement and Decisions | *See — Damages* § 278; *Profits* § 825
§ 921

§ 921. General Statement and Decisions.

Prior to Jan. 1, 1898, there was no statutory limitation as to the time of recovery of profits or damages. By the act of Mar. 3, 1897, in effect Jan. 1, 1898, the following was added to sec. 4921:

But in any suit or action brought for the infringement of any patent there shall be no recovery of profits or damages for any infringement committed more than six years before the filing of the bill of complaint or the issuing of the writ in such suit or action, and this provision shall apply to existing causes of action.

The patent had some twelve years to run after the date of this contract. The substance of this contract is, that the defendants are to pay in money a certain proportion of the ascertained value of the fuel saved at stated intervals throughout the period of twelve years, if the boat to which the cut-off is attached should last as long. The result is that the contract is void, not being in writing. It is a contract not to be performed within the year, subject to a defeasance by the happening of a certain event which might or might not occur within that time. — Packet Co. *v.* Sickles, 72 U. S. 580; 18 L. Ed. 550.

When there is an alleged promise or contract set up, a delay of 15 years brings the case within the statute. — Leggett *v.* Standard, 149 U. S. 287; 37 L. Ed. 737; 13 S. Ct. 902.

McLean *v.* Fleming, 96 U. S. 245; Speidel *v.* Henrici, 120 U. S. 377; Galliher *v.* Cadwell, 145 U. S. 368.

State statutes of limitations apply to an action at law for infringement. This case is the leading case upon this subject, and for the first time this question has been settled in the affirmative by the Supreme Court. — Campbell *v.* Haverhill, 155 U. S. 601; 39 L. Ed. 280; 15 S. Ct. 217.

Hayden *v.* Oriental, 15 Fed. 605; Bricknall *v.* Hartford, 49 Fed. 372; Bauserman *v.* Blunt, 147 U. S. 647; Metcalf *v.* Watertown, 153 U. S. 671; Balkam *v.* Woodstock, 154 U. S. 177; Rudd *v.* Burrows, 91 U. S. 426; Indianapolis *v.* Horst, 93 U. S. 291; Phelps *v.* Oaks, 117 U. S. 236; Keshkonong *v.* Burton, 104 U. S. 668; Wheeler *v.* Jackson, 137 U. S. 245; Adams *v.* Woods, 6 U. S. 336; Bell *v.* Morrison, 26 U. S. 351; Vance *v.* Campbell, 66 U. S. 427; Hausskecht *v.* Claypool, 66 U. S. 431; Wright *v.* Bales, 67 U. S. 535; McElmoyle *v.* Cohn, 38 U. S. 312; Andrea *v.* Redfield, 98 U. S. 225; Barney *v.* Oelrichs, 138 U. S. 529; Barton *v.* White, 144 Mass. 281; Re Keach, 14 R. I. 571; Beatty *v.* Burnes,

12 U. S. 98; M'Cluny *v.* Silliman, 28 U. S. 270; Patterson *v.* Kentucky, 97 U. S. 501; Webber *v.* Virginia, 103 U. S. 344; Ager *v.* Murray, 105 U. S. 126; Ashcroft *v.* Walworth, 1 Holmes, 152.

We are of opinion that the Court of Claims ruled correctly that the statute of limitations was a bar to any recovery for the use of the patented invention prior to six years before the action was commenced. — U. S. *v.* Berdan, 156 U. S. 552; 39 L. Ed. 530; 15 S. Ct. 420.

STATUTES RELATING TO PATENTS — THE PATENT STATUTE.

General Statement § 922
Decisions Relating to the Statutes § 923

See — The Patent Statute Digested and Provided With the Patent Office Annotations, page 849

§ 922. General Statement.

An elaborate history of the Patent Act will be found in Root *v.* Railway, 105 U. S. 189. While all the more important sections which have been connected with appellate decisions are quoted at the beginning of the several titles, the entire Act has been digested and arranged on the same lines as the decisions, provided with the Patent Office annotations, and added as a separate chapter.

§ 923. Decisions Relating to the Statutes.

The object of 4917 is to enable the patentee to disclaim what he has not invented; and 4922 is to legalize and uphold suits brought on patents mentioned in 4917. — Hailes *v.* Albany, 123 U. S. 582; 31 L. Ed. 284; 8 S. Ct. 262.

A patent statute cannot be judicially settled until passed upon by the Supreme Court. — Andrews *v.* Hovey, 124 U. S. 694; 31 L. Ed. 557; 8 S. Ct. 676.

Wilson *v.* City, 84 U. S. 473; Ex Parte Wilson, 114 U. S. 417.

Sec. 4887 fully discussed historically and construed in Bate *v.* Sulzberger, 157 U. S. 1; 39 L. Ed. 601; 15 S. Ct. 508.

See also Bate *v.* Hammond, 129 U. S. 151.

To hold that a treaty could not abrogate a prior statute regarding patents because this particular legislative power is committed to Congress could not be permitted so long as the general rule as to statutes superseding treaties, and vice versa, declared by the Supreme Court in the way we have pointed out exists. The rules which we have explained with reference to the relation of treaties to statutes, and as to treaties becoming immediately effective are the necessary sequence of the decisions explained in U. S. *v.* Lee, 185 U. S. 213. — United *v.* Duplessis, 155 Fed. 842; 84 C. C. A. 76.

THREATS.

General Statement § 924

§ 924. General Statement.

Notice is one thing, a threat quite another. A threat is never justifiable; a notice may be justifiable or it may amount to a threat. See Adriance *v.* National, 121 Fed. 827, under § 516.

Where notices are given or circulars distributed in good faith to warn against infringement, no wrong whatever is committed; but where as is here averred, they are not made or issued with such intent, but in bad faith, and solely for the purpose of destroying the business of another, a very different case is presented. In such a case property rights are fraudulently assailed, and a court of chancery, whose interposition is invoked for their protection, should not refuse to accord it. — Farquhar *v.* National, 102 Fed. 714; 42 C. C. A. 600.

Emack *v.* Kane, 34 Fed. 46; Kelly *v.* Mfg. Co. 44 Fed. 23; Casey *v.* Union, 45 Fed. 135; Toledo *v.* Penn. 54 Fed. 730; Computing *v.* National, 79 Fed. 962; Lewin *v.* Light Co. 81 Fed. 904; Railway *v.* McConnell, 82 Fed. 65; Adriance *v.* National, 98 Fed. 118; In re Debs, 158 U. S. 564; Herbert *v.* Rainey, 54 Fed. 248.

TITLE.

General Statement § 925
Actionable § 926
Miscellaneous Rules § 927
See — Abatement § 21; *Assignment* § 149; *Bankruptcy* § 182; *Corporations* § 271; *Defenses* § 306; *Injunction* § 571; *Letters Patent* § 746; *License* § 749; *Licensor and Licensee* § 766; *Mortgage* § 778; *Pleading and Practice* §§ 801, 806; *Sale of Patented Article* § 899

§ 925. General Statement.

It has been shown under *Assignment* and *License* (§§ 150 and 750) what constitutes a title interest in a patent and what constitutes a license interest under a patent. The rule in the Waterman Case there quoted is definitive. The statute makes no specific provision on the subject. Joint owners are tenants in common, and an accounting does not lie between them. — Blackledge *v.* Weir, 108 Fed. 71, *infra*, and cases cited thereunder.

§ 926. Actionable.

The holder of the legal title only can maintain an action against a third party who commits an infringement upon it. — Gayler *v.* Wilder, 10 How. 477; 13 L. Ed. 504.

Nemo dat quod non habet applies to titles to patent interests. — Mitchell *v.* Hawley, 83 U. S. 544; 21 L. Ed. 322.

Foxley's case, 5 Co. 109; 2 Black. Com. 449; 2 Kent's Com. 224; Williams *v.* Merle, 11 Wend. 80; Syone *v.* Marsh, 6 B. & C. 551; Marsh *v.* Keating, 1 Bing. N. C. 198; Benj. Sales, 4; White *v.* Spettigue, 13 Mus & W. 603.

Inasmuch as four years have elapsed since the assignment was executed, and the corporation has shown no disposition to question its validity, and inasmuch as the assignment under which the complainant derives title is good and sufficient in form to transfer a legal title to the patent, we think that no third party — not even a person who has a lien on certain stock of the corporation — should be permitted to challenge the validity of the assignment in a collateral proceeding. — Kansas City *v.* Devol, 81 Fed. 726; 26 C. C. A. 578.

2 Morr. Corp. sec. 619, 626 and 631.

In view of the fact that the infringers have no interest or claim to said patent, and that they do not assert any legal or equitable title to said patent is asserted by any one else, or is in fact now outstanding in any one else, it might be sufficient to hold for the purpose of this case, and as against mere infringers, the prima facie record title should be sufficient to warrant a decree. — Goss *v.* Scott, 108 Fed. 253; 47 C. C. A. 302.

The assignor was sole patentee. It will be noticed that the assignor is one of the assignees. But no criticism is made upon that circumstance. We think the objection stated is hypercritical, and that the intent and effect of the assignment was to transfer a one-half interest to the other partner, nothing appearing to show that the partners stood upon unequal terms. — Canda *v.* Michigan, 124 Fed. 486; 61 C. C. A. 194.

Suit by an assignee for infringement is authorized only when the assignment is complete within the statutory requirement. The rights of the patentees cannot be adjudicated in their absence, and the claimant of an equitable title or interest cannot maintain suit for infringement upon such title alone. — Milwaukee *v.* Brunswick-Balke, 126 Fed. 171; 61 C. C. A. 175.

Rob. Pat. sec. 771; Curt. Pat. secs. 171–2; Regan *v.* Pacific, 49 Fed. 68; Waterman *v.* Mackenzie, 138 U. S. 252; Pope *v.* Gormully, 144 U. S. 248; Rob. Pat. sec. 1099; Stimpson *v.* Rogers, 4 Blatchf. 333.

Whether the transfer of a title to a patent as a pledge for a debt is such alienation as will prevent the patentee from maintaining an action for infringement, see — Westmoreland *v.* Hogan, 167 Fed. 327; C. C. A.

§ 927. Miscellaneous Rules.

The commissioner should decide upon the sufficiency of the title of the applicant, and having done so, the right of applicant to compel issue is by appeal and not mandamus. — Holloway *v.* Whiteley, 71 U. S. 522; 18 L. Ed. 335.

Difference between right to vend and right to use. Rule (old) stated in Mitchell *v.* Hawley, 83 U. S. 544; 21 L. Ed. 322.

Bloomer *v.* McQuewan, 14 How. 549; Chaffee *v.* Belting Co. 22 How. 223.

In the nature of things lawful purchase of a patented article carries with it the lawful right to use without restriction of time or place. — Adams *v.* Burks, 84 U. S. 453; 21 L. Ed. 700.

Bloomer *v.* McQuewan, 14 How. 549; Mitchell *v.* Hawley, 83 U. S. 544.

It does not lie in the mouth of an alleged infringer to set up the right of the assignee as against a title from the bankrupt acquired with the consent of such assignee. — Sessions *v.* Romadka, 145 U. S. 29; 36 L. Ed. 609; 12 S. Ct. 799.

When the patentee has not parted, by assignment, with any of his original right but chooses himself to make and vend a patented article of manufacture, it is obvious that a purchaser can use the article in any part of the United States, and, unless restrained by contract with the patentee, can sell and dispose of the same. It has passed outside of the monopoly, and is no longer under the peculiar protection granted to patented rights. — Keeler *v.* Standard, 157 U. S. 659; 39 L. Ed. 848; 15 S. Ct. 738.

Goodyear *v.* Beverly, 1 Cliff. 348.

The sale of a patent right contains an implied warranty as to title, and an after acquired title obtained by the vendor inures to the vendee. — Brush *v.* California, 52 Fed. 945; 3 C. C. A. 368.

Faulks *v.* Kamp, 3 Fed. 989; Curran *v.* Burdsall, 20 Fed. 835; Gottfried *v.* Miller, 104 U. S. 520; Smith *v.* Sheley, 12 Wall. 358.

That a legal title acquired with notice of a prior equitable title, is inferior thereto, see — Carroll *v.* Goldschmidt, 83 Fed. 508; 27 C. C. A. 566.

That the acquirement of a title which would protect a defendant against a charge of infringement committed subsequent thereto, cannot be made to relate back to acts done prior to such acquisition, see — Keene *v.* Barratt, 100 Fed. 590; 40 C. C. A. 571.

Now, it is certainly settled that partners may acquire legal title to personal property under a purchase made in the firm name; and it is not material whether such firm name is wholly fanciful or whether it contains the names of one or more of the members of the firm. — Fresno *v.* Fruit, 101 Fed. 826; 42 C. C. A. 43.

Manghaum *v.* Sharpe, 17 C. B. (N. S.) 443.

It was stipulated between the parties that if, on the reference, it appeared that the complainant had the full legal title, the balance of the royalty should be then paid. A hearing was had before the referee and he decided, in substance, as the court below held, that the title was not an absolutely perfect title, but was a perfectly good marketable title. *Held:* sufficient. — Deering *v.* Kelly, 103 Fed. 261; 43 C. C. A. 225.

The use of an invention by one of co-owners or by his licensees is not the exercise of the entire monopoly conferred by the patent. That can be effected only by the joint or concurrent action of all owners. The separate action of any one owner or his licensees can be an exercise or use only of his individual right, which, though exclusive of all besides, is not exclusive of the other patentees, their assignees or licensees. On principle, therefore, there can be no accountability on the part of a part owner of an invention to other owners for profits made by the exercise of his individual right, whether it be by engaging in the manufacture and sale, or by granting to others licenses, or by assigning interests in the patent. — Blackledge *v.* Weir, 108 Fed. 71; 47 C. C. A. 212.

Clum *v.* Brewer, Fed. Cas. 2,909; Mfg. Co. *v.* Gill, 32 Fed. 697; Bloomer *v.* McQuewan, 14 How. 539; Mathers *v.* Green, 34 Beav. 170; Steers *v.* Rogers, 62 Law. J. Ch. 671; Vose *v.* Singer, 4 Allen, 226; Dunham *v.* Railroad, Fed. Cas. 4,151. (See also long list of cases cited in the briefs.)

Joint owners of a patent are at the mercy of each other. Each may use or license others to use the invention without the consent of his fellows and without responsibility to such fellows for the profits arising from such use or license. — McDuffee *v.* Hestonville, 162 Fed. 36; 89 C. C. A. 76.

Clum *v.* Brewer, 2 Curt. 523; Aspinwall *v.* Gill, 32 Fed. 697; Walk Pat. § 294.

TRADEMARKS.

General Statement and Cases Relating to Patents § 928

§ 928. General Statement and Cases relating to Patents.

The trademark right is one which arises by occupation under the common law, and is a right wholly distinct from the right to a patent, which arises only under the statute and in contravention of the common law right. The Federal law with reference to the registration of trademarks creates no monopoly, but gives the registrant certain advantages in the protection of his right, all being matters with which the patent law is not concerned.

General rule, *held:* The generic right to trademark founded on a patent expires with the patent; but another using it must distinguish his mark to avoid unfair trade. — Singer *v.* June, 163 U. S. 169; 41 L. Ed. 118; 16 S. Ct. 1002.

That the right to a trademark founded upon a patent expires with the patent, see — Holzapfels *v.* Rahtjens, 183 U. S. 51; 46 L. Ed. 49; 22 S. Ct. 6.

It is true that during the life of the patent the name of the thing may also be indicative of the manufacturer, because the thing can then be manufactured only by the single person; but when the right to manufacture and sell becomes universal, the right to the use of the name by which the name is known becomes equally universal. It matters not that the inventor coined the word by which the thing has become known. It is enough that the public has accepted that word as the name of the thing, for thereby the word has become incorporated as a noun into the English language, and the common property to all. Whatever doubts may theretofore have existed on this proposition have been, for the federal courts, put at rest by the recent decision of the Supreme Court in the case of Singer *v.* June, 163 U. S. 169. — Centaur *v.* Heinsfurter, 84 Fed. 955; 28 C. C. A. 581.

Canal Co. *v.* Clark, 13 Wall. 311; Chemical Co. *v.* Meyer, 139 U. S. 540; Mfg. Co. *v.* Nairn, 7 Ch. Div. 834; Mfg. Co. *v.* Shakespear, 39 Law. J. Ch. 36.

That the right to use a trade name or designation specifically indicating the article made under the patent, terminates with the licensee see — Stimpson *v.* Stimpson, 104 Fed. 893; 44 C. C. A. 241.

The designers of articles of manufacture not otherwise entitled to receive design patents cannot justify the issuance of such patents on any theory that the design is a trade-mark. — Rowe *v.* Blodgett, 112 Fed. 61; 50 C. C. A. 120.

In an action for unfair competition and infringement of trademark the facts were that defendant, while connected with complainant, had obtained a patent relating to the product trademarked by the name of the inventor, but that he had made no assignment of the patent, and that complainant had secured no rights thereunder. The court held that, defendant having established an independent business, complainant could not mark its articles "patented" or "owned by" as referring to such patent, but could use the mark. — Hygienic *v.* Way, 137 Fed. 592; 70 C. C. A. 553.

That a mere assignment of a patent does not carry with it a trade-mark formerly used to advertise the patented article, and that when the patentee's name is some part of such mark, in using his name in connection with subsequent patents on similar articles, he must clearly distinguish from the previous mark, see — Reed *v.* Frew 162 Fed. 887; 89 C. C. A. 577.

UNFAIR TRADE.

General Statement and Cases § 929 | *See — Pleading* § 794

§ 929. General Statement and Cases.

As will be seen from the following cases, this subject is a recent one in connection with patents. Much law is yet to be made upon the subject. It would seem to the writer that it must be decided ultimately that, as in the case of a trademark which is the designation of a patented article, the right to that which relates to appearance must expire with the patent. It would seem, also, that a bill for infringement and for unfair trade would be multifarious, notwithstanding the ruling in Adam *v.* Folger, 120 Fed. 260 (see § 795).

But the trial judge seems to put his conclusion on another ground — unfair competition in trade. What is above said applies to this point in the opinion. Defendants seem to be acting in good faith, and allege their ability to respond in damages, which is not questioned. Bouchat believes he has made an improvement in coat pads entitling him to a patent. He has obtained letters patent therefor. This cost something, and a company has been organized to manufacture coat pads under these letters patent. Is this unfair competition in trade? If so, no improvement in a patented article could ever be made by one versed in the art. Bouchat had worked at the trade of making coat pads, became familiar with the art, experienced in the business, and knew the demands of the trade. True, this was when he was a stockholder, owning one share, and an employee of a corporation using the Goldman patent, when he probably saw the defects in the coat pads manufactured under the patent, and devised what he conceived to be an improvement in coat pads. Is the fact that he was such stockholder and employee of a corporation using a patent to deprive him of the benefit of supposed inventive genius? If so no one would probably ever make any improvements on patented articles. — American *v.* Phoenix, 113 Fed. 629; 51 C. C. A. 339.

Upon the claim made for the appellant, it would be impossible, without invading complainant's right, to construct and sell a book-case having the most desirable characteristics. Nor is it competent for one person to appropriate to his own purposes any common and general characteristics of the goods he manufactures to such an extent that another shall be impleaded or embarrassed in his free right to the use of such characteristics. (The claim was unfair trade in making sectional book-cases which could be used in stack with those of the complainant). — Globe-Wernicke *v.* Macey, 119 Fed. 696; 56 C. C. A. 304.

The name "Victor" was adopted to denote the heater manufactured in accordance with the specifications of the patent. It would be a fraud upon the public, during the life of the patent, to permit a stranger to palm off a spurious article for the patented article by means of the identifying and generic name of the latter. — Adam *v.* Folger, 120 Fed. 260; 56 C. C. A. 540.

Singer *v.* June, 163 U. S. 169; Holzapfel's *v.* Rahtjens, 183 U. S. 1; Centaur *v.* Heinsfurter, 84 Fed. 955; Gally *v.* Mfg. Co. 30 Fed. 118; Stimpson *v.* Stimpson, 104 Fed. 893.

Of course in this suit for infringement of a patent we cannot inquire into the apparently unfair devices in the way of get up, ornamentation, etc., by which it is suggested that the defendants are seeking to deceive the public into a belief that their bells are those of the complainant. — New Departure *v.* Sargent, 127 Fed. 152; 62 C. C. A. 266.

UNPATENTED INVENTIONS.

Statutory Provision § 930
Assignment § 931
Construction or Sale Before Patent § 932
Employee § 933
Non-Assignable § 934
Miscellaneous § 935
See — Abandonment § 1; *License* § 756; *Secret Process or Machine* § 898

§ 930. Statutory Provision.

Every person who purchases of the inventor or discoverer, or, with his knowledge and consent, constructs any newly invented or discovered machine, or other patentable article, prior to the application by the inventor or discoverer for a patent, or who sells or uses one so constructed, shall have the

right to use, and vend to others to be used, the specific thing so made or purchased, without liability therefor. R. S. 4899.

In addition to the foregoing certain rights in the nature of shop licenses or implied licenses may arise out of conditions of employment. See § 756, also § 366.

§ 931. Assignment.

While it is, perhaps, not necessary to decide whether in any case a sale of an invention which is never patented carries with it anything of value, we are of opinion that the rights growing out of an invention may be sold, and that in the present case the sale, with the right to use it in connection with the existing patent and its reissues or renewals, protects defendants from liability. — Hammond *v.* Mason, 92 U. S. 724; 23 L. Ed. 767.

A court of chancery cannot decree specific performance of an agreement to convey property which has no existence or to which defendant has no title. — Kennedy *v.* Hazleton, 128 U. S. 667; 32 L. Ed. 576; 9 S. Ct. 202.

§ 932. Construction or Sale Before Patent.

Under section 4899 the following have an implied license to a machine made before patent: (1) every person " who purchases of the inventor " the machine before his application for a patent; (2) every person who " with his knowledge and consent constructs " the machine before application; (3) every person who sells a machine " so constructed," that is to say, which has been constructed with the knowledge and consent of the inventor by another person; (4) every person " who uses one so constructed," that is to say, constructed with the inventor's knowledge and consent by another person.

In order to entitle a person to any of these four classes to use and vend the machine, under this section, the machine must originally have been either purchased from the inventor or else constructed with his knowledge and consent before his application for a patent; and it may well be that a fraudulent or surreptitious purchase or construction is insufficient. — Wade *v.* Metcalf, 129 U. S. 202; 32 L. Ed. 661; 9 S. Ct. 271.

Kendall *v.* Winsor, 62 U. S. 522; Andrews *v.* Hovey, 124 U. S. 694.

When machine was constructed by partnership, of which inventor was a member, an implied license arises in favor of the machine as constructed. Quaere. — Wade *v.* Metcalf, 129 U. S. 202; 32 L. Ed. 661; 9 S. Ct. 271.

§ 933. Employee.

Where the inventor in employ of defendant allowed his unpatented invention to be used with his knowledge and consent, according to the terms of the statute defendant has a right to continue to use those machines without compensation. — Dable *v.* Flint, 137 U. S. 41; 34 L. Ed. 618; 11 S. Ct. S.

§ 934. Non-Assignable.

The inventor of a new and useful improvement certainly has no exclusive right to it, until he obtains a patent. This right is created by the patent, and no suit can be maintained by the inventor against anyone, for using it before the patent is issued. But the discoverer of a new and useful improvement is vested by law with an inchoate right to its exclusive use, and which he may perfect and make absolute by proceeding in the manner which the law requires. — Gayler *v.* Wilder, 10 How. 477; 13 L. Ed. 504.

The inventor who designedly and with a view to applying it indefinitely and exclusively for his own benefit withholds his invention from the public comes not within the policy or objects of the Constitution. Hence, if, during such concealment, an invention similar to or identical with his own should be made or patented or brought into use without a patent, the latter could not be inhibited nor restricted. Moreover, that which is once given to or is invested in the public cannot be recalled nor taken from them. — Kendall *v.* Winsor, 62 U. S. 322; 16 L. Ed. 165.

In the absence of protection by patent, no person can monopolize or appropriate to the exclusion of others elements of mechanical construction which are essential to the successful practical operation of a manufacture, or which primarily serve to promote its efficiency for the purpose to which it is devoted. Unfair competition is not established by proof of similarity of form, dimensions, or general appearance alone. — Marvel *v.* Pearl, 133 Fed. 160; 66 C. C. A. 226.

§ 935. Miscellaneous.

The right of Duncan to the inventions, if they were inventions, existed prior to, and continued independently of, the issuing of the patents. — Siemens-Halske *v.* Duncan, 142 Fed. 157; 73 C. C. A. 375.

Fuller *v.* Berger, 120 Fed. 274; Victor *v.* The Fair 123 Fed. 424.

WORDS AND PHRASES.

"Means" § 936
"Substantially," etc. § 937
"Whereby" Clause § 938

See — Claims §§ 214, 229; *Equivalents* § 373; *Specification* § 900

§ 936. "Means."

Of course an inventor cannot by the mere use of the word "means," in reference to the accomplishment of a designated function in a combination claim, appropriate any and all kinds of mechanism or devices which may perform the specified function, or any other mechanism or device than that which is described in the patent, or which is its equivalent. Reference must be had to the specifications to ascertain the means which are made an element of the claim and are protected by the patent. — American *v.* Hickmott, 142 Fed. 141; 73 C. C. A. 359.

Jones *v.* Munger, 49 Fed. 61; Williams *v.* Steam, 47 Fed. 322.

While the claims specify the physical elements of the combinations, they do not specify the means whereby those elements perform their intended functions, but call for "means" generally for performing them. By this is not meant all possible means for accomplishing the result. Such comprehensiveness of claim would not be patentable. The claims in question by direct terms refer to the specification for the means by which the function, purpose, or object of the invention is to be accomplished, and to that we must look for them. — Union *v.* Diamond, 162 Fed. 148; 89 C. C. A. 172.

Dryfoos *v.* Wiese, 124 U. S. 32.

§ 937. "Substantially," etc.

The words "substantially as set forth," "substantially as described" refer to the specification, and tend to make the claim specific. — Seymour *v.* Osborne, 78 U. S. 516; 20 L. Ed. 33.

Expressions such as "substantially as described" refer to the specification and make the claim specific. — Railroad *v.* DuBois, 79 U. S. 47; 20 L. Ed. 265.

Qualifies the claim in the light of the specification to the means pointed out. — Brown *v.* Guild, 90 U. S. 181; 23 L. Ed. 161.

The words "substantially as described" found in each of the first two claims of the original patent, properly confined those claims to the shifting mechanism described. — Brown *v.* Davis, 116 U. S. 237; 29 L. Ed. 659; 6 S. Ct. 379.

The clause "substantially as described" are words of limitation, limiting the combination to the specific elements described. — Pope *v.* Gormully, 144 U. S. 248; 36 L. Ed. 423; 12 S. Ct. 641.

Without determining what particular meaning, if any, should be given to these words ("substantially as described or set forth") we are of opinion that they are not to be construed as limiting the patentee to the exact mechanism described; but that he is still entitled to the benefit of the doctrine of equivalents. — Hobbs *v.* Beach, 180 U. S. 383; 45 L. Ed. 586; 21 S. Ct. 409.

Morley *v.* Lancaster, 129 U. S. 263; Discussing, Seymour *v.* Osborne, 11 Wall. 516; Cornplanter Pat. 23 Wall. 181; Westinghouse *v.* Boyden, 170 U. S. 537; Mitchell *v.* Tilghman, 19 Wall. 287.

The words "substantially as described," do not warrant the insertion of an additional element in the claim. The words must relate to the matter designated. — Boynton *v.* Morris, 87 Fed. 225; 30 C. C. A. 617.

Lake Shore *v.* National, 110 U. S. 229.

The use of the words "to operate substantially as described" did not serve to read into this claim every element of the entire structure set forth in the specification precisely as described, and thus limit the patentee to the exact mechanism described therein. — General *v.* International, 126 Fed. 755; 61 C. C. A. 329.

Hobbs *v.* Beach, 180 U. S. 383; Penfield *v.* Potts, 126 Fed. 475; McCarty *v.* Lehigh, 160 U. S. 110.

The "spacing members" are not described in the claims except by reference to the specifications by the words "substantially as described" at the end of each claim. This carries to the claims the description of the specification. — Sanders *v.* Hancock, 128 Fed. 424; 63 C. C. A. 166.

Soehner *v.* Favorite, 84 Fed. 182; Stilwell-Bierce *v.* Eufaula, 117 Fed. 410; Lamb *v.* Lamb, 120 Fed. 267; Canda *v.* Michigan, 124 Fed. 486.

Claims 3 and 8 close with the words "substantially as set forth" and "substantially as described," respectively. This language brings into the claim the particular description of the structure contained in the specifications, and the drawings to which they refer. — Lackawanna *v.* Davis-Colby, 131 Fed. 68; 65 C. C. A. 306.

The words "as set forth" in the claims may grammatically refer to anything which precedes them. Therefore, in view of the just and liberal rules of construction stated in Reece *v.* Globe, 61 Fed. 958, they should not be held as restrictive, or as limiting anything in the claims, so as to render ineffectual

any part of the conception involved in the portion of the specification which we have quoted. — Westinghouse *v.* Stanley, 133 Fed. 167; 68 C. C. A. 523.

Where there are two claims in a patent for two distinct improvements invented to accomplish different results, the words "substantially as specified" mean substantially as specified relative to the subject matter of the claim, and do not necessarily import the description or claim of either improvement into the claim for the other. Lake Shore *v.* Car-Brake, 110 U. S. 229; Page *v.* Land, 49 Fed. 936. But these words ordinarily refer back to and point out elements in the combination claimed which have substantially the construction and operation described in the specification. Westinghouse *v.* Boyden, 170 U. S. 537; Singer *v.* Cramer, 192 U. S. 265. Cases may be found where an element described in the specification which is essential to the operation, in the way portrayed in the specification, of a combination or device claimed, has been read into the claim from the specification. Westinghouse *v.* Boyden, *supra;* Wellman *v.* Midland, 106 Fed. 221. The converse of this proposition, that elements or devices described in the specification may not be imported into the claim, is equally well established. Boynton *v.* Morris, 87 Fed. 227; General *v.* International, 126 Fed. 755; Walker on Pat. sec. 182; Temple *v.* Mfg. Co., 30 Fed. 442. Nor are decisions wanting which have limited the general language of a claim to an element or device, its construction, and operation as set forth in the specification. White *v.* Dunbar, 119 U. S. 47; Vance *v.* Campbell, 1 Black, 427; Stirrat *v.* Mfg. Co., 61 Fed. 980; Adams *v.* Lindell, 77 Fed. 432. — Jewell *v.* Jackson, 140 Fed. 340; 72 C. C. A. 304.

These words refer to the whole claim, and import nothing into it not already there, either to narrow it, so as to escape anticipation, or to broaden it so as to establish infringement. The words mean "substantially as specified" in regard to the combination which is the subject of the claim. — American *v.* Hickmott, 142 Fed. 141; 73 C. C. A. 359.

Lake Shore *v.* Car-Brake, 110 U. S. 229.

These words are sometimes used to limit a claim and sometimes to enlarge its operation, but seldom to practically defeat what was the real invention of the patentee. — Draper *v.* American, 161 Fed. 728; 88 C. C. A. 588.

§ 938. "Whereby" Clause.

On referring to the specification we find it there expressly declared that the invention consisted "in the construction and combination of parts hereinafter fully described and claimed, reference being had to accompanying drawing." Nowhere, either expressly or by reasonable inference, is it asserted that simply the best or preferable construction of the whole or any part of the combination is what is described. — Singer *v.* Cramer, 192 U. S. 265; 48 L. Ed. 437; 24 S. Ct. 291.

Note: It would seem that this holding carries the rule of words of limitation farther than any other case, making it include the stock phrases above quoted.

The evidence demonstrates — and quite likely Russell understood — that some cement mixtures, commercially speaking, were more desirable than others; and the word "cement," used in the claims must be understood when considered in connection with the statutory description as referring generally to cementitious mixtures having the qualities which he describes. — American *v.* Howland, 80 Fed. 395; 25 C. C. A. 500.

We are not permitted in litigations of this character, to give any word a particular interpretation when it is fairly capable of another one which will enable the patent to cover the actual invention. — Hatch *v.* Electric, 100 Fed. 975; 41 C. C. A. 133.

To ignore the express functional limitation of the claim, viz. "whereby they are enabled to fold back into the case side by side," would be to create a new claim; not interpret one granted. — Anthony *v.* Ginnert, 108 Fed. 396; 47 C. C. A. 426.

The specification states that they are "preferably" of the same area, and that they are "preferably" to overlap completely, in order to eliminate any limitation that might be implied if these terms had not been used and thus to save the claim from being narrowed so that a can otherwise like that described would not be covered by its terms. — Ironclad *v.* Dairyman's, 143 Fed. 512; 74 C. C. A. 372.

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491	909	275
492	901	275
494	869	276
496	906	277
Sub. 496, Sec. 7, Act Mar. 3, 1897	864	3385
892	878	673
893	878	673
894	878	673
973	870	703
1537	902	1056
1673	877	1141
4883	900	Supp. 1452
4884	899	3381
4885	900	Supp. 1453
4886	889	3382
Sub. 4886, Act Mar. 3, 1883	877	3386
4887	882	Supp. 1453
4888	862	3383
4889	876	3383
4890	870	3383
4891	904	3383
4892	905	Supp. 1454
4893	863	3384
4894	863	3384
4895	900	3385
4896	879	Supp. 1455
4897	864	3386
4898	865	3387
4899	913	3387
4900	903	3388
4901	880	3388

U. S. R. S. Sec.	In here, page	U. S. Comp. Stat.
4903	864	3389
4904	887	3389
4905	887	3390
4906	887	3390
4907	887	3390
4908	887	3390
4909	888	3390
4910	888	3390
4912	888	3391
4913	888	3391
4914	888	3392
4915	858	3392
Sub. 4915, Sec. 9, R. S. D. C. § 780	860	3391
4916	910	3393
4917	876	3393
4918	889	3394
4919	871	3394
4920	873	3394
4921 (see Jud. Code, Sec. 264)	907	Supp. 236
4921, Sec. 2, Act Feb. 16, 1875	908	526
4922	885	3396
4923	882	3396
4929	874	Supp. 1457
4930	875	3399
4931	875	3399
4933	875	3399
Sub. 4933, Act Feb. 4, 1887	875	3398
Sub. 4933, *Ibid.*, Sec. 2	875	3399
4934 (amended)	880	Supp. 1458
4934 (orig.)	880	3400
4935	881	3400
4936	881	3400
Sub. 5046, Act July 1, 1898, Sec. 70	866	Supp. 1511
A[illegible] June 25, 1910	883	Supp. 1457
Fed. Jud. Code, Sec.		
9	894	Supp. 131
11	895	Supp. 131
24	896	Supp. 135
48	897	Supp. 149
50	897	Supp. 149
116	893	Supp. 190
117	893	Supp. 190
128	894	Supp. 193
129	893	Supp. 194
239	893	Supp. 228
240	898	Supp. 228
250	892	Supp. 231
251	898	Supp. 232
256	896	Supp. 233
263	896	Supp. 235
264	895	Supp. 236
267	896	Supp. 237
289	892	Supp. 243
291	893	Supp. 243
292	897	Supp. 244
293	894	Supp. 244
294	894	Supp. 244
295	894	Supp. 244
296	898	Supp. 244
297	897	Supp. 244

THE PATENT STATUTE DIGESTED

AND PROVIDED WITH THE PATENT OFFICE ANNOTATIONS.

ABANDONMENT

Application — Delay for One Year.

All applications for patents shall be completed and prepared for examination within one year after the filing of the application, and in default thereof, or upon failure of the applicant to prosecute the same within one year after an action therein, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the Commissioner of Patents that the delay was unavoidable. — R. S. 4894 (Amend. Mar. 3, 1897).

Note: The Act of Mar. 3, 1897, changed the period of time from "two years" to *one year*.

Bar to Patent.

Any person who has invented * * * unless the same is proved to have been abandoned, may * * * obtain a patent therefor. — R. S. 4886 (Amend. Mar. 3, 1897).

Delay for One Year — Unavoidable — Excuses.

(In sound discretion of Commissioner). — R. S. 4894.

Renewal Applications — Question of Fact.

* * * And upon the hearing of renewed applications preferred under this section, abandonment shall be considered as a question of fact. — R. S. 4897.

ACTIONS

Equity — Questions of Fact — Trial by Jury.

Sec. 2. That said courts (U. S. district courts) when sitting in equity for the trial of patent causes, may empanel a jury of not less than five and not more than twelve persons, subject to such general rules in the premises as may, from time to time, be made by the Supreme Court, and submit to them such questions of fact arising in such causes as such circuit court shall deem expedient.

And the verdict of such jury shall be treated and proceeded upon in the same manner and with the same effect as in the case

of issues sent from chancery to a court of law and returned with such findings. — R. S. 4921 (Amend. Mar. 3, 1897).

Equity — To Compel Issue of Patent.

Whenever a patent on application is refused, either by the Commissioner of Patents or by the Supreme Court of the District of Columbia upon appeal from the Commissioner, the applicant may have remedy by bill in equity; and the court having cognizance thereof, on notice to adverse parties and other due proceedings had, may adjudge that such applicant is entitled, according to law, to receive a patent for his invention, as specified in his claim, or for any part thereof, as the facts in the case may appear. And such adjudication, if it be in favor of the right of the applicant, shall authorize the Commissioner to issue such patent on the applicant filing in the Patent Office a copy of the adjudication, and otherwise complying with the requirements of law. In all cases, where there is no opposing party, a copy of the bill shall be served on the Commissioner; and all the expenses of the proceeding shall be paid by the applicant, whether the final decision is in his favor or not. — R. S. 4915. See Jud. Code, Sec. 24.

In what district the bill should be brought considered. — Butterworth *v.* Hill, 114 U. S., 128–133.

On what questions bill in equity is appropriate. — Butterworth *v.* Hoe, 112 U. S., 50–60.

Bill in equity is governed by the rules of delay specified in sec. 4894. — Gandy *v.* Marble, 122 U. S., 432–440.

Invention must be patentable to get favorable decision. — Hill *v.* Wooster, 132 U. S., 693.

May raise new questions. — Christie *v.* Seybold, 55 F. R., 69.

Canceled claims, burden of proof of invention. — Durham, 6 App. D. C., 78; 71 O. G., 601.

Expedition of — By Heads of Departments of Government.

(See Application — Expedition of) — (Act Mar. 3, 1897).

Infringement — Action on the Case.

Damages for the infringement of any patent may be recovered by action on the case, in the name of the party interested either as patentee, assignee, or grantee. And whenever in any such action a verdict is rendered for the plaintiff, the court may enter judgment thereon for any sum above the amount found by the verdict as the actual damages sustained, according to the circumstances of the case, not exceeding three times the amount of such verdict, together with the costs. — R. S. 4919.

Infringement — Plea.

(See Defenses, R. S. 4920).

Interfering Patents.

(See Interfering Patents, R. S. 4918).

Qui Tam Actions — Jurisdiction — Penalty.

(See Marking Articles Patented, R. S. 4901).

ADMINISTRATOR

Oath by.
(See Executor).

AFFIDAVITS AND DEPOSITIONS

(See Interferences, R. S. 4905).

AMENDMENT

Application — Reissue.
(See. Reissue, R. S. 4916).

Disclaimer.
R. S. 4917.

Duty of Commissioner.
R. S. 481.

Examination of Application.
R. S. 4893.

Requirement — General.
R. S. 4888.

Rules for Patent Office Practice.
R. S. 483.

When to be Made.
R. S. 4894.

ANNUAL REPORT

Commissioner of Patents.
(See Commissioner of Patents).

ANTICIPATION

General Provision.
R. S. 4886.

Prior Foreign Invention — When Not.

Whenever it appears that a patentee, at the time of making his application for the patent, believed himself to be the original and first inventor or discoverer of the thing patented, the same shall not be held to be void on account of the invention or discovery, or any part thereof, having been known or used in a foreign country, before his invention or discovery thereof, if it had not been patented or described in a printed publication. — R. S. 4923.

APPEALS

Applications — Examiners-in-Chief.

Every applicant for a patent or for the reissue of a patent, any of the claims of which have been twice rejected, and every party to an interference, may appeal from the decision of the primary examiner, or of the examiner in charge of interferences in such case, to the board of examiners-in-chief; having once paid the fee for such appeal. — R. S. 4909.

Certification — To Supreme Court.

(See Judicial Code, Secs. 239, 251).

Certiorari — Supreme Court.

(See Judicial Code, Sec. 240).

Circuit Court of Appeals.

(See Judicial Code, Secs. 116, 117, 128, 129).

Court of Appeals, D. C.

That the determination of appeals from the decision of the Commissioner of Patents, now vested in the general term of the Supreme Court, of the District of Columbia, in pursuance of the provisions of section 780 of the Revised Statutes of the United States relating to the District of Columbia, shall hereafter be and the same is hereby vested in the court of appeals created by this act.

And in addition any party aggrieved by a decision of the Commissioner of Patents in any interference case may appeal therefrom to said court of appeals. — Sec. 9, Act of Feb. 9, 1893.

Court of Appeals, D. C. — Notice of to Commissioner.

When an appeal is taken to the Court of Appeals of the District of Columbia, the appellant shall give notice to the Commissioner, and file in the Patent Office within such time as the Commissioner shall appoint, his reasons of appeal, specifically set forth in writing. — R. S. 4912. (See R. S. D. C. 780).

Court of Appeals, D. C. — Notice — Proceedings — Evidence.

The court shall, before hearing such appeal, give notice to the Commissioner of the time and place of the hearing, and on receiving such notice the Commissioner shall give notice of such time and place in such manner as the court may prescribe, to all parties who appear to be interested therein. The party appealing shall lay before the court certified copies of all the original papers and evidence in the case, and the Commissioner shall furnish the court with the grounds of his decision, fully set forth in writing, touching all the points involved by the reasons of appeal. And at the request of any party interested, or of the court, the Commissioner and the examiners may be examined under oath, in explanation of the principles of the thing for which a patent is demanded. — R. S. 4913.

Court of Appeals, D. C. — Return — Certificate entered in P. O.

The court, on petition, shall hear and determine such appeal, and revise the decision appealed from in a summary way, on the

evidence produced before the Commissioner, at such early and convenient time as the court may appoint; and the revision shall be confined to the points set forth in the reasons of appeal. After hearing the case the court shall return to the Commissioner a certificate of its proceedings and decision, which shall be entered of record in the Patent Office, and shall govern the further proceedings in the case. But no opinion or decision of the court in any such case shall preclude any person interested from the right to contest the validity of such patent in any court wherein the same may be called in question. — R. S. 4914.

Examiners-in-Chief — Duties of.

* * * On the written petition of the appellant, to revise and determine upon the validity of the adverse decisions of examiners upon applications for patents, and for reissues of patents, and in interference cases * * * — R. S. 482.

Examiners-in-Chief to Commissioner of Patents.

If such party is dissatisfied with the decision of the Examiners-in-Chief, he may, on payment of the fee prescribed, appeal to the Commissioner in person. — R. S. 4929.

Interferences — From Examiner of Interferences — From Examiners-in-Chief.

Whenever an application is made for a patent which, in the opinion of the Commissioner, would interfere with any pending application, or with any unexpired patent, he shall give notice thereof to the applicants, or applicant and patentee, as the case may be, and shall direct the primary examiner to proceed to determine the question of priority of invention. And the Commissioner may issue a patent to the party who is adjudged the prior inventor, unless the adverse party appeals from the decision of the primary examiner, or of the board of examiners-in-chief, as the case may be, within such time, not less than twenty days, as the Commissioner shall prescribe. — R. S. 4904.

Interferences — To Examiners-in-Chief.

Every applicant for a patent or for the reissue of a patent, any of the claims which have been twice rejected, and every party to an interference, may appeal from the decision of the primary examiner, or of the examiner in charge of interferences in such case, to the board of examiners-in-chief, having once paid the fee for such appeal. — R. S. 4909.

Interferences — Time Allowed.

(See R. S. 4904).

APPLICANT

Notice to — Of Interference.

(See Interference — Notice of, R. S. 4904).

Oath of — Before whom Taken.
(See Oath, R. S. 4892).

APPLICATION

General Provisions — Requirements.

Before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the Commissioner of Patents, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding, and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery. The specification and claim shall be signed by the inventor and attested by two witnesses. — R. S. 4888.

Application must be made by the inventor. — Kennedy *v.* Hazelton, 128 U. S., 667.

Claim limited by description. — Mitchell *v.* Tilghman, 19 Wall., 287; Hailes *v.* Van Womer, 29 Wall., 353; Fuller *v.* Yentzer, 94 U. S., 288, 299; Merrill *v.* Yeomans, 94 U. S., 568; R. R. Co. *v.* Mellon, 104 U. S., 112; Yale *v.* Greenleaf, 117 U. S., 554; White *v.* Dunbar, 119 U. S., 47; Snow *v.* Lake Shore, 121 U. S., 617; Haines *v.* McLaughlin, 135 U. S., 584; Howe *v.* National, 134 U. S., 388; McClain *v.* Ortmayer, 141 U. S., 419; Knapp *v.* Morss, 150 U. S., 221; Am. Fibre *v.* Port Huron, 72 F. R., 516; Gould *v.* Trojan, 74 F. R., 794; Groth *v.* International, 61 F. R., 284.

Composition of matter; how identified in claim. — Cochrane *v.* Badische, 111 U. S., 293.

Claims defined and construed.—Estey *v.* Burdett, 109 U. S., 633-640; Bussey *v.* Excelsior, 110 U. S., 131; Railway *v.* Car Brake, 110 U. S., 229; Consolidated *v.* Kunkle, 119 U. S., 45; Dryfoos *v.* Wiese, 124 U. S., 32; Bragg *v.* Fitch, 121 U. S., 478; Plummer *v.* Sargent, 120 U. S., 442. Joyce *v.* Chillicothe, 127 U. S., 557; Sargent *v.* Burgess, 129 U. S., 19; Crescent *v.* Gottfried, 128 U. S., 158; Boyden *v.* Westinghouse, 70 F. R., 816; McCormick *v.* Aultman, 73 O. G., 1999. National *v.* Am., 53 F. R., 367; Sayre *v.* Scott, 55 F. R., 971; Judd *v.* Fowler, 61 F. R., 821; Le Favour *v.* Rice, 62 F. R., 393; Kilbourne *v.* Bingham, 50 F. R., 697; Norton *v.* Jensen, 49 F. R., 859; Illinois *v.* Robbins, 52 F. R., 215.

Claims to pioneer invention construed. — Morley *v.* Lancaster, 129 U. S., 263; Tuttle *v.* Claflin, 76 F. R., 227; Dederick *v.* Siegmund, 51 F. R., 233.

Claims construed by prior art. — Washing Mach. *v.* Tool Co., 20 Wall., 342. Zane *v.* Soffe, 110 U. S., 200; Thompson *v.* Boisselier, 114 U. S., 1; Grier *v.* Wilt, 120 U. S., 412; Wollensack *v.* Reiher, 115 U. S., 87; Deering *v.* Winona, 155 U. S., 286; Schuyler *v.* Elec., 66 F. R., 313; Fox *v.* Perkins, 52 F. R., 205; West. Elec. *v.* Sperry, 58 F. R., 186; Blount *v.* Bardsley, 75 F. R., 674.

Definiteness of Specification. — Mowry *v.* Whitney, 14 Wall., 620; Sewall *v.* Jones, 91 U. S., 171; Eames *v.* Andrews, 122 U. S., 40; Telephone Cases, 126 U. S., 1; Béné *v.* Jeantet, 129 U. S., 683; Western *v.* Ansonia, 114 U. S., 447; Lawther *v.* Hamilton, 124 U. S., 1; Lalance *v.* Habermann, 53 F. R., 375; Dixon Woods *v.* Pfeifer, 55 F. R., 390; Long *v.* Pope, 75 F. R., 835; Edison *v.* U. S., 52 F. R., 300.

Deceptive patent void. — Carlton *v.* Bokee, 17 Wall., 463.

Effect of words "substantially as described" considered. — Brown *v.* Davis, 116 U. S., 237; Columbus *v.* Robbins, 64 F. R., 384; Westinghouse

v. Edison, 63 F. R., 588; Campbell *v.* Richardson, 76 F. R., 576.

Effect of words "for the purpose set forth" considered. — Day *v.* Fair Haven, 132 U. S., 98.

Elements not imported into a claim by construction to make out a case of novelty or infringement. — Wollensack *v.* Sargent, 151 U. S., 221; McCarty *v.* Lehigh, 160 U. S., 110.

Element positively included in the claim is made essential. — Fay *v.* Cordesman, 109 U. S., 408; Yale *v.* Sargent, 117 U. S., 373; Watson *v.* Cincinnati, 132 U. S., 161; Wright *v.* Yuengling, 155 U. S., 47; Coupe *v.* Royer, 155 U. S., 565.

Indefinite claim, patent invalid. — Electric *v.* McKeesport, 159 U. S., 465.

Interpretation of specification and drawing. — Caverly *v.* Deere, 66 F. R., 305.

Limitations in patent resulting from answer to requirement of Office. — Sargent *v.* Hall, 114 U. S., 63; Sutter *v.* Robinson, 119 U. S., 530; Shepard *v.* Carrigan, 116 U. S., 593; McCormick *v.* Graham, 129 U. S., 1; Phœnix *v.* Spiegel, 133 U. S., 360; Roemer *v.* Peddie, 132 U. S., 313; Morgan *v.* Albany, 152 U. S., 425; Lehigh *v.* Kearney, 158 U. S., 461; American *v.* Pennock, 17 S. C. Reporter, 1; Reece *v.* Globe, 61 F. R., 958.

Must be claimed as well as shown. — Roemer *v.* Bernheim, 132 U. S., 103.

New matter introduced by amendment condemned. — Eagleton *v.* Mfg. Co., 111 U. S., 490; Chicago *v.* Sayles, 97 U. S., 554; Michigan *v.* Consolidated, 67 F. R., 121; Long *v.* Pope, 75 F. R., 835.

Useful application test of a patent's validity. — Klein *v.* Russell, 19 Wall., 433.

Completion of.

All applications for patents shall be completed and prepared for examination within one year after the filing of the application, and in default thereof, or upon failure of the applicant to prosecute the same within *one year* after any action therein, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the Commissioner of Patents that such delay was unavoidable. — R. S. 4894.

Statutes in regard to delay apply to bill in equity under sec. 4915. — Gandy *v.* Marble, 122 U. S., 432–440.

Decision of Office final. — West. Elec. *v.* Sperry, 58 F. R., 186.

Drawings — When Required.

When the nature of the case admits of drawings, the applicant shall furnish one copy signed by the inventor or by his attorney in fact, and attested by two witnesses, which shall be filed in the Patent Office; and a copy of the drawing, to be furnished by the Patent Office, shall be attached to the patent as a part of the specification. — R. S. 4889.

Examination of — Novelty — Utility — Importance.

On the filing of any such application and the payment of the fees required by law, the Commissioner of Patents shall cause an examination to be made of the alleged new invention or discovery; and if on such examination it shall appear that the claimant is justly entitled to a patent under the law, and that the same is sufficiently useful and important, the Commissioner shall issue a patent therefor. — R. S. 4893.

Mandamus to compel Commissioner to sign patent, if his judgment and discretion are to issue it — Supervision of Secretary of Interior not applicable to this matter. — Butterworth *v.* Hoe, 112 U. S., 50–60.

Examination and Rejection — Reconsideration.

Whenever, on examination, any claim for a patent is rejected, the Commissioner shall notify the applicant thereof, giving him briefly the reasons for such rejection, together with such information and references as may be useful in judging of the propriety of renewing his application or of altering his specification; and if, after receiving such notice, the applicant persists in his claim for a patent, with or without altering his specifications, the Commissioner shall order a re-examination of the case. — R. S. 4903.

Amendment may be made by attorney after inventor's death. — De la Vergne v. Featherstone, 147 U. S., 209.

Executor or Administrator — When and How Made.

(See Executor and Administrator, R. S. 4896).

Execution of — Oath.

(See Oath. — By Inventor if Living, R. S. 4895).

Expedition of — Request by Head of Department of Government.

That in every case where the head of any Department of the Government shall request the Commissioner of Patents to expedite the consideration of an application for a patent it shall be the duty of such head of a Department to be represented before the Commissioner in order to prevent the improper issue of a patent. — Sec. 7 of Act of Mar. 3, 1897.

Lapse of — Failure to Pay Final Fee.

* * * If the final fee is not paid within that period (six months from the time at which it was passed and allowed and notice thereof was sent to the applicant or his agent) the patent shall be withheld. — R. S. 4885.

Oath — By Inventor.

* * * And in all cases of an application by an assignee for the issue of a patent, the application shall be made and the specification sworn to by the inventor or discoverer, and in all cases of an application for a reissue of any patent, the application must be made and the corrected specification signed by the inventor or discoverer, if he is living * * * — R. S. 4895.

Reissue — By Whom Made.

* * * And in all cases of an application for a reissue of any patent, the application must be made and the corrected specification signed by the inventor or discoverer, if he is living * * * — R. S. 4895.

Renewal — Failure to Pay Final Fee.

Any person who has an interest in an invention or discovery, whether as inventor, discoverer, or assignee, for which a patent was ordered to issue upon the payment of the final fee, but who fails to make payment thereof within six months from the time at which it was passed and allowed, and notice thereof was sent to

the applicant or his agent, shall have a right to make an application for a patent for such invention or discovery the same as in the case of an original application. But such second application must be made within two years after the allowance of the original application. But no person shall be held responsible in damages for the manufacture or use of any article or thing for which a patent was ordered to issue under such renewed application prior to the issue of the patent. And upon the hearing of renewed applications preferred under this section, abandonment shall be considered as a question of fact. — R. S. 4897.

Requirements Regarding — Specifications and Claims.
(See Specifications — Requirements, R. S. 4888).

Right of Purchaser — Before Application is Made.
Every person who purchases of the inventor or discoverer, or, with his knowledge and consent, constructs any newly invented or discovered machine, or other patentable article, prior to the application by the inventor or discoverer for a patent, or who sells or uses one so constructed, shall have the right to use, and to vend to others to be used, the specific thing so made or purchased, without liability therefor. — R. S. 4899.

Who May Make — Assignment Before Issue.
* * * In all cases of an application by an assignee for the issue of a patent, the application shall be made and the specification sworn to by the inventor or discoverer; and in all cases of an application for a reissue for any patent, the application must be made and the corrected specification signed by the inventor or discoverer, if he is living. * * * — R. S. 4895.

ART
Patentability of.
R. S. 4886.

ASSIGNEES
Renewal Applications — Default in Paying Final Fee.
(May make such application under restrictions and limitations, R. S. 4897).

ASSIGNMENT
General Provision.
Every patent or any interest therein shall be assignable in law by an instrument in writing, and the patentee or his assigns or legal representatives may in like manner grant and convey an exclusive right under his patent to the whole or any specified part of the United States. An assignment, grant, or conveyance shall be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, unless it is recorded in the Patent Office within three months from the date thereof.

It any such assignment, grant, or conveyance of any patent shall be acknowledged before any notary public of the several States

or Territories or the District of Columbia, or any commissioner of the United States circuit court, or before any secretary of legation or consular officer authorized to administer oaths or perform notarial acts under section seventeen hundred and fifty of the Revised Statutes, the certificate of such acknowledgment, under the hand and official seal of such notary or other officer, shall be prima facie evidence of the execution of such assignment, grant, or conveyance. — R. S. 4898.

Assignment and license defined. — Nicholson *v.* Jenkins, 14 Wall., 452; Adams *v.* Burks, 17 Wall., 453; Littlefield *v.* Perry, 21 Wall., 205; Burdell *v.* Denig, 92 U. S., 716. Hayward *v.* Andrews, 106 U. S., 672; Oliver *v.* Chem. Works, 109 U. S., 75; Laver *v.* Dennitt, 109 U. S., 90; Solomons *v.* U. S., 137 U. S., 342; Waterman *v.* Mackenzie, 138 U. S., 252; St. Paul *v.* Starling, 140 U. S., 184; Dalzell *v.* Watch Co., 149 U. S., 315; Lane *v.* Locke, 150 U. S., 193; Heaton *v.* Eureka, 78 O. G., 171. Anderson *v.* Eiler, 50 F. R., 775.

Construction of contract. — National *v.* Willcox, 74 F. R., 557.

Verbal license is void as against subsequent assignee without notice. — Gates *v.* Frazier, 153 U. S., 332.

An agreement not to dispute the validity of a patent not directly involved in the agreement is against public policy. — Pope *v.* Gormully, 144 U. S., 224 et seq.

Authority of attorney to execute assignment. — Chauche *v.* Pare, 75 F. R., 283.

Assignment for extension. — R. R. *v.* Trimble, 10 Wall., 367. Nicholson *v.* Jenkins, 14 Wall., 452.

Conditional assignment. — Atkins *v.* Parke, 61 F. R., 953.

Future invention, contract to assign. — Regan *v.* Pacific, 49 F. R., 68.

Implied license, employer and employee. — Hapgood *v.* Hewitt, 119 U. S., 226–234.

Specific performance of contract to assign invalid patent. — Kennedy *v.* Hazelton, 128 U. S., 667–673.

Assignment construed. — Rude *v.* Westcott, 130 U. S., 152.

Effect of subsequent contract on absolute assignment. — Boesch *v.* Graff, 133 U. S., 697.

Licensee's liability. — U. S. *v.* Burns, 12 Wall., 246. Paper Bag Cases, 105 U. S., 766.

License, escrow. — Mellon *v.* R. R. Co., 21 O. G., 1616.

Mortgage, notice. — Waterman *v.* Shipman, 55 F. R., 982.

One inventor as trustee for another. — Ambler *v.* Whipple, 20 Wall., 546.

Patented machine is purchaser's property. — Mitchell *v.* Hawley, 16 Wall., 544. Paper Bag Cases, 105 U. S., 766.

Purchase of article may give license to use process. — Vt. *v.* Gibson, 56 F. R., 143.

Right to purchase patented article. — Hobbie *v.* Jennison, 149 U. S., 355.

Recording assignments, effect of; what instruments recorded. — Standard *v.* Crane, 77 O. G., 811.

Seal. — Gottfried *v.* Miller, 104 U. S., 521.

Separate claims of a patent are not assignable. — Pope *v.* Gormully, 144 U. S., 248.

Successors of assignees. — Hammond *v.* Mason, 92 U. S., 724.

Bankruptcy — Vests Patent Property.

Sec. 70. Title to Property. The trustee of the estate of a bankrupt, upon his appointment and qualification, and his successor or successors, if he shall have one or more, upon his or their appointment and qualification, shall in turn be vested by operation of law with the title of the bankrupt, as of the date he was adjudged a bankrupt, except in so far as it is to property which is exempt, to all (1) documents relating to his property; (2) interests in patents, patent rights, copyrights, and trade-marks. — R. S. 5046, and Sec. 70, Act July 1, 1898.

Before Application — Implied License.

(See R. S. 4899).

Before Issue — Application to be made by Inventor.

Patents may be granted and issued or reissued to the assignee of the inventor or discoverer; but the assignment must first be entered of record in the Patent Office. And in all cases of an application by an assignee for the issue of a patent, the application shall be made and the specification sworn to by the inventor or discoverer; and in all cases of an application for a reissue of any patent, the application must be made and the corrected specification signed by the inventor or discoverer, if he is living. * * * — R. S. 4895.

Fees for Recording.

(See Fees).

By Instrument in Writing — Execution and Recording.

Every patent or any interest therein shall be assignable in law by an instrument in writing, and the patentee or his assigns or legal representatives may in like manner grant and convey an exclusive right under his patent to the whole or any specified part of the United States. An assignment, grant, or conveyance shall be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, unless it is recorded in the Patent Office within three months from the date thereof.

If any such assignment, grant, or conveyance of any patent shall be acknowledged before any notary public of the several States and Territories or the District of Columbia, or any commissioner of the United States circuit court, or before any secretary of legation or consular officer authorized to administer oaths or perform notarial acts under section 1750 of the Revised Statutes, the certificate of such acknowledgment under the hand and official seal of such notary or other officer, shall be prima facie evidence of the execution of such assignment, grant, or conveyance. — R. S. 4898, and Act Mar. 3, 1897.

Note: The last paragraph added by Act Mar. 3, 1897.

By Instrument in Writing — Prima Facie.

(See R. S. 4898 supra).

Recording — Must be Within Three Months.

(See R. S. 4898 supra).

Recording — Must be Recorded in Patent Office — When.

(See Assignment Before Issue, R. S. 4895).

ASSISTANT COMMISSIONER

Appointment of.

(See R. S. 476).

ATTORNEYS

Recognition Refused — Gross Misconduct.

For gross misconduct the Commissioner of Patents may refuse to recognize any person as a patent-agent, either generally or in any particular case; but the reasons for such refusal shall be duly recorded, and be subject to the approval of the Secretary of the Interior. — R. S. 487.

BANKRUPTCY

Assignments in — Vests Patent Property in Assignee.

(See Assignments — Bankruptcy, Sec. 70, Act July 1, 1898).

BILL

In Equity — To Compel Issue of Patent.

(See Actions — Equity, R. S. 4915).

CERTIFIED COPIES

Foreign Patents.

(See Evidence — Foreign Letters Patent, R. S. 893).

Records and Papers. — Patent Office.

(See Evidence — Copies of Patents and Records, R. S. 892).

For Court of Appeals, D. C. — Furnished by Whom.

(See Appeals — Court of Appeals, D. C.).

CERTIORARI

Supreme Court — From Circuit Court of Appeals.

(See Judicial Code, Sec. 240).

CIRCUIT COURT OF APPEALS

(See Appeals).

CLAIM

What to Cover.

(See Application — Requirements, R. S. 4888).

CLERK OF U. S. COURT

Summoning Witnesses — Interference Cases.

(See Witnesses, R. S. 4906).

COMMISSIONER OF PATENTS

General Provision.

There shall be in the Patent Office a Commissioner of Patents, one Assistant Commissioner, and three examiners-in-chief, who shall be appointed by the President, by and with the advice and consent of the Senate. All other officers, clerks, and employés

authorized by law for the Office shall be appointed by the Secretary of the Interior, upon the nomination of the Commissioner of Patents. [See § 169.] — R. S. 476.

Annual Report of — Shall Contain What.

The Commissioner of Patents shall lay before Congress, in the month of January, annually, a report, giving a detailed statement of all moneys received for patents, for copies of records or drawings, or from any other source whatever; a detailed statement of all expenditures for contingent and miscellaneous expenses, a list of all patents which were granted during the preceding year; designating under proper heads the subjects of such patents; an alphabetical list of all the patentees with their places of residence; a list of all patents which have been extended during the year; and such other information of the condition of the Patent Office as may be useful to Congress or the public. — R. S. 494.

Appeal to.

If such party is dissatisfied with the decision of the examiners-in-chief, he may, on payment of the fee prescribed, appeal to the Commissioner in person. — R. S. 4910.

Applications — Examination of.

(See Application — Examination of, R. S. 4893).

Bond — Chief Clerk.

The Commissioner of Patents and the chief clerk, before entering upon their duties, shall severally give bond, with sureties, to the Treasurer of the United States, the former in the sum of ten thousand dollars and the latter in the sum of five thousand dollars, conditioned for the faithful discharge of their respective duties, and that they shall render to the proper officers of the Treasury a true account of all money received by virtue of their office. — R. S. 479.

Duties of.

The Commissioner of Patents, under the direction of the Secretary of the Interior, shall superintend or perform all duties respecting the granting and issuing of patents directed by law; and he shall have charge of all books, records, papers, models, machines, and other things belonging to the Patent Office. — R. S. 481.

Duties of Commissioner. — Butterworth *v.* Hoe, 112 U. S. 50.

Examination Under Oath — Court of Appeals, D. C.

* * * And at the request of any party interested, or of the court, the Commissioner and the examiners may be examined under oath, in explanation of the principles of the thing for which a patent is demanded. — R. S. 4913.

How Appointed.

(See Patent Office — Officers, R. S. 476).

Notice of Hearings — Court of Appeals, D. C.
(See Appeals — Court of Appeals, D. C.).

Rules and Regulations — Established by.
(See Rules and Regulations, R. S. 483).

Rules for Taking Evidence — Patent Office Cases.
The Commissioner of Patents may establish rules for taking affidavits and depositions required in cases pending in the Patent Office, and such affidavits and depositions may be taken before any officer authorized by law to take depositions to be used in the courts of the United States or of the State where the officer resides. — R. S. 4905.

COMPOSITION OF MATTER

Patentability of.
R. S. 4886.

Specimens to be Furnished — When and How.
When the invention or discovery is of a composition of matter, the applicant, if required by the Commissioner, shall furnish specimens of ingredients and of the composition, sufficient in quantity for the purpose of experiment. — R. S. 4890.

CONGRESS

Powers of.
[*The constitutional provision.* — The Congress shall have power * * * to promote the progress of Science and Useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.] — Art. I, Sec. VIII.

COSTS

Complainants — Actions for Infringement.
(See R. S. 4919).

Defendants — Actions for Infringement.
(See R. S. 4920).

Disclaimer — Failure to File.
When judgment or decree is rendered for the plaintiff or complainant, in any suit at law or in equity, for the infringement of a part of a patent, in which it appears that the patentee, in his specification, claimed to be the original and first inventor or discoverer of any material or substantial part of the thing patented, of which he was not the original and first inventor, no costs shall be recovered, unless the proper disclaimer, as provided by the patent laws, has been entered at the Patent Office before the suit was brought. (See 4917, 4922). — R. S. 973.

Failure to Disclaim — When.

* * * But in every such case in which a judgment or decree shall be rendered for the plaintiff, no costs shall be recovered unless the proper disclaimer has been entered at the Patent Office before the commencement of the suit. * * * — R. S. 4922.

COURT OF APPEALS, D. C.

General Act — Jurisdiction &c.

Be it enacted, &c., That there shall be, and there is hereby, established in the District of Columbia a court, to be known as the court of appeals of the District of Columbia.

SEC. 6. That the said court of appeals shall establish a term of the court during each and every month in each year excepting the months of July and August. Act Feb. 9, 1893.

* * * Except as provided in the next succeeding section (as to certification and certiorari), the judgments and decrees of said court of appeals shall be final in all cases arising under the patent laws * * *. — Jud. Code, Sec. 250.

DAMAGES

General Provision.

Damages for the infringement of any patent may be recovered by action on the case, in the name of the party interested either as patentee, assignee, or grantee. And whenever in any such action a verdict is rendered for the plaintiff, the court may enter judgment thereon for any sum above the amount found by the verdict as the actual damages sustained, according to the circumstances of the case, not exceeding three times the amount of such verdict, together with the costs. — R. S. 4919.

Actual damages, rule in law actions. — Birdsall *v.* Coolidge, 93 U. S., 64.

Anticipation, question for jury in law action. — Harper & Reynolds Co. *v.* Wilgus, 56 F. R., 587.

Conspiracy, action at law. — Ambler *v.* Choteau, 107 U. S., 586.

Infringement. — Fermentation *v.* Maus, 122 U. S., 413; Safety Valve *v.* Steam Gage, 113 U. S., 157; Lake Shore *v.* Nat'l., 110 U. S., 229; Morley *v.* Lancaster, 129 U. S., 263; Hurlbut *v.* Schillinger, 130 U. S., 456; Plummer *v.* Sargent, 120 U. S., 442. Wollensack *v.* Sargent, 151 U. S., 221; Deering *v.* Winona, 155 U. S., 286; Dubois *v.* Kirk, 158 U. S., 58; National *v.* Boston, 156 U. S., 502; Potts *v.* Creager, 155 U. S., 597; Belknap *v.* Schild, 161 U. S., 10; Griswold *v.* Harker, 62 F. R., 389; Devlin *v.* Paynter, 64 F. R., 398; Am. *v.* National, 51 F. R., 229; Gurney *v.* Oakes, 66 F. R., 1007; Capital *v.* Natl., 70 F. R., 709; Lalance *v.* Habermann, 53 F. R., 375; Celluloid *v.* Arlington, 52 F. R., 740; Adee *v.* Mott, 55 F. R., 876.

Infringement doubtful, injunction refused. — Ertel *v.* Stahl, 65 F. R., 517; Schwarzwalder *v.* N. Y., 66 F. R., 152.

Infringement of apparatus which delivers perishable article. — Morgan *v.* Albany, 152 U. S., 425.

Infringement by purchaser from assignee. — Keeler *v.* Standard, 157 U. S., 659.

Infringement, pioneer invention. — Westinghouse *v.* N. Y., 63 F. R., 962; Norton *v.* Jensen, 49 F. R., 859.

Noninfringement. — Coon *v.* Wilson, 113 U. S., 268; Blake *v.* San Francisco, 113 U. S., 679; Thompson *v.* Boisselier, 114 U. S., 1; Sargent *v.* Hall, 114 U. S., 63; McMurray *v.* Mallory, 111 U. S., 97; Voss *v.* Fisher, 113 U. S., 213; Grier *v.* Wilt, 120 U. S., 412; Fay *v.* Cordesman, 109 U. S., 408; Estey *v.*

Burdett, 109 U. S., 633; Clements *v.* Excavating, 109 U. S., 641; Bussey *v.* Excelsior, 110 U. S., 131; Zane *v.* Soffe, 110 U. S., 200; Shepard *v.* Carrigan, 116 U. S., 593; Yale *v.* Sargent, 117 U. S., 373; Consold. *v.* Kunkle, 119 U. S., 45; California *v.* Schalicke, 119 U. S., 401; Sutter *v.* Robinson, 119 U. S., 530; Sharp *v.* Riessner, 119 U. S., 631; Hartshorn *v.* Saginaw Co., 119 U. S., 664; Crawford *v.* Heysinger, 123 U. S., 589; Dryfoos *v.* Wiese, 124 U. S., 32; Yale *v.* James, 125 U. S., 447; Clark *v.* Beecher, 115 U. S., 79; Wollensak *v.* Reiher, 115 U. S., 87; Field *v.* De Comeau, 116 U. S., 187; Brown *v.* Davis, 116 U. S., 237; Worden *v.* Searls, 121 U. S., 14; McCormick *v.* Whitmer, 129 U. S., 1; Sargent *v.* Burgess, 129 U. S., 19; Peters *v.* Active, 129 U. S., 530; Béné *v.* Jeantet, 129 U. S., 683; Hendy *v.* Golden, 127 U. S., 370; Cook *v.* Sandusky, 15 Brodix, 120; Wright *v.* Yuengling, 155 U. S., 47; United States *v.* Berdan, 156 U. S., 552. Miller *v.* Eagle, 151 U. S., 186; McCarty *v.* Lehigh, 160 U. S., 110; Elec. *v.* McKeesport, 159 U. S., 465; Lehigh *v.* Kearney, 158 U. S., 461; Boyd *v.* Janesville, 158 U. S., 260; Black Diamond *v.* Excelsior, 156 U. S., 611; Roller Mill *v.* Barnard, 156 U. S., 261; Dashiell *v.* Grosvenor, 162 U. S., 425; Kinzel *v.* Luttrell, 67 F. R., 926; Wright *v.* Clinton, 67 F. R., 790; Bonsak *v.* Elliott, 69 F. R., 335; Jensen *v.* Norton, 67 F. R., 236; Thomson-Houston *v.* West. 70 F. R., 69; Gould *v.* Trojan, 74 F. R., 794; Brush *v.* Western, 76 F. R., 761; Stirratt *v.* Excelsior, 61 F. R., 980; Cornell *v.* Bataille, 61 F. R., 684; Pacific *v.* Cons. Co., 62 F. R., 288.

Noninfringement — Article made by particular process. — Cochrane *v.* Badische, 111 U. S., 293.

Noninfringement of combination claim. — Rowell *v.* Lindsay, 113 U. S., 97; Elec. *v.* Signal, 114 U. S., 87; Bragg *v.* Fitch, 121 U. S., 478; Snow *v.* Lake Shore, 121 U. S, 617; Thomson-Houston *v.* Kelsey, 75 F. R., 1005.

Evidence of novelty; discretion of lower court. — St. Paul *v.* Starling, 140 U. S., 184.

Patent for improvement does not convey right to use broad invention. — Cantrell *v.* Wallick, 117 U. S., 689.

Patent rights reached by creditor's bill. — Ager *v.* Murray, 105 U. S., 126.

Contributory infringement. — Heaton *v.* Eureka, 77 F. R., 288.

Repairing patented device. — Shickle *v.* St. Louis, 77 O. G., 2142. (Consult also citations under sec. 4886.)

Designs.

(See Designs).

In Equity — Trebling Damages.

* * * The complainant shall be entitled to recover, in addition to the profits to be accounted for by the defendant, the damages the complainant has sustained thereby; and the court shall assess the same or cause the same to be assessed under its direction. And the court shall have the same power to increase such damages, in its discretion, as is given to increase the damages found by verdicts in actions in the nature of actions of trespass on the case. * * * — R. S. 4921.

Failure to Mark Articles "Patented" — When a Bar.

* * * And in any suit for infringement, by the party failing so to mark, no damages shall be recovered by the plaintiff, except on proof that the defendant was duly notified of the infringement, and continued, after such notice, to make, use, or vend the article so patented. — R. S. 4900.

Infringement — Trebling Damages.

(In actions at Law, see R. S. 4919).

DEFENSES

General Provisions.

In any action for infringement the defendant may plead the general issue, and, having given notice in writing to the plaintiff or his attorney thirty days before, may prove on trial any one or more of the following special matters:

First. That for the purpose of deceiving the public the description and specification filed by the patentee in the Patent Office was made to contain less than the whole truth relative to his invention or discovery, or more than is necessary to produce the desired effect; or,

Second. That he had surreptitiously or unjustly obtained the patent for that which was in fact invented by another, who was using reasonable diligence in adapting and perfecting the same; or,

Third. That it had been patented or described in some printed publication prior to his supposed invention or discovery thereof, *or more than two years prior to his application for a patent therefor;* or,

Fourth. That he was not the original and first inventor or discoverer of any material and substantial part of the thing patented; or,

Fifth. That it had been in public use or on sale in this country for more than two years before his application for a patent, or had been abandoned to the public.

And in notices as to proof of previous invention, knowledge, or use of the thing patented, the defendant shall state the names of the patentees and the dates of their patents, and when granted, and the names and residences of the persons alleged to have invented or to have had the prior knowledge of the thing patented, and where and by whom it had been used; and if any one or more of the special matters alleged shall be found for the defendant, judgment shall be rendered for him with costs. And the like defenses may be pleaded in any suit in equity for relief against an alleged infringement; and proofs of the same may be given upon like notice in the answer of the defendant, and with the like effect. — R. S. 4920.

Note: Amendment of Mar. 3, 1897, in italics.

Complainants must prove infringement. — Fuller *v.* Yentzer, 94 U. S., 288, 299; Bates *v.* Coe, 98 U. S., 31.

Damages must be proved. — Robertson *v.* Blake, 94 U. S., 728.

Defenses to suit not confined to those mentioned in this statute. — Gardiner *v.* Herz, 118 U. S., 180.

Defense of priority. — Clark *v.* Willimantic, 140 U. S., 481.

Defense of prior patent must be made below. — Andrews *v.* Thum, 67 F. R., 911.

Defense that complainant has no interest. — Paine *v.* Trask, 56 F. R., 233.

Delay as an estoppel. — Thorne Co. *v.* Washburn, 159 U. S., 423.

Denial of utility. — Gandy *v.* Belt Co., 143 U. S., 587.

Denial of validity. — Western *v.* La Rue, 139 U. S., 601.

Estoppel by former recovery. — Russell *v.* Place, 94 U. S., 606.

Estoppel by decree pro confesso. — Thomson *v.* Wooster, 114 U. S., 104.

Estoppel by assignment. — Babcock *v.* Clarkson, 63 F. R., 607.

Estoppel of assignor. — Martin *v.* Martin, 67 F. R., 786.

No estoppel by application for patent. — Haughey *v.* Lee, 151 U. S., 282.

Exceptions to judge's charge to the jury. — Haines *v.* McLaughlin, 135 U. S., 584.

Expert testimony necessary. — Waterman *v.* Shipman, 55 F. R., 982.

Estoppel by interference proceedings in Office. — Shoemaker *v.* Merrow, 61 F. R., 945; Fassett *v.* Ewart, 62 F. R., 404.

Fraudulent patents. — Railroad *v.* Dubois, 12 Wall., 47.

General purpose of the statute. — Root *v.* Ry., 105 U. S., 189; Albright *v.* Teas, 106 U. S., 613; Dolan *v.* Jennings, 139 U. S., 385; White *v.* Rankin, 144 U. S., 628.

Government needs no defense. — Cammeyer *v.* Newton, 94 U. S., 225; U. S. *v.* Burns, 12 Wall., 246. U. S. *v.* McKeever, 23 O. G., 1525-1530. Hollister *v.* Benedict, 113 U. S., 59. United States *v.* Palmer, 128 U. S., 262. Solomons *v.* United States, 137 U. S., 342; Schillinger *v.* United States, 155 U. S., 163; Belknap *v.* Schild, 161 U. S., 10.

Judicial notice. — Brown *v.* Piper, 91 U. S., 37; Terhune *v.* Phillips, 99 U. S., 592. Slawson *v.* R. R., 107 U. S., 649; Black Diamond *v.* Excelsior, 156 U. S., 611; Richards *v.* Chase, 159 U. S., 477; Am. Fibre *v.* Buckskin, 72 F. R., 508. Butte City *v.* Pacific, 60 F. R., 410.

Jurisdiction in equity, general demurrer. — McCoy *v.* Nelson, 121 U. S., 484.

Infringement is question for jury. — Tucker *v.* Spaulding, 13 Wall., 453.

Licensee estoppel. — Dueber *v.* Robbins, 75 F. R., 17.

Law or equity procedure. — Cochrane *v.* Deener, 94 U. S., 780; Hayward *v.* Andrews, 106 U. S., 672; Clark *v.* Wooster, 119 U. S., 322; Germain *v.* Wilgus, 67 F. R., 597.

New matter in patent need not be specifically set forth in the answer. — Eagleton *v.* Mfg. Co., 111 U. S., 490.

No suit under original after reissue. — Reedy *v.* Scott, 23 Wall., 352.

Ownership. — Cammeyer *v.* Newton, 94 U. S., 225.

Patentee need not notify intending infringer. — Railroad *v.* Dubois, 12 Wall., 47.

Patentee the original inventor. — Sewall *v.* Jones, 91 U. S., 171; Loom Co. *v.* Higgins, 105 U. S., 580; Atlantic *v.* Brady, 107 U. S., 192.

Patentee bound by his patent. — Keystone *v.* Phœnix, 95 U. S., 274.

Patents not set up in answer may be introduced to aid in construction of claims. — Grier *v.* Wilt, 120 U. S., 412.

Point of void reissue must be made in lower court (Klein *v.* Russell, 19 Wall., 433), *and must be by defendant.* — Smith *v.* Goodyear, 93 U. S., 486; Bates *v.* Coe, 98 U. S., 31.

Proof of invalidity upon defendants. — Seymour *v.* Osborne, 11 Wall., 516; Reckendorfer *v.* Faber, 92 U. S., 347; Roemer *v.* Simon, 95 U. S., 214; Imhaeuser *v.* Buerk, 101 U. S., 647.

Questions for court and those for jury considered. — Market *v.* Rowley, 155 U. S., 621; Coupe *v.* Royer, 155 U. S., 565; Lumber *v.* Rodgers, 112 U. S., 659; Keyes *v.* Grant, 118 U. S., 25; Humiston *v.* Wood, 124 U. S., 12. Royer *v.* Schultz, 135 U. S., 319; Miller *v.* Eagle, 151 U. S., 186.

Res adjudicata. — Johnson *v.* Wharton, 152 U. S., 252; Lyon *v.* Perrin, 125 U. S., 698; Bradley *v.* Eagle, 58 F. R., 721; Elec. *v.* Brush, 52 F. R., 130.

Reconstruction may be infringement. — Am. *v.* Simmons, 106 U. S., 89.

Statutes of limitations of the several States apply to patent suits. — Campbell *v.* Haverhill, 155 U. S., 610.

Under general denial prior knowledge may be shown. — Zane *v.* Soffe, 110 U. S., 200.

Validity and infringement must be clear to warrant preliminary injunction. — Stand. *v.* Crane, 56 F. R., 718.

Want of patentability need not be specifically pleaded. — May *v.* Juneau, 137 U. S., 408; Hendy *v.* Golden, 127 U. S., 370; Richards *v.* Chase, 158 U. S., 299.

Technical questions can not be raised on appeal where not raised below. — Tuttle *v.* Claflin, 76 F. R., 227; Smith *v.* Mellon, 58 F. R., 705.

DESIGNS

General Provisions.

Any person who has invented any new, original, and ornamental design for an article of manufacture, not known or used by others in this country before his invention thereof, and not patented or described in any printed publication in this or any foreign country before his invention thereof, or more than two years prior to his application, and not in public use or on sale in this country for more

than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law and other due proceedings had, the same as in cases of invention or discoveries covered by section forty-eight hundred and eighty-six, obtain a patent therefor. — R. S. 4929.

Doubtful patentability. — N. Y. *v.* N. J., 137 U. S., 445.

Utility in designs. — Smith *v.* Whitman, 148 U. S., 674.

Novelty determined by ocular comparison. — Braddock *v.* Macbeth, 64 F. R., 118.

Double use not patentable. — Untermeyer *v.* Freund, 58 F. R., 205.

Invention. — Caldwell *v.* Powell, 73 F. R., 488.

Lack of invention. — Krick *v.* Jansen, 61 F. R., 847; Paine *v.* Snowden, 50 F. R., 776.

Must be ornamental. — Rowe *v.* Blodgett, 98 O. G., 1286.

The Commissioner may dispense with models of designs when the design can be sufficiently represented by drawings or photographs. — R. S. 4930.

Patents for designs may be granted for the term of three years and six months, or for seven years, or for fourteen years, as the applicant may, in his application, elect. — R. S. 4931.

All the regulations and provisions which apply to obtaining or protecting patents for inventions or discoveries not inconsistent with the provisions of this Title, shall apply to patents for designs. — R. S. 4933.

Be it enacted, etc., That hereafter, during the term of letters patent for a design, it shall be unlawful for any person other than the owner of said letters patent, without the license of such owner, to apply the design secured by such letters patent, or any colorable imitation thereof, to any article of manufacture for the purpose of sale, or to sell or expose for sale any article of manufacture to which such design or colorable imitation shall, without the license of the owner, have been applied, knowing that the same has been so applied. Any person violating the provisions, or either of them, of this section, shall be liable in the amount of two hundred and fifty dollars; and in case the total profit made by him from the manufacture or sale, as aforesaid, of the article or articles to which the design, or colorable imitation thereof, has been applied, exceeds the sum of two hundred and fifty dollars, he shall be further liable for the excess of such profit over and above the sum of two hundred and fifty dollars; and the full amount of such liability may be recovered by the owner of the letters patent, to his own use, in any circuit court of the United States having jurisdiction of the parties, either by action at law or upon a bill in equity for an injunction to restrain such infringement.

SEC. 2. That nothing in this act contained shall prevent, lessen, impeach, or avoid any remedy at law or in equity which any owner of letters patent for a design, aggrieved by the infringement of the same, might have had if this act had not been passed; but such owner shall not twice recover the profit made from the infringement. — Act Feb. 4, 1887.

Profit meant is total profit. — Untermeyer *v.* Freund, 58 F. R., 205.

DISCLAIMER

General Provision.

Whenever, through inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, a patentee has claimed more than that of which he was the original or first inventor or discoverer, his patent shall be valid for all that part which is truly and justly his own, provided the same is a material or substantial part of the thing patented; and any such patentee, his heirs or assigns, whether of the whole or any sectional interest therein, may, on payment of the fee required by law, make disclaimer of such parts of the thing patented as he shall not choose to claim or to hold by virtue of the patent or assignment, stating therein the extent of his interest in such patent. Such disclaimer shall be in writing, attested by one or more witnesses, and recorded in the Patent Office; and it shall thereafter be considered as part of the original specification to the extent of the interest possessed by the claimant and by those claiming under him after the record thereof. But no such disclaimer shall affect any action pending at the time of its being filed, except so far as may relate to the question of unreasonable neglect or delay in filing it.

[See secs. 973, 4922.] — R. S. 4917.

Costs, effect of disclaimer on. — Sessions *v.* Romadka, 145 U. S., 29.

Disclaimer of reissue claim. — Gage *v.* Herring, 107 U. S., 640; McMurray *v.* Mallory, 111 U. S., 97; Hurlbut *v.* Schillinger, 130 U. S., 456.

Disclaimer made to obviate having included too many devices. — Sessions *v.* Romadka, 145 U. S., 29.

Disclaimer part of specification. — Dunbar *v.* Meyers, 94 U. S., 187; Schwarzwalder *v.* N. Y., 66 F. R., 152.

Disclaimer filed after bill. — Smith *v.* Nichols, 21 Wall., 112.

Purpose of disclaimer. — Hailes *v.* Albany, 123 U. S, 582; Union *v.* U. S., 112 U. S., 624–645; Collins *v.* Coes, 130 U. S., 56–69.

Failure to File — Bars Costs.

(See Costs — Disclaimer — Failure to file, R. S. 973).

Laches — When Failure to File is.

* * * But no patentee shall be entitled to the benefits of this section if he has unreasonably neglected or delayed to enter a disclaimer. — R. S. 4922.

DISCOVERY

Patentability of.

Any person who has invented or discovered any new and useful art, machine, manufacture or combination of matter, or any new and useful improvement thereof * * * may * * * obtain a patent therefor. — R. S. 4886.

DRAWINGS

General Provision.

When the nature of the case admits of drawings, the applicant shall furnish one copy signed by the inventor or his attorney in

fact, and attested by two witnesses, which shall be filed in the Patent Office; and a copy of the drawing, to be furnished by the Patent Office, shall be attached to the patent as a part of the specification. — R. S. 4889.

In Reissue — How Amended.

(See Reissue — When and How Granted, R. S. 4916).

Part of Patent.

(See Letters Patent — Drawing, R. S. 4884).

DRAWING AND SPECIFICATION

(See Letters Patent — Contents, R. S. 4884).

DIVISION OF PATENT

Reissue.

(See Reissue).

EMPLOYEES

Government — Right to Obtain a Patent.

The Secretary of the Interior and the Commissioner of Patents are authorized to grant any officer of the Government, except officers and employees of the Patent Office, a patent for any invention of the classes mentioned in section 4886 of the Revised Statutes when such invention is used or to be used in the public service, without payment of any fee: Provided, That the applicant in his application shall state that the invention described therein, if patented, may be used by the Government, or any of its officers or employees in prosecution of work for the Government, or by any other person of the United States, without the payment to him of any royalty thereon, which stipulation shall be included in the patent. — R. S. sub. 4886 (Mar. 3, 1883).

Patent Office — Cannot Acquire Interest in Patent.

All officers and employees of the Patent Office shall be incapable during the period for which they hold their appointments, to acquire or take, directly or indirectly, except by inheritance or bequest, any right or interest in any patent issued by the Office. — R. S. 480.

United States — Royalties to — Barred.

No royalty shall be paid by the United States to any one of its officers or employees for the use of any patent for the system, or any part thereof, mentioned in the preceding section, nor for any such patent in which said officers or employees may be directly or indirectly interested. — R. S. 1673.

EQUITY

Damages and Profits.

(See Profits, R. S. 4921).

EQUITY ACTIONS

Jury Trials.

(See Sec. 2, R. S. 4921).

EVIDENCE

Copies of Patents and Records — Certified Copies.

Written or printed copies of any records, books, papers, or drawings belonging to the Patent Office, and of letters patent authenticated by the seal and certified by the Commissioner or Acting Commissioner thereof, shall be evidence in all cases wherein the originals could be evidence; and any person making application therefor, and paying the fee required by law, shall have certified copies thereof. — R. S. 892.

Certified copy of patent as evidence. — Oregon *v.* Excelsior, 132 U. S., 215–216.

Certified copy of record of assignment as evidence. — Am. *v.* Mayor, 60 F. R., 1016.

Foreign Letters Patent. — Evidence of What.

Copies of the specifications and drawings of foreign letters patent certified as provided in the preceding section, shall be prima facie evidence of the fact of the granting of such letters patent, and of the date and contents thereof. — R. S. 893.

Printed Copies of Specifications and Drawings — Certified and gratuitously Distributed.

The printed copies of specifications and drawings of patents, which the Commissioner of Patents is authorized to print for gratuitous distribution and to deposit in the capitols of the States and Territories, and in the Clerk's offices of the district courts, shall, when certified by him and authenticated by the seal of his office, be received in all courts as evidence of all matters therein contained. — R. S. 894.

Required by Patent Office — Method of Taking.

The Commissioner of Patents may establish rules for taking affidavits and depositions required in cases pending in the Patent Office, and such affidavits and depositions may be taken before any officer authorized by law to take depositions to be used in the courts of the United States, or of the State where the officer resides. — R. S. 4905.

EXAMINATION

(See Application).

EXAMINERS-IN-CHIEF

Qualifications — Duties.

The examiners-in-chief shall be persons of competent legal knowledge and scientific ability, whose duty it shall be, on the written application of the appellant, to revise and determine upon the

validity of the adverse decisions of examiners upon applications for patents, and for reissue of patents, and in interference cases; and when required by the Commissioner, they shall hear and report upon claims for extensions, and perform such other like duties as he may assign to them. — R. S. 482.

EXECUTOR, ADMINISTRATOR, OR GUARDIAN

Application by and Oath of.

When any person, having made any new invention or discovery for which a patent might have been granted, dies before a patent is granted, the right of applying for and obtaining the patent shall devolve on his executor or administrator, in trust for the heirs at law of the deceased, in case he shall have died intestate; or if he shall have left a will disposing of the same, then in trust for his devisees, in as full manner and on the same terms and conditions as the same might have been claimed or enjoyed by him in his lifetime; and when the application is made by such legal representatives, the oath or affirmation required to be made shall be so varied in form that it can be made by them. The executor or administrator duly authorized under the law of any foreign country to administer upon the estate of the deceased inventor shall, in case the said inventor was not domiciled in the United States at the time of his death, have the right to apply for and obtain the patent. The authority of such foreign executor or administrator shall be proved by certificate of a diplomatic or consular officer of the United States. — R. S. 4896.

Authority of attorney after death of inventor. — Eagleton *v.* Mfg. Co., 111 U. S., 490.

Patent to deceased inventor goes to his heirs. — De la Vergne *v.* Featherstone, 147 U. S., 209.

The above as amended May 23, 1908.

An act to amend section forty-eight hundred and ninety-six of the Revised Statutes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section forty-eight hundred and ninety-six of the Revised Statutes be, and the same is hereby, amended so that the section shall read as follows:

"SEC. 4896. When any person, having made any new invention or discovery for which a patent might have been granted, dies before a patent is granted, the right of applying for and obtaining the patent shall devolve on his executor or administrator, in trust for the heirs-at-law of the deceased, in case he shall have died intestate; or if he shall have left a will disposing of the same, then in trust for his devisees in as full manner and on the same terms and conditions as the same might have been claimed or enjoyed by him in his lifetime; *and when any person having made any new invention or discovery for which a patent might have been granted becomes insane before a patent is granted the right of applying for and obtaining the patent shall devolve on his legally-appointed*

guardian, conservator, or representative in trust for his estate in as full manner and on the same terms and conditions as the same might have been claimed or enjoyed by him while sane; and when the application is made by such legal representatives the oath or affirmation required to be made shall be so varied in form that it can be made by them. The executor or administrator duly authorized under the law of any foreign country to administer upon the estate of the deceased inventor shall, in case the said inventor was not domiciled in the United States at the time of his death, have the right to apply for and obtain the patent. The authority of such foreign executor or administrator shall be proved by certificate of a diplomatic or consular officer of the United States.

"The foregoing section, as to insane persons, is to cover all applications now on file in the Patent Office or which may be hereafter made."

Approved, May 23, 1908.

FALSE MARKING

Action for and Penalty.

Every person who, in any manner, marks upon anything made, used, or sold by him for which he has not obtained a patent, the name or any imitation of the name of any person who has obtained a patent therefor, without the consent of such patentee, or his assigns or legal representatives; or

Who, in any manner, marks upon or affixes to any such patented article the word "patent" or "patentee," or the words "letters patent," or any word of like import, with intent to imitate or counterfeit the mark or device of the patentee, without having the license or consent of such patentee or his assigns or legal representatives; or

Who, in any manner, marks upon or affixes to any unpatented article the word "patent" or any word importing that the same is patented, for the purpose of deceiving the public, shall be liable, for every such offense, to a penalty of not less than one hundred dollars, with costs; one-half of said penalty to the person who shall sue for the same, and the other to the use of the United States, to be recovered by suit in any district court of the United States within whose jurisdiction such offense may have been committed.—R. S. 4901.

FEES

General Patent Office.

The following shall be the rates for patent fees:

On filing each original application for a patent, except in design cases, fifteen dollars.

On issuing each original patent, except in design cases, twenty dollars.

In design cases: For three years and six months, ten dollars; for seven years, fifteen dollars; for fourteen years, thirty dollars.

On every application for the reissue of a patent, thirty dollars.
On filing each disclaimer, ten dollars.

* * * * * * *

On an appeal for the first time from the primary examiners to the examiners-in-chief, ten dollars.

On every appeal from the examiners-in-chief to the Commissioner, twenty dollars.

For certified copies of patents and other papers, including certified printed copies, ten cents per hundred words.

For recording every assignment, agreement, power of attorney, or other paper, of three hundred words or under, one dollar; of over three hundred and under one thousand words, two dollars; and for each additional thousand words or fraction thereof, one dollar.

Certified copies of such drawings and specifications may be furnished by the Commissioner of Patents to persons applying therefor upon payment of the present rates for uncertified copies, and twenty-five cents additional for each certification.

For copies of drawings, the reasonable cost of making them. — R. S. 4934.

Patent fees may be paid to the Commissioner of Patents, or to the Treasurer, or any of the assistant treasurers of the United States, or to any of the designated depositaries, national banks, or receivers of public money, designated by the Secretary of the Treasury for that purpose; and such officer shall give the depositor a receipt or certificate of deposit therefor. All money received at the Patent Office, for any purpose, or from any source whatever, shall be paid into the Treasury as received, without any deduction whatever. — R. S. 4935.

The Treasurer of the United States is authorized to pay back any sum or sums of money to any person who has through mistake paid the same into the Treasury, or to any receiver or depositary, to the credit of the Treasury, as for fees accruing at the Patent Office, upon a certificate thereof being made to the Treasurer by the Commissioner of Patents. — R. S. 4936.

Final — When Must be Paid.

* * * If the final fee is not paid within that period (six months from the time at which it was passed and allowed and notice thereof sent to the applicant or his agent) the patent shall be withheld. — R. S. 4885.

Required to be Paid — As a Condition to the Grant.

(See R. S. 4886).

Witnesses.

(See Witnesses, R. S. 4907).

FEIGNED ISSUES

Questions of Fact — Special Jury.

(See sec. 2, R. S. 4921).

FOREIGN PATENT

General Provision — When Not a Bar.

No person otherwise entitled thereto shall be debarred from receiving a patent for his invention or discovery, nor shall any patent be declared invalid by reason of its having been first patented or caused to be patented by the inventor or his legal representatives or assigns in a foreign country, unless the application for said foreign patent was filed more than twelve months, in cases within the provisions of section forty-eight hundred and eighty-six of the Revised Statutes, and four months in cases of designs, prior to the filing of the application in this country, in which case no patent shall be granted in this country.

An application for patent for an invention or discovery or for a design filed in this country by any person who has previously regularly filed an application for a patent for the same invention, discovery, or design in a foreign country which, by treaty, convention, or law, affords similar privileges to citizens of the United States shall have the same force and effect as the same application would have if filed in this country on the date on which the application for patent for the same invention, discovery, or design was first filed in such foreign country, provided the application in this country is filed within twelve months in cases within the provisions of section forty-eight hundred and eighty-six of the Revised Statutes, and within four months in cases of designs, from the earliest date on which any such foreign application was filed. But no patent shall be granted on an application for patent for an invention or discovery or a design which had been patented or described in a printed publication in this or any foreign country more than two years before the date of the actual filing of the application in this country, or which had been in public use or on sale in this country for more than two years prior to such filing. — R. S. 4887.

Identity of the inventions considered. — Siemens *v.* Sellers, 123 U. S., 276; Commercial *v.* Fairbank, 135 U. S., 176; Elec. *v.* Brush, 52 F. R., 130.

Effect of prior foreign patent. — Telephone Cases, 126 U. S., 1–584.

Term of foreign patent. — Bate *v.* Hammond, 129 U. S., 151; Pohl *v.* Anchor, 134 U. S., 381–387.

A U. S. patent granted for an invention previously patented abroad, but which foreign patent has expired, is without validity. — Huber *v.* Nelson, 148 U. S., 270.

Term of foreign patent — Limitation on face of U. S. patent unnecessary — Certificate of correction. — Edison *v.* U. S., 52 F. R., 300.

The meaning of "previously patented" considered. — Bate *v.* Sulzberger, 157 U. S., 1.

When a Bar to Domestic Patent.

(See Invention — Patentable, R. S. 4886).

FOREIGN USE

Not Bar to Patent.

Whenever it appears that a patentee, at the time of making his application for the patent, believed himself to be the original and

first inventor or discoverer of the thing patented, the same shall not be held to be void on account of the invention or discovery, or any part thereof, having been known or used in a foreign country, before his invention or discovery thereof, if it had not been patented or described in a printed publication. — R. S. 4923

FORFEITED APPLICATION

Renewal of.

(See Application — Renewal, R. S. 4897).

FRAUD

Defense of.

(See Defenses, R. S. 4920).

GOVERNMENT

Employees of Patent Office not to Hold Patents.

All officers and employés of the Patent Office shall be incapable, during the period for which they hold their appointments, to acquire or take, directly or indirectly, except by inheritance or bequest, any right or interest in any patent issued by the Office. — R. S. 480.

Employees Need Not Pay Fees for Patenting — When.

The Secretary of the Interior and the Commissioner of Patents are authorized to grant any officer of the Government, except officers and employés of the Patent Office, a patent for any invention of the classes mentioned in section forty-eight hundred and eighty-six of the Revised Statutes when such invention is used or to be used in the public service, without the payment of any fee: *Provided*, That the applicant in his application shall state that the invention described therein, if patented, may be used by the Government, or any of its officers or employés in prosecution of work for the Government, or by any other person in the United States, without the payment to him of any royalty thereon, which stipulation shall be included in the patent. — Amendment of Mar. 3, 1883, to Sec. 4886.

Infringement by.

That whenever an invention described in and covered by a patent of the United States shall hereafter be used by the United States without license of the owner thereof or lawful right to use the same, such owner may recover reasonable compensation for such use by suit in the Court of Claims: Provided, however, That said Court of Claims shall not entertain a suit or award compensation under the provisions of this Act where the claim for compensation is based on the use by the United States of any article heretofore owned, leased, used by, or in the possession of, the United States: Provided, further, That in any such suit the United States may avail itself of any and all defenses, general or special, which might be pleaded by a defendant in an action for infringement, as set forth in Title Sixty

of the Revised Statutes or otherwise: And provided, further, That the benefits of this Act shall not inure to any patentee, who, when he makes such claim, is in the employment or service of the Government of the United States; or the assignee of any such patentee; nor shall this Act apply to any device discovered or invented by such employee during the time of his employment or service. — Act June 25, 1910, U. S. Comp. Stat. Supp. p. 1457.

See Crozier *v.* Krupp, 224 U. S., 290.

Royalties Not to be Paid by.

No royalty shall be paid by the United States to any one of its officers or employés for the use of any patent for the system, or any part thereof, mentioned in the preceding section, nor for any such patent in which said officers or employés may be directly or indirectly interested. — R. S. 1673.

IMPROVEMENT

Patentability of.

Any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement thereof * * * — R. S. 4886.

INFRINGEMENT

General Provision — Jurisdiction.

The district courts shall have original jurisdiction as follows:

* * * * * * *

Seventh. Of all suits at law or in equity arising under the patent, the copyright, and the trade-mark laws. — Jud. Code, Sec. 24.

Supreme Court of the District of Columbia in patent causes has circuit court jurisdiction. — Cochrane *v.* Deener, 94 U. S., 780.

Jurisdiction. — Hartell *v.* Tilghman, 99 U. S., 547. Albright *v.* Teas, 106 U. S., 613; Oliver *v.* Chem. Works, 109 U. S., 75; Marsh *v.* Nichols, 140 U. S., 344; White *v.* Rankin, 144 U. S., 628.

Court of Claims. — U. S. *v.* McKeever, 23 O. G., 1530. U. S. *v.* Palmer, 128 U. S., 262–372. Hollister *v.* Benedict, 113 U. S., 59–73. Schillinger *v.* U. S., 155 U. S., 163; U. S. *v.* Berdan Mfg. Co., 156 U. S., 552.

Jurisdiction of circuit court. — St. Paul *v.* Starling, 127 U. S., 376–378.

Jurisdiction to annul patents. — U. S. *v.* Bell Telephone, 128 U. S., 315–373; Mowry *v.* Whitney, 14 Wall., 343.

Actions at Law.

Damages for the infringement of any patent may be recovered by action on the case. * * * — R. S. 4919.

Article Made or Purchased Before Application with the Consent of the Inventor.

Every person who purchases of the inventor or discoverer, or, with his knowledge and consent, constructs any newly invented or

discovered machine, or other patentable article, prior to the application by the inventor or discoverer for a patent, or who sells or uses one so constructed, shall have the right to use, and vend to others to be used, the specific thing so made or purchased, without liability therefor. — R. S. 4899.

Claims too Broad — Recovery when — Costs.

Whenever, through inadvertence, accident, or mistake, and without any willful default or intent to defraud or mislead the public, a patentee has, in his specification, claimed to be the original and first inventor or discoverer of any material or substantial part of the thing patented, of which he was not the original and first inventor or discoverer, every such patentee, his executors, administrators, and assigns, whether of the whole or any sectional interest in the patent, may maintain a suit at law or in equity, for the infringement of any part thereof, which was bona fide his own, if it is a material and substantial part of the thing patented, and definitely distinguishable from the parts claimed without right, notwithstanding the specifications may embrace more than that of which the patentee was the first inventor or discoverer. But in every such case in which a judgment or decree shall be rendered for the plaintiff, no costs shall be recovered unless the proper disclaimer has been entered at the Patent Office before the commencement of the suit. But no patentee shall be entitled to the benefits of this section if he has unreasonably neglected or delayed to enter a disclaimer. [See secs. 973, 4917.] — R. S. 4922.

Disclaimer filed before rehearing considered. — Roemer *v.* Bernheim, 132 U. S., 103.

Disclaimer filed after suit begun will prevent recovery of costs. — Sessions *v.* Romadka, 145 U. S., 29.

Costs — Disclaimer.

(See Costs, R. S. 973).

Damages.

(See Damages, R. S. 4919).

Profits.

(See Profits, R. S. 4921).

Defenses.

(See Defenses, R. S. 4920)

Laches.

(See Laches, R. S. 4897).

Designs.

* * * That hereafter, during the term of letters patent for a design, it shall be unlawful for any person other than the owner of said letters patent, without the license of such owner, to apply

the design secured by such letters patent, or any colorable imitation thereof, to any article of manufacture for the purpose of sale, or to sell or expose for sale any article of manufacture to which such design, or colorable imitation shall, without the license of the owner, have been applied, knowing that the same has been so applied. * * * — R. S. sub. 4933, Act Feb. 4, 1881.

Disclaimer.

(See Disclaimer, R. S. 4917).

Pleas — Statutory.

(See Defenses, R. S. 4920).

Renewal Applications — Prior to Issue of Patent.

* * * But no person shall be held responsible in damages for the manufacture or use of any article or thing for which a patent was ordered to issue under such renewed application prior to the issue of the patent. * * * — R. S. 4897.

Rights Secured Before Application.

(See Unpatented Invention, R. S. 4899).

INJUNCTIONS

Power of Equity to Grant — Damages and Accountings.

The several courts vested with jurisdiction of cases arising under the patent laws shall have power to grant injunctions according to the course and principles of courts of equity to prevent the violation of any right secured by patent, on such terms as the court may deem reasonable; and upon a decree being rendered in any such case for an infringement the complainant shall be entitled to recover, in addition to the profits to be accounted for by the defendant, the damages the complainant has sustained thereby; and the court shall assess the same or cause the same to be assessed under its direction. And the court shall have the same power to increase the damages, in its discretion, as is given to increase the damages found by verdicts in actions in the nature of actions of trespass upon the case.

But in any suit or action brought for the infringement of any patent there shall be no recovery of profits or damages for any infringement committed more than six years before the filing of the bill of complaint or the issuing of the writ in such suit or action, and this provision shall apply to existing causes of action. — R. S. 4921.

See Jud. Code, Secs. 263, 264.

INSANE INVENTOR

Application by Committee.

(See Executor, R. S. 4896).

INTERFERENCES

General Provisions.

Whenever an application is made for a patent which, in the opinion of the Commissioner, would interfere with any pending application, or with any unexpired patent, he shall give notice thereof, to the applicants, or applicant and patentee, as the case may be, and shall direct the primary examiner to proceed to determine the question of priority of invention. And the Commissioner may issue a patent to the party who is adjudged the prior inventor, unless the adverse party appeals from the decision of the primary examiner, or of the board of examiners-in-chief, as the case may be, within such time, not less than twenty days, as the Commissioner shall prescribe. — R. S. 4904.

Diligence discussed. — Christie *v.* Seybold, 55 F. R., 69; Yates *v.* Huson, 74 O. G., 1732.

Patentee and applicant. — Burr *v.* Ford, 70 O. G., 275. Porter *v.* Louden, 73 O. G., 1551.

Conception and reduction to practice. — Colhoun *v.* Hodgson, 5 App. D. C., 21; Soley *v.* Hebbard, 70 O. G., 921.

Constructive reduction to practice. — Porter *v.* Louden, 73 O. G., 1551; Croskey *v.* Atterbury, 76 O. G., 163.

Inoperative invention, priority. — Glidden *v.* Noble, 5 App. D. C., 480; Hisey *v.* Peters, 6 App. D. C., 68; Northal *v.* Bernardin, 74 O. G., 655; Carty *v.* Kellogg, 74 O. G., 657; Drawbaugh *v.* Seymour, 77 O. G., 1313.

Abandonment. — La Flare *v.* Chase, 74 O. G., 1735.

Priority. — Shellaberger *v.* Sommer, 74 O. G., 1897.

Foreign patent. — Preliminary statement amended. — Parker *v.* Appert, 75 O. G., 1201.

Partnership. — Milton *v.* Kingsley, 75 O. G., 2193.

Presumption as to inventorship. — Hill *v.* Parmelee, 78 O. G., 170.

The Commissioner of Patents may establish rules for taking affidavits and depositions required in cases pending in the Patent Office, and such affidavits and depositions may be taken before any officer authorized by law to take depositions to be used in the courts of the United States or the State where the officer resides. — R. S. 4905.

The clerk of any court of the United States, for any district or Territory wherein testimony is to be taken for use in any contested case pending in the Patent Office, shall, upon the application of any party thereto, or of his agent or attorney, issue a subpœna for any witness residing or being within such district or Territory, commanding him to appear and testify before any officer in such district or Territory authorized to take depositions and affidavits, at any time and place in the supœna stated. But no witness shall be required to attend at any place more than forty miles from the place where the subpœna is served upon him. — R. S. 4906.

Every witness duly subpœnaed and in attendance shall be allowed the same fees as are allowed to witnesses attending the courts of the United States. — R. S. 4907.

Whenever any witness, after being duly served with such subpœna, neglects or refuses to appear, or after appearing refuses to testify, the judge of the court whose clerk issued the subpœna may, on proof of such neglect or refusal, enforce obedience to the process,

or punish the disobedience, as in other like cases. But no witness shall be deemed guilty of contempt for disobeying such subpœna, unless his fees and traveling expenses in going to, returning from, and one day's attendance at the place of examination, are paid or tendered him at the time of the service of the subpœna; nor for refusing to disclose any secret invention or discovery made or owned by himself. — R. S. 4908.

Every applicant for a patent or for the reissue of a patent, any of the claims of which have been twice rejected, and every party to an interference, may appeal from the decision of the primary examiner, or of the examiner in charge of interferences in such case, to the board of examiners-in-chief; having once paid the fee for such appeal. — R. S. 4909.

If such party is dissatisfied with the decision of the examiners-in-chief, he may, on payment of the fee prescribed, appeal to the Commissioner in person. — R. S. 4910.

Appeal under this section discussed. — Butterworth *v.* Hoe, 112 U. S., 50–60.

When an appeal is taken to the Court of Appeals of the District of Columbia, the appellant shall give notice thereof to the Commissioner, and file in the Patent Office within such time as the Commissioner shall appoint, his reasons of appeal, specifically set forth in writing. — R. S. 4912.

The court shall, before hearing such appeal, give notice to the Commissioner of the time and place of the hearing, and on receiving such notice the Commissioner shall give notice of such time and place in such manner as the court may prescribe, to all parties who appear to be interested therein. The party appealing shall lay before the court certified copies of all the original papers and evidence in the case, and the Commissioner shall furnish the court with the grounds of his decision, fully set forth in writing, touching all the points involved by the reasons of appeal. And at the request of any party interested, or of the court, the Commissioner and the examiners may be examined under oath, in explanation of the principles of the thing for which a patent is demanded. — R. S. 4913.

The court, on petition, shall hear and determine such appeal, and revise the decision appealed from in a summary way, on the evidence produced before the Commissioner, at such early and convenient time as the court may appoint; and the revision shall be confined to the points set forth in the reasons of appeal. After hearing the case the court shall return to the Commissioner a certificate of its proceedings and decision, which shall be entered of record in the Patent Office, and shall govern the further proceedings in the case. But no opinion or decision of the court in any such case shall preclude any person interested from the right to contest the validity of such patent in any court wherein the same may be called in question. — R. S. 4914.

Review confined to point raised. — Forg, 2 App. D. C., 58.

Appeals — Examiners-in-chief.

* * * On the written petition of appellant, to revise and determine upon the adverse decisions of the examiners * * * in interference cases. * * * — R. S. 482.

INTERFERING PATENTS

Suits Affecting — Adjudication in Equity.

Whenever there are interfering patents, any person interested in any one of them, or in the working of the invention claimed under either of them, may have relief against the interfering patentee, and all parties interested under him, by suit in equity against the owners of the interfering patent; and the court, on notice to adverse parties, and other due proceedings had according to the course of equity, may adjudge and declare either of the patents void in whole or in part, or inoperative, or invalid in any particular part of the United States, according to the interest of the parties in the patent or the invention patented. But no such judgment or adjudication shall affect the right of any person except the parties to the suit and those deriving title under them subsequent to the rendition of such judgment. — R. S. 4918.

Relation of improvements to original invention. — Cantrell *v.* Wallick, 117 U. S., 689; Robertson *v.* Blake, 94 U. S., 728.

Decision of Patent Office, effect in suit. — Appleton *v.* Ecaubert, 67 F. R., 917.

Devices actually made as well as face of patent should be considered in determining interference. — Thomson-Houston *v.* Western, 72 F. R., 530.

INVENTION

Patentable — General Provision.

Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof, not known or used by others in this country, *before his invention or discovery thereof*, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, *or more than two years prior to his application*, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceeding had, obtain a patent therefor. — R. S. 4886.

Abandoned experiments. — Seymour *v.* Osborne, 11 Wall., 516. Corn Planter Patent, 23 Wall., 181; Wood Paper Pat., 23 Wall., 566. Deering *v.* Winona Works, 155 U. S., 286; West. *v.* Sperry, 58 F. R., 186.

Abandonment of invention. — Rifle *v.* Whitney, 118 U. S., 22.

Act of invention. — Wells *v.* Curtis, 66 F. R., 318.

Aggregation. — Hailes *v.* Van Wormer, 20 Wall., 353. Reckendorfer *v.* Faber, 92 U. S., 347; Rubber *v.* Welling, 97 U. S., 7; Bussey *v.* Excelsior, 110 U. S., 131; Beecher *v.* Atwater, 114 U. S., 523; Hendy *v.* Golden, 127 U. S., 370; Thatcher *v.* Burtis, 121 U. S., 286; Union *v.* Keith, 139 U. S., 530. Cluett *v.* Claflin, 140 U. S., 180; Patent *v.* Glover, 141 U. S., 560; Derby *v.* Thompson, 146 U. S., 476; Ide *v.* Ball, 149 U. S., 550; Giles *v.* Heysinger, 150 U. S., 627. Richards *v.* Chase, 158 U. S., 299; Richards *v.* Chase, 159

U. S., 477; Palmer *v.* Corning, 156 U. S., 342; Deere *v.* Case, 56 F. R., 841; Griswold, 78 O. G., 482.

Aggregation and combination distinguished. — Stephenson *v.* Brooklyn Co., 114 U. S., 149; Snyder, 78 O. G., 485.

Anticipation of combination claim. — Cantrell *v.* Wallick, 117 U. S., 689; Sutter *v.* Robinson, 119 U. S., 530; Flower *v.* City, 127 U. S., 563; Wollensak *v.* Sargent, 151 U. S., 221; Cons. *v.* Barnard, 156 U. S., 261; American *v.* Pennock, 17 S. C. Reporter, 1; Cochrane *v.* Deener, 94 U. S., 780; Roemer *v.* Simon, 95 U. S., 214; Illinois *v.* Robbins, 52 F. R., 215.

Art, machine, manufacture or composition of matter — Double use — Aggregation. — Fond du Lac *v.* May, 137 U. S., 395.

Article of manufacture. — Union *v.* Van Dusen, 23 Wall., 530; Cohn *v.* U. S., 93 U. S., 366; Andrews *v.* Thum, 67 F. R., 911.

Article distinguished from method of making. — Cochrane *v.* Badische, 111 U. S., 293.

Change of material. — Hicks *v.* Kelsey, 18 Wall., 670. Smith *v.* Goodyear, 93 U. S., 486; Terhune *v.* Phillips, 99 U. S., 592. Brown *v.* District of Columbia, 130 U. S., 87; Florsheim *v.* Schilling, 137 U. S., 64; Chenеau *v.* Comr., 70 O. G., 924. Kilbourne *v.* Bingham, 50 F. R., 697; Edison *v.* U. S., 52 F. R., 300.

Change of parts. — Ives *v.* Hamilton, 92 U. S., 426; Werner *v.* King, 96 U. S., 218; Mach. *v.* Murphy, 97 U. S., 120; Thomson-Houston *v.* Western, 72 F. R., 530.

Change in shape. — Butler *v.* Steckel, 137 U. S., 21–30.

Degree. — Planing Mach. *v.* Keith, 101 U. S., 479; Ansonia *v.* Elec., 144 U. S., 11; Burt *v.* Evory, 133 U. S., 349; Wright *v.* Yuengling, 155 U. S., 47.

Double use. — Tucker *v.* Spaulding, 13 Wall., 453. Brown *v.* Piper, 91 U. S., 37; Roberts *v.* Ryer, 91 U. S., 150; Vinton *v.* Hamilton, 104 U. S., 465; Blake *v.* San Francisco, 113 U. S., 679; Railroad *v.* Safety Truck, 110 U. S., 490; Window Cleaner *v.* Bosley, 15 Brodix, 64. Crescent *v.* Gottfried, 128 U. S., 158; Peters *v.* Hanson, 129 U. S., 541; St. Germain *v.* Brunswick, 135 U. S., 227; Howe *v.* National, 134 U. S., 388–398; Marchand *v.* Emken, 132 U. S., 195–200; Day *v.* Fair Haven, 132 U. S., 98–103; Busell *v.* Stevens, 137 U. S., 423; Lovell *v.* Cary, 147 U. S., 623; Leggett *v.* Oil Co., 149 U. S., 287; Market *v.* Rowley, 155 U. S., 621; National *v.* Thompson, 65 F. R., 427; Beach *v.* Inman, 71 F. R., 420; New Departure *v.* Bevin, 73 F. R., 469; Steiner *v.* Adrian, 59 F. R., 132; Zinsser *v.* Krueger, 48 F. R., 296.

Double use and invention distinguished. — Potts *v.* Creager, 155 U. S., 597; Taylor *v.* Sawyer, 75 F. R., 301.

Equivalents. — Seymour *v.* Osborne, 11 Wall., 516. Smith *v.* Nichols, 21 Wall., 112. Gould *v.* Rees, 15 Wall., 187. Hyndman *v.* Roots, 97 U. S., 224; Mfg. Co. *v.* Mfg. Co., 12 Brod., 281. Imhaeuser *v.* Buerk, 101 U. S., 647; Goodyear *v.* Davis, 102 U. S., 222; Wicke *v.* Ostrum, 103 U. S., 461; Guidet *v.* Brooklyn, 105 U. S., 566; Clough *v.* Gilbert, 106 U. S., 178; King *v.* Gallun, 109 U. S., 99; Consolidated *v.* Walker, 138 U. S., 124; Western *v.* La Rue, 139 U. S., 601; McClain *v.* Ortmayer, 141 U. S., 419; Myers *v.* Shovel, 141 U. S., 674; Hoyt *v.* Horne, 145 U. S., 302; Nat'l *v.* Hedden, 148 U. S., 482; Brigham *v.* Coffin, 149 U. S., 557; Erie *v.* Am., 70 F. R., 58; Hunt *v.* Cassidy, 53 F. R., 257; Briggs, 78 O. G., 169. McKay *v.* Dizer, 16 F. R., 102; Jones *v.* Munger, 49 F. R., 61.

Extensive use. — Magowan *v.* N. Y., 141 U. S., 332; McClain *v.* Ortmayer, 141 U. S., 419; McCreary *v.* Canal Co., 141 U. S., 459; Gandy *v.* Belt Co., 143 U. S., 587; Grant *v.* Walter, 148 U. S., 547; Krementz *v.* Cottle, 148 U. S., 556; Duer *v.* Corbin, 149 U. S., 216; Keystone *v.* Adams, 151 U. S., 139; Olin *v.* Timkin, 155 U. S., 141; Seabury *v.* Am Ende, 152 U. S., 561; Holmes *v.* Truman, 67 F. R., 542; Fox *v.* Perkins, 52 F. R., 205; Dueber *v.* Robbins, 75 F. R., 17; Saunders *v.* Allen, 60 F. R., 610; Watson *v.* Stevens, 51 F. R., 757.

Foreign publication. — Rosewasser *v.* Spieth, 129 U. S., 47.

Idea not patentable. — Pencil Co. *v.* Howard, 20 Wall., 498.

Inoperative structure. — Mitchell *v.* Tilghman, 19 Wall., 287.

Patent covers other analogous uses. — Stow *v.* Chicago, 104 U. S., 547; Wire Cloth *v.* Clinton Co., 67 F. R., 790.

Lack of invention generally. — Lehigh *v.* Kearney, 158 U. S., 461. Belding *v.* Challenge, 151 U. S., 100; Morgan *v.* Albany, 152 U. S., 425; Sargent *v.* Covert, 152 U. S., 516; Haughey *v.* Lee, 151 U. S., 282; Western *v.* Ansonia, 114 U. S., 447–453; Estey *v.* Burdett, 109 U. S., 633; Hartshorn *v.* Saginaw, 119 U. S., 664–679; Preston

v. Manard, 116 U. S., 661–664; Weir *v.* Morden, 125 U. S., 98–108; Hailes *v.* Albany, 123 U. S., 582–589; Holland *v.* Shipley, 127 U. S., 396; Peters *v.* Active, 130 U. S., 626; Pattee *v.* Kingman, 129 U. S., 294–305; Dreyfus *v.* Searle, 124 U. S., 60; Munson *v.* Mayor, 124 U. S., 601–605; Goebel *v.* Goldman, 64 F. R., 787; Consolidated *v.* Holtzer, 67 F. R., 907; Andrews *v.* Thum, 67 F. R., 911; Kilmer *v.* Griswold, 67 F. R., 117; Thompson *v.* Walbridge, 67 F. R., 1021; Kilmer *v.* Griswold, 74 F. R., 561; Philadelphia *v.* Weeks, 61 F. R., 405.

Mechanical skill. — Hollister *v.* Benedict, 113 U. S., 59–73. Morris *v.* McMillin, 112 U. S., 244; Pomace *v.* Ferguson, 119 U. S., 335–338; Yale *v.* Greenleaf, 117 U. S., 554–559; Aron *v.* Manhattan, 132 U. S., 84; Shenfield *v.* Nashawannuck, 137 U. S., 56; Phillips *v.* Detroit, 111 U. S., 604. Royer *v.* Roth, 132 U. S., 201; French *v.* Carter, 137 U. S., 239; Giles *v.* Heysinger, 150 U. S., 627; Black Diamond *v.* Excelsior, 156 U. S., 611; Smith *v.* Macbeth, 67 F. R., 137; Union *v.* Waterbury, 70 F. R., 240; Merritt *v.* Middleton, 61 F. R., 680; Westinghouse *v.* Edison, 63 F. R., 588.

Mechanical method and its relation to article produced — Aggregation. — Two patents to one inventor for one invention. — Mosler *v.* Mosler, 127 U. S., 354.

Mechanical processes criticised. — Risdon *v.* Medart, 158 U. S., 68; Glass Co. *v.* Henderson, 67 F. R., 930.

Must involve invention as well as novelty and utility. — Thompson *v.* Boisselier, 114 U. S., 1; Gardner *v.* Herz, 118 U. S., 180; Hill *v.* Wooster, 132 U. S., 693.

New and useful result. — Loom Co. *v.* Higgins, 105 U. S., 580.

Operativeness and usefulness, evidence of. — Dashiell *v.* Grosvenor, 162 U. S., 425.

Originality of invention, employer and employee. — Thompson *v.* Hall, 130 U. S., 117–122; Forgie *v.* Oil Well, 58 F. R., 871.

Particular arrangement. — Pope *v.* Gormully, 144 U. S., 238; Topliff *v.* Topliff, 145 U. S., 156; Dobson *v.* Cubley, 149 U. S., 117; Corbin *v.* Eagle, 150 U. S., 38; Knapp *v.* Morss, 150 U. S., 221; Howard *v.* Detroit, 150 U. S., 164; Magin *v.* Karle, 150 U. S., 387.

Public use or sale. — Consolidated *v.* Wright, 94 U. S., 92. Elizabeth *v.* Pavement, 97 U. S., 126. Parks *v.* Booth, 102 U. S., 96; Egbert *v.* Lippman, 104 U. S., 333; Worley *v.* Loker, 104 U. S., 340; Hall *v.* Macneale, 107 U. S., 90; Manning *v.* Glue Co., 108 U. S., 462; Miller *v.* Force, 116 U. S., 22; Beedle *v.* Bennett, 122 U. S., 71; Smith *v.* Sprague, 123 U. S., 249; Andrews *v.* Hovey, 124 U. S., 694; Andrews *v.* Hovey, 123 U. S., 267–276; Brush *v.* Condit, 132 U. S., 39–50; Barbed Wire Patent, 143 U. S., 275; (*in this country*). Gandy *v.* Belt Co., 143 U. S., 587; Root *v.* Third Ave., 146 U. S., 210; Kirk *v.* United States, 163 U. S., 49, 911. Gates *v.* Frazier, 153 U. S., 332; Smith *v.* Mellon, 58 F. R., 705; Gamewell *v.* Municipal, 61 F. R., 208; National *v.* Quick, 74 F. R., 236.

Prior knowledge or use. — Forncrook *v.* Root, 127 U. S., 176; Collins *v.* Coes, 130 U. S., 56; Peters *v.* Active, 129 U. S., 530.

Prior publication. — Eames *v.* Andrews, 122 U. S., 40.

Process defined. — Mowry *v.* Whitney, 14 Wall., 620; Wood Paper Pat., 23 Wall., 566. Cochrane *v.* Deener, 94 U. S., 780; Downtown *v.* Yeager, 108 U. S., 466; Fermentation *v.* Maus, 122 U. S., 413–432. Lawther *v.* Hamilton, 124 U. S., 1–11; International *v.* Gaylord, 140 U. S., 55; Royer *v.* Coupe, 146 U. S., 524; Wells *v.* Henderson, 67 F. R., 930; Schwarzwalder *v.* N. Y., 66 F. R., 152; Tannage *v.* Zahn, 70 F. R., 1003. Wall *v.* Leck, 66 F. R., 552; Vt. *v.* Gibson, 56 F. R., 143; Heroult, 5 App. D. C., 90; Am. *v.* Buckskin, 72 F. R., 508.

Process and apparatus claims treated; priority and originality of invention; operative device. — Telephone Cases, 126 U. S., 1–584.

Result not patentable. — Fuller *v.* Yentzer, 94 U. S., 288, 299; Glue Co. *v.* Upton, 97 U. S., 3. Brush *v.* Western, 76 F. R., 761; Browning *v.* Colorado, 61 F. R., 845.

Two patents to one inventor for one invention. — Miller *v.* Eagle Co., 151 U. S., 186; Underwood *v.* Gerber, 149 U. S., 224; Russell *v.* Kern, 69 F. R., 94; Thomson-Houston *v.* West. Elec., 70 F. R., 69; Westinghouse *v.* N. Y., 67 F. R., 962; Fassett *v.* Ewart, 62 F. R., 404; Elec. *v.* Brush, 52 F. R., 130; (Consult also citations under sec. 4919.)

Importance — Necessary to Grant.

* * * And if * * * it shall appear * * * that the same is sufficiently useful and important, the Commissioner shall issue a patent therefor. — R. S. 4893.

INVENTOR

Death of — Who may Apply for Patent.

(See Executor, R. S. 4896).

Who may make Application as.

(See Invention, R. S. 4886).

JUDICIAL CODE

(NOTE: The following is a classification of the sections of the Federal Judicial Code, in effect Jan. 1, 1912, which relate to patents).

Appeals — Circuit Court of Appeals.

(See Circuit Court of Appeals, Secs. 128, 129, Jud. Code).

Appeals — Court of Appeals, D. C.

Sec. 250. Any final judgment or decree of the court of appeals of the District of Columbia may be reexamined and affirmed, reversed, or modified by the Supreme Court of the United States, upon writ of error or appeal in the following cases:

* * * * * * *

Except as provided in the next succeeding section, the judgments and decrees of said court of appeals shall be final in all cases arising under the patent laws, the copyright laws, the revenue laws, the criminal laws, and in admiralty cases; and except as provided in the next succeeding section, the judgments and decrees of said court of appeals shall be final in all cases not reviewable as hereinbefore provided.

Appeals — Injunction.

(See Circuit Court of Appeals, Sec. 129, Jud. Code).

Certification — To Supreme Court.

(See Circuit Court of Appeals, Sec. 239, Jud. Code).

Certiorari — To Court of Appeals, D. C.

(See Court of Appeals, D. C., Sec. 251, Jud. Code).

Certiorari — To Circuit Court of Appeals.

(See Supreme Court, Sec. 240, Jud. Code).

Circuit Courts — Abolished — Transfer of Records.

Sec. 289. The circuit courts of the United States, upon the taking effect of this Act, shall be, and hereby are, abolished; and there-

upon, on said date, the clerks of said courts shall deliver to the clerks of the district courts of the United States for their respective districts all the journals, dockets, books, files, records, and other books and papers of or belonging to or in any manner connected with said circuit courts. * * *

Circuit Courts — Transfer of Powers and Duties.

Sec. 291. Whenever, in any law not embraced within this Act, any reference is made to, or any power or duty is conferred or imposed upon, the circuit courts, such reference shall, upon the taking effect of this Act, be deemed and held to refer to, and to confer such power and impose such duty upon, the district courts.

Circuit Courts of Appeals — Circuits — Constitution.

Sec. 116. There shall be nine judicial circuits of the United States, constituted as follows:

* * * * * * *

Sec. 117. There shall be in each circuit a circuit court of appeals, which shall consist of three judges, of whom two shall constitute a quorum, and which shall be a court of record, with appellate jurisdiction, as hereinafter limited and established.

Circuit Courts of Appeals — Certification to Supreme Court.

Sec. 239. In any case within its appellate jurisdiction, as defined in section 128, the circuit court of appeals at any time may certify to the Supreme Court of the United States any questions or propositions of law concerning which it desires the instruction of that court for its proper decision; and thereupon the Supreme Court may either give its instruction on the questions and propositions certified to it, which shall be binding upon the circuit court of appeals in such case, or it may require that the whole record and cause be sent up to it for its consideration, and thereupon shall decide the whole matter in controversy in the same manner as if it had been brought there for review by writ of error or appeal.

Circuit Courts of Appeals — Certiorari to.

(See Supreme Court, Sec. 240, Jud. Code).

Circuit Courts of Appeals — Injunctions — Interlocutory Decrees.

Sec. 129. Where upon a hearing in equity in a district court, or by a judge thereof in vacation, an injunction shall be granted, continued, refused, or dissolved by an interlocutory order or decree, or an application to dissolve an injunction shall be refused, or an interlocutory order or decree shall be made appointing a receiver, an appeal may be taken from such interlocutory order or decree granting, continuing, refusing, dissolving, or refusing to dissolve, an injunction, or appointing a receiver, to the circuit court of appeals, notwithstanding an appeal in such case might, upon final decree under the statutes regulating the same, be taken directly to the Supreme

Court: Provided, That the appeal must be taken within thirty days from the entry of such order or decree, and it shall take precedence in the appellate court; and the proceedings in other respects in the court below shall not be stayed unless otherwise ordered by that court, or the appellate court, or a judge thereof, during the pendency of such appeal: Provided, however, That the court below may, in its discretion, require as a condition of the appeal an additional bond.

Circuit Courts of Appeals — Jurisdiction. Sec. 128. The circuit courts of appeals shall exercise appellate jurisdiction to review by appeal or writ of error final decisions in the district courts, including the United States district court for Hawaii, in all cases other than those in which appeals and writs of error may be taken direct to the Supreme Court, as provided in section 238, unless otherwise provided by law; and, except as provided in sections 239 and 240, the judgments and decrees of the circuit courts of appeals shall be final in all cases in which the jurisdiction is dependent entirely upon the opposite parties to the suit or controversy being aliens and citizens of the United States, or citizens of different States; also in all cases arising under the patent laws, under the copyright laws, under the revenue laws, and under the criminal laws, and in admiralty cases.

Construction — Arrangement and Classification.

Sec. 295. The arrangement and classification of the several sections of this Act have been made for the purpose of a more convenient and orderly arrangement of the same, and therefore no inference or presumption of a legislative construction is to be drawn by reason of the chapter under which any particular section is placed.

Construction — Continuation of Previous Acts.

Sec. 294. The provisions of this Act, so far as they are substantially the same as existing statutes, shall be construed as continuations thereof, and not as new enactments, and there shall be no implication of a change of intent by reason of a change of words in such statute, unless such change of intent shall be clearly manifest.

Construction — Definition.

Sec. 293. The provisions of sections one to five, both inclusive, of the Revised Statutes, shall apply to and govern the construction of the provisions of this Act. The words " this title," wherever they occur herein, shall be construed to mean this Act.

Courts — Always Open as Courts of Equity.

Sec. 9. The district courts, as courts of admiralty and as courts of equity, shall be deemed always open for the purpose of filing any pleading, of issuing and returning mesne and final process, and of making and directing all interlocutory motions, orders, rules, and other proceedings preparatory to the hearing, upon their merits, of all causes pending therein. Any district judge may, upon reason-

able notice to the parties, make, direct, and award, at chambers or in the clerk's office, and in vacation as well as in term, all such process, commissions, orders, rules, and other proceedings, whenever the same are not grantable of course, according to the rules and practice of the court.

Courts — Special Terms.

Sec. 11. A special term of any district court may be held at the same place where any regular term is held, or at such other place in the district as the nature of the business may require, and at such time and upon such notice as may be ordered by the district judge. Any business may be transacted at such special term which might be transacted at a regular term.

Court of Appeals, D. C. — Appeals from.

(See Appeals, Sec. 250, Jud. Code).

Court of Appeals, D. C. — Certification to Supreme Court.

Sec. 251. * * * It shall also be competent for said court of appeals, in any case in which its judgment or decree is made final under the section last preceding, at any time to certify to the Supreme Court of the United States any questions or propositions of law concerning which it desires the instruction of that court for their proper decision; and thereupon the Supreme Court may either give its instruction on the questions and propositions certified to it, which shall be binding upon said court of appeals in such case, or it may require that the whole record and cause be sent up to it for its consideration, and thereupon shall decide the whole matter in controversy in the same manner as if it had been brought there for review by writ of error or appeal.

Court of Appeals, D. C. — Certiorari to.

(See Supreme Court, Sec. 251, Jud. Code).

Decrees — Interlocutory — Appeals.

(See Circuit Courts of Appeals, Sec. 129, Jud. Code).

Equity — Jurisdiction — Adequate Remedy at Law.

(See Jurisdiction, Sec. 267, Jud. Code).

Injunction — Appeals.

(See Circuit Courts of Appeals, Sec. 129, Jud. Code)

Injunction — Circuit Judge.

(See Injunction, Sec. 264, Jud. Code).

Injunction — In what Case Judge May Grant.

Sec. 264. Writs of injunction may be granted by any justice of the Supreme Court in cases where they might be granted by the

Supreme Court; and by any judge of a district court in cases where they might be granted by such court. But no justice of the Supreme Court shall hear or allow any application for an injunction or restraining order in any cause pending in the circuit to which he is allotted, elsewhere than within such circuit, or at such place outside of the same as the parties may stipulate in writing, except when it can not be heard by the district judge of the district. In case of the absence from the district of the district judge, or of his disability, any circuit judge of the circuit in which the district is situated may grant an injunction or restraining order in any case pending in the district court, where the same might be granted by the district judge.

Injunction — Supreme Court Justices.

(See Injunction, supra, Sec. 264, Jud. Code).

Injunction — Temporary Restraining Order.

Sec. 263. Whenever notice is given of a motion for an injunction out of a district court, the court or a judge thereof may, if there appears to be danger of irreparable injury from delay, grant an order restraining the act sought to be enjoined until the decision upon the motion; and such order may be granted with or without security, in the discretion of the court or judge.

Jurisdiction — Circuit Court of Appeals.

(See Circuit Court of Appeals, Sec. 128, Jud. Code).

Jurisdiction — District Courts.

Sec. 24. The district courts shall have original jurisdiction as follows:

* * * * * * *

Seventh. Of all suits at law or in equity arising under the patent, the copyright, and the trade-mark laws.

Jurisdiction — Equity — Adequate Remedy at Law.

Sec. 267. Suits in equity shall not be sustained in any court of the United States in any case where a plain, adequate, and complete remedy may be had at law.

Jurisdiction — Exclusive of State Courts.

Sec. 256. The jurisdiction vested in the courts of the United States in the cases and proceedings hereinafter mentioned, shall be exclusive of the courts of the several states:

* * * * * * *

Second. Of all suits for penalties and forfeitures incurred under the laws of the United States.

* * * * * * *

Fifth. Of all cases arising under the patent-right, or copyright laws of the United States.

Jurisdiction — Residence or Place of Business — Patent Causes.

Sec. 48. In suits brought for the infringement of letters patent the district courts of the United States shall have jurisdiction, in law or in equity, in the district of which the defendant is an inhabitant, or in any district in which the defendant, whether a person, partnership, or corporation, shall have committed acts of infringement and have a regular and established place of business. If such suit is brought in a district of which the defendant is not an inhabitant, but in which such defendant has a regular and established place of business, service of process, summons, or subpœna upon the defendant may be made by service upon the agent or agents engaged in conducting such business in the district in which suit is brought.

Jurisdiction — Several Defendants — Diversity of Residence.

Sec. 50. When there are several defendants in any suit at law or in equity, and one or more of them are neither inhabitants of nor found within the district in which the suit is brought, and do not voluntarily appear, the court may entertain jurisdiction, and proceed to the trial and adjudication of the suit between the parties who are properly before it; but the judgment or decree rendered therein shall not conclude or prejudice other parties not regularly served with process nor voluntarily appearing to answer; and non-joinder of parties who are not inhabitants of nor found within the district, as aforesaid, shall not constitute matter of abatement or objection to the suit.

Repeal and Superseding Provisions.

Sec. 297, among other things, repeals or effects supersedence of sections and acts heretofore embodied in the so-called patent laws:

629, R. S., repealed.

Act Mar. 3, 1897, sub 629, superseded by Sec. 48.

699, R. S., repealed.

711, R. S., repealed, see Sec. 256.

Act Mar. 3, 1891, secs. 2 and 4, sub 711, superseded by Secs. 116 and 117.

Act Feb. 19, 1897, sec. 6, sub 711, superseded by Secs. 239 and 240.

Act Feb. 9, 1893, secs. 6 and 8, sub 4915, repealed by Sec. 250.

Revision of Previous Acts — Supersedence.

Sec. 292. Wherever, in any law not contained within this Act, a reference is made to any law revised or embraced herein, such reference, upon the taking effect hereof, shall be construed to refer to the section of this Act into which has been carried or revised the provision of law to which reference is so made.

Supreme Court — Certification of Questions to.

(See Circuit Court of Appeals, Sec. 239, Jud. Code).

Supreme Court — Certiorari to Circuit Courts of Appeals.

Sec. 240. In any case, civil or criminal, in which the judgment or decree of the circuit court of appeals is made final by the provisions of this Title, it shall be competent for the Supreme Court to require, by certiorari or otherwise, upon the petition of any party thereto, any such case to be certified to the Supreme Court for its review and determination, with the same power and authority in the case as if it had been carried by appeal or writ of error to the Supreme Court.

Supreme Court — Certiorari to Court of Appeals, D. C.

Sec. 251. In any case in which the judgment or decree of said court of appeals is made final by the section last preceding, it shall be competent for the Supreme Court of the United States to require, by certiorari or otherwise, any such case to be certified to it for its review and determination, with the same power and authority in the case as if it it had been carried by writ of error or appeal to said Supreme Court.

* * * * * * *

Title — Designation.

Sec. 296. This Act may be designated and cited as "The Judicial Code."

JURISDICTION.

Circuit Courts — Law and Equity.

(See Jud. Code, Sec. 24).

Court of Claims.

(See Government, Act June 25, 1910).

Designs — Infringement.

* * * And the full amount of such liability may be recovered by the owner of the letters patent, to his own use, in any circuit court of the United States having jurisdiction of the parties, either by action at law or upon a bill in equity for an injunction to restrain such infringement.

SEC. 2. That nothing in this act contained shall prevent, lessen, impeach or avoid any remedy at law or in equity which any owner of letters patent for a design, aggrieved by the infringement of the same, might have had if this act had not been passed; but such owner shall not twice recover the profit made from the infringement. — R. S. 4933 and Act Feb. 4, 1887.

Patent Causes.

(See Jud. Code, Sec. 256).

Place and Person.

(See Jud. Code, Sec. 48).

JURY TRIAL

Equity Cases — Questions of Fact.

SEC. 2. The said courts (U. S. Circuit Courts) when sitting in equity for the trial of patent causes, may empanel a jury of not less than five and not more than twelve persons, subject to such general rules in the premises as may, from time to time, be made by the Supreme Court, and submit to them such questions of fact arising in such case as such circuit court shall deem expedient.

And the verdict of such jury shall be treated and proceeded upon in the same manner and with the same effect as in the case of issues sent from chancery to a court of law and returned with such findings. — R. S. 4921.

LACHES

Application — Abandonment.

(See Invention, R. S. 4886).

Application — Prosecution.

(See Application, R. S. 4894).

Claims too Broad — Failure to File Disclaimer.

* * * But no patentee shall be entitled to the benefits of this section if he has unreasonably neglected or delayed to enter a disclaimer. — R. S. 4922.

Reissue.

(See Reissue, R. S. 4916).

LAW ACTIONS

Damages.

(See Damages, R. S. 4919).

LETTERS PATENT

General Provision — Contents.

Every patent shall contain a short title or description of the invention or discovery, correctly indicating its nature and design, and a grant to the patentee, his heirs or assigns, for the term of seventeen years, of the exclusive right to make, use, and vend the invention or discovery throughout the United States and the Territories thereof, referring to the specification for the particulars thereof. A copy of the specification and drawings shall be annexed to the patent and be a part thereof. — R. S. 4884.

Patented articles subject to State police laws. — Patterson *v.* Kentucky, 97 U. S., 501. Webber *v.* Va., 103 U. S., 344.

Patents are property. — Densmore *v.* Scofield, 102 U. S., 375.

Government has no right to use patented inventions without compensation. — James *v.* Campbell, 104 U. S., 356.

General Provision — Date.

Every patent shall issue within a period of three months from the date of the payment of the final fee, which fee shall be paid not later than six months from the time at which the application was passed and allowed and notice thereof was sent to the applicant or his agent; and if the final fee is not paid within that period, the patent shall be withheld. — R. S. 4885, Amended May 23, 1908.

General Provision — Grant Issuance Attestation.

All patents shall be issued in the name of the United States of America, under the seal of the Patent Office, and shall be signed by the Commissioner of Patents, and they shall be recorded, together with the specifications, in the Patent Office in books to be kept for that purpose. — R. S. 4883.

Omission of signature of the Secretary. — Marsh *v.* Nichols Co., 128 U. S., 605.

Actions to Compel Issue — Actions in Equity.

(See Actions — Equity, R. S. 4915).

Assignment Before Issue.

Patents may be granted and issued or reissued to the assignee of the inventor or discoverer; but the assignment must first be entered of record in the Patent Office. And in all cases of an application by an assignee for the issue of a patent, the application shall be made and the specification sworn to by the inventor or discoverer; and in all cases of an application for a reissue of any patent, the application must be made and the corrected specification signed by the inventor or discoverer, if he is living, unless the patent was issued and the assignment made before the eighth day of July, eighteen hundred and seventy. — R. S. 4895.

Assignee of patent before issue. — Hendrie *v.* Sayles, 98 U. S., 546.

Assignment — Execution and Recording.

(See Assignment — By Instrument in Writing, R. S. 4898).

Authentication — Seal of Patent Office.

The seal heretofore provided for the Patent Office shall be the seal of the Office, with which letters patent and papers issued from the Office shall be authenticated. — R. S. 478.

Certified Copies — How Obtained.

* * * Any person making application therefor, and paying the fee required by law, shall have certified copies thereof. — R. S. 892.

Designs.

(See Designs, R. S. 4929).

Drawings — Part of Specification.

(See Letters Patent — Contents, R. S. 4884).

Duration of Grant.

Every patent shall contain * * * a grant to the patentee, his heirs or assigns, for the term of seventeen years. * * * — R. S. 4884.

Duration — Limitation by Foreign Patent.

(See Foreign Patent — Effect on U. S. Application, R. S. 4887).

For what Granted.

(See Inventions — Classes of, R. S. 4886).

Foreign Use — No Bar to Grant — When.

(See Anticipation — Prior Foreign Invention, R. S. 4923).

Grant to Representatives of Deceased or Insane Inventor.

(See Executor, R. S. 4896).

Granted to Assignee.

(See Assignment — Before Issue, R. S. 4895).

Interest in — Patent Office Employees.

(See Employees — Patent Office, R. S. 480).

Issuance — Signature, Seal and Record.

All patents shall be issued in the name of the United States of America, under the seal of the Patent Office, and shall be signed by the Commissioner of Patents, and they shall be recorded, together with the specifications, in the Patent Office in books to be kept for that purpose. — R. S. 4883.

Recording of — In Patent Office.

(See Letters Patent — Issuance, R. S. 4883).

Sealing.

The seal heretofore provided for the Patent Office shall be the seal of the Office, with which letters patent and papers issued from the Office shall be authenticated. — R. S. 478.

Scope of Grant — Territory Included.

Every patent shall contain * * * a grant to the patentee, his heirs and assigns * * * throughout the United States and Territories thereof. * * * — R. S. 4884.

Short Title.

(See Letters Patent — Contents, R. S. 4884).

LITHOGRAPHING AND ENGRAVING

The lithographing and engraving required by the two preceding sections shall be awarded to the lowest and best bidders for the

interests of the Government, due regard being paid to the execution of the work, after due advertising by the Congressional Printer under the direction of the Joint Committee on Printing; but the Joint Committee on Printing may empower the Congressional Printer to make immediate contracts for engraving whenever, in their opinion, the exigencies of the public service will not justify waiting for advertisement and award; or if, in the judgment of the Joint Committee on Printing, the work can be performed under the direction of the Commissioner of Patents more advantageously than in the manner above prescribed, it shall be so done, under such limitations and conditions as the Joint Committee on Printing may from time to time prescribe. — R. S. 492.

LICENSE

Assignment.

(See Assignment, R. S. 4898).

Implied — Arising Before Application.

Every person who purchases of the inventor or discoverer, or, with his knowledge and consent, constructs any newly invented or discovered machine, or other patentable article, prior to the application of the inventor or discoverer for a patent, or who sells or uses one so constructed, shall have the right to use, and vend to others to be used, the specific thing so made or purchased, without liability therefor. — R. S. 4899.

LIMITATIONS

Statute of.

* * * But in any suit or action brought for the infringement of any patent there shall be no recovery of profits or damages for any infringement committed more than six years before the filing of the bill of complaint or the issuing of the writ in such suit or action, and this provision shall apply to existing causes of action. — R. S. 4921.

MACHINE

Patentability of.

(See Invention, R. S. 4886).

MANUFACTURE

Patentability of.

(See Invention, R. S. 4886).

MARINE SERVICE

Adoption of Patented Articles — How Recommended.

No patented article connected with marine engines shall hereafter be purchased or used in connection with any steam vessels of war until the same shall have been submitted to a competent

board of naval engineers, and recommended by such board, in writing, for purchase and use. — R. S. 1537.

MARKING ARTICLES PATENTED

Necessity and Manner — Result of Not Marking.

It shall be the duty of all patentees, and their assigns and legal representatives, and of all persons making or vending any patented article for or under them, to give sufficient notice to the public that the same is patented; either by fixing thereon the word "patented," together with the day and year the patent was granted; or when, from the character of the article, this can not be done, by fixing to it, or to the package wherein one or more of them is inclosed, a label containing the like notice; and in any suit for infringement, by the party failing so to mark, no damages shall be recovered by the plaintiff, except on proof that the defendant was duly notified of the infringement, and continued, after such notice, to make, use, or vend the article so patented. — R. S. 4900.

Sufficiency of notice. — Sessions *v.* Romadka, 145 U. S., 29; Dunlap *v.* Schofield, 152 U. S., 244; Beach *v.* Inman Co., 71 F. R., 420.

Penalty for False Marking.

Every person who, in any manner, marks upon anything made, used or sold by him for which he has not obtained a patent, the name or any imitation of the name of any person who has obtained a patent therefor, without the consent of such patentee, or his assigns or legal representatives; or,

Who, in any manner, marks upon or affixes to any such patented article the word "patent" or "patentee" or the words "letters patent" or any word of like import, with intent to imitate or counterfeit the mark or device of the patentee, without having the license or consent of such patentee or his assigns or legal representatives; or,

Who, in any manner, marks upon or affixes to any unpatented article the word "patent" or any word importing that the same is patented, for the purpose of deceiving the public, shall be liable, for every such offense, to a penalty of not less than one hundred dollars, with costs; one-half of said penalty to the person who shall sue for the same, and the other to the use of the United States, to be recovered by suit in any district court of the United States within whose jurisdiction such offense may have been committed. — R. S. 4901.

MODELS

Arrangement and Exhibition of — Public Inspection.

The Commissioner of Patents shall cause to be classified and arranged in suitable cases, in the rooms and galleries provided for that purpose, the models, specimens of composition, fabrics, manufactures, works of art, and designs, which have been or shall be de-

posited in the Patent Office; and the rooms and galleries shall be kept open during suitable hours for public inspection. — R. S. 484.

Designs — Dispensed with — When.

The Commissioner may dispense with models of designs when the design can be sufficiently represented by drawings or photographs. — R. S. 4930.

Disposition of — Rejected Applications.

The Commissioner of Patents may restore to the respective applicants such of the models belonging to rejected applications as he shall not think necessary to be preserved, or he may sell or otherwise dispose of them after the application has been finally rejected for one year, paying the proceeds into the Treasury, as other patent moneys are directed to be paid. — R. S. 485.

Reissue — Amendment.

(See Reissue).

When Requisite.

In all cases which admit of representation by model, the applicant, if required by the Commissioner, shall furnish a model of convenient size to exhibit advantageously the several parts of his invention or discovery. — R. S. 4891.

NOTICE OF ALLOWANCE

(See R. S. 4885).

NOVELTY

Designs — Prior Patent, Publication, or Use.

(See Designs — Patentability of, R. S. 4929).

Prior Foreign Invention — When Not Anticipation.

(See Anticipation — Prior Foreign Invention, R. S. 4923).

Prior Use — Prior Publication.

Any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement thereof, not known or used by others in this country *before his invention or discovery thereof*, and not patented or described in any printed publication in this or any foreign country before his invention or discovery thereof, *or more than two years prior to his application*, and not in public use or on sale *in this country* for more than two years prior to his application * * * may * * * obtain a patent therefor. — R. S. 4886.

Note: Amendments of Mar. 3, 1897, in italics.

Required — Novelty and Utility.

Any person who has invented or discovered any new and useful * * * — R. S. 4886.

OATH

General Provisions.

The applicant shall make oath that he does verily believe himself to be the original and first inventor or discoverer of the art, machine, manufacture, composition or improvement for which he solicits a patent; that he does not know and does not believe that the same was ever before known or used; and shall state of what country he is a citizen. Such oath may be made before any person within the United States authorized by law to administer oaths, or, when the applicant resides in a foreign country, before any minister, chargé d'affaires, consul, or commercial agent holding commission under the Government of the United States, or before any notary public, *judge, or magistrate having an official seal and authorized to administer oaths in* the foreign country in which the applicant may be, *whose authority shall be proved by certificate of a diplomatic or consular officer of the United States.*— R. S. 4892.

Note: The italics indicate the change made by amendment of Mar. 3, 1903.

Not necessary to recite that oath has been taken. — Seymour *v.* Osborne, 11 Wall., 516.

Oath must be made by the inventor. — Kennedy *v.* Hazelton, 128 U. S., 667–673.

Executor, Administrator or Committee.

(See Executor, R. S. 4896).

Requirement of — Assigned Invention.

Patents may be granted and issued or reissued to the assignee of the inventor or discoverer; but the assignment must first be entered of record in the Patent Office. And in all cases of an application by an assignee for the issue of a patent, the application shall be made and the specification sworn to by the inventor or discoverer; and in all cases of an application for a reissue of any patent, the application must be made and the corrected specification signed by the inventor or discoverer, if he is living, unless the patent was issued and the assignment made before the eighth day of July, 1870. — R. S. 4895.

OFFICIAL GAZETTE

Publication of — Authority for.

The Commissioner of Patents may print, or cause to be printed, copies of the claims of current issues. * * * — R. S. 489.

PAPERS AND DOCUMENTS

Legibility — Printing.

The Commissioner of Patents may require all papers filed in the Patent Office, if not correctly, legibly, and clearly written, to be printed at the cost of the party filing them. — R. S. 488.

PATENT OFFICE

General Provisions.

The Secretary of the Interior is charged with the supervision of public business relating to the following subjects:

* * * * * * *

Fifth. Patents for inventions. — R. S. 441.

Jurisdiction of the Secretary on appeal from Commissioner. — Butterworth *v.* Hoe, 112 U. S., 50–60.

There shall be in the Department of the Interior an office known as the Patent Office, where all records, books, models, drawings, specifications, and other papers and things pertaining to patents shall be safely kept and preserved. — R. S. 475.

Classifications.

The Commissioner of Patents shall cause to be classified and arranged in suitable cases, in the rooms and galleries provided for that purpose, the models, specimens of composition, fabrics, manufactures, works of art, and designs which have been or shall be deposited in the Patent Office; and the rooms and galleries shall be kept open during suitable hours for public inspection. — R. S. 484.

Disbursements — Disbursing Clerk.

All disbursements for the Patent Office shall be made by the disbursing clerk of the Interior Department. — R. S. 496.

Documents, etc. — Preservation of.

There shall be in the Department of the Interior an office known as the Patent Office, where all records, books, models, drawings, specifications, and other papers and things pertaining to patents shall be safely kept and preserved. — R. S. 475.

Employees — Number and Salaries.

(For list of minor employees, salaries, etc., see R. S. 440 and amendments thereto, and also the several appropriation acts of Congress).

Library — Purchase of Books.

There shall be purchased for the use of the Patent Office a library of such scientific works and periodicals, both foreign and American, as may aid the officers in the discharge of their duties, not exceeding the amount annually appropriated for that purpose.

For purchase of professional and scientific books and expenses of transporting publications of patents issued by the Patent Office to foreign governments, two thousand five hundred dollars. — R. S. 486 and Act Feb. 3, 1905.

Officials — Appointment of.

There shall be in the Patent Office a Commissioner of Patents, one Assistant Commissioner, and three examiners-in-chief, who shall be appointed by the President, by and with the advice and consent of the Senate. All other officers, clerks, and employés authorized by law for the office shall be appointed by the Secretary of the Interior, upon the nomination of the Commissioner of Patents. — R. S. 476.

Publications — Law and Decisions.

The Commissioner of Patents may print, or cause to be printed, copies of the claims of current issues, and copies of such laws, decisions, regulations, and circulars as may be necessary for the information of the public. — R. S. 489.

Seal of — Authentication by.

The seal heretofore provided for the Patent Office shall be the seal of the Office, with which letters patent and papers issued from the Office shall be authenticated. — R. S. 478.

Secretary of the Interior — Charged with Supervising.

The Secretary of the Interior is charged with the supervision of public business relating to the following subjects:

* * * * * * *

Fifth. Patents for inventions. — R. S. 441.

PRIORITY

Between Applicants — Applicant and Patentee.

(See Interferences, R. S 4904).

Interfering Patents.

(See Interfering Patents, R. S. 4918).

PROCESS

Patentability of.

(See Invention, R. S. 4886).

PROFITS

General Provision.

The several courts vested with jurisdiction of cases arising under the patent laws shall have power to grant injunctions according to the course and principles of courts of equity, to prevent the violation of any right secured by patent, on such terms as the court may deem reasonable; and upon a decree being rendered in any such case for an infringement the complainant shall be entitled to recover, in addition to the profits to be accounted for by the defendant, the damages the complainant has sustained thereby; and the court shall assess the same or cause the same to be assessed under its

direction. And the court shall have the same power to increase such damages, in its discretion, as is given to increase the damages found by verdicts in actions in the nature of actions of trespass upon the case.

But in any suit or action brought for the infringement of any patent there shall be no recovery of profits or damages for any infringement committed more than six years before the filing of the bill of complaint or the issuing of the writ in such suit or action, and this provision shall apply to existing causes of action. — R. S. 4921.

Articles imported from abroad. — *Measure of damages.* — Boesch *v.* Graff, 133 U. S., 697.

Compensatory damages. — Birdsall *v.* Coolidge, 93 U. S., 64.

Court will not interfere to enjoin a pending suit at law, much less the bringing of one in the future. — Hapgood *v.* Hewitt, 119 U. S., 226.

Decree against all defendants. — Hohorst *v.* Hamburg Am., 148 U. S., 262.

Effect of laches on right to preliminary injunction. — Keyes *v.* Eureka, 158 U. S., 150; Russell *v.* Kern, 69 F. R., 94.

Effect of expiration of patent before final decree. — Beedle *v.* Bennett, 122 U. S., 71; Clark *v.* Wooster, 119 U. S., 322.

Infringement by equivalents. — Seymour *v.* Osborne, 11 Wall., 516. Gould *v.* Rees, 15 Wall., 187. Cawood Patent, 94 U. S., 695.

Infringer's liability. — Mowry *v.* Whitney, 14 Wall., 620. Philp *v.* Nock, 17 Wall., 460. Packet Co. *v.* Sickles, 19 Wall., 611. Littlefield *v.* Perry, 21 Wall., 205; Mason *v.* Graham, 23 Wall., 261; Tremolo Patent, 23 Wall., 518; Burdell *v.* Denig, 92 U. S., 716. Mevs *v.* Conover, 11 O. G., 1111. Elizabeth *v.* Pavement, 97 U. S., 126. Marsh *v.* Seymour, 97 U. S., 348; Goulds *v.* Cowing, 105 U. S., 253; Crosby *v.* Safety Valve, 141 U. S., 441; McCreary *v.* Canal Co., 141 U. S., 459; Sessions *v.* Romadka, 145 U. S., 29; Consumer *v.* Am. Co., 50 F. R., 778.

Liabilities of parties, maker, user, and seller. — Birdsell *v.* Shaliol, 112 U. S., 485.

Measure of damages. — Garretson *v.* Clark, 111 U. S., 120; Black *v.* Thorne, 111 U. S., 122; Rude *v.* Westcott, 130 U. S., 152. Hurlbut *v.* Schillinger, 130 U. S., 456; Cornely *v.* Marckwald, 131 U. S., 159; Thomson *v.* Wooster, 114 U. S., 104; Clark *v.* Wooster, 119 U. S., 322; Seabury *v.* Am Ende, 152 U. S., 561; Warren *v.* Keep, 155 U. S., 265; Belknap *v.* Schild, 16 S. C. Reporter, 443; Holmes *v.* Truman, 67 F. R., 542; Hunt *v.* Cassidy, 53 F. R., 257; Sayre *v.* Scott, 55 F. R., 971; Keystone *v.* Adams, 151 U. S., 139; Coupe *v.* Royer, 155 U. S., 565; Tilghman *v.* Proctor, 125 U. S., 136; Tuttle *v.* Claflin, 76 F. R., 227; Mosher *v.* Joyce, 51 F. R., 441.

Measure of damages, interest on damages. — *Death of patentee during suit.* — Railroad *v.* Turrill, 110 U. S., 301.

Not necessary to show recovery at law to warrant jurisdiction in equity for injunction. — McCoy *v.* Nelson, 121 U. S., 484.

Jurisdiction. — Heaton Co. *v.* Eureka Co., 78 O. G., 171.

Perpetual injunction granted. — Safety Valve *v.* Steam Co., 113 U. S., 157.

Violation of preliminary injunction. — Warden *v.* Searles, 121 U. S., 14.

Injunction. — Am. *v.* National Co., 51 F. R., 229.

SEC. 2. That said courts [U. S. district courts], when sitting in equity for the trial of patent causes, may impanel a jury of not less than five and not more than twelve persons, subject to such general rules in the premises as may, from time to time, be made by the Supreme Court, and submit to them such questions of fact arising in such cause as such circuit court shall deem expedient.

And the verdict of such jury shall be treated and proceeded upon in the same manner and with the same effect as in the case of issues sent from chancery to a court of law and returned with such findings. — Act Feb. 16, 1875.

PRINTING

Papers Filed.

The Commissioner of Patents may require all papers filed in the Patent Office, if not correctly, legibly, and clearly written, to be printed at the cost of the party filing them. — R. S. 488.

PUBLICATION

Claims, Laws, Decisions.

The Commissioner of Patents may print, or cause to be printed, copies of the claims of current issues, and copies of such laws, decisions, regulations, and circulars as may be necessary for the information of the public. — R. S. 489.

Specifications and Drawings.

The Commissioner of Patents is authorized to have printed, from time to time, for gratuitous distribution, not to exceed one hundred and fifty copies of the complete specifications and drawings of each patent hereafter issued, together with suitable indexes, one copy to be placed for free public inspection in each capitol of every State and Territory, one for the like purpose in the clerk's office of the district court of each judicial district of the United States, except when such offices are located in State or Territorial capitols, and one in the Library of Congress, which copies shall be certified under the hand of the Commissioner and seal of the Patent Office, and shall not be taken from the depositories for any other purpose than to be used as evidence. [See § 894.] — R. S. 490.

The Commissioner of Patents is authorized to have printed such additional numbers of copies of specifications and drawings, certified as provided in the preceding section, at a price not to exceed the contract price for such drawings, for sale, as may be warranted by the actual demand for the same; and he is also authorized to furnish a complete set of such specifications and drawings to any public library which will pay for binding the same into volumes to correspond with those in the Patent Office and for the transportation of the same, and which shall also provide for proper custody for the same, with convenient access for the public thereto, under such regulations as the Commissioner shall deem reasonable. — R. S. 491.

PUBLIC USE

Prior.

(See Novelty — Prior Use, R. S. 4886).

Prior Foreign Use — When Not a Bar.

(See Anticipation — Prior Foreign Invention, R. S. 4923).

PURCHASER

Article Made Before Application — License.

(See Infringement — Article made before Application, R. S. 4899).

QUESTION OF FACT

In Equity — Trial by Jury.

(See Actions — Equity, R. S. 4921).

RECORDS AND DOCUMENTS

Certified Copies — How Obtained.

* * * Any person making application therefor and paying the fee required by law, shall have certified copies thereof. — R. S. 892.

Evidence — Patent Office Records.

(See Evidence, R. S. 892).

REDUCTION TO PRACTICE

General Requirements.

(See R S. 4886 and 4888).

REISSUE

General Provision.

Whenever any patent is inoperative or invalid, by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention or discovery more than he had a right to claim as new, if the error has arisen by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, the Commissioner shall, on the surrender of such patent and the payment of the duty required by law, cause a new patent for the same invention, and in accordance with the corrected specification, to be issued to the patentee, or, in case of his death or of an assignment of the whole or any undivided part of the original patent, then to his executors, administrators, or assigns, for the unexpired part of the term of the original patent. Such surrender shall take effect upon the issue of the amended patent. The Commissioner may, in his discretion, cause several patents to be issued for distinct and separate parts of the thing patented, upon demand of the applicant, and upon payment of the required fee for a reissue for each of such reissued letters patent. The specifications and claim in every such case shall be subject to revision and restriction in the same manner as original applications are. Every patent so reissued, together with the corrected specifications, shall have the same effect and operation in law, on the trial of all actions for causes thereafter arising, as if the same had been originally filed in such corrected form; but no new matter shall be introduced into the specification, nor in case of a machine patent shall the model or drawings be amended, except each by the other; but when there is neither model nor drawing, amendments may be made upon proof satisfactory to the Commissioner that such new matter or amendment was a part of the original invention, and was omitted from the specification by inadvertence, accident, or mistake, as aforesaid. — R. S. 4916.

Reissue must be for original invention. — Seymour *v.* Osborne, 11 Wall., 516. Littlefield *v.* Perry, 21 Wall., 205; Gill *v.* Wells, 22 Wall., 1; Union *v.* Van Dusen, 23 Wall., 530; Russell *v.* Dodge, 93 U. S., 460; Marsh *v.* Seymour, 97 U. S., 348; Powder *v.* Powder, 98 U. S., 126; Ball *v.* Langles, 102 U. S., 128; Garneau *v.* Dozier, 102 U. S., 230; James *v.* Campbell, 104 U. S., 356; Heald *v.* Rice, 104 U. S., 737; Johnston *v.* R. R., 105 U. S., 539; Wing *v.* Anthony, 106 U. S., 142. Gage *v.* Herring, 107 U. S., 640; McMurray *v.* Mallory, 111 U. S., 97–109; Cochrane *v.* Badische, 111 U. S., 203; Eachus *v.* Broomall, 115 U. S., 429; Worden *v.* Searls, 121 U. S., 14; Pattee *v.* Kingman, 129 U. S., 294; Flower *v.* Detroit, 127 U. S., 563; Farmers *v.* Challenge, 128 U. S., 506; Dunham *v.* Dennison, 154 U. S., 103; Olin *v.* Timkin, 155 U. S., 141; Lehigh *v.* Kearney, 158 U. S., 461; Pat. Clothing *v.* Glover, 141 U. S., 560; Freeman *v.* Asmus, 145 U. S., 226; Huber *v.* Nelson, 148 U. S., 270; Leggett *v.* Oil Co., 149 U. S., 287; Corbin *v.* Eagle, 150 U. S., 38; American *v.* Johnston, 52 F. R., 229.

Can not proceed on original patent if reissue is void. — Eby *v.* King, 158 U. S., 366.

Defective specification, inoperative patent; mistake, laches, new matter, reinstatement of claims. — Yale *v.* Berkshire, 135 U. S., 342.

Disclaimer to new matter in reissue considered. — Hurlbut *v.* Schillinger, 130 U. S., 456.

Enlarged claim must be sought within two years. — Topliff *v.* Topliff, 145 U. S., 156; Wollensak *v.* Reiher, 115 U. S., 96.

Intervening rights. — Lumber *v.* Rodgers, 112 U. S., 659; Clements *v.* Excavating, 109 U. S., 641–650; Turner *v.* Stamping, 111 U. S., 319; White *v.* Dunbar, 110 U. S., 47; Cornell *v.* Weidner, 127 U. S., 261; Brown *v.* Davis, 116 U. S., 237; Mahn *v.* Harwood, 112 U. S., 354; Ives *v.* Sargent, 119 U. S., 652; Newton *v.* Furst, 119 U. S., 373.

Inadvertence or mistake. — Coon *v.* Wilson, 113 U. S., 268; Yale *v.* James, 125 U. S., 447.

Insufficient specification, accident or mistake, enlargement of claims. — Eames *v.* Andrews, 122 U. S., 40; Matthews *v.* Iron Clad, 124 U. S., 347.

Matter purposely erased in original. — Leggett *v.* Avery, 101 U. S., 256; Goodyear *v.* Davis, 102 U. S., 222; Cartridge *v.* Cartridge, 112 U. S., 624; Beecher *v.* Atwater, 114 U. S., 523; Crawford *v.* Heysinger, 123 U. S., 589; Dobson *v.* Lees, 137 U. S., 258.

Question of fact settled by Commissioner. — Seymour *v.* Osborne, 11 Wall., 516; Corn Planter Patent, 23 Wall., 181.

Reissue for abandoned invention. — Mfg. Co. *v.* Corbin, 103 U. S., 786.

"The same invention" defined. — Parker *v.* Yale, 123 U. S., 87–104.

Unreasonable delay. — Miller *v.* Brass Co., 104 U. S., 350; Matthews *v.* Mach. Co., 105 U. S., 54; Bantz *v.* Frantz, 105 U. S., 160; Johnson *v.* R. R. Co., 105 U. S., 539; Thomson *v.* Wooster, 114 U. S., 104–120; Gardner *v.* Herz, 118 U. S., 180; Hartshorn *v.* Saginaw, 119 U. S., 664; Gas Light *v.* Boston, 139 U. S., 481; Leggett *v.* Oil Co., 149 U. S., 287; Wollensak *v.* Sargent, 151 U. S., 221.

Applications for — By Whom Made.
(Must be made by inventor, R. S. 4888, 4896).

Assignee — May be Granted to.
(See Assignment Before Issue, R. S. 4895).

Oath — By Inventor if Living.
(See Oath, R. S. 4888, 4896).

REJECTION

Application — Notice to Applicant.
(See Application — Examination, R. S. 4903).

RENEWAL

Forfeited Application.
(See Application — Renewal of, R. S. 4897).

RULES AND REGULATIONS

Patent Office — Establishment of.

The Commissioner of Patents, subject to the approval of the Secretary of the Interior, may from time to time establish regulations, not inconsistent with law, for the conduct of proceedings in the Patent Office. — R. S. 483.

RULES

Taking Testimony — Commissioner to Establish.

(See Evidence — Required by Patent Office, R. S. 4905).

SECRETARY OF THE INTERIOR

Supervision of Patents — Charged with.

The Secretary of the Interior is charged with the supervision of public business relating to the following subjects:

* * * * * * *

Fifth. Patents for inventions. — R. S. 441.

SPECIFICATIONS

Requirements Regarding — Specifications and Claims.

Before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the Commissioner of Patents, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery. The specification and claim shall be signed by the inventor and attested by two witnesses. — R. S. 4888.

Signing and Witnessing.

(See Specifications, supra).

SPECIMENS

May be Required.

(See Compositions of Matter, R. S. 4890).

SUBPOENAS

Witnesses.

See Witnesses, R. S. 4906).

UNPATENTED INVENTIONS

Right of Purchaser or Maker to Use.

Every person who purchases of the inventor or discoverer, or, with his knowledge and consent, constructs any newly invented or discovered machine, or other patentable article, prior to the application by the inventor or discoverer for a patent, or who sells or uses one so constructed, shall have the right to use, and vend to others to be used, the specific thing so made or purchased, without liability therefor. — R. S. 4899.

Previously purchased machine can be no infringement during extension. — Paper Bag Mach. Cases, 105 U. S., 766.

What persons have the right to use. — Wade *v.* Metcalf, 129 U. S., 202. Dable *v.* Flint, 137 U. S., 41.

UTILITY

Necessity of to Grant.

* * * And if * * * it shall appear * * * that the same is sufficiently useful and important, the Commissioner shall issue a patent therefor. — R. S. 4893.

Any person who has invented or discovered any new and useful * * * — R. S. 4886.

WITNESSES

Contempt — Evidence before Department.

Whenever any witness, after being duly served with such subpœna, neglects or refuses to appear, or after appearing refuses to testify, the judge of the court whose clerk issued the subpœna may, on proof of such neglect or refusal, enforce obedience to the process, or punish the disobedience, as in other like cases. But no witness shall be deemed guilty of contempt for disobeying such subpœna, unless his fees and traveling expenses in going to and returning from, and one day's attendance at the place of examination, are paid or tendered him at the time of the service of the subpœna; nor for refusing to disclose any secret invention or discovery made or owned by himself. — R. S. 4908.

Evidence before Department — Privileged Matter.

* * * But no witness shall be deemed guilty of contempt * * * for refusing to disclose any secret invention or discovery made or owned by himself. — R. S. 4908.

Fees — Evidence before Department.

Every witness duly subpœnaed and in attendance shall be allowed the same fees as are allowed to witnesses attending courts of the United States. — R. S. 4907.

Subpœnas — Evidence before Department.

The clerk of any court of the United States, for any district or Territory wherein testimony is to be taken for use in any con-

tested case pending in the Patent Office, shall, upon the application of any party thereto, or of his agent or attorney, issue a subpœna for any witness residing or being within such district or Territory, commanding him to appear and testify before any officer in such district or Territory authorized to take depositions and affidavits, at any time and place in the subpœna stated. But no witness shall be required to attend at any place more than forty miles from the place where the subpœna is served upon him. — R. S. 4906.

APPENDIX

Covering cases reported since first edition, down to and including 225 U. S. and 194 Fed.

The section numbering is identical with the original, main chapter.

ABANDONMENT.

§ 2. General Rules.

The law provides that if the invention covered by a patent was in public use or on sale earlier than two years before the date of the application, the patent is invalid. The law is based upon the proposition that if an inventor permits the public to use the invention for more than two years, during which period he takes no steps to secure the monopoly for himself, he is presumed to have abandoned it. In other words, he cannot secure a patent and levy tribute upon or enjoin a use which he has constructively sanctioned for a period of two years. — Corrington *v.* Westinghouse, 178 Fed. 711; 103 C. C. A. 479.

The defense of constructive abandonment through prior sale first appeared in the patent act of 1836, which provided that a defendant might defend by showing that the thing patented "had been in public use or on sale with the consent and allowance of the patentee before his application for a patent." This provision was modified by the patent act of 1839, which provided that purchases and sales prior to the application for the patent should not invalidate it except on proof "that such purchase, sale or prior use had been for more than two years prior to the application." The consolidated patent act of 1870 (§§ 4920, 4886) provided that a defendant might show by way of defense that the patented device "had been in public use or on sale in this country for more than two years before his application for a patent." And this language has not been changed by the amendments of 1897 and 1903. — National *v.* American, 178 Fed. 79; 101 C. C. A. 569.

There is a distinction between abandonment of an invention and abandonment of an application. Abandonment of the invention was not pleaded. Abandonment of an invention being a question of intent, appellant, if it had pleaded the defense, would have had the burden of proving clearly that Schmertz and his successors in interest had such an intent. — Western Glass *v.* Schmertz, 185 Fed. 788; 109 C. C. A. 1.

Western Elec. *v.* Sperry, 58 Fed. 186; International *v.* Kellogg, 171 Fed. 651.

The invention was completed and used in 1897. Application for patent was not made until Feb. 10, 1900. The alleged anticipating device was made in the fall of 1898, and application filed Feb. 6, 1899. *Held:* Thus, if the above-mentioned device and use of Hill were anticipated in date by Reginer (patentee of patent in suit), they became public property through Hill's independent disclosure and dedication, pending such conduct of Reginer indicative of abandonment, and we believe any (assumed) invention therein on the part of Reginer must be treated as abandoned and unpatentable,

under the settled policy of the patent law. — Handy Things *v.* Tucker, 188 Fed. 68; 110 C. C. A. 138.

Kendall *v.* Winsor, 21 How. 322.

It is the general rule that abandonment of an invention is not to be presumed, but must be clearly proven. — Sly *v.* Russell, 189 Fed. 61; 110 C. C. A. 625.

Ide *v.* Trorlicht, 115 Fed. 137.

§ 4. Amendment.

That when, by amendment, an applicant omits a feature of his invention as originally disclosed, it will be presumed that he considered it inoperative or worthless and abandoned, see — Western Glass *v.* Schmertz, 185 Fed. 788; 109 C. C. A. 1.

Stoner *v.* Todd, L. R. Ch. Div. 60, 46 L. J. Ch. 33.

§ 5. Application — Abandonment and Renewal.

One application for a patent may be a continuation of a prior application for the same thing under certain circumstances. — Model Bottling Mach. *v.* Anheuser-Busch, 190 Fed. 573; 111 C. C. A. 389.

Hayes-Young *v.* St. Louis, 137 Fed. 80.

§ 9. Division of Application.

Among the numerous cases cited we find none where it has been held that when a patent has been issued to a party for all he claimed in his application, the party may subsequently make a new application for a new patent upon omitted matters, and that such new application was a continuation of the first or original application, without surrendering the first patent and obtaining a reissue for the unexpired term of the first patent, as provided in § 4916. — Model Bottling Mach. *v.* Anheuser-Busch, 190 Fed. 573; 111 C. C. A. 389.

That division of an application or separate application upon a process and an apparatus does not work abandonment, one by the other, even though one or the other may have been abandoned, see — Acme Acetylene *v.* Commercial, 192 Fed. 321; 112 C. C. A. 573.

Leeds *v.* Victor, 213 U. S. 301.

While he abandoned his first application and substituted therefor a second, he did not abandon his invention. This substitution was proper procedure. We also find the substance of the second application had been embodied in the first. In that respect we have the action of the Patent Office, which, with full knowledge of the previous application, allowed such substitution and based its grant of the patent on the basis of the substantial identity of the two applications. The presumption that arises in such case must, as in a reissue, "only by showing from a comparison of the original specification with that of the reissue that the former does not substantially describe what is described and claimed in the latter." — Clark Blade *v.* Gillette, 194 Fed. 421; 114 C. C. A. 383.

Godfrey *v.* Eames, 1 Wall. 324; Corrington *v.* Westinghouse, 173 Fed. 76; Smith *v.* Goodyear, 93 U. S. 499.

§ 10. Experimental Use.

In so far as the patentee exercised invention therein, it was completely formulated and disclosed in the machine of 1898 (application filed in 1903),

and it is immaterial that its operation was unsatisfactory to him, inducing frequent experiments to improve the combination. His undoubted election to use the invention, independently and commercially, over four years before application for a patent, followed by at least two years of such use in the first machine, constitutes an abandonment thereof to the public. — Star *v.* Crescent, 179 Fed. 856; 103 C. C. A. 342.

Smith *v.* Sprague, 123 U. S. 249; Eastman *v.* Mayor, 134 Fed. 844.

§ 11. Evidence of.

The burden was upon appellant to prove very clearly that the patentee meant to donate his invention to the public. — International *v.* Kellogg, 171 Fed. 651; 96 C. C. A. 395.

Ide *v.* Trorlicht, 115 Fed. 144.

§ 18. Public Use.

Manufacturing and delivering a machine upon an advance order indicate just as much an intention to abandon the invention as delivering it when completed upon an order then obtained. We think it would be altogether too technical and wholly out of accord with the purpose of the patent laws to hold that the manufacture and delivery of the machine upon an order obtained in advance amounted to anything different. In our opinion the disposition by an inventor for a pecuniary consideration of the article invented amounts to a "sale" within the meaning of the patent act, whether such disposition be made in accordance with a contract to manufacture such article or to sell it after manufacture. — National *v.* American, 178 Fed. 79; 101 C. C. A. 569.

ACTIONS.

§ 25. To Compel Issue of Patent.

That an action brought under § 4915 R. S. asking for a decree upon a question of reissue and also upon an interference is multifarious, see — Gould *v.* Gould, 187 Fed. 273; 109 C. C. A. 615.

This case seems to establish the following:

1. That an action to compel issue is an original proceeding and is in no sense an appeal from the Department or from the Court of Appeals, D. C.
2. That the complainant may carry his date of invention back of that of the Patent Office proceeding and that in evidence before the Court of Appeals, D. C.
3. That to overcome the decision of the Patent Office as affirmed by the Court of Appeals, D. C. the complainant must introduce evidence which will overcome the presumption of finality of the decision of that court, and more. — Greenwood *v.* Doyer, 194 Fed. 91; 114 C. C. A. 169.

Morgan *v.* Daniels, 153 U. S. 120; In re Hein, 160 U. S. 432; Maxwell Land Grant Case, 121 U. S. 325; United States *v.* Am. Bell Tel. 167 U. S. 224; Westinghouse *v.* Stanley, 133 Fed. 167; Brooks *v.* Sachs, 81 Fed. 403.

§ 26. Cancellation of Patent.

Congress named certain permissible defenses, of which fraud and collusion in following the application to issuance is not one. Therefore a patent procured by fraud and collusion or by illegal procedure can be attacked only by the government. — Western Glass *v.* Schmertz, 185 Fed. 788; 109 C. C. A. 1.

Gandy *v.* Marble, 122 U. S. 432; Mowry *v.* Whitney, 14 Wall. 439; Mahn *v.* Harwood, 112 U. S. 354; Ry. Register *v.* North Hudson, 23 Fed. 593; U S. *v.* Am. Bell Tel. 128 U. S. 315; id. 159 U. S. 555; id. 167 U. S. 224.

ADJUDICATION.

§ 30. Patent Office Decisions.

In the interference proceedings, the respective rights of McBerty and Fowler to the issuance of a patent, were examined in succession by the Examiner of Interferences, the Board of Examiners in Chief, the Commissioner of Patents, and the Court of Appeals for the District of Columbia; and in each tribunal judgment of priority of invention was in favor of McBerty. To overcome these judgments, the proof must be clear and convincing — by evidence which shall strongly outweigh that of the respondent below, as put by Judge Putnam. — Western Elec. *v.* Fowler, 177 Fed. 224; 101 C. C. A. 394.

Brooks *v.* Sachs, 81 Fed. 403; Morgan *v.* Daniels, 153 U. S. 120; United States *v.* Bell Tel. 167 U. S. 224.

§ 31. Prior — Conclusiveness.

If the first Peckham company were privy to the decree declaring the patent void, there would be great force in the argument that that decree established, as against the plaintiff, the right of the Peckham Mfg. Co. to make and sell the patented article, and that the right ought to be recognized in a suit against its customer, defended by it. Brill *v.* Washington, 215 U. S. 527; 54 L. Ed. 311; 30 S. Ct. 177.

Kessler *v.* Eldred, 206 U. S. 285.

We are met at the outset with a decree of the Circuit Court for the Northern District holding in a contested case where the same claim was made, that this identical patent was valid. This decree being between other parties, does not constitute res adjudicata. We are not constrained to follow it upon any principle of stare decisis. Still we think an orderly administration of justice in patent causes requires, as a general rule, that when a patent, after a full hearing, has been declared by the Circuit Court to be valid and such decree has been affirmed by this court, we should follow the decision in a subsequent case involving the validity of the same patent, and not presenting any essentially different evidence, notwithstanding the claim of validity was not urged upon this court upon the prior appeal. — Crier *v.* Innes, 170 Fed. 324; 95 C. C. A. 508.

That where a patent has been finally held void, both the combination and the elements of the combination become public property; and a person exercising his right to their use may restrain the owner of the invalidated patent from threatening or harassing his customers, see — Rubber Tire *v.* Goodyear, 183 Fed. 978; 106 C. C. A. 318.

Kessler *v.* Eldred, 206 U. S. 285; Young and Foerster, 37 Fed. 203; Morgan *v.* Albany, 152 U. S. 425; distinguishing Aspden *v.* Nixon, 4 How. 467; Birdsell *v.* Shaliol, 112 U. S. 485.

That where a party had practically intervened and made himself a party to the defense so that estoppel would apply, and the patent was defeated, such party may restrain the owner of the defeated patent from bringing suits against his customers, see — Marshall *v.* Bryant, 185 Fed. 499; 107 C. C. A. 599.

Columb *v.* Webster, 84 Fed. 592; United States *v.* California, 192 U. S. 355; Kessler *v.* Eldred, 206 U. S. 285; distinguishing Russell *v.* Place, 94 U. S. 606.

For a partial ruling in applying Kessler *v.* Eldred, 206 U. S. 285, and certification of a doubtful question thereunder to the Supreme Court, see — Hurd *v.* Seim, 191 Fed. 832; 112 C. C. A. 346.

§ 37. Stare Decisis.

That the Supreme Court will not reverse findings of fact after concurrent decisions of the lower courts, see — Rumford *v.* Hygienic, 215 U. S. 156; 54 L. Ed. 137; 30 S. Ct. 45.

The case being here on substantially the same state of facts as in the former appeal, all questions of law determined on the first appeal become law of the case for courts and parties on the second. — Penn *v.* Conroy, 185 Fed. 511; 107 C. C. A. 611.

Columbia *v.* Duff, 184 Fed. 876.

This court would not depart from its former ruling on the patent in suit without satisfactory evidence of other facts which ought to induce a different conclusion in respect to the validity of the patent. — Interurban *v.* Westinghouse, 186 Fed. 166; 108 C. C. A. 298.

ANTICIPATION.

§ 59. General Rules.

The only conclusion we have been able to reach is that we are not "satisfied beyond a reasonable doubt" that the alleged anticipating device was perfected and in use prior to the date of application. Inasmuch as the burden of thus satisfying the court rests upon the defendant, the defense of prior use is not made out. — Moyer *v.* Metal Stamping, 178 Fed. 830; 102 C. C. A. 504.

In determining the question of patentable novelty, there can be no hard and fast rule. Each case must be decided upon its own facts. — Union Carbide *v.* Am. Carbide, 181 Fed. 104; 104 C. C. A. 522.

§ 61. Abandoned Device or Experiment — Non-Anticipating.

That where a device disclosed in a preliminary specification is abandoned and omitted from the final specification, it will be presumed to have been inoperative and merely experimental, see — Western Glass *v.* Schmertz, 185 Fed. 788; 109 C. C. A. 1.

Stoner *v.* Todd, L. R. Ch. Div. 60, 46 L. J. Ch. 33.

§ 62. Abandoned Device or Experiment — Application.

An application for a patent pending in the office is not such a printed publication as the statute contemplates, and, indeed, is not a publication at all. — Interurban *v.* Westinghouse, 186 Fed. 166; 108 C. C. A. 298.

§ 63. Analogousness — Art.

Still we appreciate the substantial difference between the problem of propelling a boat and the motor vehicle problem and are not inclined to hold that this use constituted an anticipation, although it may properly be considered in determining the question of invention. — Columbia *v.* Duerr, 184 Fed. 893; 107 C. C. A. 215.

That a machine for punching paper is not in an art analogous to that of punching steel beams, see — Conley *v.* King Bridge, 187 Fed. 137; 109 C. C. A. 412.

§ 64. Analogousness — Use.

It does not follow as a rule of law, that because the Gauthier sprinkler was used in sprinkling trees, and delivered the fluid in the form of mist, the

Wilgus sprinkler, which was used to sprinkle lawns, and delivered the water in drips, was not anticipated by the prior invention. — Wilgus *v.* Germain, 72 Fed. 773; 19 C. C. A. 188.

Tucker *v.* Spalding, 13 Wall. 453; Smith *v.* Nichols, 21 Wall. 112; Machine Co. *v.* Murphy, 97 U. S. 125; Machine Co. *v.* Keith, 101 U. S. 479.

§ 65. Anticipating an Anticipation — Burden of Proof.

The burden was on complainant to do so by satisfactory and convincing proof. She did not produce the inventor himself, who was the best witness on the issue. On the contrary, we are asked to believe the oral testimony of witnesses somewhat contradictory in itself, given many years after the event and unsupported by physical exhibits or other substantial or imperishable monument. Such testimony is not sufficient. — Torry *v.* Hancock, 184 Fed. 61; 107 C. C. A. 79.

Clark *v.* Willimantic, 140 U. S. 481; Rogers *v.* Fitch, 81 Fed. 403; Eastern *v.* Continental, 142 Fed. 479; Kraatz *v.* Tiemen, 79 Fed. 322.

That to anticipate an anticipation the burden is upon him asserting it to show prior conception and diligence in reduction to practice, see — Sheffield *v.* D'Arcey, 194 Fed. 686; — C. C A. —.

Barbed Wire Pat. 143 U. S. 275; Columbus *v.* Standard, 148 Fed. 622; Christie *v.* Seybold, 55 Fed. 69; Automatic *v.* Pneumatic, 166 Fed. 288.

§ 68. Combining Old Elements — Different Patents.

It is no defense to a claim of an infringement that one or more elements of a patented combination, or one or more elements of a patented improvement, may be found in one old patent or publication, and others in another, and still others in a third. It is indispensable that all of them, or their mechanical equivalents, be found in the same description or machine, where they do the same work by substantially the same means. — Owens *v.* Twin City, 168 Fed. 259; 93 C. C. A. 561.

Imhaeuser *v.* Buerk, 101 U. S. 647; Bates *v.* Coe, 98 U. S. 31; Latta *v.* Shawk, Fed. Cas. 8116; Machine *v.* Pearce, Fed. Cas. 4132; Mfg. Co. *v.* Steiger. 17 Fed. 250; National *v.* American, 53 Fed. 367; Rhodes *v.* Lincoln, 64 Fed. 218; Packard *v.* Lacing, 70 Fed. 66.

Defendants have ransacked patent offices in America and Europe. Piecing together excerpts and elements from this wide search, they have built up a formidable speculative argument to show how simple and easy was the step taken. This is a form of argumentation familiar in patent litigation. The patent law, however, has its proper place in the realm of actual industrial life, and not in the limbocs of parchment casuistry. — Naylor *v.* Alsop, 168 Fed. 911; 94 C. C. A. 315.

If we assume the first seven features here mentioned are to be found in prior patents — that is, one feature in one patent and another feature in another patent, or substantially this — it would not in any way affect the validity of the combination covered by claim 3 of the Houghton patent. Under a familiar and well-settled rule the patentability of combination claims cannot be overthrown in this way. — Whitin *v.* Houghton, 178 Fed. 278; 101 C. C. A. 344.

It is urged that it did not involve inventive genius to make such changes in the apparatus of the above (cited prior) patents as to adapt them to the transmission of carriers under a vacuum system such as that of the patent in suit — that such alterations were within the competency of any one skilled in the art. Doubtless had the apparatus in question been seen and examined

by those skilled in the art, as disclosed by the above patents, and they had been asked to make such changes, they might have done so. But this circumstance fails to overcome the presumption of validity arising from the granting of the patent, coupled with the nature of the change necessary to be made to convert pressure despatch into vacuum despatch systems. — Am. Pneumatic *v.* Snyder, 180 Fed. 712; 104 C. C. A. 78.

These claims are for new combinations of old devices. They are of course not anticipated by the fact that a part of the old devices may be found in one and another part of them in a prior patent. The claim for such a combination is no more anticipated than it is infringed by a combination which lacks any one of its mechanical elements. Dissenting opinion of Judge Sanborn in — Electric Protection *v.* American, 184 Fed. 916; 107 C. C. A. 38.

§ 71. Evidence of — Burden of Proof.

Prior use, in order to show anticipation of a patent, must be "proven by evidence so cogent as to leave no reasonable doubt in the mind of the court." Mueller *v.* Glauber, 184 Fed. 609; 106 C. C. A. 613.

Deering *v.* Winona, 155 U. S. 286; Barbed Wire Patent, 143 U. S. 275.

§ 72. Evidence of — Device or Exhibit.

In Writing Mach. *v.* Wagner, 151 Fed. 576, we held that a model filed in the Patent Office, which is a full operative embodiment of the patented mechanism, may be considered upon the question of invention arising upon a subsequent patent. But we have never gone to the extent of holding that an unpleaded patent issued after the patent in suit may defeat the latter because the specification states that the application was filed prior to the application of the patent in suit. Assuming, that the specification and drawings may be considered, we think they are entitled to little weight unless supplemented by proof showing their condition at the time of filing and that no material changes have been made in either. We have nothing but the printed date on the specification that his device was made before Hobart's and nothing but inference to show that the specification and drawings were those originally filed. It would be a dangerous rule to establish that a patent granted in 1904 may be destroyed by the disclosures of a patent granted in 1905, the latter not being pleaded and no word of proof being offered as to what changes were made during the two years it remained in the Patent Office, inaccessible to the public. — Roth *v.* Harris, 168 Fed. 279; 93 C. C. A. 581.

§ 74. Evidence of — Parol.

The oral testimony of many witnesses, if unsupported by any evidence consisting of documents or things, must be very reasonable or very strong to establish the defense of prior use. — Parker *v.* Stebler, 177 Fed. 210; 101 C. C. A. 380.

Barbed Wire Pat. 143 U. S. 275; Deering *v.* Winona, 155 U. S. 286; Cantrell *v.* Wallick, 117 U. S. 689; Knickerbocker *v.* Rogers, 61 Fed. 297; Pratt *v.* Seneenbaugh, 64 Fed. 779; Wickes *v.* Lockwood, 65 Fed. 610; Singer *v.* Schenck, 68 Fed. 191; Emerson *v.* Van Nort, 116 Fed. 974; Pettibone *v.* Penn. Steel, 133 Fed. 730.

It is true that prior use must be established beyond a reasonable doubt, but testimony must be weighed in a patent cause as in other cases, and the court is not permitted to reject arbitrarily the testimony of respectable witnesses because of mistakes and differences in nonessentials. — Corrington *v.* Westinghouse, 178 Fed. 711; 103 C. C. A. 479.

The testimony as to these alleged transactions in 1897 is entirely founded on the unaided memories of witnesses testifying 10 years after the event, and is not sufficient under well recognized rules to make out the alleged anticipation. — Schwab *v.* Apstein, 178 Fed. 91; 101 C. C. A. 455.

In order to defeat a patent by evidence of prior public use more than two years before the application for a patent is made by another, the proof must be very clear and definite, and as a general proposition it has been held that mere oral evidence, depending on the memory of the witness or witnesses, without the production of any visible sign or contemporary memoranda certainly fixing and defining the character of the alleged anticipating structure, will not be regarded as sufficient. Still it has been held that the rule is not inflexible, and upon the testimony of witnesses who are shown to be familiar with the thing or matter described, if it is so definite and specific in detail as to induce the court to feel that it is treading on safe ground, the fact may be established without the production of any tangible exhibit. — Interurban *v.* Westinghouse, 186 Fed. 166; 108 C. C. A. 298.

Am. Roll-Paper *v.* Weston, 59 Fed. 149.

The existence and use of an unpatented anticipating device prior to the invention patented may be established by oral testimony only by clear and satisfactory evidence, sufficient to prove the facts beyond a reasonable doubt. — DeLaval *v.* Iowa, 194 Fed. 423; 114 C. C. A. 385.

Barbed Wire Pat. 143 U. S. 275; Mast *v.* Dempster, 82 Fed. 327; National *v.* Interchangeable, 106 Fed. 693; Am. Bank Protection *v.* Electric, 181 Fed. 350.

§ 77. Evidence of — Miscellaneous Holdings.

That a prior blueprint of a construction which is not proved to have been constructed or reduced to practice is not admissible to prove anticipation, see — Morgan Engineering *v.* Alliance, 176 Fed. 100; 100 C. C. A. 30.

It is a significant fact that, although he was the inventor of other devices and was at that time applying for patents thereon, he never filed an application for a patent on his truck, but, on the other hand, discarded his own invention and used appellee's. — Parker *v.* Stebler, 177 Fed. 210; 101 C. C. A. 380.

§ 78. Experiment.

It is also quite clear that Wochler published a mere result of a laboratory experiment which was put to no practical use. Crystalline carbide, on the other hand, has been a great commercial success, and has furnished the foundation for important industries. — Union Carbide *v.* Am. Carbide, 181 Fed. 104; 104 C. C. A. 522.

§ 87. Inoperative Device.

When the question is whether a prior system described and diagrammatically illustrated is practically operative, any doubt which arises should be resolved in favor of the working plan and against the paper plan. — Hall *v.* General, 169 Fed. 290; 94 C. C. A. 580.

A patent cannot be invalidated by a structure which can only be altered into an anticipation by the use of inventive skill. — Waterbury *v.* Aston, 183 Fed. 120; 105 C. C. A. 410.

The Crosby invention undoubtedly anticipates and describes the whole theory of the Pettit patent; but it does not appear ever to have been put to use, and there is no evidence that any machine was ever constructed under it. It is one thing to invent the theory of a machine. It is quite another thing to invent a successfully operating machine. In any view, the Pettit machine being the first successful machine to accomplish a new result, the claims of the patent are clearly entitled to a broad and liberal construction, and to the benefit of the doctrine of equivalents. — Kings County *v.* U. S. Consolidated, 182 Fed. 59; 104 C. C. A. 499.

Deering *v.* Winona, 155 U. S. 286.

It seems unnecessary to spend time in support of the proposition that a method of making a new and useful fabric is not anticipated by testimony that prior to the invention of this fabric a machine was in existence which, by a few changes in adjustment, was capable of producing the fabric had some one known enough to make them. Few patents could survive such a test as this. — General Knit Fabric *v.* Steber, 194 Fed. 99; 114 C. C. A. 177.

§ 88. Knowledge.

Whether he knew it in fact or not, he is conclusively presumed to have been entirely familiar with all the prior art as disclosed either by patents or prior devices; and the originality of his accomplishment must be determined in the light of this presumption. — Torrey *v.* Hancock, 184 Fed. 61; 107 C. C. A. 79.

Voigtmann *v.* Weis, 148 Fed. 848.

§ 91. Old Elements or Device — Requiring Adaptation.

It is not enough to constitute anticipation that the devices relied upon might, by a process of modification, reorganization, or combination with each other, be made to accomplish the function performed by the device of the patent sued on. — Los Alamitos *v.* Carroll, 173 Fed. 280; 97 C. C. A. 446.

Western Elec. *v.* Home Tel. 85 Fed. 649; Dederick *v.* Cassell, 9 Fed. 506; Pattee *v.* Moline, 9 Fed. 821; Fuller *v.* Yentzer, 94 U. S. 288; Topliff *v.* Topliff, 145 U. S. 156; Rob. Pat. § 282; Walk. Pat. § 62.

The situation is the oft-recurring one, where none of the prior devices anticipates the patent, but where, taking one element here and another there, all the elements of the patented combination may be found in the prior art, and where, by recasting prior structures in the light of the patented structure, something like it may be produced. * * * The unified results and capabilities of the McKanna oiler are not mere aggregations of separate old devices having separate old results, but come from an integral, mechanically-true combination. — Lavigne *v.* McKanna, 194 Fed. 112; 114 C. C. A. 190.

§ 95. Prior Art — Sufficient.

That a statement in a patent that it is adapted to other uses than that specifically shown in the patent opens the door to examination of other arts suggested, see — Safety Car Heating *v.* Consolidated, 174 Fed. 658; 98 C. C. A. 412.

§ 97. Prior Patent — Insufficient.

That question is more wisely determined by the lesson of experience than by conjecture after the event. The record is full of proof of attempts to bring forth improved devices to serve the use, and yet in the 10 years between the

alleged anticipating patent and the patent in suit the eye of the mechanic never saw in the description of the prior patent, and his skill never reproduced from it, the simple, inexpensive, and effective device of the patent in suit. — Wayne *v.* Benbow-Brammer, 168 Fed. 271; 93 C. C. A. 573.

It is enough that a patent which was respected by competitors for 13 years and which covers a system which has been in successful operation during its entire life cannot be invalidated by the ambiguous language of a patent which has added nothing of value to the art. In such circumstances, unusually clear and perspicuous language is necessary. Success cannot be anticipated by failure. When the problem of aerial navigation is finally solved by the construction of a secure dirigible air-ship, it is safe to predict that the inventor's patent will not be invalidated by a prior structure, no matter how perfect it may be, which was never known to fly. — Hall *v.* General, 169 Fed. 290; 94 C. C. A. 580.

That a patent alleged to anticipate must not be vague, confused, indeterminate, must be reduced to practical form, and must be more than the naked assertion that a certain result can be accomplished, see — American *v.* Leeds, 170 Fed. 327; 95 C. C. A. 511.

Standard *v.* Peters, 77 Fed. 630; Hanifen *v.* Godshalk, 84 Fed. 649; Coffin *v.* Ogden, 18 Wall. 120; Badische *v.* Kalle, 104 Fed. 802.

That the fact that a prior patent may show the mechanical arrangement of the patent in suit, but not designed or used for the purpose of the patent, does not necessarily amount to anticipation, see — Gray Tel. *v.* Baird, 174 Fed. 417; 98 C. C. A. 353.

Brill *v.* Third Ave. 103 Fed. 289; Canda *v.* Michigan, 124 Fed. 486.

That a patent not a part of the prior art at the time of the filing of the application of the patent in suit cannot be availed of as an anticipation, see — Gray Tel. *v.* Baird, 174 Fed. 417.

Bates *v.* Coe, 98 U. S. 31; Anderson *v.* Collins, 122 Fed. 451; Eck *v.* Kutz, 132 Fed. 758; Walk. Pat. § 70; Rob. Pat. § 331, n. 332, 334; Barnes *v.* Sprinkler, 60 Fed. 605.

§ 98. Prior Patent — Sufficient.

It is obvious that the invention disclosed by Hilker's first patent is as important in determining questions of anticipation and patentable invention as if the invention and patent were those of a third person. — Hilker *v.* U. S. Mop. 191 Fed. 613; 112 C. C. A. 176.

James *v.* Campbell, 104 U. S. 356.

§ 100. Process — Machine.

But it is said that these patents were machine patents, and, being such, are impertinent as evidence of anticipation. A full and complete answer to this is that, though these patents were each for an apparatus, they fully disclosed the process, and upon the issue of the patents such process was published. — Model Bottling Mach. *v.* Anheuser-Busch, 190 Fed. 573; 111 C. C. A. 389.

§ 101. Process — Process Rule.

"You cannot apply the doctrine of mechanical equivalents to a chemical patent." (Quoted from 24 Pat. Des. & T. M. Cas. 365 in) — Naylor *v.* Alsop, 168 Fed. 911; 94 C. C. A. 315.

It is sufficient if in general aspects the two processes are the same and the difference in minor matters is only such as would suggest themselves to a person possessing ordinary skill in the art. — Model Bottling Mach. *v.* Anheuser-Busch, 190 Fed. 573; 109 C. C. A. 389.

§ 102. Process — Miscellaneous.

When it is sought to ascertain the state of the art by means of prior patents, nothing can be used except what is disclosed on the face of those patents. Such patents cannot be reconstructed in the light of the invention in suit, and then used as a part of the prior art. — Naylor *v.* Alsop, 168 Fed. 911; 94 C. C. A. 315.

An expert cannot take a process patent, which has never been applied industrially, and work the process in his laboratory, and discover therefrom something which is not disclosed on the face of the patent, and then transfer that experience back to the time of the patent and make it a part of the prior art. The trifling experiments of the laboratory shown by defendant's experts in this case, are not entitled to weight as against the teaching of this practical experience. — Naylor *v.* Alsop, 168 Fed. 911; 94 C. C. A. 315.

§ 103. Public Use — Sufficient.

The testimony as to the use by the defendant long prior to the date of the invention of the patent in suit was correctly admitted by the court below, on the ground that it was not the introduction of evidence as to prior use affecting the validity of the patent, but evidence tending to show the rightful use by defendant of the alleged infringing device, on the ground that it had used it long prior to the application for the patent. — Baltimore & O. *v.* McCune, 174 Fed. 991; 98 C. C. A. 561.

This use was not an abandoned experiment but an attempt to induce the railway company to equip the cars with the Brayton engine. The perfected structure was capable of practical use, although there was much room for improvement. It was not embryonic or inchoate. The combination of the engine, the drive, and the carriage was used in public, and thereafter it required the use of the imitative, and not of the inventive, faculties to claim, without modification, the same combination. The use of the engine in one vehicle pointed directly to its use in another vehicle. — Columbia *v.* Duerr, 184 Fed. 893; 107 C. C. A. 215.

APPEALS.

§ 111. Assignments of Error — Sufficiency.

There are but two assignments of error. The first alleges error in entering the order adjudging Grove guilty of contempt, and the second alleges error in the refusal of the court to deny the order. These assignments, though not sufficiently specific to conform to the best practice, are sufficient, we think, to justify our inspection of the record to ascertain whether there be in it any apparent error. — In re Grove, 180 Fed. 62; 103 C. C. A. 416.

§ 117. Decrees — Interlocutory — Defined.

No point is better settled in this court, than that an appeal may be prosecuted only from a final decree. The cases are numerous where appeals have been dismissed, because the decree of the Circuit Court was not final. . . . The decree in the case under consideration is not final, within the decisions of this court. The injunction prayed for was made perpetual, but there was a reference to a master to ascertain the damages by reason of the infringe-

ment; the bill was not dismissed, nor was there a decree for costs. — Barnard *v.* Gibson, 7 How. 650; 12 L. Ed. 857.

Distinguishing Forgay *v.* Conrad, 6 How. 201.

As to the individual defendants, the rule is that, where defendants are jointly sued with others, and the bill is dismissed as to some but is retained as to others for a final decree and accounting, the decree is not final and no appeal lies from the part dismissing the bill as to some of the defendants so jointly charged. — Electric Protection *v.* American, 184 Fed. 916; 107 C. C. A. 238.

Hohorst *v.* Hamburg American, 148 U. S. 262; Stanley *v.* Roberts, 59 Fed. 836.

§ 118. Decrees — Interlocutory — What Determined on Appeal.

That the question of infringement may be considered and determined upon an appeal from an interlocutory decree, see — Highland *v.* Schmertz, 178 Fed. 944; 102 C. C. A. 316.

Smith *v.* Vulcan, 165 U. S. 518; Mast *v.* Stover, 177 U. S. 485; distinguishing *Ex parte* National, 201 U. S. 156.

As the patent was sustained by the Circuit Court in the Waring Case and as the present record contains only the bill and affidavits used on the motion for the preliminary injunction, it is manifest that the validity of the patent is not now in issue and that the question of infringement is alone presented. — Ferry-Hallock *v.* Herman, 178 Fed. 550; 101 C. C. A. 230.

Consolidated *v.* Diamond, 157 Fed. 677.

When in such a suit (on different patents) the bill is sustained as to some of the patents but dismissed as to others by an interlocutory decree, no appeal lies from that part of the decree which dismisses the bill as to some of the patents until after the final decree. — Electric Protection *v.* American, 184 Fed. 916; 107 C. C. A. 238.

Ex parte Enameling, 201 U. S. 156.

§ 125. Exceptions — Master's Report.

As the transcript does not contain any of the evidence before the master, except as the same may be quoted in the master's report, his findings of fact, unless inconsistent with the evidence, as quoted by him, must be taken as conclusive. — Mairnen *v.* Union Special Mach. Co. 187 Fed. 123; 109 C. C. A. 41.

§ 128. Finality.

Such being the construction of the contract by this court, it follows that the charge of the court below on the retrial was error, for it overlooked the scope of this court's former decision. The construction of this contract was a question which this court was required to pass upon when the case was here before. That question it decided. — Columbia *v.* Duff, 184 Fed. 876; 107 C. C. A. 200.

Nat. Surety *v.* Kansas, 182 Fed. 54; Roberts *v.* Cooper, 20 How. 467.

That the decision of the Court of Appeals, D. C. is not final upon the question of novelty, see — Model Bottling Mach. *v.* Anheuser-Busch, 190 Fed. 573; 111 C. C. A. 389.

Butterworth *v.* Hoe, 112 U. S. 50; U. S. *v.* Duell, 172 U. S. 576.

§ 129. Findings.

These concurring findings (of the master and the circuit court) are presumptively correct and must be permitted to stand, unless some obvious error has intervened in the application of the law, or some serious and important mistake has been made in the consideration of the evidence. — Brown *v.* Lanyon, 179 Fed. 309; 102 C. C. A. 497.

Moffat *v.* Blake, 145 Fed. 40; Houck *v.* Christy, 152 Fed. 612.

The testimony of the witnesses upon this issue is conflicting, and under a familiar rule the finding of the chancellor must prevail unless the defendant has succeeded in showing from the record that he has made a mistake in his deduction of this fact from the evidence. — Century Electric *v.* Westinghouse, 191 Fed. 350; 112 C. C. A. 8.

Kimberly *v.* Arms, 129 U. S. 512; Tilghman *v.* Proctor, 125 U. S. 136; Furrer *v.* Ferris, 145 U. S. 132; Coder *v.* Arts, 152 Fed. 943; State of Iowa *v.* Carr, 191 Fed. 257; Brammer *v.* Schroeder, 106 Fed. 918; Anderson *v.* Collins, 122 Fed. 451.

The question of infringement being one of fact, we might be justified in following, in the absence of manifest error, the finding of the court below. — Krupp *v.* Midvale, 191 Fed. 588; 112 C. C. A. 194.

Continental *v.* Eastern, 210 U. S. 405.

When the chancellor has considered conflicting evidence, and made his finding and decree thereon, they must be taken to be presumptively right; and unless an obvious error has intervened in the application of the law, or some serious mistake has been made in the construction of the evidence, they must be permitted to stand. — DeLaval *v.* Iowa, 194 Fed. 423; 114 C. C. A. 385.

Tilghman *v.* Proctor, 125 U. S. 136; Kimberly *v.* Arms. 129 U. S. 512; Evans *v.* State Bank, 141 U. S. 107; Furrer *v.* Ferris, 145 U. S. 132; Warren *v.* Burt, 58 Fed. 101; Paxson *v.* Brown, 61 Fed. 874; Stuart *v.* Hayden, 72 Fed. 402; Coder *v.* Arts, 152 Fed. 943.

When questions of fact are disposed of by the trier of the facts in an equity suit, his decision may be reviewed on appeal. When disposed of by the verdict of a jury, properly instructed, its decision on those points are not reviewable by the appellate court. — Transit Development Co. *v.* Cheatham 194 Fed. 963; 114 C. C. A. 599.

Heide *v.* Panoulias, 188 Fed. 915.

§ 131. Law Actions — What Considered On.

That although the defendant failed to except to the refusal of the court to grant a motion for dismissal non obstante verdicto, the question will be considered on appeal, see — Baltimore & O. *v.* McCune, 174 Fed. 991; 98 C. C. A. 561.

Defendant's counsel now asks that he be allowed to reargue on this point, (a defense not raised on the trial) and to contend that the " court may take judicial notice that the patent is invalid for the reason stated." This should not be done. Plaintiff has had no opportunity to litigate that point, nor to put in evidence which might have avoided it. — Heide *v.* Panoulias, 188 Fed. 914; 110 C. C. A. 656.

Ordinarily the presence or absence of " invention " and " infringement " are questions of fact. When disposed of by the trier of the facts in an equity

suit, his decision may be reviewed on appeal. When disposed of by the verdict of a jury, properly instructed, its decisions on those points are not reviewable on appeal. — Heide *v.* Panoulias, 188 Fed. 914; 110 C. C. A. 656.

Singer *v.* Cramer, 192 U. S. 275; Heald *v.* Rice, 104 U. S. 737; Bischoff *v.* Wethered, 76 U. S. 812; Keyes *v.* Grant, 118 U. S. 25; Royer *v.* Schultz, 135 U. S. 319.

§ 133. Orders.

This appeal must be dismissed, because an order overruling a demurrer, and giving the defendant leave to answer, is not a final decision. — Adriance *v.* National, 101 Fed. 1005; 41 C. C. A. 675.

That an order dismissing a bill as to one party is not appealable until after final decree, see — Gen. Electric *v.* Allis-Chalmers, 194 Fed. 413; 114 C. C. A. 375.

Hohorst *v.* Hamburg, 148 U. S. 262; *Ex parte* National, 201 U. S. 158.

That where an injunction order has been vacated and a new order entered for the evident purpose of enabling the parties to appeal piecemeal as to matters involved in the accounting, the order will be reversed with direction to reinstate the original order of injunction on application, see — Metzger *v.* Berlin, 194 Fed. 426; 114 C. C. A. 388.

§ 136. Record — Stipulated.

While we have in the present case no bill of exceptions, we have a record made up by agreement of the parties. The agreement of counsel was not merely that the papers mentioned in their stipulation should be printed in the record, but that it should "constitute the record." This case differs in this respect from Continental *v.* Murray, 162 Fed. 873. — In re Grove, 180 Fed. 62; 103 C. C. A. 416.

The file wrappers of the patent in suit and of the Aston application were not printed in the record, but by stipulation between the parties the printing thereof was waived and the same were returned as exhibits. This was done without the consent of the court, and we are under no obligation to receive them. — Waterbury *v.* Aston, 183 Fed. 120; 105 C. C. A. 410.

§ 137. Record — Miscellaneous Rules.

A writ of error addresses itself to any defect apparent on the face of the record, provided the defect be pointed out in the assignment of errors, but the evidence taken in the case is no part of the record, unless, by some method known to the law, it is imported into the record. — In re Grove, 180 Fed. 62; 103 C. C. A. 416.

Suydam *v.* Williamson, 20 How. 427; Storm *v.* U. S., 94 U. S. 76; Insurance Co. *v.* Piaggio, 16 Wall. 378.

That the records in other appeals taken by the defendant contain the necessary facts, and that these may be used in support of the appeal under consideration is without sanction, see — Frank *v.* Bernard, 185 Fed. 810; 108 C. C. A. 42.

The motion is, in effect, for a direction to the court of claims to certify the evidence to this court, and not its conclusions from the evidence. This is clearly in contravention of the rule of this court which requires the record on appeal from the court of claims to contain a finding by the court "of the facts in the case established by the evidence in the nature of a special verdict,

but not the evidence establishing it." — United States *v.* Société Anonyme &c. 224 U. S. 309; 56 L. Ed. 224; 32 S. Ct. 479.

§ 141. Subject-Matter.

As the ground of complaint insisted on in this court was not included in the grounds of complaint mentioned in the bill of complaint, and does not seem to have been presented to or argued before the Circuit Court, it should not be considered here. — New Jersey Patent *v.* Schaefer, 178 Fed. 276; 101 C. C. A. 540.

§ 143. Supreme Court.

In Frasch *v.* Moore, 211 U. S. 1, it was held that decisions in the court of appeals of the District of Columbia in appeals from the Commissioner of Patents under § 9 of the act Feb. 9, 1893, were interlocutory, and not final, and not reviewable by this court under § 8 of that act. Under § 4914 no opinion or decision of the court of appeals on appeal from the Commissioner precludes "any person interested from the right to contest the validity of such patent in any court wherein the same may be called in question;" and by § 4915 a remedy by bill in equity is given where a patent is refused; and we regard these provisions as applicable in trademark cases under § 9 of the act Feb. 20, 1905. — Atkins *v.* Moore, 212 U. S. 285; 53 L. Ed. 514; 29 S. Ct. 390.

§ 144. Miscellaneous Rules.

It has been held by the supreme court that the omission to give a bond for costs at the time the appeal is taken does not necessarily avoid the appeal, and that the appellant may be allowed to file the bond afterwards, within a reasonable time. — Schenck *v.* Diamond, 73 Fed. 22; 19 C. C. A. 352.

While in some jurisdictions it has been held that a mere promise or agreement not to prosecute an appeal will not divest an appellate court of its jurisdiction, the contrary has been held in other jurisdictions; and it seems to be universally held that, where such an agreement is made upon a valid and legal consideration, either before or after trial, it will be enforced in an appellate court, and the appeal, if taken, will be dismissed. — U. S. Consolidated *v.* Chaddock, 173 Fed. 577; 97 C. C. A. 527.

Sanders *v.* White, 22 Ga. 103; Fahs *v.* Darling, 82 Ill. 142; Runnion *v.* Ramsay, 93 N. C. 410; Townsend *v.* Masterson, 15 N. Y. 587; Cole *v.* Thayer, 25 Mich. 212; Oliver *v.* Blair, 5 Pac. 917; Saling *v.* Ger. Sav. Bk. 8 N. Y. Supp. 469; Commonwealth *v.* Johnson, 3 Pa. 136; Wheeler *v.* Floral, 10 Nev. 200; Hill *v.* Hermans, 59 N. Y. 396; Mackey *v.* Daniel, 59 Md. 484; Emerick *v.* Armstrong, 1 Ohio. 513; Johnson *v.* Halley, 27 S. W. 750.

As to *this* court, when an order is "affirmed on the opinion of the court below," it approves the reasoning, adopts the findings and concurs in the conclusions of the court below. When, itself writing nothing, making no record of its findings as a court of appeals, it merely announces, "Order affirmed," it is to be understood that for some reason it prefers not to adopt the opinion of the court below, either that it has reached the conclusion by a totally different process of reasoning, or that, while in the main approving the opinion, there is something in it which the appellate court does not wish to approve. — Victor Talking Mach. *v.* Hoschke, 188 Fed. 326; 110 C. C. A. 304.

ASSIGNMENT.

§ 151. Action to Compel.

Complainant, the owner of basic patents, entered into verbal agreements with defendants to promote a nation-wide industry and entered into a written agreement giving licenses for a specific territory. Much money and effort were put into the enterprise by both parties, but the basic patents proved ineffective. Defendants invented improvements, but refused to assign to complainant. Action brought to compel assignment of improvements patented and unpatented. *Held:* Before any case can be said to be made out, requiring appellants to assign their inventions, it must be shown that consciously, and knowing the effect of what they were doing, they expressly agreed to make the assignment. Persons are not to be deprived of their inventions merely because to retain them, under the circumstances, may appear unconscionable. The circumstances must include a contemplated assignment as their conscious act and deed. But such conscious act and deed is sufficiently shown, it seems to us, when it is made to appear that consciously, and knowing the effect of what they were doing, they became parties to a lawful undertaking that, to carry out the undertaking as an entirety, expressly involved, on their part, such an assignment. In other words, title will not be taken, by the courts, from the inventor, and given to another, upon a state of facts that does not involve proof that the inventor, consciously and knowing the effect of what he was doing, contemplated that the title should go to the other; the rule being to protect the inventor against everything except his conscious agreement. But it was not intended that he should thereby be circumscribed in what he consciously wished to do with his future inventions. The rule was to save him from advantage being taken of him by others. * * * There existed, then, between these parties, as we view it, a relationship that made them, appellee as well as appellants, agents to a common enterprise — agents by agreement — the principal being the common enterprise itself; a relationship that, faithfully carried out by appellants, required them to put in the name of the appellee, but for the common enterprise, whatever they might invent in that line; and that, faithfully carried out by appellee, required that he extend (the appellants fulfilling their obligations) the scope of the common enterprise to include the whole of the United States — the specific option contracts being the mode employed. In what respect has this relationship failed: That appellants stand in a trustee relationship with respect to these inventions, to this common enterprise, we think is clear. That appellee stands, in relation to this common enterprise, as a trustee also, we think is clear. This clothes the court with power to enter a decree of some kind. It is the form of decree that remains to be determined. * * * The fairest and most equitable thing, as it seems to us, is to deal with this common enterprise as we would with a dissolved partnership, giving to each of the separating parties, as nearly as possible, his interest in the assets that have grown out of the common enterprise. — Nat. Wire Bound Box *v.* Healy, 189 Fed. 49; 110 C. C. A. 613.

Marshall had, however, in violation of his contract, previously assigned patent 725,349 to the New Marshall Engine Co., which took with notice of the prior transfer. This company, therefore, held the legal title as trustee for the complainant. Under the circumstances the state court had jurisdiction to pass on the question of ownership, and to enter a decree requiring * * * assignment in due form to the complainant. This jurisdiction was based on general principles of equity jurisprudence, and did not present a case arising under the patent law. It is, however, urged that the state court was ousted of jurisdiction to enter a decree for specific performance, because the bill went farther, and prayed that the defendants * * * be enjoined.

* * * The injunction was asked for only as an incident to a finding that the title was vested in the complainant. — New Marshall Engine Co. *v.* Marshall, 223 U. S. 473; 56 L. Ed. 513; 32 S. Ct. 238.

Brown *v.* Shannon, 20 How. 56; Wilson *v.* Sanford, 10 How. 99.

That where an inventor assigns the invention of one application to one party and thereafter assigns the invention of another application to another party which second application matures into a patent containing claims covering what was really the property of the purchaser of the first application, so long as the second application contains claims distinct from the first, an action to compel assignment by the owner of the second patent will not lie, see — Gould Storage Battery *v.* Electric Storage Battery, 192 Fed. 28; 112 C. C. A. 416.

§ 157. Debtor and Creditor.

That a sheriff selling under execution, a trustee in bankruptcy, or a receiver under a creditor's bill can convey no title beyond that held by the debtor; and while he may be able to sell the physical object of the patent, such sale may convey no right to use, see — Henry *v.* Dick, 224 U. S. 1; 56 L. Ed. 645; 32 S. Ct. 364.

Sawin *v.* Guild, 1 Gall. 485; Wilder *v.* Kent, 15 Fed, 217; Porter *v.* National, 17 Fed. 536.

§ 158. Evidence.

That where the search for a lost assignment has been thorough, it is not necessary that the complainant search the country over on mere conjecture in order to make a certified copy admissible, see — Wayne *v.* Benbow-Brammer, 168 Fed. 271; 93 C. C. A. 573.

§ 160. Future Inventions — Legality.

That where parties embark upon a common enterprise under agreements which are general and comprehensive, a condition may exist which will create an equitable trust wherein both patented inventions and future inventions will be held trust property for the benefit of all the parties, after the manner of concluding a copartnership, see — Nat. Wire Bound Box *v.* Healy, 189 Fed. 49; 110 C. C. A. 613.

Note: This is believed to be a novel question and a leading case upon the question of future inventions and the powers of a court of equity in dealing with the titles to patents. See excerpt from this decision under § 151, and compare with cases referred to by the court: Pressed Steel *v.* Hanson, 137 Fed. 403; American *v.* Wilson, 198 Mass. 182; Dalzell *v.* Dueber, 149 U. S. 315; Deane *v.* Hodge, 35 Minn. 146; Belcher *v.* Whittemore, 134 Mass. 330; Burr *v.* DeLaVergne, 102 N. Y. 415; Hapgood *v.* Hewitt, 119 U. S. 226; Solomons *v.* U. S., 137 U. S. 342.

§ 164. Interests Assignable.

The defendant's patent cannot be split up; it must be transferred in its entirety (i. e., the claims cannot be split up). — Gould Storage Battery *v.* Electric Storage Battery, 192 Fed. 28; 112 C. C. A. 416.

§ 168. Parol.

The general understanding and agreement between the parties was one thing; it fixed their relations to each other. The particular written agreements was another and different thing; they were only the modus vivendi

of carrying out the general understanding as business conditions and opportunity developed. There is no ground, therefore, for applying the rule of law that verbal conversations are merged in a subsequent written agreement; for these subsequent written agreements were not accepted or acted upon by the parties as a written embodiment of the verbal agreement. — Nat. Wire Bound Box *v.* Healy, 189 Fed. 49; 110 C. C. A. 613.

§ 174. Specific Performance.

That where the assignment was made subject to a royalty and a provision that the assignee should use reasonable diligence in putting the apparatus to practical use, and the assignee failed to use any reasonable diligence whatever, the assignor is entitled to an accounting and a reassignment, see — Neenan *v.* Otis Elevator, 194 Fed. 414; 114 C. C. A. 376.

§ 175. Territorial.

For a history of the law relating to the right to use, as distinguished from the right to make, including territorial rights, see — Daimler *v.* Conklin, 170 Fed. 70; 95 C. C. A. 346.

CLAIMS.

§ 186. Ambiguity.

A claim for a combination which embraces an element only in case it is made capable of being employed in the combination and without disclosing means of adapting it, discloses nothing definite. — Columbia *v.* Duerr, 184 Fed. 893; 107 C. C. A. 215.

§ 188. Construction — Beneficial Uses.

A patentee who has sufficiently described and distinctly claimed his invention is entitled to every use to which his device can be applied, whether he perceived or was aware of all of such uses at the time he claimed and secured his patent or not. — Acme *v.* Meredith, 183 Fed. 124; 105 C. C. A. 414.

Stow *v.* Chicago, 100 U. S. 547; Roberts *v.* Ryer, 91 U. S. 150; Miller *v.* Eagle, 151 U. S. 186; National *v.* Interchangeable, 106 Fed. 693.

§ 189. Construction — Broad and Narrow.

Where a patent contains a general claim for a combination of certain mechanical elements and a specific claim for a combination of a specified form, combination, or construction of one of those elements with other elements of the general claim, the legal presumption is that the two claims secure different combinations, and the general claim is not limited to the specific form, composition, or construction claimed in the specific claim, but protects the element and its mechanical equivalents, though in form, composition, or construction differing from that of the specific claim. — Owens *v.* Twin City, 168 Fed. 259; 93 C. C. A. 561.

Progress in the inventive arts cannot be impeded by giving to a patent for an intricate mechanical combination a construction that will deny to anyone his right to make and use a combination essentially different from the patented combination, even though features of the new combination may have been suggested by the patented combination. — Ohl *v.* Falstrom, 175 Fed. 67; 99 C. C. A. 89.

There is nothing in the prior art that compels the restriction of the broad element of claim 1. Under such conditions, following our previous decision,

we give effect to all parts of the patent by enforcing a construction that makes both generic and specific claims effective. — Freeman Co. *v.* General Electric, 191 Fed. 168; 111 C. C. A. 646.

Following Ryder *v.* Schlichter, 126 Fed. 487.

§ 191. Construction — Dissecting.

It would indeed be arbitrary, as said by claimant, to read into the claim the specific metal of which those shells are composed " for no other purpose than to render it (the claim) worthless." — United States *v.* Société Anonyme &c., 224 U. S. 309; 56 L. Ed. 224; 32 S. Ct. 479.

§ 193. Construction — Duplication.

It is true ordinarily that the employment of different words in separate claims indicates a purpose to secure distinct inventions; indeed, the rule is that " each claim of a patent covers a complete invention, and is, in substance, an independent patent." — Twentieth Century *v.* Taplin, 181 Fed. 96; 104 C. C. A. 156.

Celluloid *v.* Zylonite, 27 Fed. 291; United Nickel *v.* California, 25 Fed. 475; Leeds *v.* Victor, 213 U. S. 301.

§ 194. Construction — Equivalents.

It is, of course, clear that an inventor is not limited to the particular structure illustrated in his patent as the best form known to him provided his claim is broad enough to cover other or equivalent forms. If the claim in the present case could have been sustained as covering a combination of any hydrocarbon engine of the compression type with the other elements, the description in the specification of the modified Brayton engine would have been considered as a statement of the inventor's idea of the best form; but he would not have been confined to it, and the Otto improved engine would unquestionably have infringed. But we are unable to sustain the claim as so construed and could only hold it valid as being limited to a combination in which a Brayton modified or reorganized engine should be a member. The patent as so construed necessarily permits only a very limited range of equivalent forms. Being confined to an engine element of a particular class or type, an engine of another class seems almost barred by the interpretation itself. — Columbia *v.* Duerr, 184 Fed. 893; 107 C. C. A. 215.

Note: This passage states the course of reasoning in the Selden Automobile Case perhaps as well as any single passage. In a nutshell, the Circuit Court held that Selden invented a motor car driven by a gas-engine of the compression type. In a nutshell, the Circuit Court of Appeals held that Selden invented a motor car driven by a particular species of gas-engine. If, as a matter of fact, the prior art showed that a motor car had been driven by the explosive force of a hydrocarbon, the Circuit Court was wrong and the Circuit Court of Appeals was wrong in holding the patent valid but limited. If the prior art did not so show, then the Circuit Court was right and the Circuit Court of Appeals was wrong. Selden's patent is for a generic invention, or nothing.

The evidence is not before me; but it seems to me self-evident that, if all that Selden did was merely to employ a Brayton engine in a combination that was old (as the appellate court holds), it is too plain for argument that he invented nothing — or at least nothing more than certain improvements upon the Brayton engine, which, possibly, might be patentable as an improvement in gas-engines. Suppose that, after a direct current motor had been employed to propel a street-car, when the alternating current motor

was invented, someone had patented and claimed the combination of a car, trolley connections, and an alternating current motor. Clearly such would be mere substitution. But this is precisely what the logic of the appellate court comes to. They say a vehicle had been driven by a gas-engine before Selden's time, and, therefore, his claim must be limited to a particular species of gas-engine.

Again, the Selden patent as a *genus* may be tolerated; it is doubtfully operable; it is commercially a monstrosity. As a genus — as the thing which pointed the way to a new field of industry — it may be viewed with patience. As a *species* — showing how to make a specific application of a known mechanical means — it is an utter absurdity. Either Selden was at the foundation of the automobile art and is entitled to the honors of a pioneer, regardless of his procrastination and failure to make any substantial addition to the art in any specific sense; or else he and his assigns have foisted upon the public, after years of cold-storage in the Patent Office and after years of utter lack of progress, a *species*, born out of time and out of joint. The Circuit Court may have been wrong on the facts; it may be that a gas-engine driven-vehicle was old in the art; such would seem to be the fact. The Circuit Court of Appeals may have been right on these facts; but its facts and its logic, as it seems to me, are sorely mismated.

The liberal construction allowed to pioneer inventions cannot be invoked in behalf of a patentee whose claim was limited to save it from anticipation by previous patents so as to broaden the claim and practically make it cover what was rejected in the Patent Office. — Cotto-Waxo *v.* Perolin, 185 Fed. 267; 107 C. C. A. 373.

Royer *v.* Coupe, 146 U. S. 524; Phoenix *v.* Spiegel, 133 U. S. 360.

§ 195. Construction — Expanding.

It would be grossly unfair to compel the builder of a practical working machine to pay tribute to one who added nothing of substantial value to the art, simply because the language of his claims is broad enough to include the successful structure. Claims should cover what the patentee has invented and not what he imagines he has invented. — Lovell *v.* Seybold, 169 Fed. 288; 94 C. C. A. 578.

To give the claim a broader application would be to depart from its own language as well as to wholly ignore the extracts from the specification which we have quoted. We cannot accede to the proposition that the patentee can, under any doctrine of equivalents, change or add to the circuit connections of the patent so as to make the apparatus work in a different way or under different conditions. — Herzog *v.* N. Y. Telephone, 176 Fed. 349; 99 C. C. A. 623.

We cannot, by construction, enlarge a claim of a patent beyond the fair meaning of its language. If a patentee discloses in his specification an invention not sufficiently covered by the claims of his patent, he may, if the limited character of the claim is the result of inadvertence, accident, or mistake, surrender his patent and apply for a reissue, with a claim or claims sufficiently definite and exact to cover the whole of his invention. If he fails to do that, the part of his invention outside the claims belongs to the public. — Nu Bone *v.* Spirella, 183 Fed. 984; 106 C. C. A. 324.

The specification may not be read into a claim for the purpose of changing it, or to escape anticipation, or establish infringement. — Mueller *v.* Glauber, 154 Fed. 609; 106 C. C. A. 613.

Westinghouse *v.* Boyden, 170 U. S. 537; Gen. Sub-Construction *v.* Netcher, 167 Fed. 549.

§ 196. Construction — Functional.

Whether a claim that is functional may be patentable where the specification discloses the means, see — Arnold *v.* Tyden, 193 Fed. 410; 113 C. C. A. 344.

Paper Bag Case, 210 U. S. 405.

§ 199. Construction — Limitation — Broadening by Amendment.

We have, then, a situation where a patent application made in the early stages of the electrical art to electric car service was promptly and properly rejected, and where the rightfulness of that rejection remained unchallenged some seven years, and, indeed, appears now unchallengeable if the disclosures then made constitute the sole ground for the patent. During this interim there was a rapid and general advance in the railway art, and when therefore a patentee, seven years after his original application and enlightened by such intervening years of progress, seeks not to prosecute his original application, but to amend the same, and on the basis of such amendment to make claims of a different character from those originally made, it becomes the duty of a court to zealously and jealously scrutinize such belated application, for to such a situation is applicable the principle laid down in Railway *v.* Sayles, 97 U. S. 563, and Corbin *v.* Eagle, 150 U. S. 43. — Hestonville *v.* McDuffee, 185 Fed. 798; 109 C. C. A. 606.

§ 201. Construction — Limitation — By Applicant.

Where an applicant for a patent materially modifies a claim in accordance with a requirement of the Patent Office, it will not be construed as it would have been if it had not been thus modified. And this is so though such modification was made under protest, accompanied by notice that applicant would insist that the modification would be construed away after the grant of the patent; and such is the law even though the decision of the Patent Office was erroneous. — Johnson *v.* Western, 178 Fed. 819; 102 C. C. A. 267.

Phoenix *v.* Spiegel, 133 U. S. 360; Thomas *v.* Rocker, 77 Fed. 431; Macbeth *v.* Gillinder, 54 Fed. 170; Lapham-Dodge *v.* Severin, 40 Fed. 763; Keystone *v.* Phoenix, 95 U. S. 274; Computing *v.* Automatic, 204 U. S. 609; Brill *v.* St. Louis, 90 Fed. 666; Westinghouse *v.* Boyden, 170 U. S. 537.

That a statement made by the patentee subsequent to the granting of the patent as to the scope of the claims is not evidence of limitation, see — Bossert *v.* Pratt, 179 Fed. 385; 103 C. C. A. 45.

§ 202. Construction — Limitation — Elements of Claim.

In patents for a combination (combinations?), if the patentee specifies any element as entering into the combination, either directly by the language of the claim or by such a reference to the descriptive part of the specification as carries such element into the claim, he makes such element material to the combination and the court cannot declare it to be immaterial. — Electric Protection *v.* American, 184 Fed. 916; 107 C. C. A. 238.

Fay *v.* Cordesman, 109 U. S. 408.

Note: This case, in my opinion, illustrates the misapprehension and misapplication of this rule. Judge Sanborn, in his dissenting opinion, has noted this fact.

§ 203. Construction — Limitation — Failure to Claim.

A great idea may be embodied in a patent, and yet the patentee take nothing of value by it. That which he takes is that which he describes and claims. His discovery may be of importance, but he may limit it by his claim, and his claim may proceed in the wrong direction. — Columbia *v.* Duerr, 184 Fed. 893; 107 C. C. A. 215.

That although an invention may disclose novelty in the process of producing the manufacture, the claim being for the article cannot be sustained on the ground of the novelty of the process, see — Ashley *v.* Tatum, 189 Fed. 357; 111 C. C. A. 279.

A patentee who limits his claims to the precise construction shown and described, even though not obliged to do so, cannot hold as an infringer one who uses a different construction. — Morse Chain *v.* Link Belt, 189 Fed. 584; 110 C. C. A. 564.

§ 204. Construction — Limitation — General Rules.

It is of the essence of the rule whereby the inventor is estopped from claiming to the full of his invention as disclosed by his specifications and claims in consequence of his concessions to meet the requirements of the Patent Office and so obtain his patent, that the requirements which were conceded by him should concern the matter upon which the estoppel is raised. The estoppel must rest upon a definite basis. If the examiner discloses his objection, we can see what it is, and know the consequence of a concession to it. If he does not do this, and contents himself with a reference, we look to the matter referred to, to ascertain his meaning. Either in the one way or the other the examiner must point out what his objection means. If his objection is not put upon the ground whereon the patentee is alleged to be estopped, it is obvious that the concession made to meet it would be a concession only of an entirely irrelevant matter. — Vrooman *v.* Penhollow, 179 Fed. 296; 102 C. C. A. 484.

Hillborn *v.* Hale, 69 Fed. 958; Owens *v.* Twin City, 168 Fed. 259.

It does not necessarily follow from the fact that the claim describes a specific form of construction, that the inventor shall be limited to that form. All depends upon his expressed intention, and the scope of the actual invention when it was made. If his improvement is but a narrow one, or if he has used language such as clearly to show his intention to limit his invention to a particular form described, then he is held to the language of his claim, and limited to the specific form. But if his is a pioneer invention, or one of such merit as to be entitled to a liberal construction, the claims will not thus be limited, even if couched in specific language, unless the inventor has also shown his positive intention to relinquish to the public all other forms in which his invention might be embodied. — Kings County *v.* U. S. Consolidated, 182 Fed. 59; 104 C. C. A. 499.

Winans *v.* Denmead, 15 How. 330; Western *v.* La Rue, 139 U. S. 601; Hoyt *v.* Horne, 145 U. S. 302; Sessions *v.* Romadka, 145 U. S. 29; McCormick *v.* Aultman, 69 Fed. 371.

§ 205. Construction — Limitation — Improvement.

We cannot assent that the patent is a "basic or pioneer patent and entitled to be construed accordingly," but rather a patent for a combination of elements already in use; and, this being true, the patent is not entitled to a broad and liberal construction, but, on the contrary, the range of in-

fringing equivalents must be restricted to those which perform the same functions in the same way. — St. Louis *v.* Sanitary, 178 Fed. 923; 103 C. C. A. 565.

Sargent *v.* Lock Co., 114 U. S. 63; Shepard *v.* Carrigan, 116 U. S. 593; Carter *v.* Hanes, 70 Fed. 859.

Note: The "range of infringing equivalents," stated by the court, is a peculiar statement. When we come to refine equivalents to "infringing" and non-infringing, we are getting to a rather fine point.

That where the prior art shows that the claim is merely an improvement, there is no room for construction, see — Jackson *v.* D'Arcey, 181 Fed. 340; 104 C. C. A. 170.

Keystone *v.* Phoenix, 95 U. S. 274; Burns *v.* Meyer, 100 U. S. 671; Duff *v.* Sterling, 107 U. S. 636; Wells *v.* Curtis, 66 Fed. 318; Ludington *v.* Leonard, 119 Fed. 937.

§ 206. Construction — Limitation — Narrow Improvement.

Were we dealing with a broad, generic invention, these differences might be considered negligible, but they cannot be ignored when considering claims which are limited to the structures described and are not entitled to a wide range of equivalents. — Corrington *v.* Westinghouse, 178 Fed. 711; 103 C. C. A. 479.

§ 207. Construction — Limitation — Patent Office Action Limiting.

That where an applicant makes the form of construction a condition to obtain a claim he is limited to that exact form, see — Campbell *v.* Am. Shipbuilding, 179 Fed. 498; 103 C. C. A. 122.

Werner *v.* King, 96 U. S. 218; Safety Oiler *v.* Scovill, 110 Fed. 203; Brill *v.* St. Louis, 90 Fed. 666; Am. Stove *v.* Cleveland, 158 Fed. 978; Morgan *v.* Albany, 152 U. S. 425; Am. Graphophone *v.* Universal, 151 Fed. 595; Roemer *v.* Peddie, 132 U. S. 313; Shepard *v.* Carrigan, 116 U. S. 593.

That where an applicant has acquiesced in the narrowing of a claim to avoid anticipation, he cannot afterwards broaden it by construction to cover infringement, see — Underwood *v.* Typewriter, 180 Fed. 726; 104 C. C. A. 92.

It is hard to perceive any difference in principle between acceptance of a limitation made in the Patent Office through change of a single claim, and acceptance of a limitation imposed upon that claim through denial of other claims of the same application. Of course it would generally be more difficult definitely to work out an estoppel in the latter case than in the former; and it must be conceded that estoppel will not lie in either of the cases suggested, unless the elements are definitely traceable to the inventor through his acquiescence in adverse action taken in the Patent Office. — Twentieth Century *v.* Taplin, 181 Fed. 96; 104 C. C. A. 156.

Vrooman *v.* Penhollow, 179 Fed. 296; Bundy *v.* Detroit, 94 Fed. 524; U. S. Repair *v.* Assyrian, 183 U. S. 591; id. 100 Fed. 965.

If claim 1 had itself been changed so as definitely to limit its scope to the swinging bail, acquiescence therein on the part of the inventor would manifestly have estopped him from using any other device than the bail to support or operate the dumping portion of his grate, no matter whether any-

thing in the prior art requires such a limitation or not. — Twentieth Century *v.* Taplin, 181 Fed. 96; 104 C. C. A. 156.

Campbell *v.* Am. Shipbuilding, 179 Fed. 498; Brown *v.* Stilwell, 57 Fed. 731; Corbin *v.* Eagle, 150 U. S. 38; Royer *v.* Coupe, 146 U. S. 524; Hubbell *v.* U. S. 179 U. S. 77.

A claim narrowed to meet rulings of the Patent Office does not resume its expansiveness when the patent is secured. — Am. Disappearing Bed *v.* Arnaelsteen, 182 Fed. 324; 105 C. C. A. 40.

It is settled by the repeated decisions of the Supreme Court and of this court that, when an inventor seeking a patent for a broad claim acquiesces in a rejection of the same by the Patent Office and substitutes therefor a narrower one, he will not be heard to insist that the construction of the claim allowed shall include that which has been rejected; also, that a claim as allowed under such circumstances must be construed with reference to the rejected claims and the prior state of the art, and will not be so interpreted as to cover either what was rejected by the Patent Office or disclosed by prior devices. — Boss *v.* Thomas, 182 Fed. 811; 105 C. C. A. 243.

Corbin *v.* Eagle, 150 U. S. 38; Computing *v.* Automatic, 204 U. S. 609; National *v.* Interchangeable, 106 Fed. 693; St. Louis *v.* American, 156 Fed. 574.

It is not necessary to enquire whether the inventor was entitled to broader claims than he has received. The fact that he acquiesced in the ruling of the examiner and accepted the limited claims here in issue estops him from now claiming what he formally abandoned. — Winchester *v.* Peters, 184 Fed. 333; 106 C. C. A. 363.

Where a patentee on the rejection of his application inserts limitations and restrictions for the purpose of obtaining his patent, he cannot after he has obtained it claim that it shall be construed as it would have been construed if such limitations and restrictions were not contained in it. — Cotto-Waxo *v.* Perolin, 185 Fed. 267; 107 C. C. A. 373.

Corbin *v.* Eagle, 150 U. S. 40; Roemer *v.* Peddie, 132 U. S. 313; Electric *v.* Boston, 139 U. S. 481; Sutter *v.* Robinson, 119 U. S. 530.

The rule is well settled that where an applicant for a patent acquiesces in the rejection of the claims presented, and amends the same or substitutes others to meet the objections of the Patent Office, he must be deemed to have surrendered and disclaimed what he thus conceded, and is bound by the limitation so imposed. — Sly *v.* Russell, 189 Fed. 61; 110 C. C. A. 625.

Shepard *v.* Carrigan, 116 U. S. 593; Roemer *v.* Peddie, 132 U. S. 313; Morgan *v.* Albany, 152 U. S. 425; American *v.* Cleveland, 158 Fed. 978; Campbell *v.* American, 179 Fed. 498; Twentieth Century *v.* Taplin, 181 Fed. 96.

Note: The rule thus stated is rather too broad, and is properly qualified by the court in the same paragraph.

Claim 11, as originally drawn, omitted the limiting phrase * * *. That phrase was inserted by amendment to distinguish it from French patent No. 157,852, on which it had been rejected. As the element here referred to has the same limiting phrase in each of the four claims, and as that phrase was inserted in claim 11 to obtain it, it follows that the limitation cannot be read out of the claim, or, indeed, out of claims 8, 9, or 10, in order to hold the defendants as infringers. — Tabor Co. *v.* Mumford Co. 191 Fed. 166; 111 C. C. A. 644.

§ 208. Construction — Limitation — Patent Office Action Not Limiting.

If a patentee acquiesces in the rejection of his claim on references, he may be estopped to maintain that an amended claim covers the combinations shown in those references, or that it has the breadth of the rejected claim, but he is not estopped from claiming and securing by the amended claim every improvement and combination which he has invented and which was not disclosed by those references. — Owens *v.* Twin City, 168 Fed. 259; 93 C. C. A. 561.

National *v.* Interchangeable, 106 Fed. 693.

While the rejection on the reference and the subsequent amendment may estop the complainant from claiming the improvements shown in the reference, they do not estop it from claiming and securing every improvement and combination which the patentee invented that was not disclosed by the reference. — Wayne *v.* Benbow-Brammer, 168 Fed. 271; 93 C. C. A. 573.

National *v.* Interchangeable, 106 Fed. 693; Owens *v.* Twin City, 168 Fed. 259.

The inventor is required by the statute to point out the best mode in which he has contemplated the application of the principle of his invention. But this does not preclude him from claiming any other mode which embodies his principle. * * * His drawings show such a form. He could have no objection to claiming his invention in that form, and accordingly accepted the suggestion of the examiner. The examiner saw that this was the inventor's preferred form, and recommended that the claim of his invention be in that form. We see nothing in these circumstances which would work a limitation any more than if he had originally so described his cutting roller. * * * We do not doubt that where the thing described in a claim has been declared by the inventor to be the only one, or has treated it as the only one appropriate to represent his invention, or the character of the associated elements is such as necessarily to require that particular form, in all such cases the patentee will be bound by his description. But where there are no such considerations, and there is simply and only a description of one form of a thing which would perform the same office in other forms, the court will apply the general rule above stated and accord him his monopoly in all equivalent forms. — Vrooman *v.* Penhollow, 179 Fed. 296; 102 C. C. A. 484.

Werner *v.* King, 96 U. S. 218.

While acquiescence in the rejection of claims on references in the Patent Office and the acceptance of a patent on amended claims estops the patentee from maintaining that the amended claims secure to him a monopoly of the use of the devices shown in the references, that is the limit of the estoppel. He is not estopped thereby from securing by amended claims every novel and useful device, composition, and process that he has discovered or invented that is not disclosed by these references. Dissenting opinion of Judge Sanborn in — Cotto-Waxo *v.* Perolin, 185 Fed. 267; 107 C. C. A. 373.

National *v.* Interchangeable, 106 Fed. 693.

Of course, the acquiescence in the rejection of a combination of elements in general terms is not an abandonment of a combination of the same elements limited to specific construction and location, for in the specific construction and location may reside invention. — Moneyweight *v.* Toledo, 187 Fed. 826; 109 C. C. A. 583.

A patentee who, in order to avoid a rejection of his application, inserts limitations in his claims, is estopped from contending that the patent as issued should be construed as if such limitations had not been made. But, as a general rule, the interpretation to be placed upon the claims and specification of a patent is to be determined from the language of the grant, and the proceedings in the Patent Office are quite immaterial. Such is the situation in the present case. Original claims were rejected in the Patent Office. Thereupon the applicants, instead of limiting their claims, substituted broader ones which were accepted. Presumably the examiner changed his mind. But whatever the explanation of his position, nothing whatever is shown to work an estoppel against the patentees. Instead of surrendering something which they now claim to obtain that which was allowed, they claimed something more and got it. — Westinghouse *v.* Condit, 194 Fed. 427; 114 C. C. A. 389.

§ 209. Construction — Limitation — Patent Office Action — Protest.

Though such modification was made under protest, accompanied by notice that the applicant would insist that the modification would be construed away after the grant of the patent, and such is the law even though the decision of the Patent Office was erroneous. — Johnson *v.* Western, 178 Fed. 819; 102 C. C. A. 267.

Phoenix *v.* Spiegel, 133 U. S. 360; Thomas *v.* Rocker, 77 Fed. 431; Macbeth *v.* Gillinder, 54 Fed. 170; Lapham-Dodge *v.* Severin, 40 Fed. 763.

§ 212. Construction — Limitation — Specification and Drawings.

That where the claims use broader language as to the action or function of the invention than the specification, the specification must govern, see — Zinn *v.* Auto Strop, 175 Fed. 78; 99 C. C. A. 100.

Can the patentee rightfully include in his claims something that does not emerge from the description? Can a patentee describe something to the world in his letters patent that means just that thing or its equivalents and nothing else, and having claimed that, claim in addition something not thus described and not its equivalents? We think not. The description is required to set forth the invention in such full, clear, concise and exact terms as to enable any person, skilled in the art to which it appertains, or with which it is most nearly connected, to make and use the same; and the claim is to enable the public to know the bounds and scope of the invention "thus described;" but "any claim which is broader than the described invention is void; even where the invention is valuable, and could have supported a valuable claim." — Walk. Pat. (4th Ed.), § 177, citg. Edison *v.* American, 114 Fed. 934.

There is nothing in Winans *v.* Denmead, 15 How. 330, or the Paper Bag Case, 210 U. S. 405, nor in any of the rules of law cited ("that the claims of every patent should be construed, if possible, to cover and protect the actual invention made by the patentee, and should not be restricted to the particular form of device disclosed in his patent, if other forms may embody it," or that "the patentee's claim is the measure of his invention," or that "where the claims of a patent are clear and unambiguous, there is no room for construction") that contravenes what has just been said; for what is said in both of these cases, and in all of the rules, is based on the fact that the inventive concept is disclosed in the description, whatever may have been the mechanical form that such concept subsequently took. Certainly it was not intended by these cases or these rules that an inventive concept,

that is separate and apart from the one embodied in the description, should become a part of the patent simply by being included in the claims. — State Bank *v.* Hillmans, 180 Fed. 732; 104 C. C. A. 98.

Note: This is believed to be a wholesome clearing-up of much loose statement, usually under shield of " beneficial uses." See §§ 188, 598.

The description in a specification or drawings of details which are not, and are not claimed as, essential elements of a combination, is the mere pointing out of the better method of using the invention. Dissenting opinion of Judge Sanborn in — Electric Protection *v.* American, 184 Fed. 916; 107 C. C. A. 238.

Boston *v.* Allen, 91 Fed. 248; National *v.* Interchangeable, 106 Fed. 693; Owens *v.* Twin City, 168 Fed. 259; Continental *v.* Eastern, 210 U. S. 405.

Claims cannot be broadened by construction beyond what is reasonably necessary to accomplish the stated primary object of the patent. — American Stoker *v.* Underfeed, 188 Fed. 314; 110 C. C. A. 292.

The specification which forms a part of the same application as the claims must be read and interpreted with them, not for the purpose of limiting, or of contracting, or expanding, the latter, but for the purpose of ascertaining from the entire agreement, of which each is a part, the actual intention of the parties, and that intention when ascertained should prevail over the dry words and inapt expressions of the contract evidenced by the patent, its specification and claims. — Century Electric *v.* Westinghouse, 191 Fed. 350; 112 C. C. A. 8.

Seymour *v.* Osborne, 11 Wall. 516; National *v.* Interchangeable, 106 Fed. 693; Jewell *v.* Jackson, 140 Fed. 344; Louden *v.* Janesville, 148 Fed. 686; Electric Machine *v.* Morris, 156 Fed. 972; Lewis *v.* Premium, 163 Fed. 950; Fullerton *v.* Anderson-Barngrover, 166 Fed. 443.

§ 213. Construction — Limitation — State of Art.

A claim in a patent as allowed must be read and interpreted with reference to the claims that have been rejected and to the prior state of the art, and cannot be so construed as to cover either what was rejected by the Patent Office or disclosed by prior devices. — Cotto-Waxo *v.* Perolin, 185 Fed. 267; 107 C. C. A. 373.

Hubbell *v.* U. S. 179 U. S. 77; Computing *v.* Automatic, 204 U. S. 609.

§ 214. Construction — Limitation — Words of Limitation.

In construing claims, whether or not the phrase " substantially as described " is repeated in each one, the first, and generally the best source of information is the specifications. — Am. Specialty *v.* New England, 176 Fed. 557; 100 C. C. A. 193.

We think that undue significance was attached by the court below to the phrase " substantially as described." The complainants certainly are not by any descriptive language in the claims of either of them restricted to the precise form or forms of closure mechanism set forth in the patent description. Nor does the description state directly or indirectly that the patentees were to be confined to such particular form or forms of closure mechanism. — Am. Pneumatic *v.* Snyder, 180 Fed. 712; 104 C. C. A. 78.

That where the claim employed the term " means " in a general way, and on rejection and reference to prior patent that term was restricted to

a specific and designated means, the claim is so limited, see — Twentieth Century *v.* Taplin, 181 Fed. 96; 104 C. C. A. 156.

§ 220. Construction — Reading in Elements.

That where an element obviously essential to a combination and obviously implied is omitted, it may be read into the claim, see — Herman *v.* Youngstown, 191 Fed. 579; 112 C. C. A. 185.

§ 222. Construction — Rules — General.

The rules applicable to the construction of these claims are: (1) That we cannot read into a claim for a combination an element not mentioned in it, although it may appear in the specifications; (2) That if the claim includes an element in general terms, and refers to the specification to identify it, we may read that element into the claim; (3) That where the applicant for a patent in one claim makes no mention of an element, and in another includes it, the presumption is that he omitted it in the first on purpose; (4) That a patentee may include in or omit from his claims so much of the matter of the specifications of his invention as he pleases; but he is bound to state distinctly what part of it he intends to claim as his own. — Duncan *v.* Cincinnati, 171 Fed. 656; 96 C. C. A. 400.

In construing the claim in controversy, we must remember that it is to be interpreted in the light of the description and drawings having regard to the difficulties to be overcome and the end to be attained. — Simplex Railway *v.* Pressed Steel, 189 Fed. 70; 110 C. C. A. 634.

§ 223. Construction — Specification.

The description in a specification or drawing of a form, or a composition, or construction, of a mechanical element, when that form, composition, or construction is not, and is not claimed to be essential to the combination or improvement claimed, is the mere pointing out of the best mode in which the patentee contemplated applying the principle of his invention under § 4888, and does not deprive him of protection for mechanical equivalents or indicate that he intended to give up all other modes of application. — Owens *v.* Twin City, 168 Fed. 259; 93 C. C. A. 561.

Continental *v.* Eastern, 210 U. S. 405; National *v.* Interchangeable, 106 Fed. 693; Boston *v.* Allen, 91 Fed. 248.

That the claim must be construed in the light of the specification, see — Washer Co. *v.* Cramer, 169 Fed. 629; 95 C. C. A. 157.

While the law permits us to read the specification into a claim upon reference thereto in the latter, it would be an abuse of such liberality to first alter the specification and then read it, thus altered, into the claim. — Duner *v.* Grand Rapids, 171 Fed. 863; 96 C. C. A. 531.

The discussion of the claims of a patent is not to be confined to a mere logomachy, which could be set at rest at once by a reference to the specifications and drawings. — Fowler *v.* National, 172 Fed. 661; 97 C. C. A. 187.

§ 228. Construction — Valeat quam Pereat Rule.

That the court cannot, in order to save a claim, limit it beyond the plain and undeniable content, see — Empire *v.* Channon, 168 Fed. 705; 94 C. C. A. 211.

A construction resulting in the abandonment by the applicant of the very feature for which the invention was in large part designed should not be adopted unless such abandonment is clearly shown. — Sly *v.* Russell, 189 Fed. 61; 110 C. C. A. 625.

§ 229. Construction — Words and Phrases.

The introductory phrase is not an element of the combination, and does not necessarily limit the claim. — Sly *v.* Russell, 189 Fed. 61; 110 C. C. A. 625.

Ex parte Casler, 90 O. G. 446.

§ 241. Generic.

Undoubtedly a patent upon a combination may be broader than a patent upon any or all of its elements. — Columbia *v.* Duerr, 184 Fed. 893 (note, p. 910); 107 C. C. A. 215.

Note: This statement is open to serious question.

§ 246. Specific.

That a claim drawn specific to another claim with an added element may be valid, see — Herman *v.* Youngstown, 191 Fed. 579; 112 C. C. A. 185.

§ 247. Sufficiency.

Claim 2 is not invalid because it is not for an operative device, for, if such were the law, patentability must have been denied to Elias Howe for "the grooved and eye-pointed needle," which constituted his seventh claim. — Clark Blade *v.* Gillette, 194 Fed. 421; 114 C. C. A. 383.

Howe *v.* Williams, Fed. Cas. 6778; Deering *v.* Winona, 155 U. S. 286.

§ 248. Void.

Claims are independent inventions. One may be infringed, others not, and the redress of the patentee is limited to the injury he suffers, not by the abstract rights which may have been granted to him in other claims. One claim may be valid, all the rest invalid — invalid for the want of some essential patentable attribute. But what is good remains and is unaffected by its illegal associates. In such cases the patent does not stand or fall as a unity. — Leeds *v.* Victor, 213 U. S. 301; 53 L. Ed. 805; 00 S. Ct. 000.

COMITY.

§ 250. General Statement and Definition.

In passing on the other foreign patents, the circuit court considered that the prior adjudications fortified the presumption of the validity of the patent in suit, and established its scope, and that the new matter introduced did not repel the presumption or limit the extent of the patent. That the lower courts properly regarded the prior adjudications as a ground of preliminary injunction is established by the cases cited Walk. Pat. §§ 665 et sq., Rob. Pat. §§ 117 et sq. And in that aspect the question must be considered, and, so considering it, we may pass the defenses of anticipation, whether complete or partial, and the defense of infringement. — Leeds *v.* Victor, 213 U. S. 301; 53 L. Ed. 805; 29 S. Ct. 495.

Note: It is believed that this decision should turn the tendency of the courts in certain circuits from their present disregard of prior adjudication to a more wholesome respect for decisions in other circuits.

§ 251. Between Circuit Courts.

When the same question subsequently comes before another judge at circuit on substantially the same evidence, it is to be expected that he will follow Judge Townsend's findings and conclusion. But if the evidence is materially different, so that he feels convinced that upon the new record Judge Townsend would have decided differently, we do not understand that he is so constrained. — Victor *v.* Hoschke, 188 Fed. 326; 110 C. C. A. 304.

§ 253. Between Circuit Courts of Appeals.

That upon substantially the same record, the decision of one circuit court of appeals should be given great weight by another circuit court of appeals, see — Westinghouse *v.* Condit, 167 Fed. 546; 93 C. C. A. 224.

The importance of securing uniformity in the law as administered in the several circuits in patent causes is so great that a decision of a court of co-ordinate jurisdiction should be followed by this court in every case where the question presented can fairly be regarded as doubtful. — Gormley & Jeffry *v.* U. S. Agency, 177 Fed. 691; 101 C. C. A. 479.

Pratt *v.* Wright, 65 Fed. 99; Enterprise *v.* Deisler, 46 Fed. 855.

The Circuit Court for the Northern District of Ohio, and the Circuit Court of Appeals for the Sixth Circuit having held the first claim of the patent here in suit is invalid, we think that an orderly administration of the patent law demands that we should follow these decisions unless clearly persuaded that they are erroneous. — Lorain *v.* White, 184 Fed. 326; 106 C. C. A. 356.

Our high respect for the learning of those courts gives to their judgment in any case a strong persuasive force, and the desirability of uniformity of decisions of courts exercising co-ordinate jurisdiction in patent cases is so great as to strongly incline us as a matter of comity to acquiesce; but there is no rule of law requiring such acquiescence. Moreover, there is evidence strongly tending to show that that (the prior) suit was collusive; not designed for a trial of the second claim of the patent upon its merits, but to secure vantage ground for future injunctive relief. In view of these things we are abundantly absolved, in any view of the rule of comity, from following the decision in the Sanders Case. — Torrey *v.* Hancock, 184 Fed. 61; 107 C. C. A. 79.

Mast *v.* Stover, 177 U. S. 485.

Although the parties are entitled to the independent judgment of this court, nevertheless the orderly administration of justice requires that, where a question has been decided after careful and exhaustive examination by the court of appeals of one circuit, another court of co-ordinate jurisdiction should not reach a different conclusion unless persuaded that the first decision is clearly wrong. Especially is this true in patent causes, for otherwise, under our present system, a party may be punished for an act which on the other side of a dividing line is perfectly lawful and proper. — Calculagraph *v.* Automatic, 187 Fed. 276; 109 C. C. A. 618.

The rule of comity for the Second Circuit, as stated by Judge Coxe, quoted and approved in — Warren Bros. *v.* City of N. Y. 187 Fed. 831; 109 C. C. A. 591.

Box Co. *v.* Paper Co. 51 Fed. 229; Doig *v.* Morgan, 91 Fed. 1001; New York Filter *v.* Niagara, 80 Fed. 924; Consolidated Rubber Tire *v.* Diamond, 157 Fed. 677; distinguishing Mast *v.* Stover, 177 U. S. 488.

Five judges have decided that the invention of the original is not the same as that of the reissue. * * * In these circumstances we should be very sure of our position before running counter to such a weight of authority. — Morse Chain *v.* Link-Belt, 189 Fed. 584; 110 C. C. A. 564.

CORPORATIONS.

§ 271. Miscellaneous Rulings.

That in the absence of proof of personal acts, officers of corporations are not personally liable for infringement by a corporation, see — Johns-Pratt *v.* Sachs, 175 Fed. 70; 99 C. C. A. 92.

The two corporations evidently preserve their separate organizations; but the control of the Bullock Company's business is exercised by the Allis-Chalmers Company, which has taken over all that is valuable in this business and made it a department of its own. The substance of the matter is that the Allis-Chalmers Company is the unquestioned master, whose orders are obeyed, and we think that under such circumstances a court of equity will look behind the corporate screen and determine where the real and responsible power lies. — Westinghouse *v.* Allis-Chalmers, 176 Fed. 362; 100 C. C. A. 408.

COSTS.

§ 273. Appeals.

That an objection to an item taxed by the appellate court should be raised by application for retaxation in that court, and cannot be raised for the first time in the court below, see — Fidelity *v.* Expanded, 183 Fed. 568; 106 C. C. A. 114.

There seems to be no reasonable doubt that sec. 1 of rule 13 requires that the bond on appeal or writ of error shall cover the costs of both the upper and lower courts, except in cases where, from the nature and character of the suit, they are otherwise secured. — Fidelity *v.* Expanded, 183 Fed. 568; 106 C. C. A. 114.

Kountze *v.* Omaha, 107 U. S. 378; Dexter *v.* Sayward, 73 Fed. 237; The Joseph B. Thomas, 158 Fed. 559.

The cost of the supersedeas bond was a necessary part of the expenses of appeal, caused by the erroneous decision of the court below. Although the bond was allowed as a favor and not a matter of right, it was necessary to protect the appellant's interests pending the appeal. As it has not been customary to tax the premiums on supersedeas or appeal bonds in the Circuit Court of Appeals, the action of the clerk is affirmed, but the appellant should be allowed to tax these premiums in the Circuit Court. — Columbia *v.* Duerr, 184 Fed. 893; 107 C. C. A. 215.

That the costs which the clerk is entitled to charge for supervising the appeal record as fixed by statute is indivisible, and that the full amount is to be charged even when the supervision involves merely preparing an index, see — Colt's Co. *v.* N. Y. Sporting Goods Co. 186 Fed. 625; 108 C. C. A. 489.

Following Bean *v.* Patterson, 110 U. S. 401.

§ 274. Disclaimer.

There being no disclaimer the decree will be without costs. And this applies as well to the costs in this court as in the court below. This relief

is merely negative, however. It denies costs, but it does not give them; and we see no occasion to direct that the defendants shall recover any costs here, or any further portion of their costs below than was there allowed them. — Novelty *v.* Brookfield, 172 Fed. 221; 97 C. C. A. 25.

That where complainant succeeds on appeal as to certain claims and is required to disclaim as to others, he may recover costs on appeal, but neither party will recover costs in the court below, see — Cummer *v.* Atlas, 193 Fed. 993; 113 C. C. A. 611.

Yale *v.* Sargent, 117 U. S. 536.

§ 277. Miscellaneous.

Where a suit is brought upon several claims of one or more patents, and the complainant succeeds in obtaining relief upon some of the claims but fails to recover upon others, an equitable division of the costs proportioned to the expense of litigating the respective claims should be made. — Owens *v.* Twin City, 168 Fed. 259; 93 C. C. A. 561.

Ide *v.* Trorlicht, 115 Fed. 137; Willcox *v.* Merrow, 93 Fed. 206; Thomson-Houston *v.* Elmira, 71 Fed. 886; Johnson *v.* Foos, 141 Fed. 73.

As the defendant succeeds as to the Whitmore patent, he was entitled to costs to which he would be entitled had there been a separate suit against him on that patent. — Roth *v.* Harris, 168 Fed. 279; 93 C. C. A. 581.

The complainant has established that he has a valid patent which has been infringed. On account of the unusual circumstances of the case, he is not entitled to any of the relief prayed for. We think it equitable that he should have one-half costs of this court, and that neither party should recover in the Circuit Court. — Crier *v.* Innes, 170 Fed. 324; 95 C. C. A. 508.

The words "cost" and "costs" do not always mean the same thing. The word "cost" and the phrase "taxable costs" generally have quite different meanings. "Cost" may be considered as synonymous with "expense." "Taxable costs" are allowances made to the successful party to reimburse him for his disbursements made in prosecuting or defending a suit. But to the unsuccessful party they are of the same nature as the damages awarded against him. He pays them because they are an incident to the judgment, not because they are any part of the expenses of his own defense. — Hygienic *v.* Provident, 176 Fed. 525; 100 C. C. A. 121.

That where two corporations entered into an agreement for mutual defense against suits for infringement, "the cost and expense of such defenses to be equally borne by the parties hereto," such agreement cannot be construed as an agreement of indemnity, so that one of the parties being mulcted with costs can recover pro rata such costs from the other party, see — Hygienic *v.* Provident, 176 Fed. 525; 100 C. C. A. 121.

In view of the fact that the complainant recovered only nominal damages, the trial court ordered it to pay all costs attending the accounting, including the hearing on the exceptions to the master's report. We think this was right. — Dowagiac *v.* Minnesota, 183 Fed. 314; 105 C. C. A. 526.

Kirby *v.* Armstrong, 5 Fed. 801; Ingersoll *v.* Musgrove, Fed. Cas. 7040; Robbins *v.* Illinois, 78 Fed. 124; Kansas City *v.* Devol, 127 Fed. 363.

It is apparently true that in some rare cases where there were several wrongdoers, some of whom had participated in doing the wrong only in a trivial or almost wholly unrelated manner, the court has exercised its discretion in their favor and cast the heavier burden of costs to which all are liable upon the more guilty parties. But such cases are exceptions to the general rule upon very special circumstances. — Vrooman *v.* Penhollow, 186 Fed. 495; 108 C. C. A. 502.

That the fact that a demurrant fails on one or more grounds set out in the demurrer, so long as he succeeds upon one ground, does not bar costs, see — Gold *v.* Gold, 187 Fed. 273; 109 C. C. A. 615.

DAMAGES.

§ 283. Increasing.

That the Circuit Court of Appeals for the Second Circuit will not follow the course in Fox *v.* Knickerbocker, 165 Fed. 442, see — Brown *v.* Drohen, 175 Fed. 576; 99 C. C. A. 192.

§ 288. Measure — Complainant's Loss.

That losses based upon diverted sales must not be speculative, see — Nat. Metal *v.* Bredin, 186 Fed. 490; 108 C. C. A. 468.

The proofs show that the complainant's profit on the strips manufactured and sold by them was 1½ cents per foot. It is fair to assume that this agent would have purchased the 71,634 feet from complainants if the defendant's infringing strip had not been offered to him. — Nat. Metal *v.* Bredin, 186 Fed. 490; 108 C. C. A. 468.

Assignment is to a refusal to charge that: "Inasmuch as plaintiff has not proven that it would have received any order for its switching devices from either of the defendants, it cannot recover." We think this request was unsound. It would require plaintiff specifically to prove what in the nature of things can only be established by inference. When a person buys and installs an infringing device, it is assumed he does so because he finds it desirable or necessary to do so; and the natural inference would be that, if he had not got the infringing device from the infringing manufacturer, he would have got the equivalent device of the patent from some one licensed to make it, or if no one is so licensed, and the owner of the patent himself manufactures, then from such owner. — Transit Development Co. *v.* Cheatham, 194 Fed. 963; 114 C. C. A. 599.

§ 289. Measure — Deductions and Mitigations.

That the complainant may have been a party to an unlawful trust or combination, which raised the prices of the articles made and sold is not a ground for mitigating or refusing damages, see — Novelty *v.* Brookfield, 170 Fed. 946; 95 C. C. A. 516.

St. Louis *v.* Terre Haute, 145 U. S. 393.

§ 292. Measure — License Fee.

The master found that the evidence failed to establish a uniform license fee for the machines when used both night and day, as but a single instance of a license for such work was shown. This proposition is not seriously disputed, but the complainant contends that there was an established license fee for day work, and as the defendant used the machines night and day, he should not complain if required to pay the fee charged for day work.

This contention certainly seems plausible, but we hesitate to adopt it in the absence of proof. Are we permitted to infer that a license fee for a machine working night and day must, under all conditions, exceed, or at least equal, a license fee for a machine working by day only? We cannot think that the affirmative of this proposition is entirely free from doubt.

Lacombe, J. dissenting: I cannot concur in the proposition that we may assume, without proof, that a patentee who has an established license fee for the use of his machine for day work only, would be likely to allow its use for day and night work both at any less rate. — Brown *v.* Drohen, 175 Fed. 576; 99 C. C. A. 192.

Note: It is difficult to follow the reasoning of Judge Coxe in this case, and it would seem that the dissent of Judge Lacombe is justified.

This conclusion (for nominal damages) was reached upon the theory that unless a uniform rate of license fee, or at least a uniform rate for the particular period during which the defendant's infringement began, can be shown, nothing at all can be recovered. We do not agree with this conclusion. The patent had a career of vicissitudes. Sometimes it was held valid, sometimes void. In consequence the owner could not always get the same license fee. * * * Upon such a state of facts we are of the opinion that the infringer should be held to have damaged the owner to the extent of what such infringer would have had to pay for a license at the lowest rate for which licenses had been issued, had he not infringed but conceded the validity of the patent at the outset. An owner may not announce some fixed rate, and then constantly depart from it for one reason or another, and at the same time insist that an infringer shall pay this rate, which the owner finds it impossible to collect from all others who use his improvement. It would be reasonable to assume that, had the infringer put the owner to an election either to abate from his announced rate or to undertake an infringement suit, such owner would have been willing to accept a rate as low as he had already accepted from others who possibly had put him to a like election in their cases. But it is a very different thing to hold that where there is a lowest limit below which the owner has never gone, preferring to bring suit rather than accept so little, an infringer may appropriate the invention feeling assured that, because all licensees have not paid exactly the same rate, he will never have to pay anything. Such a rule seems to us to be most inequitable, and the one indicated above is certainly fair to both sides. * * * We find nothing in the frequent statement that an "established rate" cannot be proved except by showing uniformity, to preclude the adoption of the rule above indicated. — Am. Sulphite Pulp Co. *v.* De Grasse, 193 Fed. 653; 113 C. C. A. 521.

Seymour *v.* McCormick, 57 U. S. 480; Packet Co. *v.* Sickles, 86 U. S. 611; Rude *v.* Westcott, 130 U. S. 152.

Note: Is this rule "certainly fair to both sides?" The reversal of the court below was clearly proper, but should an infringer be entitled to dictate the terms of a license or the amount he will pay for infringement? If an infringer is a tort feasor, why should he have a privilege, established by law, to drive a better bargain by committing a tort than he would have been able to make had he acted lawfully?

§ 299. Miscellaneous Rulings.

It is said that the glass company was a non-exclusive licensee by sufferance, and that the damages which it suffered must be recovered, if at all, by the owner prosecuting in its behalf. This, no doubt, is the law. Bird-

sell *v.* Shaliol, 112 U. S. 485. But it does not necessarily dispose of the case. Neither is it ruled by Yale *v.* Sargent, 117 U. S. 552, where the owner of the patent was allowed to recover damages to a partnership of which he was a member. Nor is Tilghman *v.* Proctor, 125 U. S. 136, applicable, there being no proof there that any one beside the plaintiff had an interest, legal or equitable, in the patent, and the question being not as to the plaintiff's damages, but the defendant's profits, which the plaintiff was held entitled to recover, no matter to whom they were eventually to go. The bill proceeds in the interest and for the benefit of the owner of the patent alone, and it is not at this stage to be transformed into something else. It is only where the licensee, exclusive or nonexclusive, is in fact, in whole or in part, the beneficial party, that anything can be claimed by way of damages on his account. — Brookfield *v.* Novelty, 170 Fed. 960; 96 C. C. A. 127.

The bill charged that the defendant maliciously and for the purpose of delaying the issue of complainant's patent caused an interfering application to be filed, and by delays and repeated appeals delayed the issue of the patent for some three years, and sought damages therefor. *Held:* The case, if any case can be made upon the facts detailed, is one in the nature of trespass on the case for injury and damage to the plaintiff in error, growing out of the postponement of its coming into enjoyment of his grant, due to the alleged malicious conduct of the defendant in error. But to support such an action, if such an action exists at law, it is essential that plaintiff in error should have suffered some specific damage due to the postponement, and that such damage should be specially set forth in the complaint. — Avery *v.* Case, 174 Fed. 147; 98 C. C. A. 181.

DEFENSES.

§ 322. Miscellaneous.

The validity of a patent is not affected by nonuser. But it may be said to have a bearing upon its construction. — Westinghouse *v.* Toledo, 172 Fed. 371; 97 C. C. A. 69.

Continental *v.* Eastern, 210 U. S. 405; Bradford *v.* Belknap, 105 Fed. 63.

If the defendant's answer had set up as the sole defense no notice other than that contained in the bill of complaint, and that immediately upon the commencement of the suit it had dismantled the machine it had been using, the contention might, perhaps, be good. — Morton Trust *v.* Standard, 177 Fed. 931; 101 C. C. A. 211.

Note: It is thought special emphasis should be put upon the word " perhaps."

DEMURRER.

§ 323. Dismissing Bill on.

Courts are slow to sustain demurrers on the ground that the letters patent are void on their face, as showing no patentable invention. They, however, recognize the duty imposed upon them, where it is clear that the device of the patent in suit does lack patentable invention, to so declare, and to dispose of the case on demurrer, and thus put an end to useless and expensive litigation. — Victor *v.* Hawthorne, 178 Fed. 455; 101 C. C. A. 439.

Rule and authorities stated in — Boldt *v.* Nevison, 194 Fed. 871; 114 C. C. A. 617.

§ 324. Judicial Notice.

Of course, every bill is written against the background of common knowledge; and in that view a demurrer may be said to invite the chancellor to take judicial notice of the background. But if a bill, in and by its own averments, states a prima facie case, that case cannot properly be overthrown by the chancellor merely on the ground that he judicially knows of facts that would support an answer. His judicial knowledge must go farther, and be so broad and all-embracing that he can properly hold that no facts exist that would tend to controvert the supposed answer and support a replication and the bill. This is so because, if such facts exist, the complainant is entitled to a hearing where he can present and argue the facts, and such a hearing cannot be had on demurrer to the bill. — Lange *v.* McGuin, 177 Fed. 219; 101 C. C. A. 389.

See foot-note to this case with list of authorities.

§ 325. Patentability and Novelty.

It is true that, in a case where there is doubt whether the patent involves invention or utility, the power of the court to pass upon its validity in advance of proofs which might be adduced to sustain it should be exercised with caution. What was said (in Richards *v.* Chase, 158 U. S. 299) is applicable with greater force in a case in which the pure question of law is presented whether the invention is or is not within the class of those which the law makes patentable. In such a case no light can come from testimony. — Am. Disappearing Bed *v.* Arnaelsteen, 182 Fed. 324; 105 C. C. A. 40.

There seems to be sufficient doubt about the question of patentability to call for a disposition of the case similar to that made in Beer *v.* Walbridge, 100 Fed. 465, National *v.* Stolts, 174 Fed. 413, and Lyons *v.* Drucker, 106 Fed. 416, where we reversed decisions sustaining demurrers. In patent causes, moreover, there is always the chance that evidence as to conditions prior and subsequent to the patentee's publication of his improved device may be introduced which induce the reversal even of a very strong impression formed merely from a perusal of the patent itself in the light of common knowledge. Such instances are within the experience of this court. See Schenck *v.* Singer, 77 Fed. 841; Brunswick-Balke-Collender *v.* Thum, 111 Fed. 904. — Stilwell *v.* McPherson, 183 Fed. 586; 106 C. C. A. 354.

§ 327. Miscellaneous.

The records in the former litigations are not before us and cannot be introduced upon the issue presented by the bill and demurrer. The demurrer admits what the bill alleges, but the bill does not allege that the original patent was held invalid because of lack of patentability. The courts may, of course, in considering a demurrer, take judicial notice of matters within the common knowledge of the people, but we have grave doubt whether we are justified in considering the testimony and exhibits produced before us at an argument which took place two years ago. The evidence of the witness who testified to a prior use in the suit on the original patent may be decisive of this case also, but his testimony is not before us and it would, we think, be establishing a dangerous precedent were we in aid of a demurrer to resort to testimony not in the record. — National *v.* Stolts, 174 Fed. 413; 98 C. C. A. 617.

DESIGNS.

§ 331. Infringement.

Design patents are to make that, which otherwise is useful, ornamental as well. Many designs, while differing in detail, may present to the ordinary

observer the same appearance. "Sameness of appearance" is "identity of design." But the object in a design patent is not to identify the article as an article of trade, but to ornament it so as to make it pleasing to the eye, the true rule being, What is the aesthetic effect? And does the alleged infringing device produce upon the eye of the ordinary observer the same aesthetic effect? The "sameness of appearance" is the sameness of aesthetic effect upon the eye. — Bolte *v.* Knight, 180 Fed. 414; 103 C. C. A. 558.

Smith *v.* Whitman, 148 U. S. 680; Jennings *v.* Kibbe, 10 Fed. 669.

That while the absence of a description accompanying the drawing in a design patent does not render the patent void, it limits the construction to the precise showing of the drawing, and the court cannot hold any element shown to be nonessential, see — Ashley *v.* Tatum, 186 Fed. 339; 108 C. C. A. 539.

Dobson *v.* Dornan, 118 U. S. 10; Ex parte Mygatt, 117 O. G. 538; Ex parte Freeman, 109 O. G. 1339; Ex parte Mygatt, 121 O. G. 1676; Tompkins *v.* N. Y. 159 Fed. 133.

§ 332. Invention.

We think it distinctly the better view that the patentee, while availing himself of parts old in the art, so united them in his design as to produce a completed whole having a new and pleasing effect distinct from the effect of the separate parts — that he obtained a new result, and consequently a valid patent. — Crier *v.* Innes, 170 Fed. 324; 95 C. C. A. 508.

§ 334. Novelty.

In order to sustain a patent, whether for mechanical construction or for design, it must appear that there was exercise of the inventive faculties. A mere change in construction which shows no originality and adds no beauty to existing structures is not sufficient to sustain a patent for a design. — Mygatt *v.* Schauffer-Flaum, 191 Fed. 836; 112 C. C. A. 350.

§ 335. Patentability.

A monument is manufactured, and in our opinion is a "manufacture," and not a species of architecture. — Crier *v.* Innes, 170 Fed. 324; 95 C. C. A. 508.

That under § 4929 as amended a design must be "ornamental" and that the term "useful" is omitted; and for a most instructive discussion of the patentability of designs, see — Phoenix Knitting Wks. *v.* Hygienic, 194 Fed. 696; — C. C. A. —.

Familiar rule and cases cited in — Boldt *v.* Nevison, 194 Fed. 871; 114 C. C. A. 617.

DISCLAIMER.

§ 340. Delay.

That where, upon the affirmance of a decree dismissing a bill, the complainant files a disclaimer and asks amendment of the mandate to permit the filing of a supplemental bill in the nature of a bill of review, such motion is made in season, see — Fellows *v.* Borden's, 187 Fed. 1005; 109 C. C. A. 535.

§ 341. Effect of.

The effect of the disclaimer was not to broaden the claim, but to limit it to the construction, described and shown. Until this disclaimer was allowed it was possible to contend for a construction broad enough to include a structure described in the language disclaimed. That this was a proper case for a disclaimer and that the language disclaimed is no longer a part of the specification are propositions which are sustained by the authorities. * * * The statement eliminated by the disclaimer was unnecessary and was not advisedly inserted, but there is nothing of which to predicate a fraudulent intent. — Simplex Railway *v.* Pressed Steel, 189 Fed. 70; 110 C. C. A. 634.

Dunbar *v.* Meyers, 94 U. S. 187; Accumulator *v.* Julien, 38 Fed. 117, and cases cited; Carnegie *v.* Cambria, 185 U. S. 403.

§ 342. Failure to File.

The decree must be affirmed as to claim 2; but there being no disclaimer as to the others, it will be without costs. And this applies as well to the costs in this court as in the court below. — Novelty *v.* Brookfield, 172 Fed. 221; 97 C. C. A. 25.

That failure to file a disclaimer which may bar costs in no wise bars the right to an accounting, see — Novelty *v.* Brookfield, 172 Fed. 221; 97 C. C. A. 25.

§ 344. Purpose and Effect of.

The old and inequitable rule of the Second Circuit that a complainant succeeding on one claim and another claim sued on being held bad must disclaim the latter before decree, is, by this decision affirmatively revoked, the court saying: Such an interpretation of the section seems unreasonable, and the so-called "rule of practice" in the Second Circuit will no longer be followed. — Page *v.* Dow, 168 Fed. 703; 94 C. C. A. 209.

Revg. the rule applied in Myers *v.* Frame, Fed. Cas. 9991; Burdett *v.* Estey, Fed. Cas. 2145; Christman *v.* Rumsey, Fed. Cas. 2704; Schillinger *v.* Gunther, Fed. Cas. 12,458; Atwater *v.* Beecher, 8 Fed. 610; Tyler *v.* Galloway, 12 Fed. 567; Brainard *v.* Cramme, 12 Fed. 621; Matthews *v.* Spagenberg, 19 Fed. 823; Hake *v.* Brown, 37 Fed. 783; Union *v.* Waterbury, 39 Fed. 389; Electric *v.* Julien, 38 Fed. 117; Steam Gauge *v.* Kennedy, 41 Fed. 38; Brush *v.* Electric, 47 Fed. 48; Ballard *v.* McCluskey, 58 Fed. 880.

That where certain claims sued on are held void on appeal and certain claims are sustained, the appellate court may compel complainant to make disclaimer upon the claims held void before entering decree upon the others, see — Morgan Engineering *v.* Alliance, 176 Fed. 100; 100 C. C. A. 30.

Morgan *v.* Alliance, 176 Fed. 100, followed in — Herman *v.* Youngstown, 191 Fed. 579; 112 C. C. A. 185.

Under the practice pointed out in Morgan *v.* Alliance, 176 Fed. 100, and Herman *v.* Youngstown, 191 Fed. 579; the complainant should have 30 days after the mandate is filed in the court below within which to file a certified copy of a disclaimer as to claims 7, 8, 9, and 10, and, in the absence of such disclaimer, the bill should be dismissed. — Cummer *v.* Atlas, 193 Fed. 993; 113 C. C. A. 611.

DISCOVERY.

§ 347. General Statement and Definition.

The prior art had no teaching on the subject, and Byerley discovered it, not by any process of reasoning or building upon former methods, but accidentally and without design. Byerley on one occasion and from mere curiosity carried the distilling process beyond the usual point, and to his surprise found it resulted in an unlooked-for and unknown chemical action and product, namely, the artificial asphalt of his second claim. — Byerley *v.* Sun, 184 Fed. 455; 106 C. C. A. 537.

DIVISIONAL PATENTING.

§ 348. Statute and General Rule.

One who makes several patentable inventions that result in a new and useful machine or process, or both, may have as many separate valid patents as he makes patentable inventions. — Century Electric *v.* Westinghouse, 191 Fed. 350; 112 C. C. A. 8.

Rob. Pat. § 465; Expanded *v.* Bradford, 214 U. S. 366; Badische *v.* Klipstein, 125 Fed. 543; Westinghouse *v.* Dayton, 106 Fed. 724; Westinghouse *v.* Electric Appliance, 142 Fed. 545.

§ 349. Co-Pending Applications.

Where each of several applications which subsequently ripen into patents to the same inventor describes the same machine and process and the inventions claimed in all the applications, but no one of the applications claims any invention claimed in any of the others and they are all pending at the same time, the respective dates when the applications were filed are immaterial, and the applications and patents cannot be used to anticipate or avoid each other. — Century Electric *v.* Westinghouse, 191 Fed. 350; 112 C. C. A. 8.

Ide *v.* Trorlicht, 115 Fed. 137; Walk. Pat. § 180; Suffolk *v.* Hayden, 3 Wall. 315; Westinghouse *v.* Dayton, 106 Fed. 724; Graham *v.* McCormick, 11 Fed. 859; Graham *v.* Manufacturing Co. 11 Fed. 138.

§ 351. Distinguished from Double Patenting.

That one application for a patent may be a continuation of a prior application for the same thing under certain circumstances is unquestioned. — Model Bottling Mach. *v.* Anheuser-Busch, 190 Fed. 573; 111 C. C. A. 389.

Hayes-Young *v.* St. Louis, 137 Fed. 80.

§ 354. Identity.

A patent for an invention does not avoid a later patent for an improvement thereon nor does a patent for an improvement avoid a later patent for the invention on which the improvement is made. The sum of the whole matter is that while an earlier patent avoids a later patent to the same patentee for the invention claimed and secured by the former, it does not invalidate a later patent to him for a distinct, different and separable invention whether generic or specific, whether an original machine or process, or both, or an improvement thereon which is not actually claimed or secured by the earlier patent. — Century Electric *v.* Westinghouse, 191 Fed. 350; 112 C. C. A. 8.

Thomson-Houston *v.* Ohio, 80 Fed. 712; Thomson-Houston *v.* Elmira, 71 Fed. 396; Electrical Accumulator *v.* Brush, 52 Fed. 130.

DOUBLE PATENTING.

§ 358. Extending the Monopoly.

That an attempt to secure by subsequent patent application claims upon combinations fully disclosed but not claimed in the prior patent — which claims might have been made part of the original patent or secured in it by a reissue, is double patenting and the latter patent void, see — Union Typewriter *v.* Smith, 181 Fed. 966; 104 C. C. A. 430.

That where an invention is patented with specific claims, the issuance of a subsequent patent with generic claims would be double patenting and extend the monopoly, see — Gold *v.* Gold, 187 Fed. 273; 109 C. C. A. 615.

An inventor may not sustain a subsequent patent for an invention actually claimed and secured in a former patent. Nor may he sustain a subsequent patent for an essential element of an invention secured by a former patent without which that invention would not have been patentable. — Century Electric *v.* Westinghouse, 191 Fed. 350; 112 C. C. A. 8.

Miller *v.* Eagle, 151 U. S. 186; Mosler *v.* Mosler, 127 U. S. 355; Otis *v.* Portland, 127 Fed. 557; Western Electric *v.* Williams-Abbott, 108 Fed. 952; Thomson-Houston *v.* Hoosick, 82 Fed. 461; Palmer *v.* Lozier, 90 Fed. 732; Industrial *v.* Wilcox, 112 Fed. 535.

DRAWINGS.

§ 363. General Statement and General Rules.

The rule is, of course, appreciated that while the drawings of a patent serve to make plain doubtful or ambiguous statements in the written description, they cannot go further and supply the entire absence of the written description required by the statute. A strict application of this rule would probably prevent us from considering what the drawings show concerning the gearing ratio or the working of the cylinders — these subjects not being mentioned in the description. But in view of the stated objects of the patent and in view of the fact that changes in the Brayton structure referred to in the description tend to increase speed capabilities, we have thought that the rule should not be strictly applied in this case and that some weight should be given to what the drawings disclose in that direction, as supplementing the written description and not altogether as supplying its absence. — Columbia *v.* Duerr, 184 Fed. 893 (note, p. 907); 107 C. C. A. 215.

EMPLOYER AND EMPLOYEE.

§ 365. Contract — Future Inventions.

The law is settled that, in the absence of an express contract or agreement, the relation of employer and employee, under whatever circumstances, short of specific employment to make an invention, does not invest the employer with the entire property right in an invention of the employee. — Johnson *v.* Western, 178 Fed. 819; 102 C. C. A. 267.

Pressed Steel *v.* Hanson, 137 Fed. 403; Hapgood *v.* Hewitt, 11 Fed. 422; affd. 119 U. S. 226.

§ 366. License — Implied.

(1) It was one of the duties of the plaintiff's employment to improve the defendant's machinery. (2) The plaintiff used the property of the defendant and the assistance of its other employés in developing and putting into practical form his invention. (3) The defendant also paid the expenses of taking out the patent. (4) The defendant also paid for the machines which were installed in the defendant's factory under the direction of the plaintiff.

(5) In addition to these material facts the salary of plaintiff was raised from $1800 to $5000 per annum, and the plaintiff also had quite a large interest in the profits of the business. Upon this state of facts, the defendant, under well settled rules governing this class of cases, clearly had at least a shop right or implied license to use these particular machines without compensation. * * * In the absence of an express agreement on the part of the defendant to pay for the use of these machines, the court below properly directed a verdict for the defendant. — Wilson *v.* Am. Circular Loom, 187 Fed. 840; 109 C. C. A. 600.

Solomons *v.* U. S. 137 U. S. 342; Gill *v.* U. S. 160 U S. 426; McClurg *v.* Kingsland, 1 How. 202; Barry *v.* Crane, 22 Fed. 396; Withington *v.* Kinney, 68 Fed. 500; Am. Tube Wks. *v.* Bridgewater, 26 Fed. 334; Magoun *v.* New England, Fed. Cas. 8960; Blauvelt *v.* Interior, 80 Fed. 906; Barber *v.* National, 129 Fed. 370; Fuller Bartlett, 68 Wisc. 73.

EQUITY.

§ 371. Jurisdiction.

Defendant held a patent and threatened to bring suit for infringement against complainant, but failed and refused so to do. Complainant brought suit to perpetuate testimony, alleging such proof sufficient to establish the invalidity of the patent and danger of such testimony being lost. *Held:* The jurisdiction of courts of equity to entertain bills for the perpetuation of testimony is undoubted. It is by original bill (under the second clause of § 886 R. S.), and exists where the complainant has an interest which he cannot make the subject of judicial inquiry and the testimony in support of such interest may be lost before such inquiry is made. — Westinghouse *v.* Electric, 170 Fed. 430; 95 C. C. A. 600.

Buddicum *v.* Kirk, 3 Cranch, 295; Booker *v.* Booker, 20 Ga. 780; Dan. Ch. 1573; Angell *v.* Angell, 1 Eng. Ch. Rep. 89; Ellice *v.* Roupell, 32 Beav. 303; May *v.* Armstrong, 26 Ky. 261; Hall *v.* Stout, 4 Del. Ch. 272; 9 Am. & Eng. Enc. 312; Story Eq. Pl. § 303; Fost. Fed. Pr. § 279; Richter *v.* Union, 115 U. S. 55; Green *v.* Compagnia, 82 Fed. 494; N. Y. *v.* N. Y. 9 Fed. 578.

That a bill setting forth no special equities, but pleading two patents, one in vigor and one expired, is bad, see — Sheridan *v.* Law, 172 Fed. 223; 97 C. C. A. 27.

Root *v.* Railway, 105 U. S. 189; Consolidated *v.* Ashton, 26 Fed. 319; distinguishing McDonald *v.* Miller, 84 Fed. 344.

Equity, in seeking justice between man and man, not obtainable at law, does not stop precisely where the cases already decided have stopped. The chancellor has now, as had the chancellor in the past, the power and duty to apply old principles to new cases involving new relationships. * * * There existed, then, between these parties, as we view it, a relationship that made them, appellee as well as appellants, agents to a common enterprise — agents by agreement — the principal being the common enterprise itself; a relationship that, faithfully carried out by appellants, required that they put in the name of the appellee, but for the common enterprise, whatever they might invent in that line; and that, faithfully carried out by appellee, required that he extend (the appellants fulfilling their obligations) the scope of the common enterprise to include the whole of the United States — the specific option contracts being the mode employed. In what respect has this relationship failed? That appellants stand in a trustee relationship with respect to these inventions, to this common enterprise, we think is clear. That appellee stands, in relation to this common enterprise, as trustee also, we think is clear. This clothes the court with power

to enter a decree of some kind. It is the form of the decree that remains to be determined. — Nat. Wire Bound Box *v.* Healy, 189 Fed. 49; 110 C. C. A. 613.

The owner of a patent cannot recover, in a suit against a manufacturer of an infringing article which he sells to retailers, the full relief to which he is entitled in suits against the retailers, and a decree for an injunction and damages against a manufacturer is no bar to suits against those who purchase from the manufacturer and use or sell to others. — Kryptok *v.* Stead, 190 Fed. 767; 111 C. C. A. 495.

Birdsell *v.* Shaliol, 112 U. S. 485.

That in an action by an assignor for an accounting and a re-assignment there is no adequate remedy at law, and equity will take jurisdiction, see — Neenan *v.* Otis Elevator, 194 Fed. 414; 114 C. C. A. 376.

EQUIVALENTS.

§ 373. General Statement and Definitions.

To be substantially equivalent means, they must perform the same office by a similar organization and mode of operation. — Chicago Grain Door *v.* National, 173 Fed. 918; 97 C. C. A. 324.

§ 374. Combinations.

The elements of the combination are things and not names. In this as in other patents for combinations, we think that the unity of the combination will not be affected by the substitution of elements which, however they may be classified or designated, perform the same function in substantially the same way, while it will be destroyed by the substitution of elements which do not perform the same office in substantially the same manner. — Columbia *v.* Duerr, 184 Fed. 893; 107 C. C. A. 215.

The doctrine of mechanical equivalents is governed by the same rules and has the same application when the infringement of a patent for a combination is in question as when the issue is over the infringement of a patent for any other invention. Dissenting opinion of Judge Sanborn in — Electric Protection *v.* American, 184 Fed. 916; 107 C. C. A. 238.

Imhauser *v.* Buerk, 101 U. S. 647; Griswold *v.* Harker, 62 Fed. 389; Fay *v.* Cordesman, 109 U. S. 408; Union *v.* Desper, 101 U. S. 332.

§ 376. Improvements.

Where a patent depends for its novelty over the prior art upon a single limited feature of construction, the claims cannot be expanded by any doctrine of equivalents, to cover a device which lacks the essential feature. — Liberman *v.* Ruwell, 170 Fed. 590; 95 C. C. A. 134.

Wagner *v.* Wycoff, 151 Fed. 585.

That the broad rule of equivalents applicable to pioneer patents, as stated in Morley *v.* Lancaster, 129 U. S. 263, does not apply to an improvement patent, see — National *v.* Ralston, 172 Fed. 293; 97 C. C. A. 91.

That an invention which is merely an improvement may partake of the nature of a pioneer invention sufficiently to give it some range of equivalency, see — Am. Pneumatic *v.* Snyder, 180 Fed. 712; 104 C. C. A. 78.

Paper Bag Case, 210 U. S. 405.

Since the invention is a secondary improvement marking only a small step in the art, and with comparatively small meritoriousness in the improvement, the range of equivalents is correspondingly narrow and the doctrine of equivalents should be less liberally applied in its favor. — Jackson *v.* D'Arcey, 181 Fed. 340; 104 C. C. A. 170.

Miller *v.* Eagle, 151 U. S. 86; Bundy *v.* Detroit, 94 Fed. 525; King *v.* Hubbard, 97 Fed. 795; Taber *v.* Meriden, 103 Fed. 83.

Considering the prior art, we cannot believe that the patent is entitled to a broad construction; on the contrary, in view of the earlier uses made of the condenser, we think the patent can be accorded only a narrow construction. — Kellogg *v.* Dean, 182 Fed. 991; 105 C. C. A. 545.

National *v.* Buckeye, 171 Fed. 847.

When an invention is a primary one, and the inventor a pioneer in the art to which it relates, he is justly entitled to a wide range of equivalents; but when it is for a slight improvement upon prior efforts which have met with more or less success, its range of equivalents should be correspondingly limited; and when the patent is for described means or mechanism to accomplish a specified improvement, it will be limited to the particular means described in the specification, or their clear mechanical equivalents. — Electric Protection *v.* American, 184 Fed. 916; 107 C. C. A. 238.

Union *v.* Diamond, 162 Fed. 148; Boyd *v.* Janesville, 158 U. S. 260; Knapp *v.* Morss, 150 U. S. 221; National *v.* Interchangeable, 106 Fed. 693.

§ 378. Range of.

The main contention of the defendant is that if a patentee in describing one feature of his invention, as, for example, a stop, says that it may consist of two forms, and in his claim he describes only one form, his claim is thereby limited to that form, and cannot be construed to cover the other form as an equivalent. In support of this proposition the defendant cites § 4888 R. S., and a long list of cases, from which it is sufficient to refer to the language of the Supreme Court in Miller *v.* Brass Co. 104 U. S. 350, 352. While the rule laid down in Miller *v.* Brass Co. and many other cases cited by the defendant has long been recognized, we do not think it has any application to the case at bar. This is not a case where the patentee, having failed to include in his claim a feature of his invention described in his specification, is seeking to have that feature read into his claim; but it is a case where the claim includes one form of the feature described in the specification, and where the only question is whether the claim does not also cover, under the doctrine of equivalents, the equivalent form described in the specification. — Whitin *v.* Houghton, 178 Fed. 444; 101 C. C. A. 344.

This question of breadth of equivalents again depends upon the extent of the advance which the inventor has made in the art. — Sly *v.* Russell, 189 Fed. 61; 110 C. C. A. 625.

Penfield *v.* Chambers, 92 Fed. 630; Bundy *v.* Detroit, 94 Fed. 524; McSherry *v.* Dowagiac, 101 Fed. 716; Winans *v.* Denmead, 15 How. 330; Metallic *v.* Brown, 104 Fed. 345; Vrooman *v.* Penhollow, 179 Fed. 296.

§ 379. Identity.

It is, of course, true that for one thing to be the equivalent of another it must perform the function of that other, and the function must be performed in substantially the same way by the alleged equivalent as by the thing of which it is alleged to be the equivalent. But it is not necessary that this

function be performed in identically the same way, or to the same extent. — Sly *v.* Russell, 189 Fed. 61; 110 C. C. A. 625.

ESTOPPEL.

§ 381. Corporations.

That an estoppel arising out of the assignment of the patent in suit against the assignor who subsequently assigns another patent to and becomes the employee of a corporation does not extend to include such corporation, see — Babcock *v.* Toledo, 170 Fed. 81; 95 C. C. A. 363.

Babcock *v.* Clarkson, 63 Fed. 607; Hall *v.* Conder, 2 C. B. (N. S.) 22; Noonan *v.* Chester, 99 Fed. 90; Boston *v.* Woodward, 82 Fed. 97; American *v.* Phoenix, 113 Fed. 629; distinguishing Daniel *v.* Miller, 81 Fed. 1000; Time Tel. *v.* Himmer, 19 Fed. 322; Continental *v.* Pendergast, 126 Fed. 381; Woodward *v.* Boston, 60 Fed. 283; Noonan *v.* Chester, supra; Lamb *v.* Lamb, 120 Fed. 267.

The defendant Sachs is the patentee. He assigned the patent to complainant and subsequently organized the Sachs Company, of which he is a large stockholder and the moving spirit. If the prior state of the art were such that his assertions of novelty were fallacious, there would be no real invention disclosed, his claims would be unwarranted, and his patent void. But in a suit for infringement brought by the person to whom the patentee sold his patent at its face value, against him and the company he has created and controls, an inquiry into the prior art for such purpose is not to be undertaken. — Johns-Pratt *v.* Sachs, 175 Fed. 70; 99 C. C. A. 92.

Nor is such estoppel of Parkinson (who effected the sale of the patent) to be evaded by his organizing the Furnace Company and operating through it. It and his associates interested in said corporation were in privity with him and are equally estopped. — Johnson *v.* Western, 178 Fed. 819; 102 C. C. A. 267.

Force *v.* Sawyer-Boss, 111 Fed. 902; Siemens-Halske *v.* Duncan, 142 Fed. 157; Mellor *v.* Carroll, 141 Fed. 992; N. Y. Phonograph *v.* National, 163 Fed. 534; Mathews *v.* Lister, 154 Fed. 490; Nat. Recording *v.* International, 158 Fed. 824; Continental Wire *v.* Pendergast, 126 Fed. 381; Woodward *v.* Boston, 60 Fed. 622.

§ 384. Licensor or Former Owner.

Parkinson participated with Johnson in the sale of the patent to Burns for complainant, and Parkinson received one-eighth of the consideration therefor. He, and all in privity with him, are estopped from now alleging the invalidity of the patent. The estoppel against the assignor is not based simply upon the covenants expressed and implied in his conveyance. It rests upon the broad and equitable doctrine that one who receives and retains a portion of the fruits of a sale of a patent which he has assisted in making to another is estopped from claiming that such patent is invalid and worthless. This principle applies to Parkinson as well as Johnson. The equitable garment fits each alike and they must each wear it. — Johnson *v.* Western, 178 Fed. 819; 102 C. C. A. 267.

Daniel *v.* Miller, 81 Fed. 1000; Force *v.* Sawyer-Boss, 111 Fed. 902; Time Tel. *v.* Himmer, 19 Fed. 322; Siemens-Halske *v.* Duncan, 142 Fed. 157.

Facts: The president of defendant company had been a stockholder and officer of complainant company and gone into other business. Defendant company's predecessor sought and engaged him to reorganize and manage its business, which he did by financing the defendant company, taking for cash a considerable block of stock. Previously, complainant company had sued defendant company's predecessor on this same patent and the patent

was held invalid (Gio -Wernicke *v.* Macey, 119 Fed. 696). On this suit complainant claims estoppel against the present company defendant to question the validity of complainant's patent issued to the president of defendant, formerly assignee-patentee to complainant and officer of complainant. Defendant sets up the former suit against its predecessor as res judicata, and complainant contends that defendant is estopped from raising such defense in bar. *Held:* No estoppel and res judicata. — Macey *v.* Globe-Wernicke, 180 Fed. 401; 103 C. C. A. 547.

Boston *v.* Woodward, 82 Fed. 97; Regent *v.* Penn, 121 Fed. 80; Babcock *v.* Toledo, 170 Fed. 81; Belknap *v.* Schild, 161 U. S. 10.

The court ruled that Christopherson (an inventor-assignor) by his assignment was to be regarded as representing that the patent was what it purported to be, was valid in accordance with its terms, that it was to be fairly construed, and that the prior art could not be invoked to limit its terms. This is the length to which the rule may be properly carried. It has never been held to estop an assignor from thereafter employing his genius in a new field of the same art, nor to deny him the fruits of such effort. It does not preclude him from denying infringement, nor of invoking the prior art for the purpose of showing that no infringement in fact exists. — Leather Grille *v.* Christopherson, 182 Fed. 817; 105 C. C. A. 249.

Siemens-Halske *v.* Duncan, 142 Fed. 157; Noonan *v.* Chester, 99 Fed. 90.

§ 385. Owner of Patent or Licensee.

Hibbard, the licensor to the old company, brought suit against the new company for infringement, claiming that the assignment did not pass to the new company from the old company, which contention was upheld. *Held:* If the suit were against the old company for further royalties, that company would be estopped from contending that the devices stamped and put forth by it as the patented devices were not in truth within the patents. But as to the new company, Hibbard cannot both deny the relation of licensor and licensee and also claim the benefit of the estoppel that would arise from the relationship. — Niagara *v.* Hibbard, 179 Fed. 844; 103 C. C. A. 330.

Sproull *v.* Pratt, 97 Fed. 807; Piaget *v.* Headley, 108 Fed. 870.

The defendant was a licensee under the patent in suit for the life of the patent, had paid royalties in full and was bound to pay royalties in the future if the patent was held valid. In a suit against a third party this defendant, by permission of the court, filed a brief in that case attacking the validity of the patent. *Held:* These royalties were large; the monopoly itself, if upheld, was extremely valuable; and the question whether the monopoly had been judicially determined, was, therefore, a matter of deep consequence to appellee (the licensee). Why may not the appellee, without violation of its contract, or violation of any ethical duty it owes to appellant, contribute toward clarifying the vision of the Court by which this judicial determination is to be made both right and final? We see nothing in the conduct of appellee that is a renunciation, repudiation or forfeiture of its contract; on the contrary we see simply a precaution upon its part that the judgment of the Court, upon which its additional obligations and its additional advantages alike depend, shall be as free from error as a full discussion of the record before the Court can make the judgment, that is to follow, free from error. — Comptograph *v.* Burroughs, 183 Fed. 321; 105 C. C. A. 533.

Note: In my opinion, this is not only bad law and bad ethics, but it is an utter misinterpretation of the authorities cited. Such a rule opens wide the

door for a licensee to entirely avoid the rule of estoppel by coming in behind a third party, furnishing the sinews of war, and defeating a patent whenever it is to the interest of the licensee so to do. The " clarifying the vision of the Court " is too screamingly specious for argument.

§ 386. Privity.

The president of the defendant companies testified " we have undertaken to assist in bearing the burdens of this defense, and have contributed to the defense financially and otherwise; " but it was not shown that, as between the present and former defendants, either company had the right to intermeddle in any way in the conduct of the case. The companies would have been glad to see the patent declared void, and were willing to pay something to that end. That was all, and that did not make them privies. — Rumford *v.* Hygienic, 125 U. S. 156; 54 L. Ed. 137; 30 S. Ct. 45.

Litchfield *v.* Goodnow's, 123 U. S. 549.

This action is brought against a copartnership consisting of three members. The two members of the firm who took part, respectively, in the two prior actions are not shown to have acted for or represented the firm or their copartners in so doing, or to have had other interest in such litigation than such as belonged to them in their attitude of stockholders in the respective corporations defendant therein. The parties, therefore, are not the same, and the judgments do not estop the present defendants. — Wilgus *v.* Germain, 72 Fed. 773; 19 C. C. A. 188.

In order that one not a party may be precluded by a former adjudication, he must have been privy to the former proceedings, or connected therewith in such a way that he had the right to control the litigation, or at least the right to appear by counsel and make motions and offer evidence and examine witnesses. To prove that one was a witness in a cause, and took a leading part in the defense thereof, without further information concerning the nature of his connection therewith, is not equivalent to proof that he had or assumed the right to control the proceedings, or to adduce or cross-examine witnesses, or to appeal from the judgment; and there is no such privity between a private corporation and its stockholders that a judgment obtained against the one is res judicata as to the other. — Wilgus *v.* Germain, 72 Fed. 773; 19 C. C. A. 188.

Miller *v.* Tobacco Co. 7 Fed. 92; Robbins *v.* Chicago, 4 Wall. 657; Litchfield *v.* Goodnow's, 123 U. S. 549; Hawkins *v.* Glenn, 131 U. S. 329; Schrader *v.* Bank, 133 U. S. 67; Glenn *v.* Liggett, 135 U. S. 533; Hawes *v.* Petroleum, 101 Mass. 385.

That although a party may have paid the attorney in the former suit, and paid part or all of the costs, so long as it does not appear that he had control of the litigation, he is not bound by it, see — General *v.* Morgan-Gardner, 168 Fed. 52; 93 C. C. A. 474.

§ 387. Miscellaneous.

The patentee, in prosecuting his application, distinguished his application from a prior patent to him. Having purchased a still earlier application of another inventor, he incorporated such broader claims therein. It was sought to extend the estoppel to such earlier case. *Held:* This would carry the doctrine of estoppel or abandonment by reason of conceding the soundness of departmental criticisms far beyond any recorded decision, and we cannot assent to any such extension. — Armstrong *v.* Belding, 174 Fed. 410; 98 C. C. A. 361.

Defendant acknowledged infringement and agreed not to infringe further, and afterwards put out a somewhat different device which it contended was not an infringement. As to the claimed estoppel, *held:* While defendant may not dispute the validity of the patent, nor such a construction of its claims as will cover kettles of the type it first made, it may show if it can, that those of the later type are not within the patent; and in considering this question the court may look into the prior art and construe the specifications in the light of the file wrapper, in order to determine whether the new style of kettle also infringes the patent. — Am. Specialty *v.* New England, 176 Fed. 557; 100 C. C. A. 193.

The defendants have adopted this construction and obtained whatever advantage in it there may be, and they cannot dispute its patentable utility. — Cummer *v.* Atlas, 193 Fed. 993; 113 C. C. A. 611.

Diamond Rubber Tire *v.* Consolidated, 220 U. S. 428.

EVIDENCE.

§ 389. Anticipation — Prior Art.

Proof was taken by the complainant, but none by the respondents, although by their answer they had specified by name and place 60 prior uses, and in addition cited 70 patents as anticipations. In the absence of proof on the respondents' part, the case is therefore before us as if on demurrer. — Greenwald *v.* Enochs, 183 Fed 583; 106 C. C. A. 351.

§ 390. Anticipation — Prior Patent or Publication.

The patent was not pleaded in the answer, and cannot be used as an anticipation. It may be considered as showing the prior art. — Roth *v.* Harris, 168 Fed. 279; 93 C. C. A. 581.

The record discloses attempts to demonstrate their actual identity (the chemical constituency of the patent in suit and the prior patent), but these are not produced in such shape as to avail the appellant. Courts place little weight on ex parte demonstrations in any case, but especially is this true with regard to experiments in chemicals. — Kuehmsted *v.* Farbenfabriken, 179 Fed. 701; 103 C. C. A. 243.

§ 391. Anticipation — Prior Use.

It is well settled that the defense of prior use must be estabiished by evidence which proves it beyond a reasonable doubt. — Parker *v.* Stebler, 177 Fed. 210; 101 C. C. A. 380.

Turrill *v.* Railroad, 1 Wall. 491.

§ 395. Depositions.

That where the answers to interrogatories in a deposition are not responsive and the interrogator has had opportunity to secure correction, such evidence may be admitted, see — Varley *v.* Ostheimer, 186 Fed. 171; 108 C. C. A. 303.

§ 398. Expert.

We should regret to be compelled to decide a case by the acceptance or rejection of a theoretic explanation upon which it still is possible that authorities in science disagree. — Steward *v.* American, 215 U. S. 161; 54 L. Ed. 139; 30 S. Ct. 46.

It is only where the court requires the explanation of technical terms or the language of any particular art to enable it to understand a specification that the evidence of those expert in the art is pertinent. The province of such expert testimony is to remove uncertainty where the terms used are obscure, and is not to create uncertainty where the language is plain. — Krupp *v.* Midvale, 191 Fed. 588; 112 C. C. A. 194.

§ 400. Invention — Fact of.

To find any substantial validity in these claims, we must determine whether invention was involved in such adaptation. Such a question is essentially one of fact. — Herman *v.* Youngstown, 191 Fed. 579; 112 C. C. A. 185.

National Tube *v.* Aikin, 163 Fed. 254; Electric *v.* Westinghouse, 171 Fed. 83; Morgan *v.* Alliance, 176 Fed. 100.

§ 403. Law Actions — Facts — For Court.

That the question of range of equivalents in a given case is a question of law to be determined by the court and given to the jury as instruction, see — Holt *v.* Best, 172 Fed. 409; 97 C. C. A. 107.

§ 404. Law Actions — Facts — For Jury.

Where the determination of the question of invention was left with the jury, we think it clear that nothing tending to show the true state of the art at the date of the claimed invention should be excluded from their consideration. — Holt *v.* Best, 172 Fed. 409; 97 C. C. A. 107.

Rob. Pat. § 1020; Aron *v.* Manhattan, 132 U. S. 84; Penn. Ry. *v.* Truck Co. 110 U. S. 490; Benbow-Brammer *v.* Richmond, 159 Fed. 161.

Upon conflicting proof it is a question for the jury to pass upon whether a patented invention is of a primary character and the patent a "pioneer patent." — Transit Development Co. *v.* Cheatham, 194 Fed. 963; 114 C. C. A. 599.

Royer *v.* Schultz, 135 U. S. 319.

That questions of invention and of infringement, in the presence of conflicting proofs, are for the jury, see — Transit Development Co. *v.* Cheatham, 194 Fed. 963; 114 C. C. A. 599.

Heide *v.* Panoulias, 188 Fed. 915; Bischoff *v.* Wethered, 76 U. S. 812.

EXPERIMENT.

§ 414. Experimental Use.

The use was not an abandoned experiment but an abandoned attempt to induce the railway company to equip the cars with the Brayton engine. The perfected structure was capable of practical use, although there was much room for improvement. — Columbia *v.* Duerr, 184 Fed. 893; 107 C. C. A. 215.

FOREIGN PATENT.

§ 420. General Rulings.

In ascertaining the true scope and meaning of an invention, the importance of looking at the claims is recognized in England. And the necessity for doing so in this country is found in the established rule. And it would seem that the rule in this behalf prevailing in this country should be applied to a foreign patent as well as to a domestic patent, where the court is called

upon to determine the effect of the duration of the grant of the former upon that of the latter. — Acme Acetylene *v.* Commercial, 192 Fed. 321; 112 C. C. A. 573.

Presto Gear *v.* Orme, 18 R. P. C. 17; Fulton Pat. 98; Keystone *v.* Phoenix, 95 U. S. 274; Railroad *v.* Mellon, 104 U. S. 112; Leeds *v.* Victor, 213 U. S. 301.

§ 421. Expiration of.

The passage (A patent cannot be exempt from the operation of the law by adding some new improvements to the invention; and cannot be construed as running partly from one date and partly from another, Siemen *v.* Sellers, 123 U. S. 276) must be construed by what precedes it. It was said there was no essential difference between the patents. "They described the same functions in all essential particulars," is the language used. "The principal invention," therefore, was "the same in both," and the improvements, which it was asserted the American patent contained, did not destroy its essence or its identity with the English patent; necessarily, therefore, did not save it "from the operation of the law." And the court meant no more than that. It was not said that a patentable improvement could not be made which could be secured by a patent which would endure beyond the expiration of a prior foreign patent for that which was improved. Such a ruling would contravene the right given by the statute. § 4886 provides that "any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or *any new and useful improvement thereof*, * * * may * * * obtain a patent therefor." The improvement would be the invention and would endure for the period given to it by law. Besides, a patent may embrace more than one invention. A process and an apparatus by which it is performed are distinct things. They may be found in one patent; they may be made the subject of different patents. So may other dependent and related inventions. If patented separately, a foreign patent for either would not affect the other. Why should such effect follow if they are embraced in the same patent? — Leeds *v.* Victor, 213 U. S. 301; 53 L. Ed. 805; 29 S. Ct. 495.

Steinmetz *v.* Allen, 192 U. S. 543; distinguishing Siemens *v.* Sellers, 123 U. S. 276; Western *v.* Citizens, 106 Fed. 215; Sawyer *v.* Carpenter, 133 Fed. 238; affd. 143 Fed. 976; Thomson-Houston *v.* McLean, 153 Fed. 883.

A French patent for the same invention was previously issued and two additions were applied for prior to the filing of the U. S. application. Normally, under § 4887, as then applicable, the U. S. patent would have expired with the original French patent, which, under the French law, carried the additions with it. The French patent and its additions were held void by the French courts, thus wiping out the French grant. While Judge Gray held that the voidance of the French patent by the courts relieved the U. S. patent from its operation, and while Judge Buffington dissented in a separate opinion, holding that the U. S. patent was limited from the day of its granting by the existence of the French patent then valid on its face, Judge Archbald concurred in the result reached by Judge Gray, but upon the ground that the treaty of Brussels took the U. S. patent out from under the operation of § 4887, *holding:* The article must be regarded as self-executing. A contrary opinion was given by the Attorney General as to the treaty of 1883. 19 Op. Atty. Gen. 275. And this was followed by the Patent Office. Ex parte Zwack, 76 O. G. 1855; Butterworth *v.* Boral, 97 O. G. 1596. It was accepted also by the Court of Appeals, D. C. Parker *v.* Appert, 75 O. G. 1201; Rousseau *v.* Brown, 104 O. G. 1120. In United *v.* Duplessis, 155 Fed. 842, also. it was held by the Court of Appeals for the First Circuit, that, although article 4 bis on its face was self-executing, it was controlled by implication by the passage by Congress of act Mar. 3, 1903, to give effect

to it. Taking treaty and acts of Congress together, therefore, the case stands this way: By § 4887 a domestic patent for the same invention previously patented abroad was made dependent upon the term of such foreign patent, by which it was limited. The act of Mar. 3, 1897, removed this restriction, but provided (§ 8) that it should not apply to patents granted prior to Jan. 1, 1898, nor to applications filed before that on which patents were subsequently granted. This prevented the patent in suit, for the time, from having the benefit of this legislation. Then the additional act of Brussels of 1900 was ratified, by which, according to art. 4 bis, there was a complete unfettering of foreign and domestic patents for the same invention; and this by express terms was made to apply to existing patents. Such was the state of the law and such the position of the patent in suit when the act of Mar. 3, 1903, came into existence. As just stated, this could not undo what had already been done, nor put back the patent into its former dependent condition. Having become entitled to the full term of 17 years according to patents generally, it could not thereafter be again restricted. Nor did the act of 1903 undertake to do so. It simply re-enacted § 4887 as amended by the act of 1897, leaving out the limitation which time and treaty had doubly disposed of, and introducing certain provisions in conformity with the treaty. — Hennebique *v.* Myers, 172 Fed. 869; 97 C. C. A. 289.

Note: It will thus be seen that the Third and First Circuits are at variance upon the construction of the legislation as to this treaty, and that this case presents two unsettled questions to be passed upon by the Supreme Court.

A French patent for the same invention was previously issued and two additions were applied for prior to the filing of the U. S. application. Normally, under § 4887 as then applicable, the U. S. patent would have expired with the original French patent, which, under the French law, carried the additions with it. The French patent and its additions were held absolutely void by the French courts, thus wiping out the foreign grant. *Held:* The words "foreign patent" and "patented in a foreign country," in § 4887, must be taken to connote matters of substance, and not of mere form, and the French patent and the addition thereto, though regular in form, conferred no such privilege or monopoly as would bring them within the purview of the section referred to. They conveyed to the patentee no substantial rights, and secured to him no valuable monopoly. Hennebique *v.* Myers, 172 Fed. 869; 97 C. C. A. 289.

Note: This opinion of Judge Gray is rigorously dissented to by Judge Buffington in a separate opinion, and is concurred in as to results by Judge Archbald in a separate opinion, but on wholly different grounds, viz. that by the treaty of Brussels, art. 4 bis, the U. S. patent was relieved from the operation of § 4887 as it stood at the time the U. S. patent was applied for, and thus disagreeing with and refusing to follow the First Circuit in United *v.* Duplessis, 155 Fed. 842. It would seem that two questions are here raised and left in dispute which must be passed upon by the Supreme Court.

Clearly, the patent granted and so limited in this country must be for an invention previously patented in a foreign country, and they must in essential features be the same. — Acme Acetylene *v.* Commercial, 192 Fed. 321; 112 C. C. A. 573.

Leeds *v.* Victor, 213 U. S. 301; Siemens *v.* Sellers, 123 U. S. 276; Westinghouse *v.* Stanley, 138 Fed. 823.

§ 422. Lapse of.

That the lapse or forfeiture of a foreign patent by reason of failure such as failure to extend does not affect the domestic patent for the same invention, see — Leeds *v.* Victor, 213 U. S. 301; 53 L. Ed. 805; 29 S. Ct. 495.

Pohl *v.* Anchor, 134 U. S. 381.

FUNCTION.

§ 426. Patentability.

It is undoubtedly true, and all the cases agree, that the mere function or effect of the operation of a machine cannot be the subject of a lawful patent. — Expanded *v.* Bradford, 214 U. S. 366; 53 L. Ed. 1034; 29 S. Ct. 652.

GOVERNMENT.

§ 428. Statutory Provisions.

By act of June 25, 1910, the following provision was made as "additional protection for owners of patents:"

That whenever an invention described in and covered by a patent of the United States shall hereafter be used by the United States without license of the owner thereof or lawful right to use the same, such owner may recover reasonable compensation for such use by suit in the court of claims: Provided, however, That said court of claims shall not entertain a suit or award compensation under the provisions of this act where the claim for compensation is based on the use by the United States of any article heretofore owned, leased, used by, or in the possession of, the United States: Provided, further, That in any such suit the United States may avail itself of any and all defenses, general or special, which may be pleaded by a defendant in an action for infringement, as set forth in title sixty of the Revised Statutes or otherwise: And provided further, That the benefits of this act shall not inure to any patentee who, when he makes such claim, is in the employment or service of the government of the United States; or the assignee of any such patentee; nor shall this act apply to any device discovered or invented by such employee during the time of his employment or service.

IMPROVEMENT.

§ 430. Statute Authority and General Statement.

Invention, in the nature of improvements, is the double mental act of discerning, in existing machines, or processes or articles, some deficiency, and pointing out the means of overcoming it. — General Electric *v.* Sangamo, 174 Fed. 246; 98 C. C. A. 154.

Note: This clear-cut definition ought to induce the Patent Office to correct its loose and improper use of the term "improvement."

§ 434. General Rule.

Singer's invention may not be a great or a pioneer one. That invention and the prior art present one of those cases in which several inventors produce by different processes different compositions which collect dust with varying degrees of operative success. Under such circumstances, each inventor is entitled to his own method and composition so long as they differ from those of his competitors, and do not include theirs. Dissenting opinion of Judge Sanborn in — Cotto-Waxo *v.* Perolin, 185 Fed. 267; 107 C. C. A. 373.

Railway *v.* Sayles, 97 U. S. 554; McCormick *v.* Talcott, 20 How. 402.

§ 435. Generic.

Whether an invention be a pioneer, or, being of small importance, is ranked at the foot of the line, the rule is that each shall be judged on its own merits; that is to say, according to the advance it has made in novelty and utility beyond the former art. And in its own peculiar field it is not upon this record to be denied that this invention was the first, and for that reason and because it has proved useful to the public, should be dealt with as one standing at the head of its line and entitled to be protected accordingly. — Vrooman *v.* Penhollow, 179 Fed. 296; 102 C. C. A. 484.

McSherry *v.* Dowagiac, 101 Fed. 716; Penfield *v.* Chambers, 92 Fed. 639; Paper Bag Case, 210 U. S. 405.

§ 440. Patentability.

And it (the law) recognizes degrees of change, dividing inventions into primary and secondary, and as they are, one or the other, gives a proportionate dominion to its patent grant. In other words, the invention may be broadly new, subjecting all that comes after it to tribute; it may be the successor, in a sense, of all that went before, a step only in the march of improvement, and limited, therefore, to its precise form and elements, as the patent in suit is conceded to be. In its narrow and humble form it may not excite our wonder as may the broader or pretentious form, but it has as firm a right to protection. — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

Chicago *v.* Sayles, 97 U. S. 554.

§ 441. Scope — Limitations.

Where an art is crowded and so old that no pioneer patent exists therein, and many inventors have conceived and made machines, combinations and improvements in it which accomplish the desideratum with varying degrees of success, each is entitled to his own machine or combination or improvement, so long as it differs from those of his competitors and does not include theirs. — Wayne *v.* Benbow-Brammer, 168 Fed. 271; 93 C. C. A. 573.

Railway *v.* Sayles, 97 U. S. 554; McCormick *v.* Talcott, 20 How. 402; Stirrat *v.* Excelsior, 61 Fed. 980; National *v.* Interchangeable, 106 Fed. 693.

When each of two inventors improves upon the former art, each in his own distinct and separate way, they shall each be credited with his own improvement. — Duncan *v.* Cincinnati, 171 Fed. 656; 96 C. C. A. 400.

Once, therefore, that an automatic cut-off was made use of in either of these earlier devices, it was conclusive upon the novelty of the idea upon everyone coming after; and the only thing open to later inventors was the particular means that might be adopted for the accomplishment of this purpose. — Elliott *v.* Youngstown, 181 Fed. 345; 104 C. C. A. 175.

INFRINGEMENT.

§ 452. Avoidance — Adding Elements or Functions.

That mere addition of an element to avoid a combination with no change of function does not avoid infringement, see — Western Telephone *v.* Swedish-American, 194 Fed. 104; 114 C. C. A. 182.

§ 456. Avoidance — Omitting Element.

If any essential element of the combination is omitted from an alleged infringing device without substituting therefor its clear mechanical equiva-

lent, the charge of infringement is not sustained. — Acme *v.* Meredith, 183 Fed. 124; 105 C. C. A. 420.

Fay *v.* Cordesman, 109 U. S. 408; Boyd *v.* Janesville, 158 U. S. 260; Cimiotti *v.* American, 198 U. S. 399; Eames *v.* Godfrey, 1 Wall. 78; Rowell *v.* Linsay, 113 U. S. 97; Union *v.* Diamond, 162 Fed. 148.

If the defendants do not use the modified Brayton engine and do use the modified Otto engine, they escape infringement unless the latter is an equivalent of the former. It is well settled that to establish infringement of a combination, the use of every element of the combination must be shown. — Columbia *v.* Duerr, 184 Fed. 893 (note, p. 910); 107 C. C. A. 215.

The use of any two of these parts only, or of two combined with a third, which is substantially different in form or in the manner of its arrangement with the others, is, therefore, not the thing patented. It is not the same combination if it substantially differs from it in any of its parts. — Electric Protection *v.* American, 184 Fed. 916; 107 C. C. A. 238.

Eames *v.* Godfrey, 1 Wall. 78.

It is settled that a claim for a combination is not infringed if any one of the elements is omitted without substitution of an equivalent. — Union Paper Bag *v.* Advance, 194 Fed. 126; 114 C. C. A. 204.

Citing old and familiar cases.

§ 457. Avoidance — Transposition of Parts.

Assuming that the defendant makes the asserted transposition, which is by no means clear on the proof, we are satisfied that infringement is not thus avoided. — General Electric *v.* Hill-Wright, 174 Fed. 996; 98 C. C. A. 566.

§ 458. Avoidance — Miscellaneous Conditions.

Appellant complains because after the decision in the former case respondent deliberately set about devising, with the aid of patent experts, a machine which would produce the Bates fence, without infringing the Bates patent. It is sufficient to answer that complaint in the language of Mr. Justine Grier in Burr *v.* Duryee, 1 Wall. 531: "Every man has a right to evade a patent, provided he does not invade the rights of the patentee." — Am. Steel & Wire *v.* New Jersey, 194 Fed. 117; 114 C. C. A. 195.

§ 459. Change of Form — Colorable.

Mere changes of the form of a device do not avoid infringement, where the principle of the invention is taken, unless the form modified is the distinguishing characteristic of the invention. — Wayne *v.* Benbow-Brammer, 168 Fed. 271; 93 C. C. A. 573.

National *v.* Interchangeable, 106 Fed. 693; Columbus *v.* Robbins, 64 Fed. 384.

Mere changes of form or composition of a device or of some of the mechanical elements of a combination will not avoid infringement, where the principle or mode of operation of the patented improvement or combination is adopted, unless the form or composition is the distinguishing characteristic of the invention. — Owens *v.* Twin City, 168 Fed. 259; 93 C. C. A. 561.

Columbus *v.* Robbins, 64 Fed. 384; New Departure *v.* Bevin, 64 Fed. 859; Machine *v.* Murphy, 97 Fed. 125; Winans *v.* Denmead, 15 How. 342; Rob. Pat. § 141; Blandy *v.* Griffith, Fed. Cas. 1529; Bonnette *v.* Koehler, 82 Fed. 431; National *v.* Interchangeable, 106 Fed. 693.

Mere changes of the form of some of the mechanical elements of a combination secured by patent will not avoid infringement, where the principle of the patented invention is adopted, unless the form of the elements changed is the distinguishing characteristic of the invention. Dissenting opinion of Sanborn, J. in — Electric Protection *v.* American, 184 Fed. 916; 107 C. C. A. 238.

Watch Co. *v.* Robbins, 64 Fed. 384; New Departure *v.* Bevin, 64 Fed. 859; Kinloch *v.* Western, 113 Fed. 652; Louric *v.* Lenhart, 130 Fed. 122.

§ 460. Change of Form — Location.

It is evident, therefore, that the respondent has availed itself of the substance of Conley's device by a mere shifting of parts, which in the shifted position still exert the identical functions of the device Conley first contributed to the art. It follows, therefore, the respondent must be held to infringe. — Conley *v.* King Bridge, 187 Fed. 137; 109 C. C. A. 412.

§ 461. Change of Form — Modification.

Infringement is not avoided by the fact that one of the integral elements is separated into two or more distinct parts, so long as the function and operation remain substantially the same. — Kings County *v.* U. S. Consolidated, 182 Fed. 59; 104 C. C. A. 499.

Kalamazoo *v.* Duff, 113 Fed. 264; Bundy *v.* Detroit, 94 Fed. 524; Brammer *v.* Witte, 159 Fed. 726.

§ 462. Change of Form — Number of Parts.

The first element of the claim is a frame, and any one who uses it in combination with the other elements is an infringer, whether the frame is composed of one piece or fifty. — Waterbury *v.* Aston, 183 Fed. 120; 105 C. C. A. 410.

§ 468. Combination — Equivalents.

We have seen De Bange describe what he conceived to be the best form of his invention, and contemplated that it could be represented in other forms and proportions. This, however, was unnecessary, for the law would secure him against imitation by other forms and proportions. — United States *v.* Société Anonyme &c. 224 U. S. 309; 56 L. Ed. 224; 32 S. Ct. 479.

Winans *v.* Denmead, 15 How. 330; Hotchkiss *v.* Greenwood, 11 How. 248; Western Electric *v.* LaRue, 139 U. S. 601.

The use of the tang in question in place of the lower central gripper does not amount to the substitution of a mechanical equivalent; for that would be to treat the paper made into diamond folds by the machine as an element of the patent. — Union Paper Bag *v.* Advance, 194 Fed. 126; 114 C. C. A. 204.

Morgan *v.* Albany, 152 U. S. 425; Am. Tobacco *v.* Streat, 83 Fed. 700.

§ 469. Combinations — Identity.

A patent for a mechanical combination is not infringed except by a device containing all the elements of that combination. The elements of the infringing device must be the very elements of the patented combination or clear mechanical equivalents thereof. — Ohl *v.* Falstrom, 175 Fed. 67; 99 C. C. A. 89.

A combination claim is never infringed, except by the use of that which embodies every element of the combination or its equivalent. — Morton Trust *v.* Standard, 177 Fed. 931; 101 C. C. A. 211.

§ 474. Contributory — Furnishing Material.

The case (Morgan *v.* Albany, 152 U. S. 425) has no principle or reasoning applicable to the case at bar. The disc is not a mere concomitant to the stylus; it coacts with the stylus to produce a result. To confound its active cooperation with the mere passivity of the paper in the mechanism described in the Morgan Envelope Company is not only to confound essential distinctions made by the patent laws, but essential distinctions between entirely different things. Besides, the lower courts found that the discs were not perishable. Can petitioner find justification under the right of repair and replacement? The sales of petitioner, as found by the courts below, and as established by the evidence, were not to furnish new records identical with those originally offered by the Victor Company, but, to use the language of Judge Lacombe, " more frequently in order to increase the repertory of tunes than as substitute for worn-out records." The right of substitution or " resupply " of an element depends upon the same test. The license granted to a purchaser of a patented combination is to preserve its fitness for use so far as it may be affected by wear or breakage. Beyond this there is no license. — Leeds *v.* Victor, 213 U. S. 325; 53 L. Ed. 816; 29 S. Ct. 503.

Wilson *v.* Simpson, 9 How. 109; Chaffee *v.* Boston, 22 How. 217.

§ 476. Contributory — Making Elements.

A combination is a composition of elements, some of which may be old and others new, or all old or all new. It is, however, the combination that is the invention, and is as much a unit in contemplation of law as a single or noncomposite instrument. Whoever uses it without permission is an infringer of it. Whoever contributes to such use is an infringer of it. It may be well here to get rid of a misleading consideration. It can make no difference as to the infringement or noninfringement of a combination that one of its elements or all of its elements are unpatented. — Leeds *v.* Victor, 213 U. S. 325; 53 L. Ed. 816; 29 S. Ct. 503.

That building a machine which embodies a part of and is essential to the carrying out of a process is infringement, see — Naylor *v.* Alsop, 168 Fed. 911; 94 C. C. A. 315.

That furnishing material to be used in connection with an infringing device — such as refilling acetylene gas tanks which are patented — is contributory infringement, see — Acme Acetylene *v.* Commercial, 192 Fed. 321; 112 C. C. A. 573.

Leeds *v.* Victor, 213 U. S. 325; Commercial Acetylene *v.* Autolux, 181 Fed. 387; Edison *v.* Peninsular, 101 Fed. 831; Acolian *v.* Juelg, 155 Fed. 119; Heaton *v.* Eureka, 77 Fed. 288; Rupp *v.* Elliott, 131 Fed. 730; Kalem *v.* Harper, 222 U. S. 55.

§ 477. Contributory — Rules.

" Contributory infringement," says Judge Townsend in Thomson-Houston *v.* Kelsey, " has been well defined as the intentional aiding of one person by another in the unlawful making, or selling or using of the patented invention." * * * There must be an intent and purpose that the article sold will be so used. Such a presumption arises when the article so sold is only adapted to an infringing use. It may also be inferred where its most conspicuous use is one which will co-operate in an infringement when such sale to such user is invoked by advertisement. — Henry *v.* Dick, 224 U. S. 1; 56 L. Ed. 645; 32 S. Ct. 364.

Thomson-Houston *v.* Kelsey, 72 Fed. 1016; Wallace *v.* Holmes, 29 Fed. Cas. 79; Risdon *v.* Trent, 92 Fed. 375; Thomson-Houston *v.* Ohio, 80 Fed. 721;

Am. Graphophone *v.* Hawthorne, 92 Fed. 516; Rupp *v.* Elliott, 131 Fed. 730; Kalem *v.* Harper, 222 U. S. 55.

§ 481. Corporations — Officers of.

This court absolutely and entirely rejects the not uncommon view that the fiction of distinct corporate existence can be made to serve as a shield against the consequences of individual wrongdoing. Upon the presentation of a case showing active participation by an officer of a corporation in the infringement of a patent, we have been, and shall be, not slow to disregard the corporate device and enforce personal responsibility. — Weston *v.* Empire, 177 Fed. 1006; 100 C. C. A. 670.

That the question of the non-liability of an officer of a corporation, in the absence of evidence, cannot be raised for the first time on appeal, see — Vrooman *v.* Penhollow, 179 Fed. 296; 102 C. C. A. 454.

§ 485. Division or Union of Parts or Elements.

A mere splitting up of the parts of a patented structure, the functions remaining the same, does not avoid infringement. — Nu Bone *v.* Spirella, 183 Fed. 984; 106 C. C. A. 324.

§ 487. Evidence of — Acts of Defendant.

That where the defendant conceded the validity of the patent, agreed to discontinue infringement and was released from liability for its past acts, the mere fact that the defendant continued to show the infringing article in its advertisements thereafter — there being no other proof of infringement subsequent to such release — is insufficient to warrant a preliminary injunction, see — Am. Specialty *v.* New England, 176 Fed. 557; 100 C. C. A. 193.

That the motives or conduct of a defendant when acting within his rights cannot be construed as evidence of infringement, see — Twentieth Century *v.* Taplin, 181 Fed. 96; 104 C. C. A. 156.

Bauer solved the problem; his simple changes have produced strength where formerly there was weakness and stability where there was infirmity. No better proof of this is needed than the tenacity with which the defendant has insisted upon using the patented structure. — Simplex Railway *v.* Pressed Steel, 189 Fed. 70; 110 C. C. A. 634.

§ 488. Evidence of — Burden.

Infringement is not only a question of fact, but it is a tort or wrong, the burden of establishing which, as in all torts, clearly rests on those who charge such wrong. The absence of actual proof is not met by the presence of expert speculations, no matter how voluminous. — Krupp *v.* Midvale, 191 Fed. 588; 112 C. C. A. 194.

§ 489. Evidence of — Expert.

The absence of actual proof is not met by the presence of expert speculations, no matter how voluminous. — Krupp *v.* Midvale, 191 Fed. 588; 112 C. C. A. 194.

§ 490. Evidence of — Function.

Complainant's and defendant's grates each perform the same functions. While it is necessary to constitute infringement that each should perform

the same function, performance of the same function does not alone constitute infringement. — Johnson *v.* Western, 178 Fed. 819; 102 C. C. A. 267.

Eames *v.* Godfrey, 1 Wall. 78; Burr *v.* Duryee, 1 Wall. 531; Westinghouse *v.* Boyden, 170 U. S. 568.

That identity of function or result is not evidence of infringement where the means or methods employed differ, see — Kellogg *v.* Dean, 182 Fed. 991; 105 C. C. A. 545.

That while the difference between simultaneous or continuous operation and successive or intermittent operation may not be proof of noninfringement, it argues therefor, see — Am. Steel & Wire *v.* New Jersey, 194 Fed. 117; 114 C. C. A. 195.

§ 491. Evidence of — Identity.

The mere fact that the defendant's device may be within the letter of the claim sued on is not conclusive proof of infringement. This is shown in the opinion of Judge Cross in the court below (171 Fed. 666). — Gen. Electric *v.* Allis-Chalmers, 178 Fed. 273; 101 C. C. A. 537.

Patentable difference does not of itself tend to negative infringement. It may just as well be based upon infringement plus improvement; and improvement may lie in addition, simplification, or variance. — Herman *v.* Youngstown, 191 Fed. 579; 112 C. C. A. 185.

§ 494. Evidence of — Sufficiency.

It would seem that where there is both a method and machine patent and the method is clearly patentable and the machine patent is doubtful, the doubt should be resolved in favor of the defendant on the ground that complainant has adequate relief under the other patent. — General Knit Fabric *v.* Steber, 194 Fed. 99; 114 C. C. A. 177.

§ 495. Evidence of — Utility — Use by Defendant.

The patent itself was evidence of the utility of claim 4 and the defendant was estopped from denying that it was of value. —Westinghouse *v.* Wagner, 225 U. S. 604; 56 L. Ed. —; 32 S. Ct. 691.

Lehnbeuter *v.* Holthaus, 105 U. S. 94.

§ 496. Evidence of — Miscellaneous Holdings.

The last item of proof in the case is a blue-print of the machine which the defendant is now using. There is not a line of testimony explaining the exhibit. It is a complicated drawing, and it would be highly presumptuous in us to say it shows infringement. — Morton Trust *v.* Standard, 177 Fed. 931; 101 C. C. A. 211.

The fact that the formulae are identical cuts little figure. A chemical formula is simply the symbolical expression of the composition or constitution of a substance. — Kuehmsted *v.* Farbenfabriken, 179 Fed. 701; 103 C. C. A. 243.

§ 497. Generic Patent.

It is a general rule that there is a presumption that a process or apparatus of a later patent does not infringe the process or apparatus of an earlier patent relating to the same subject. There is also a general rule that there is a presumption that a process or apparatus of a later patent does not infringe

the process or apparatus of an earlier patent between which the Commissioner of Patents has decided that there was no interference. But there is an exception to this rule that where a patentee has made a primary invention of a new and useful process or apparatus which accomplishes a result never before produced by such a process or machine, the presumption that a process or apparatus of a later patent on the same subject is for a subordinate improvement or modification of the primary invention and hence subject to an infringement of the earlier patent which secures it, is at least as strong as the presumptions of the general rules, because there are many more patents for subordinate improvements and modifications of primary inventions than there are for such inventions, and hence more probability that a given process or apparatus is of the former than that it is of the latter class. — Century Electric *v.* Westinghouse, 191 Fed. 350; 112 C. C. A. 8.

Ries *v.* Barth, 136 Fed. 850; Boyd *v.* Janesville, 158 U. S. 260; Consolidated *v.* Crosby, 113 U. S. 157; Morley *v.* Lancaster, 129 U. S. 263; National *v.* Interchangeable, 106 Fed. 693; Crown *v.* Aluminum, 108 Fed. 845.

§ 498. By Government.

The text of this statute (Act June 25, 1910, see App. § 428) leaves no room to doubt that it was adopted in contemplation of the contingency of the assertion by a patentee that rights secured to him by a patent had been invaded for the benefit of the United States by one of its officers; that is, that such officer, under the conditions stated, had infringed a patent. The enactment of the statute, we think, grew out of the operation of the prior statute law concerning the right to sue the United States for the act of an officer in infringing a patent, as interpreted by repeated decisions of this court. — Crozier *v.* Krupp, 224 U. S. 290; 56 L. Ed. 771; 32 S. Ct. 488.

United States *v.* Palmer, 128 U. S. 262; Schillinger *v.* U. S. 155 U. S. 163; United States *v.* Berdan, 156 U. S. 552; Russel *v.* U. S. 182 U. S. 516; Hariey *v.* U. S. 198 U. S. 229.

§ 500. Identity — Means Employed.

It does not necessarily follow that, because the separate elements unaffected by their special adaptations might be found in both patents, the combinations are therefore the same. — Duncan *v.* Cincinnati, 171 Fed. 656; 96 C. C. A. 400.

Westinghouse *v.* Boyden, 170 Fed. 537.

It is no defense to a charge of infringement of a process, a machine or a combination clearly described and claimed in a patent that it, or some part of it, was misnamed therein, or that the infringer had called it by a name different from that applied to it by the patentee. Patents protect new and useful processes, machines and combinations, whatever their names, when they are clearly described and claimed in the specification. — Century Electric *v.* Westinghouse, 191 Fed. 350; 112 C. C. A. 8.

§ 503. Identity — Tests of.

To sustain the charge of infringement the infringing device must be substantially identical with the one alleged to be infringed in (1) the result attained; (2) the means of attaining that result; and (3) the manner in which its different parts operate and co-operate to produce the result. If the devices are substantially different in either of these respects the charge of infringement is not sustained. — Electric Protection *v.* American, 184 Fed. 916; 107 C. C. A. 238.

Machine Co. *v.* Murphy, 97 U. S. 120; Eames *v.* Godfrey, 1 Wall. 78; National *v.* Interchangeable, 106 Fed. 693; Adams *v.* Lindell, 77 Fed. 432.

§ 505. Importation and Exportation.

The use of articles covered by a United States patent within the United States can no more be controlled by foreign law than the sale can. The sale by a German patentee of a patented article may take it out of the monopoly of the German patent, but how can it take it out of the monopoly of the American patentee who has not sold? — Daimler *v.* Conklin, 170 Fed. 70; 95 C. C. A. 346.

Featherstone *v.* Ormonde, 53 Fed. 110.

§ 506. Improvement — By an Improvement.

The mechanism of defendant differs in some respects from that of the patent. It is made under a later patent issued to defendant, but that circumstance does not necessarily negative infringement. The later patent expressly states that it relates to improvements in stitch-forming mechanism such as is illustrated in the patent in suit. It not infrequently happens that some improvement of an older device exhibits patentable novelty, but cannot be put in practice without infringement of the original device, which it has improved. — Acme-Keystone *v.* Dearborn, 185 Fed. 503; 107 C. C. A. 603.

§ 507. Improvement — Of an Improvement.

That in determining whether there is infringement of an improvement the scope of the prior patent must be determined, see — Herman *v.* Youngstown, 191 Fed. 579; 112 C. C. A. 185.

§ 508. Intent.

The infringement of a patented combination is complete when the component parts of the combination are made or sold, fitted to be put together and intended to be put together. The infringement in this case was clearly a direct infringement. The facts do not show a partial infringement in aid of a complete infringement. He sold both parts of the combination in a condition ready to be put together to make a completed structure. His offense contained all the elements of a direct infringement. — Kreplik *v.* Couch Patents, 190 Fed. 565; 111 C. C. A. 381.

Goodyear *v.* Jackson, 112 Fed. 148; Bullock *v.* Westinghouse, 129 Fed. 105.

§ 510. License — By Licensee.

That a patentee may effectually restrict the time, place or manner of using a patented machine, so that a prohibited use will constitute an infringement of the patent, is fully conceded. * * * The books abound in cases upholding the right of a patentee owner of a machine to license another to use it subject to any qualification in respect of time, place, manner or purpose of use which the licensee agrees to accept. Any use in excess of the license would obviously be an infringing use and the license would be no defense. — Henry *v.* Dick, 224 U. S. 1; 56 L. Ed. 645; 32 S. Ct. 364.

Note: This is final authority; see long list of cases cited by Justice Lurton in foot-note.

Complainant and defendant entered into a cross-license agreement permitting each to " operate " under the patents of the other. Defendant took from a third party in trade goods made by said party in infringement of the patents of complainant and resold them as its goods. *Held:* The order is sought to be sustained on the ground that selling these records was a violation of the agreement. Conceding, without admitting, this to be so, the act

would not be a contempt, but a breach of contract, to be remedied in an action at law. — Am. Graphophone *v.* Victor, 183 Fed. 580; 106 C. C. A. 348.

Washburn *v.* Southern, 37 Fed. 428.

§ 519. Process — Tests of.

The real test of infringement is not identity of product which is not patented, but identity of patented process in producing an unpatented product. — Krupp *v.* Midvale, 191 Fed. 588; 112 C. C. A. 194.

§ 520. Process — Miscellaneous.

The patentee is entitled to the protection of his process against its use by such a subsequently invented machine, and also to protection of his apparatus against its infringement by its mechanical equivalents. — Century Electric *v.* Westinghouse, 191 Fed. 350; 112 C. C. A. 8.

§ 528. Tests — Interchangeability.

The mechanism of the two hammers is not interchangeable, and noninterchangeability is an important test in determining the question of infringement. — Boyer *v.* Cleveland, 185 Fed. 808; 108 C. C. A. 40.

Miller *v.* Eagle, 151 U. S. 186.

§ 531. Tests — Miscellaneous.

Infringement is to be judged by the state of the art when it takes place, and not by something which has come in since. — Novelty *v.* Brookfield, 170 Fed. 946; 95 C. C. A. 516.

INJUNCTION.

§ 535. Appeals — Comity.

Judge Coxe states the principles which should control when application for a preliminary injunction is subsequently made and resisted on ex parte affidavits, as follows: "There can be no doubt that the doctrine of comity not only, but the orderly administration of justice, requires that the Circuit Court should adopt and follow the decisions of the Circuit Courts of Appeals in other circuits than their own, rendered upon facts substantially identical. Any other rule would lead to confusion and injustice. Of course in such circumstances the defendant in patent causes may introduce new evidence of anticipation and may show that the facts on which infringement is based are essentially different from those in the adjudicated case. Such proof must carry conviction with it." Appellant's brief bitterly attacks this statement, but we understand it to be an accurate presentation of the law and find nothing in Mast *v.* Stover, 177 U. S. 488, which calls for a different conclusion. The practice indicated by Judge Coxe has been uniformly followed in this circuit. — Warren Bros. *v.* City of N. Y. 187 Fed. 831; 109 C. C. A. 591.

Box Co. *v.* Paper Co. 51 Fed. 229; Doig *v.* Morgan, 91 Fed. 1001; N. Y. Filter *v.* Niagara, 80 Fed. 924; Consolidated Rubber Tire *v.* Diamond, 157 Fed. 677.

§ 536. Appeals — Contempt, General.

Writ of error will lie only when the fine is clearly punitive, and in vindication of the authority of the court, as in the case where the fine is made payable in whole or in part to the United States. — Heller *v.* National, 168 Fed. 249; 93 C. C. A. 551.

In re Christensen, 194 U. S. 458.

A contempt case like the present one, where the fine imposed is payable to the United States, and where the party adjudged to be in contempt is not a party to the cause in which the contempt occurs, is in its nature a criminal and not a civil proceeding. The judgment is final. For these reasons it is reviewable on a writ of error. — In re Grove, 180 Fed. 62; 103 C. C. A. 416.

§ 538. Appeals — Contempt — Reverse of Rule in Debs Case.

The matter sought to be reviewed is an order adjudging Henry S. Grove (president of defendant) guilty of contempt for having refused to produce before the examiner, in response to a subpoena duces tecum. The penalty imposed was a fine of $1 payable to the United States. The case is therefore one in which the fine was punitive and in vindication of the authority of the court, and not compensatory to the complainants in the principal case. It follows that the order of the circuit court is reviewable on a writ of error. — In re Grove, 180 Fed. 62; 103 C. C. A. 416.

Bessette *v.* Conkey, 194 U. S. 324; id., 133 Fed. 163; In re Christensen, 194 U. S. 458.

§ 539. Appeals — Decision on Merits.

Familiar rule and familiar citations in — Sheffield *v.* D'Arcey, 194 Fed. 686; — C. C. A. —.

§ 540. Appeals — Dismissing Bill.

It is now well settled by the supreme court that the court, in passing upon an appeal of this character (appeal from order granting an injunction), may consider and decide the case on the merits. — Berliner *v.* Seaman, 110 Fed. 30; 49 C. C. A. 99.

Smith *v.* Iron Works, 165 U. S. 518.

§ 543. Appeals — Sound Discretion.

That the refusal of the trial court to permit the complainant to adduce evidence to show the amount of his damage by reason of the violation of injunction by defendant is a matter of discretion and not appealable, see — Cazier *v.* Mackie-Lovejoy, 168 Fed. 701; 94 C. C. A. 215.

That where the primary question is that of discretion exercised by the court below, the appellate court will not go further into the case, see — Grushlaw *v.* Phoenix, 183 Fed. 222; 105 C. C. A. 484.

The general rule is that unless it explicitly appears that the court has proceeded upon an erroneous hypothesis of pertinent fact or law, or has improvidently exercised its legal discretion, the order will not be disturbed. — Acme Acetylene *v.* Commercial, 192 Fed. 321; 112 C. C. A. 573.

Interurban *v.* Westinghouse, 186 Fed. 166; Shelbyville *v.* Glover, 184 Fed. 234.

§ 544. Appeals — What Considered on.

The granting or refusing of a preliminary injunction ordinarily rests in the sound discretion of the trial court, and the review thereof by an appellate court is limited to the inquiry whether there was abuse of discretion in granting the writ. — Kings County *v.* U. S. Consolidated, 182 Fed. 59; 104 C. C. A. 499.

Blount *v.* Société, 53 Fed. 98; Jensen *v.* Norton, 64 Fed. 662; Southern *v.* Earl, 82 Fed. 690.

The general rule is that the (injunction) order will not be disturbed unless it clearly appears that the court below has exercised the discretion, which it admittedly has, upon a wholly wrong comprehension of the facts or law of the case. — Interurban *v.* Westinghouse, 186 Fed. 166; 108 C. C. A. 298.

Thomson-Houston *v.* Ohio, 80 Fed. 712; Loew *v.* German-American, 107 Fed. 949; Proctor *v.* Globe, 92 Fed. 357; Paris *v.* Hill, 102 Fed. 148.

We may say with respect to the present case that this rule (sound discretion) requires us to pass upon any question of law, the determination of which was necessarily involved in the granting of the order. — Acme Acetylene *v.* Commercial, 192 Fed. 321; 112 C. C. A. 573.

Bissell *v.* Goshen, 72 Fed. 545.

§ 545. Appeals — Miscellaneous Rulings.

We cannot agree with the proposition of counsel that once this court had declared the validity and infringement of the letters patent, and remanded the case for further proceedings not inconsistent with its opinion, the right of an injunction followed as a matter of course, and that the circuit court was without discretion in the premises. No ruling to that effect has been cited, and, instead of there being no authority to the contrary, there are many cases at circuit in which such discretion has been exercised. — In re Chicago Sugar Ref. 87 Fed. 750; 31 C. C. A. 221.

§ 546. Bond.

That although a patent may have been sustained on appeal in another circuit, where the injunction would work hardship and the defendant is entirely responsible, a bond may be required in lieu, see — Westinghouse *v.* Burton, 77 Fed. 301; 23 C. C. A. 174.

That where an injunction is granted conditioned upon complainant giving a bond in a sum specified, in the event of failure of complainant to succeed, the damages which defendant can recover cannot exceed the amount of the bond, see — Cimiotti *v.* American, 168 Fed. 529; 93 C. C. A. 546.

That where the patent has but a short time to run, and the granting of a preliminary injunction would work serious consequences with the defendant, the injunction may be suspended pending appeal with proper bond, see — Interurban *v.* Westinghouse, 186 Fed. 166; 108 C. C. A. 298.

§ 548. Discontinuance or Non-Use.

The fact that a defendant has ceased to infringe and promised not to infringe in the future does not necessarily prevent an injunction issuing against him. Indeed, under such conditions, an injunction would ordinarily issue. But still an injunction is only granted to prevent threatened injury. If it is clear that no injury is threatened, it should not issue. — Crier *v.* Innes, 170 Fed. 324; 95 C. C. A. 508.

The appellant for two or three months at a period of about one year before the bill was filed, made and sold some of these sockets; they then discontinued the use of that form and adopted the later numbered styles. It does not appear that the appellee was notified of the discontinuance of the infringing style or had any knowledge that it had been discontinued. We cannot say that it had no reason for apprehending that its use would be discontinued, or would not be renewed. In these circumstances, the appellee was entitled to file its bill for an injunction. — Yost *v.* Perkins, 179 Fed. 511; 103 C. C. A. 116.

§ 549. Discretion of Court.

The grant of a preliminary injunction rests in the discretion of the trial court, not in its arbitrary, whimsical will, but in its sound judicial discretion, informed and guided by the established principles, rules, and practice of equity jurisprudence; and where the court has not departed from them, its injunctional orders may not be reversed without clear proof of an abuse of its discretion. — Kryptok *v.* Stead, 190 Fed. 767; 111 C. C. A. 495.

§ 552. General Rules for Refusing.

Injunction is not the appropriate remedy to procure relief for past injuries, and is to be used only in the prevention of further injury when further injury is actually threatened. — Kennicott *v.* Bain, 185 Fed. 520; 107 C. C. A. 626.

High, Inj. § 23; Gen. Electric *v.* New England, 123 Fed. 310; Odell *v.* Stout, 22 Fed. 159.

§ 554. Grounds for Granting — Acquiescence.

The patent in suit has never been adjudicated, and it is, of course, the general rule that a preliminary injunction will not be issued upon an unadjudicated patent. But exceptions to this rule exist in cases where the validity of the patent has been admitted and acquiesced in. — Standard Typewriter *v.* Standard, 181 Fed. 500; 104 C. C. A. 248.

That where a patent has been upheld in a prior suit and the defendant there and others took out licenses under the patent, such acquiescence is persuasive, see — Grushlaw *v.* Phoenix, 183 Fed. 222; 105 C. C. A. 484.

§ 555. Grounds for Granting — Conduct of Defendant.

For a case specifying a number of acts, any one of which should entitle complainant to an injunction, see — Standard Typewriter *v.* Standard, 181 Fed. 500; 104 C. C. A. 248.

§ 559. Grounds for Granting — Nature of Act.

Appellant takes the position that a well-grounded apprehension of infringement may, in a proper case, alone suffice to support a bill quia timet for an injunction, without any established breach; that the patent being valid, the fact of a breach has ordinarily been held sufficient to justify an injunction because of a well-grounded apprehension of a repetition of the infringement. From this position, as a proposition of law, we do not dissent. — Kennicott *v.* Bain, 185 Fed. 520; 107 C. C. A. 626.

Woolworth *v.* Stone, Fed. Cas. 18,021; Facer *v.* Midvale, 38 Fed. 231; Celluloid *v.* Arlington, 34 Fed. 324; Brookfield *v.* Elmer, 132 Fed. 312; Sawyer *v.* Turner, 55 Fed. 979; Kane *v.* Candy Co. 44 Fed 287; Matthews *v.* National, 71 Fed. 518; Cayuta *v.* Kennedy, 127 Fed. 355; Potter *v.* Crowell, Fed. Cas. 11, 323; N. Y. Filter *v.* Chemical, 93 Fed. 827; Winchester *v.* American, 54 Fed. 703; Gen. Electric *v.* New England, 128 Fed. 738.

§ 561. Grounds for Granting — Prior Adjudication.

In passing on the other foreign patents, the circuit court considered that the prior adjudications fortified the presumption of validity of the patent in suit, and established its scope, and that the new matter introduced did not repel the presumption or limit the extent of the patent. That the lower courts properly regarded the prior adjudications as a ground of preliminary injunction is established by the cases cited Walk. Pat. §§ 665 et sq., and Rob. Pat. §§ 117 et sq. And in that aspect the question must be considered, and, so considering it, we may pass the defenses of anticipation, whether

complete or partial, and the defense of infringement. — Leeds *v.* Victor, 213 U. S. 301; 53 L. Ed. 805; 29 S. Ct. 495.

Note: This ruling should put a stop to the tendency in certain circuits, especially the seventh, to disregard prior adjudications, especially those of other circuits.

When there has been a prior adjudication sustaining the patent and the infringement thereof is the same or in another circuit, where the validity of the patent has been contested upon full proofs, the circuit court should, upon a motion for preliminary injunction, sustain the patent, and leave the determination of the question of its validity to be determined upon the final hearing. This rule is even more emphatic when the former decision was made by the federal court in the same circuit. — Interurban *v.* Westinghouse, 186 Fed. 166; 108 C. C. A. 298.

Duplex *v.* Campbell, 69 Fed. 250.

That where a patent has been sustained upon full proofs in a prior suit, the trial court should, on motion for a preliminary injunction, sustain the patent and leave the proofs to final hearing, see — Acme Acetylene *v.* Commercial, 192 Fed. 321; 112 C. C. A. 573.

Interurban *v.* Westinghouse, 186 Fed. 166; Leeds *v.* Victor, 213 U. S. 302; Commercial Acetylene *v.* Acme, 188 Fed. 89.

§ 562. Grounds for Granting — Sufficiency — General.

To entitle the complainant to a preliminary injunction in a suit for the infringement of a patent prior to a trial on the merits, he must show three things: a clear title to the patent; its presumptive validity; threatened infringement by the defendant. — Kings County *v.* U. S. Consolidated, 182 Fed. 59; 104 C. C. A. 499.

Edison *v.* Beacon, 54 Fed. 679; Norton *v.* Can Co. 57 Fed. 929.

§ 564. Grounds for Refusing — Conflicting Proofs.

The contention is that, the Grant patent having been declared invalid by the circuit court of appeals for the sixth circuit and by the circuit court for the district of Indiana in the seventh circuit, the rubber company should not have been enjoined from the handling or sale of tires manufactured in the sixth and seventh circuits, and cites Kessler *v.* Eldred, 206 U. S. 285. The court of appeals practically reserved the question. It modified the decree of the circuit court so far as it prevented the handling, using, or selling tires and rims authorized by any judicial decree, recognizing, as it said, the applicability of Kessler *v.* Eldred. But it further said: "Whether it should be given a broader interpretation is a question upon which we express no opinion, deeming it more prudent to wait until the facts are fully developed." * * * We concur in these remarks. — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

There is a sharp conflict of evidence, numerous affiants testifying. All their statements are ex parte affidavits made without any opportunity to test their probative force by cross-examination. Under such circumstances, it seems to us, irrespective of any of the other questions in the case, that infringement was not so clearly established as to justify a preliminary injunction. — Wright *v.* Herring-Curtiss, 180 Fed. 110; 103 C. C. A. 31.

Westinghouse *v.* Montgomery, 139 Fed. 868; Hall *v.* General, 153 Fed. 907.

§ 566. Grounds for Refusing — Infringement not Clear.

The most favorable view for the complainant is that the question of infringement is involved in doubt, and a preliminary injunction should not be granted in a doubtful case. — Ferry-Hallock *v.* Herman, 178 Fed. 550; 101 C. C. A. 230.

That where infringement is in doubt, injunction should be refused pendente lite, see — Wright *v.* Paulhan, 180 Fed. 112; 103 C. C. A. 32.

Wright *v.* Herring-Curtiss, 180 Fed. 110.

§ 574. Non-User.

Doubtless, in the present case, the complainant was entitled to an injunction restraining further infringement. It was entitled to that relief whether it made use of the patent or not. — Lorain *v.* N. Y. Switch, 184 Fed. 301; 106 C. C. A. 443.

Paper Bag Case, 210 U. S. 405.

It is sufficient to sustain the decree of the court below, that, as a matter of fact, appellee did, in good faith, cease the use of the infringing device, and that appellant had full opportunity to make itself acquainted with this fact before it filed its bill. — Kennicott *v.* Bain, 185 Fed. 520; 107 C. C. A. 626.

§ 576. Powers and Scope.

Where a court of equity has jurisdiction of appellants, it may enjoin them by decree in personam from doing any acts at places beyond the jurisdiction of the court, as well as within it. — Rubber Tire *v.* Goodyear, 183 Fed. 978; 106 C. C. A. 318.

§ 577. Violation of — Contempt.

It is true that the corporation is not expressly named as defendant, but it could not have had more direct and explicit notice of the injunction if it had been so named. It was cited by an order of the Circuit Court to appear and show cause why it should not be punished for contempt in violating the injunction and was given full opportunity to purge itself. In organizing the corporation Bernard was the moving spirit. That it was organized for the purpose of escaping the consequences of the infringement of the patent which Bernard had sold and assigned to the complainants, is too plain for controversy. A person who, with full knowledge of its provisions, has violated an injunction may be punished for contempt, although not a party to it. — Bernard *v.* Frank, 179 Fed. 516; 101 C. C. A. 459.

In re Lennon, 166 U. S. 548; In re Debs, 158 U. S. 564; Bessette *v.* Conkey, 194 U. S. 324.

That it is not contempt for a party to refuse to produce and exhibit records which he is under injunction from a department of the government to keep secret and which the head of such department has advised him not to disclose, see — In re Grove, 180 Fed. 62; 103 C. C. A. 416.

The injunction against which the offense was committed was an injunction against "directly or indirectly" infringing the patent. The learned judge who sat in the Circuit Court adjudged that the defendant violated the injunction. We find this judgment free from error, whether the defendant is held to be guilty of a direct or a merely contributory infringement. — Kreplik *v.* Couch Patents, 190 Fed. 565; 111 C. C. A. 381.

The courts of the United States recognize that the process of contempt has two distinct aspects — one criminal, to punish for disobedience; and the other remedial and civil to enforce a decree of the court, and to compensate private persons. * * * The two aspects of contempt proceedings have often been before the Circuit Court in this circuit, where it has been clearly recognized that in an equity case a fine for contempt imposed for the use of the petitioner is not a punitive fine, but merely indemnity to the petitioner for the loss occasioned to him by the offensive acts of the defendant. * * * The Circuit Court made its two awards, its compensatory award and its punitive award, in one proceeding. In doing so it followed the practice of the courts in this circuit and in other circuits * * * in patent cases the practice has been to combine the two under a proper proceeding, and to order punishment, if it is thought proper, and to indemnify the plaintiff if it is thought proper, or to do both if justice requires. * * * In the Gompers Case the court has nowhere said that this practice of the several circuits in patent causes is improper or illegal. Under the principles announced in that case, it must, of course, appear in a case in equity that, before imposing a sentence for criminal contempt, the court distinctly gave the defendant his day in court and allowed him a full and fair hearing upon a criminal charge. * * * The Supreme Court further said that, where a court is proceeding in vindication of its authority, this element dominates the proceeding, and is reviewable by the Circuit Court of Appeals on writ of error. It is clear, then, that in a proceeding where both the remedial and punitive elements are brought before the court, the criminal element must control. — Kreplik *v.* Couch Patents, 190 Fed. 565; 111 C. C. A. 381.

Re Christensen, 194 U. S. 458; Bessette *v.* Conkey, 194 U. S. 324; Gompers *v.* Bucks, 221 U. S. 418; Hendryx *v.* Fitzpatrick, 19 Fed. 810; Re Chiles, 22 Wall. 157; Anderson *v.* Dunn, 6 Wheat. 204.

§ 578. Violation of — Miscellaneous Rules.

When the validity of a patent has been established, and the defending party decreed to be an infringer on account of certain specific devices brought before the court, the infringing party may not, by mere colorable changes, avoid the effect of the decree as an adjudication between the parties; and the offending party may be reached either by separate suit or by a supplemental bill. — Cazier *v.* Mackie-Lovejoy, 168 Fed. 701; 94 C. C. A. 215.

Murray *v.* Orr, 153 Fed. 369.

§ 579. Miscellaneous Injunction Decisions.

Cruikshank (one of the partners) died before the commencement of the suit, and the defendant Marr is his administrator. An injunction cannot run against the former, nor against the latter as administrator on account of his intestate's infringing act. — Crier *v.* Innes, 170 Fed. 324; 95 C. C. A. 508.

That the fact that there are other suits pending upon the same patent in other circuits against other infringers is not a ground for refusing injunction, see — Interurban *v.* Westinghouse, 186 Fed. 166; 108 C. C. A. 298.

That an injunction should be refused if its granting will cause greater injury than its refusal, see — Kryptok *v.* Stead, 190 Fed. 767; 111 C. C. A. 767.

Russell *v.* Farley, 105 U. S. 433; Shubert *v.* Woodward, 167 Fed. 47; Blount *v.* Société, 53 Fed. 98.

That a defendant manufacturer may not restrain a complainant from bringing suits against its customers or dealers merely because such course

may cause expense and loss to the original defendant or to such other persons sued, see — Kryptok *v.* Stead, 190 Fed. 767; 111 C. C. A. 767.

Acetylene *v.* Avery, 152 Fed. 642.

INTERFERENCES.

§ 584. Conclusiveness.

It was so decided in the interference proceedings, which, while not conclusive upon us, it is or the defendants to overcome. — Novelty *v.* Brookfield, 170 Fed. 946; 95 C. C. A. 516.

Morgan *v.* Daniels, 153 U. S. 120.

That an interference adjudication is conclusive in a subsequent suit between the same parties only upon the issues there determined, and upon those issues only in the absence of further and persuading proofs, see — Elliott *v.* Youngstown, 181 Fed. 345; 104 C. C. A. 175.

That an interference adjudication is presumed to be conclusive against the defeated party and his privies until such presumption is overcome, see — Hillard *v.* Remington, 186 Fed. 334; 108 C. C. A. 534.

Morgan *v.* Daniels, 153 U. S. 120.

That an interference or the failure to declare an interference has small evidential weight, see — Herman *v.* Youngstown, 191 Fed. 579; 112 C. C. A. 185.

§ 585. Miscellaneous.

The patentee, after succeeding in interference, appropriated the claims of the defeated party. *Held:* True, the fact that Cox (the patentee) may have mistakenly regarded these things as not new, and therefore not the subject of a patent, would not have prevented him from correcting his mistake if done in apt time, by amending his application and broadening his claims. But this must be done by a showing in his application that the conception was his, and that it was new and novel; and this he did not do. His application, either before or after the new claims were inserted, discloses no conception of the deficiency to which the interfering patent was directed, antedating it. — General Electric *v.* Sangamo, 174 Fed. 246; 98 C. C. A. 154.

The result of the interference was adverse to Marder; but the result does not establish the proposition as against the rest of the world that the patentees had perfected their invention prior to September 12, 1904. — Dey *v.* Bundy, 178 Fed. 812; 102 C. C. A. 260.

INVENTION.

§ 591. Adaptation — Arrangement or Grouping.

That mere arrangement of a part, such as giving a certain inclination to the moldboard or disk of a plow, is not invention, see — Torrey *v.* Hancock, 184 Fed. 61; 107 C. C. A. 79.

Eddy *v.* Dennis, 95 U. S. 560.

§ 594. Aggregation — Co-action Wanting.

The patent concerns metallic or pressed steel cars provided with double hopper-bottoms. In the device as a whole there was no interchange of mechanical function between the several parts, and no new result from their

contiguity. Each maintained its independent function, which, whether in isolation or companionship, remained the same. There being absence of new functional co-operation, and the position and relation of the several parts being wholly structural, we cannot regard the construction as inventive in character. — Am. Car & Foundry *v.* Morton Trust, 175 Fed. 568; 99 C. C. A. 190.

The mere bringing together of old parts and allowing each to work out its own old effect, without producing some new machine or product, is not invention. It is necessary always to determine whether the conception of a combination of old parts results from the intuition of the inventor as distinguished from the skill of the mechanic. — Warner *v.* Stewart, 185 Fed. 507; 107 C. C. A. 607.

Reckendorfer *v.* Faber, 92 U. S. 347.

That a tool embracing means for performing a plurality of functions, lacking co-action, though convenient and useful, is not patentable, see — Irvington *v.* Utica Drop Forge, 191 Fed. 169; 111 C. C. A. 647.

§ 596. Aggregation — Not Invention.

The specifications of the patent acknowledge "that scorching devices and burning tools are separately old." If the patent consists in simply bringing together into one tool these two things, it is not invention. It is mere aggregation. — Tyssowski *v.* Thayer, 174 Fed. 43; 98 C. C. A. 29.

Mere simultaneous treatment of two objects by the same process previously applied to one is not invention. — Krupp *v.* Midvale, 191 Fed. 588; 112 C. C. A. 194.

§ 597. Aggregation — Old Elements, Old Result.

To sustain a patent with a combination of old elements, it is well settled that a new result must be obtained, which is due to the joint and co-operating action of all the old elements. Either this must be accomplished, or a new machine of distinct character and function must be constructed. If several old devices are so put together to produce even a better machine or instrument than was formerly in use, but each of the old devices does what it had formerly done in the machine or instrument from which it was borrowed, and in the old way, without uniting with other old devices to perform any joint function, it seems that the conbination is not patentable. — Anton *v.* Grier, 185 Fed. 796; 108 C. C. A. 173.

Brinkerhoff *v.* Aloe, 146 U. S. 515; Pickering *v.* McCullough, 104 U. S. 310; Reckendorfer *v.* Faber, 92 U. S. 347; Hailes *v.* Van Wormer, 87 U. S. 353; Specialty *v.* Fenton, 174 U. S. 492.

§ 598. Beneficial Uses and Scope of.

We should be slow to infer such ignorance. * * * When a person produces a useful instrument, to say that he did not know what he was about is at least confusing. To take from him the advantage of it upon nice speculation as to whether it was an ignorant guess or confident knowledge and adaptation might do him great injustice. His success is his title to consideration. — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

Even if the patentee at the time of making his application did not know of this advantage, or knowing failed distinctly to express it, he, in view of

what he did state and show, is entitled to have his invention considered with reference to it. — Morgan Engineering *v.* Alliance, 176 Fed. 100; 100 C. C. A. 130.

Goshen *v.* Bissell, 72 Fed. 67; Dowagiac *v.* Superior, 115 Fed. 886; Stilwell-Bierce *v.* Eufaula, 117 Fed. 410.

It is possible that in Forster's device the water, to some extent, impinges upon the inside of the " tubular body," though he does not suggest it. But he would be entitled to the benefit of that feature, if in fact it existed. — Forest City *v.* Barnard, 176 Fed. 561; 100 C. C. A. 197.

Goshen *v.* Bissell, 72 Fed. 67; Goodyear *v.* Rubber, 116 Fed. 363; Stilwell-Bierce *v.* Eufaula, 117 Fed, 410; Eames *v.* Worcester, 123 Fed. 67.

A patentee who has plainly described and claimed his machine or combination has the right to every use to which his device can be applied, and to every way in which it can be utilized to perform its function, whether he was aware of these uses or methods of use when he claimed or secured his monopoly or not. — Warren Webster *v.* Dunham, 181 Fed. 836; 104 C. C. A. 346.

National *v.* Interchangeable, 106 Fed. 693; Roberts *v.* Ryer, 91 U. S. 150; Miller *v.* Mfg. Co. 151 U. S. 186; Goshen *v.* Bissell, 72 Fed. 67; Stearns *v.* Russell, 85 Fed. 218; Mfg. Co. *v.* Neal, 90 Fed. 725; Tire Co. *v.* Lozier, 90 Fed. 732.

It is objected that the advantage of avoiding side tones is not mentioned in the specification. This is true. But this omission was not fatal if the advantage was necessarily achieved through the invention. — Kellogg *v.* Dean, 182 Fed. 991; 105 C. C. A. 545.

Goshen *v.* Bissell, 72 Fed. 67; Dowagiac *v.* Superior, 115 Fed. 886; Stilwell-Bierce *v.* Eufaula, 117 Fed. 410; Morgan *v.* Alliance, 176 Fed. 100.

§ 599. Carrying Forward.

The rule of Smith *v.* Nichols, 21 Wall. 112, quoted and applied in — Neureuther *v.* Mineral Point, 179 Fed. 850; 103 C. C. A. 336.

Smith *v.* Nichols, supra; Wilce *v.* Bush, 134 Fed. 389.

In Smith *v.* Nichols, 21 Wall. 119, it was held that a mere carrying forward of an original conception patented, a new and more extended application of it, involving no change of form, proportion, or degree, the substitution of equivalents doing the same thing as did the original invention by substantially the same means with better effects, is not such invention as will sustain a patent. — Yost *v.* Perkins, 179 Fed. 511; 103 C. C. A. 116.

Roberts *v.* Ryer, 91 U. S. 150; Phillips *v.* Detroit, 111 U. S. 604; Burt *v.* Evory, 133 U. S. 349; Ansonia *v.* Electrical, 144 U. S. 19; Lovell *v.* Cary, 147 U. S. 623.

§ 601. Change of Form — Mere Change.

If it were shown to be true that a machine with knives set at a particular angle had distinct advantages over a machine with knives set at any other angle, the discovery and embodiment of the fact in a working machine ought, we suppose, to be deemed patentable. But nothing of the kind is shown here. It follows that there is no patentability in that particular, even if it be conceded that the drawings of the patent are to be regarded as working plans, showing the particular angle stated, — a proposition which, in view of the fact that the specification is silent on the subject, is not deemed tenable. — Caverly *v.* Deere, 66 Fed. 305; 13 C. C. A. 452.

Any changes made were in degree, proportion, or symmetry. The plow of his patent did the same thing in the same way, and by substantially the same means as before, and although it produced better results it did not rise to the dignity of invention. — Torrey *v.* Hancock, 184 Fed. 61; 107 C. C. A. 79.

Smith *v.* Nichols, 21 Wall. 112; Belding *v.* Corn Planter, 152 U. S. 100.

§ 602. Change of Form — When Patentable.

But the law has other tests of invention than subtle conjectures of what might have been and yet was not. It regards a change as evidence of novelty, the acceptance and utility of change, even as demonstration. — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

The structure on which invention is predicated is unquestionably new, there being a readjustment of materials, by which new and highly useful results are brought about. — Edison *v.* Novelty, 167 Fed. 977; 93 C. C. A. 381.

Rainear *v.* Western, 159 Fed. 431.

§ 603. Combinations — Co-Action of Elements.

When the complete machine of the patent is used, the crushing and separating elements do, in our opinion, co-operate to produce a new, final and unitary result, to wit, the complete separation of the cinder from the iron and the ejection of the former from the mill and the leaving of the latter therein. This constitutes invention. — Sly *v.* Russell, 189 Fed. 61; 110 C. C. A. 625.

Nat. Cash Register *v.* American, 53 Fed. 367; Walk. Pat. § 33.

An aggregation is the mere assembling of separate elements without changing their respective functions or accomplishing any result other than the added result of those functions. In order to be patentable a combination of elements must in their co-relation produce a different force, or effect, or result, from the sum of that which is produced by their separate parts. It is not necessary that each element in performing its own function shall also modify the function performed by the others. It is generally sufficient if there be such coaction that a result is produced which is new, and the result is new if it is substantially a better result than that which has been accomplished by the other combinations. — Pelton *v.* Doble, 190 Fed. 760; 111 C. C. A. 488.

Reckendorfer *v.* Faber, 92 U. S. 347; Hailes *v.* VanWormer, 20 Wall. 353; Loom Co. *v.* Higgins, 105 U. S. 580.

§ 604. Combinations — Entirety.

A combination is a union of elements, which may be partly old and partly new, or wholly old or wholly new. But whether new or old, the combination is a means — an invention — distinct from them. They, if new, may be inventions and the proper subject of patents, or they may be covered by claims in the same patent with the combination. — Leeds *v.* Victor, 213 U. S. 301; 53 L. Ed. 805; 29 S. Ct. 495.

The novelty as well as the virtue of the invention depends upon the machine as a whole. — Novelty *v.* Brookfield, 170 Fed. 946; 95 C. C. A. 516.

Brookfield *v.* Novelty, 154 Fed. 197.

The test is whether there is a new unitary result, to the production of which the different elements coact. — Novelty *v.* Brookfield, 170 Fed. 946; 95 C. C. A. 516.

Bliss *v.* Reed, 106 Fed. 314; National *v.* Aiken, 163 Fed. 264.

It is sufficient to sustain the claim to hold that the combination embraced a novel element. The claim is held to be valid as covering a combination in a road locomotive of the different elements with a liquid hydrocarbon compression engine of the Brayton type. — Columbia *v.* Duerr, 184 Fed. 893; 107 C. C. A. 215.

A number of the elements of this combination are undoubtedly old, but, by reason of its compact unitary structure and easy accessibility for purposes of inspection and repair, and other advantages, it has achieved a result which entitled it to be characterized as an advance in the art. — Allis-Chalmers *v.* Westinghouse, 184 Fed. 722; 107 C. C. A. 541.

The fact that there is novelty in one of the elements does not justify a claim to a combination of the elements unless there is co-action between them to produce a new result, and a combination is not unpatentable merely because the result might have been accomplished by other combinations. — Pelton *v.* Doble, 190 Fed. 760; 111 C. C. A. 488.

§ 608. Combinations — Old Elements, New Results.

It is perfectly well settled that a new combination of elements, old in themselves, but which produce a new and useful result, entitles the inventor to the protection of a patent. — Expanded *v.* Bradford, 214 U. S. 366; 53 L. Ed. 1034; 29 S. Ct. 652.

Loom Co. *v.* Higgins, 105 U. S. 580.

A combination of old elements which accomplishes a new and beneficial result, or attains an old result in a more facile, economical, or efficient way, may be protected by patent as securely as a new machine or composition of matter. — Dissenting opinion of Judge Sanborn in — Electric Protection *v.* American, 184 Fed. 916; 107 C. C. A. 238.

Seymour *v.* Osborne, 11 Wall. 516; Gould *v.* Rees, 15 Wall. 187; Thomson *v.* Bank, 53 Fed. 250.

While the desirability of insulating the inside of a socket was recognized, while the use of insulating material retained in place by its yielding nature in other portions of a socket was common, and while it was known to the bottle-stopping art that a yielding lining material could be sprung into the interior of a stopper and there retained, yet the existence of these elements in severalty suggested to no one their combined use to fill a recognized want in electric lighting. — Freeman Co. *v.* General Electric, 191 Fed. 168; 111 C. C. A. 646.

§ 614. Definition of.

In the eyes of the patent law, the real device is this case is not the skill of the dressmaker in making the skirt after she is once told how, but in the original thought that discovered and originated the device without being told. — Greenwald *v.* Enochs, 183 Fed. 583; 106 C. C. A. 351.

§ 615. Dividing or Uniting Parts.

Being obvious and self evident, the remedy employed of cutting the horn in two sections, was equally obvious and self evident, and to claim a patent

monopoly therefor is a misuse of the patent laws which are to foster invention alone. The device of the patent in suit, to overcome the inconvenience of handling and packing a one-piece horn, no more involves invention than cutting a length of stove-pipe into two sections and providing for their being united and fitted together, by slightly crimping the end of one section, that it may enter and be pressed into the end of the other. — Victor *v.* Hawthorne, 178 Fed. 455; 101 C. C. A. 439.

The general rule stated and followed in — Gould *v.* Cincinnati, 194 Fed. 680; — C. C. A. —.

Standard *v.* Caster, 113 Fed. 162; National *v.* Aiken, 163 Fed. 254; Herman *v.* Youngstown, 191 Fed. 579.

Familiar rule followed and familiar cases cited in — Sheffield *v.* D'Arcy, 194 Fed. 686; — C. C. A. —.

§ 616. Double or Analogous Use — Analogous Use Non-Patentable.

That the adaptation of a device for printing pictures to making blue-prints is mere double use, see — Elliott *v.* Youngstown, 181 Fed. 345; 104 C. C. A. 175.

But conceding that the complainant is entitled to all the uses and advantages which may arise from the slot, whether he conceived the idea of all of them or not (Roberts *v.* Ryer, 91 U. S. 150), the fact still remains that the only feature of his device not found in the prior art is the slot or slidable connection of the braces. * * * His application of the slot or slidable connection (known in an art clearly analogous) did not involve patentable invention. — Stevens *v.* Rodgers, 186 Fed. 631; 108 C. C. A. 495.

Smyth *v.* Sheridan, 149 Fed. 208.

§ 620. Evidence of — Acquiescence.

That acquiescence by the public and purchase of the patent or license under it by manufacturers may be evidence of invention, but of slight weight in view of other facts, see — Elliott *v.* Youngstown, 181 Fed. 345; 104 C. C. A. 175.

§ 622. Evidence of — Commercial Success.

The unsuccessful experiments on the part of those not only skilled in the art, but under the sharp spur of competition, the success and usefulness of the device and its speedy general adoption, furnish persuasive evidence of invention. — Electric *v.* Westinghouse, 171 Fed. 83; 96 C. C. A. 187.

Keystone *v.* Adams, 151 U. S. 139; Potts *v.* Creager, 155 U. S. 597; Hobbs *v.* Beach, 180 U. S. 383; Star *v.* General, 111 Fed. 398; Kalamazoo *v.* Duff, 113 Fed. 264; Dowagiac *v.* Superior, 115 Fed. 886.

Peller has produced a device the value of which has been demonstrated not only by its popularity in the trade but by the persistent contest in the patent office for the honor of being its inventor. — Waterbury *v.* Aston, 183 Fed. 120; 105 C. C. A. 410.

Topliff *v.* Topliff, 145 U. S. 156.

§ 623. Evidence of — Commercial Success — When Not.

It may be admitted that the commercial utility of a patented device is sometimes persuasive evidence of invention. But it is not conclusive. — Victor *v.* Hawthorne, 178 Fed. 455; 101 C. C. A. 439.

The rule is that general public acceptance and use of the patented device is only a fact to be considered with all the other facts in the case on the issue of patentable novelty, and is most appropriately resorted to in cases where the issue is in grave doubt. — Torrey *v.* Hancock, 184 Fed. 61; 107 C. C. A. 79.

Smith *v.* Goodyear, 93 U. S. 486.

§ 624. Evidence of — Efficiency.

If the combination of elements described in the patent in suit furnishes a machine that bends pipes and tubes in a more rapid, economical, efficient, or advantageous way than any of the machines of the prior art, it is an important fact in solving the question of the validity of the patent. — Morton Trust *v.* Standard, 177 Fed. 931; 101 C. C. A. 211.

§ 625. Evidence of — Extensive Litigation.

The utility of a device may be attested by the litigation over it, as litigation "shows and measures the existence of the public demand for its use." — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

Eames *v.* Andrews, 122 U. S. 40.

For 10 years now solicitors and courts have been searching the records and the law to decide attacks upon the validity of this patent, and no court has ever held that the Palmer patent anticipated or rendered it void. These facts are too persuasive and compelling to permit us to hold that there was no invention. — Wayne *v.* Benbow-Brammer, 168 Fed. 271; 93 C. C. A. 573.

The protracted and stubbornly contested interference is wholly inconsistent with defendant's present contention that the patent is void for lack of patentability. Men do not struggle for years to secure a valueless thing. — Roth *v.* Harris, 168 Fed. 279; 93 C. C. A. 581.

Peller has produced a device the value of which has been demonstrated not only by its popularity in the trade, but by the persistent contest in the patent office for the honor of being its inventor. — Waterbury *v.* Aston, 183 Fed. 120; 105 C. C. A. 410.

§ 626. Evidence of — Extensive Use.

We can understand that some advertising was necessary to bring it into notice, and give it a certain use, but the extensive use which it attained, and more certainly the exclusive use which it attained, could only have been the result of its essential excellence, indeed its pronounced superiority over all other forms. Here, again, in our discussion, a comparison is suggested between it and other tires, and the inquiry occurs why capital has selected to invest in and advertise, and not one of the tires of the prior art, if it be not better than they? But the effect of advertising is mere speculation; to the utility and use of an article the law assigns a definite presumption of its character, as we have seen, and which we are impelled by the facts of this record to follow. — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

But the law has other tests of invention than subtle conjectures of what might have been and yet were not. It regards a change as evidence of novelty, the acceptance and utility of change as a further evidence, even as

demonstration. — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

Note: This case, next to the Barbed Wire Case, illustrates a condition where the question of doubtful novelty has been overcome solely by utility of an extreme nature. It cannot be said that this case sets any new rule in this respect, but it certainly serves to put a period to the expression of certain judges to the effect that utility in the absence of novelty which they have predetermined, is not evidence of invention.

§ 627. Evidence of — Extensive Use — When Not.

General use alone does not show invention. — De Long *v.* Francis, 168 Fed. 900; 94 C. C. A. 240.

§ 628. Evidence of — Obvious Demand.

Manufacturers of these supplies were constantly seeking, through skilled engineers, economies in material and form of unitary transformers which were thus obtained by Kurda's combination, and we believe it to be fairly attributable to invention, rather than an obvious expedient of the engineer; that without great advance in the art his new combination is entitled to protection within its narrow scope. — Gen. Electric *v.* Winona, 183 Fed. 418; 105 C. C. A. 652.

§ 629. Evidence of — Patent Prima Facie.

The records of the Patent Office disclose only the fact that a patent was issued to Wilgus upon an application in which he stated that he was aware of the Gauthier patent, and called attention to the features which distinguished his invention. The issuance of the patent, under these circumstances, created only a prima facie presumption that the invention of the patentee was not anticipated by the prior invention. — Wilgus *v.* Germain, 72 Fed. 773; 19 C. C. A. 188.

Corning *v.* Burden, 15 How. 265; Miller *v.* Mfg. Co. 151 U. S. 208; Boyd *v.* Tool Co. 158 U. S. 260; Pavement Co. *v.* Elizabeth, Fed. Cas. 312; Ransome *v.* Hyatt, 69 Fed. 148.

The presumption of validity arising from the grant is of no avail where the prior art excludes all reasonable presumption of novelty or the exercise of inventive genius. — Trethaway *v.* Bertels, 180 Fed. 730; 104 C. C. A. 96.

§ 631. Evidence of — Prior Failures.

It is often difficult to determine whether a given improvement is a mere mechanical advance, or the result of the exercise of the creative faculty amounting to a meritorious invention. The fact that the invention seems simple after it is made does not determine the question; if this were the rule, many of the most beneficial patents would be stricken down. It may be safely said that if those skilled in the mechanical arts are working in a given field, and have failed, after repeated efforts, to discover a certain new and useful improvement, that he who first makes the discovery has done more than make the obvious improvement which would suggest itself to a mechanic skilled in the art, and is entitled to protection as an inventor. — Expanded *v.* Bradford, 214 U. S. 366; 53 L. Ed. 1034; 29 S. Ct. 652.

That the fact that skilled inventors had labored long to attain the result is evidence that the end was inobvious and involved invention, see — Edison *v.* Novelty, 167 Fed. 977; 93 C. C. A. 387.

It affirms rather than lessens the achievement that the different parts were brought together from the scrap heap, to which they had been consigned. — Novelty *v.* Brookfield, 170 Fed. 946; 95 C. C. A. 516.

That the fact that a device was well known in other arts, and that no one had previously contemplated its use in the art in question is evidence of invention, see — Am. Laundry Mach. *v.* Troy, 174 Fed. 415; 98 C. C. A. 612.

But the fact that the electrical world, with the knowledge of the use of both rotary converter and auxiliary exciter, during the several years the difficulty existed, made no such combination as Lamme's, is highly suggestive that it required more than mere engineering advance of the electrical art. — Westinghouse *v.* Allis-Chalmers, 176 Fed. 362; 100 C. C. A. 408.

While it may not always be helpful in determining whether a given act or result involves the exercise of constructive faculty rather than mechanical skill to resort either to the fact that the matter in dispute had been allowed to lie dormant for years in the face of needed solution, or to the approval accorded to such solution by men of scientific knowledge and practical experience immediately upon becoming aware of it, yet it is not always easy or advisable to repel the influence of such facts. — Morgan Engineering *v.* Alliance, 176 Fed. 100; 100 C. C. A. 30.

The fact that so many persons caught the idea (four applications being made about the same time) goes rather to prove that it was simple and obvious, and not that it required inventive genius to conceive. It is not like the case where the art is waiting for the device, and inventors striving unsuccessfully to produce it, under which circumstances invention may well be held to appear. — Elliott *v.* Youngstown, 181 Fed. 345; 104 C. C. A. 175.

Dean was the first to get the voice currents into the receiver by direct and continuous path, and at the same time to practically exclude the energizing current. He did this by placing an old device in a new location, and so, through combination with other elements old in themselves, secured a new result. We are therefore of opinion that Dean made an improvement of such merit as to entitle it to the rank of patentable invention. It is true there was left to him but a "short step," but if this step was within the skill of the art, why was it not taken in the long struggle that we have but outlined? — Kellogg *v.* Dean, 182 Fed. 991; 105 C. C. A. 545.

Morgan *v.* Alliance, 176 Fed. 100.

Moreover, it must not be overlooked that the improvement was made in a long-developed art, in which there was meagre sphere for invention. Where a field is barren, a marked improvement in product evidences corresponding originality in making such improvement. — Greenwald *v.* Enochs, 183 Fed. 583; 106 C. C. A. 351.

§ 632. Evidence of — Simplicity.

The fact that the invention is simple and that at the present time it seems as if it might have been obvious to the workers in this art, does not militate against its validity. Many of the most useful inventions depend equally upon simple changes. — General Electric *v.* Hill-Wright, 174 Fed. 996; 98 C. C. A. 566.

§ 633. Evidence of — Turning Failure into Success.

Hoffmann has produced a medicine indisputably beneficial to mankind — something new in a useful art, such as our patent policy was intended to promote. Kraut and his contemporaries, on the other hand, had produced only, at best, a chemical compound in an impure state. And it makes no difference, so far as patentability is concerned, that the medicine thus produced is lifted out of a mass that contained, chemically, the compound; for, though the difference between Hoffmann and Kraut be one of purification only — strictly marking the line, however, where the one is therapeutically available and the others were therapeutically unavailable — patentability would follow. In the one case the mass is made to yield something to the useful arts; in the other case what is yielded is chiefly interesting as a fact in chemical learning. — Kuehmsted *v.* Farbenfabriken, 179 Fed. 701; 103 C. C. A. 243.

Merrill *v.* Youmans, 94 U. S. 569; Badische *v.* Kalle, 104 Fed. 802; Badische *v.* Klipstein, 125 Fed. 543.

In addition to the presumption which arises from the issuance of the patent, there are to be taken into consideration, as sustaining the patent, the further fact that, when his invention was made, there was want in the art for such a device, that in the prior art there were well recognized and admitted defects, and that the appellee's device eliminated those defects and went into general and successful use. — Kitchen *v.* Levison, 188 Fed. 658; 110 C. C. A. 424.

§ 634. Evidence of — Use by Defendant.

It is conceded that the invention is a narrow one, — a step beyond the prior art, — built upon it, it may be, and only an improvement upon it. Its legal evasion may be the easier, and hence we see the strength of the concession to its advance beyond the prior art and of its novelty and utility by the runner company's imitation of it. The prior art was open to the rubber company. That "art was crowded," it says, "with numerous prototypes and predecessors" of the Grant tire, and they, it is insisted, possessed all of the qualities which the dreams of experts attributed to the Grant tire. And yet the rubber company uses the Grant tire. It gives the tribute of its praise to the prior art; it gives the Grant tire the tribute of its imitation, as others have done. And yet the narrowness of the claims seemed to make legal evasion easy. Why, then, was there not evasion by a variation of the details of the patented arrangement? Business interests urged to it as much as to infringement. We can find no answer except that given by the tire company: "The patented organization must be the one that is essential. Its use in the precise form described and shown in the patent must be inevitably necessary." — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

Chicago *v.* Sayles, 97 U. S. 554.

When a defendant persists in using such an improvement in preference to prior devices which he insists are equally efficacious, he tacitly concedes its superiority. It is difficult to reconcile his persistent use, even though it involves him in an infringement suit, with the contention that other devices which he is free to use are equally good. — Rajah *v.* Crossman, 188 Fed. 73; 110 C. C. A. 143.

The defendants are not in a position to deny that the Scott patent discloses both novelty and invention in view of the fact that the defendant Steber, in March, 1910, received a patent for a knitted fabric which contains all the prominent features of the complainant's fabric, and differs only in details

which do not alter its usefulness or its appearance. In other words, one who receives a patent for the Steber fabric in 1910 is hardly in a position to deny patentability to the Scott fabric of 1908. — General Knit Fabric *v.* Steber, 194 Fed. 99; 114 C. C. A. 177.

§ 635. Evidence of — Utility — When Evidence.

We think the invention may be said to be useful within the meaning of the statute, and, that being true, the rule is that the court would not be justified in declaring the patent void. — St. Louis *v.* Sanitary, 178 Fed. 923; 103 C. C. A. 565.

Seymour *v.* Osborne, 11 Wall. 516; Wilbur *v.* Beecher, Fed. Cas. 17,634; Lehnbeuter *v.* Holthaus, 105 U. S. 94; Gibbs *v.* Hoefner, 19 Fed. 323.

Note: This clearly is not an exact statement of the law.

Facts: The claim was for crystalline CaC_2 in aggregated masses. Amorphous carbide was old, but was not of practical commercial value. *Held:* that the difference of character of the products and the difference in utility constituted novelty. — Union Carbide *v.* Am. Carbide, 181 Fed. 104; 104 C. C. A. 522.

In view of the presumption arising from the grant, the further fact that the prior art fails to disclose any device showing the same combination, the further fact that its utility is such that it has come into demand, together with the rule of law which requires that doubt be solved in favor of the validity of the patent, it is our opinion that the patent discloses patentable novelty, though of a low order. — Mueller *v.* Glauber, 184 Fed. 609; 106 C. C. A. 613.

For an instance of saving a patent from falling within ordinary mechanical skill upon very narrow grounds of patentable utility, see — General Electric *v.* Hartman, 187 Fed. 131; 109 C. C. A. 49.

§ 636. Evidence of — Utility — When Not.

Utility alone is not enough to establish invention. Jacobs *v.* Almond, 177 Fed. 935; 101 C. C. A. 215.

In doubtful cases the fact that a patented article has gone into extensive or general use is evidence of its utility; but that is by no means conclusive of its patentability. When there is no invention, the extent of the use is a matter of no importance. — Boss *v.* Thomas, 182 Fed. 811; 105 C. C. A. 243.

McClain *v.* Ortmayer, 141 U. S. 419; Adams *v.* Bellaire, 141 U. S. 539; Duer *v.* Corbin, 149 U. S. 216.

The considerations of prior demand, unsuccessful attempts to supply the demand, utility, and public favor, are evidence of invention, and in an otherwise doubtful case might turn the scale in favor of its existence. But neither or all of these considerations, regardless of all others, necessarily prove invention, the existence of which is always ultimately a question of fact, to be determined upon a consideration of all applicable facts and conditions. — Gould *v.* Cincinnati, 194 Fed. 680; — C. C. A. —.

Familiar rule and authorities stated in — Boldt *v.* Nevison, 194 Fed. 871; 114 C. C. A. 617.

§ 637. Evidence of — Want of Invention.

That while the fact that a patent has never gone into general use cannot defeat a patent, it may be considered in construing the patent, see — National *v.* Buckeye, 171 Fed. 847; 96 C. C. A. 515.

Bradford *v.* Belknap, 105 Fed. 63; Crown *v.* Aluminum, 108 Fed. 845.

It would seem that, in a case of doubtful novelty, the fact that a feature relied upon in the patent as important possessed little utility and was displaced by a different construction, such fact is pertinent upon the question of novelty, see — Hayward *v.* Ellis, 187 Fed. 128; 109 C. C. A. 46.

§ 646. Improvement — Non-Patentable.

While the policy of our law is to encourage inventions, we should in this age of rapid and marvelous improvements in mechanical appliances, when dealing with patents, be careful to distinguish between those improvements which do and those which do not involve real inventive genius. The mechanical art should not be burdened with patents for those improvements which involve only the skill of the mechanic. — Standard Machine *v.* Rambo, 188 Fed. 323; 110 C. C. A. 301.

§ 649. Manufacture.

Facts: The claim was for crystalline CaC_2 in aggregated masses. Amorphous carbide was old, but was not of practical commercial value. *Held:* that the difference in character of the products and the difference in utility constituted novelty. — Union Carbide *v.* Am. Carbide, 181 Fed. 104; 104 C. C. A. 522.

§ 652. Mechanical Skill — Adaptation.

That mere change of construction, such as the extension of a lug, turning it in an opposite direction or attaching by means of a screw instead of a rivet, does not rise to the dignity of invention, see — Boss *v.* Thomas, 182 Fed. 811; 105 C. C. A. 243.

Richards *v.* Chase, 158 U. S. 299; Mast *v.* Stover, 177 U. S. 485; Ross *v.* Dowden, 157 Fed. 681.

§ 653. Mechanical Skill — Aggregation.

A mere improvement in the method of doing the work does not necessarily lie within the boundaries of patentable invention. — Winston *v.* Croton Falls, 191 Fed. 123; 114 C. C. A. 201.

Dodge *v.* N. Y. C. 150 Fed. 738; Dunbar *v.* Eastern, 81 Fed. 201; Fowler *v.* City of N. Y. 121 Fed. 747; Richards *v.* Chase, 158 U. S. 299.

§ 654. Mechanical Skill — Carrying Forward.

That improvements, though useful, which would occur to those familiar with the electrical art, are not patentable invention, see — General Electric *v.* Winona, 188 Fed. 77; 110 C. C. A. 147.

§ 655. Mechanical Skill — Change of Form.

That they discharge into an air current going on one direction, instead of in another, or that they admit only part instead of all the gases, is not a new result, nor does it involve novel co-action so as to support a claim whose only novelty lies therein. — Cummer *v.* Atlas, 193 Fed. 993; 113 C. C. A. 611.

Electric *v.* Perkins, 179 Fed. 511; Nat. Tube *v.* Aikin, 163 Fed. 260.

§ 656. Mechanical Skill — Definition and Distinction from Invention.

Many things which seemed indicative of invention in earlier times have lapsed into the domain of the skill and prevision of the artisan, and the test of invention in the mechanical arts has risen to a higher plane as the eye, the hand, the intelligence of the workman have been educated to higher issues. The fruits of the progress thus made belong to the general public, and the danger is that too many of the utilities of life may be covered by the ever-increasing flood of patents, too many of which may have little or no right to a monopoly. — Duncan *v.* Cincinnati, 171 Fed. 656; 96 C. C. A. 400.

The question is whether the improvement is the result of mere mechanical skill or involves the higher quality of invention. This question might be answered differently by persons of equal intelligence. — Bossert *v.* Pratt, 179 Fed. 385; 103 C. C. A. 45.

Western *v.* LaRue, 139 U. S. 601; Potts *v.* Creager, 155 U. S. 597; Hobbs *v.* Beach, 180 U. S. 383; O'Rourke *v.* McMullen, 160 Fed. 936.

§ 657. Mechanical Skill — Degree of Knowledge and Skill.

Mechanical skill is not converted into invention because it is applied to a structure showing the highest degree of inventive genius. If the problem be to construct a key for a lock, it can make no difference whether the lock is attached to a typewriter or an ice box. — Hillard *v.* Remington, 186 Fed. 334; 108 C. C. A. 534.

§ 658. Mechanical Skill — Dividing or Uniting Parts.

There was no invention in making two parts or two pieces of the integral member employed by the earlier patent. — Chicago Grain Door *v.* National, 173 Fed. 918; 97 C. C. A. 324.

Bundy *v.* Detroit, 94 Fed. 524; D'Arcy *v.* Staples, 161 Fed. 733, and cases cited at page 742.

To divide the handle midway of the collar would not have constituted invention. — Hilker *v.* U. S. Mop, 191 Fed. 613; 112 C. C. A. 176.

Standard *v.* Caster, 113 Fed. 162.

§ 660. Mechanical Skill — Increased Efficiency.

That a mere difference in speed or skill is not patentable, see — Highland *v.* Schmertz, 178 Fed. 944; 102 C. C. A. 316.

§ 665. Mechanical Skill — Strengthening or Increasing.

For a case which comes perilously near holding that strengthening and arranging and adapting parts may involve invention, see — Morgan Engineering *v.* Alliance, 176 Fed. 100; 100 C. C. A. 30.

§ 666. Mechanical Skill — Miscellaneous Decisions.

That merely securing two rows of articles by a single line of stitching instead of two lines is not invention, see — De Long *v.* Francis, 168 Fed. 900; 94 C. C. A. 240.

That it does not involve invention to put the operating key of a line lock on a typewriter in a more convenient place, employing well-known mechanisms, see — Hillard *v.* Remington, 186 Fed. 334; 108 C. C. A. 534.

Mann's *v.* Monarch, 34 Fed. 130; Aron *v.* R. R. 132 U. S. 84; Stephenson *v.* Brooklyn, 114 U. S. 149.

§ 667. Novelty — Definitions and Distinctions.

Nor does it detract from its merit that it is the result of experiment and not the instant and perfect product of inventive power. A patentee may be baldly empirical, seeing nothing beyond his experiments and the result; yet if he has added a new and valuable article to the world's utilities, he is entitled to the rank and protection of an inventor. — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

Aside from those contentions and the ability by which they are supported, we might point out what it does as a demonstration of its difference from all that preceded it, attribute or force, — something which is the law of its organization and function, and raises it above a mere aggregation of elements to a patentable combination. — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

§ 668. Novelty — Evidence of.

It appears from the record that neither Wightman not the Potter patent was cited to the examiner in the Patent Office and were overlooked by him. This circumstance affects the presumption in favor of the validity of the patent from its issuance. — Westinghouse *v.* Toledo, 172 Fed. 371; 97 C. C. A. 69.

Cleveland *v.* Kauffman, 126 Fed. 658; American *v.* Sample, 130 Fed. 145.

Note: It is to be noted that of the two authorities cited in support of this rule the first is a reversed case; and that the second is not a case which would warrant drawing a general rule. Such a rule would be, to say the least, dangerous; for as a matter of fact the file wrapper discloses, *not all of the patents which an examiner may have examined*, but *only* those he may have considered pertinent. Before such a conclusion could be justified it would be necessary to establish by evidence the fact that the examiner had overlooked the patents in question.

§ 671. Old Device, New Use — General Rules.

But the application of an old device or combination to a new use is not in itself an invention, or capable of protection by a patent. If the relation between the two uses is remote, and the old device or combination produced a new result by virtue of its application, that application may constitute invention. Where a machine or a combination is discovered in a remote art, where it is used to perform a different function, and where it was not designed and was not apparently suitable to accomplish the thing desired, the application of it with proper mechanical adaptation to a new use is often the result of the exercise of the inventive faculty. But the thought that an existing machine or combination discovered in the same art or one nearly analogous to it, designed and suitable to perform a similar function, may be used or adopted to accomplish the desideratum, is not the product of inventive genius, but the result of the application of the skill of the mechanic to the subject under consideration. It is only when the new use is so recondite and remote from that to which the old device and combination has been applied, or for which it was conceived, that its application would not occur to the mind of the ordinary mechanic skilled in the art, seeking to devise means to perform the desired function, with the old machine or combination before him, that its conception may rise to the dignity of invention. — Warren Webster *v.* Dunham, 181 Fed. 836; 104 C. C. A. 346.

Potts *v.* Creager, 155 U. S. 597; Hobbs *v.* Beach, 180 U. S. 383; Adams *v.* Lindell, 77 Fed. 432; National *v.* Interchangeable, 106 Fed. 693.

Note: This statement of a most profound mind is open to one serious criticism. Suppose that the invention was not made " with the old machine or combination before him; " does it follow that if re-invented independently, the rule does not apply? Clearly not; the law assumes that the inventor has before him the prior art and all its analogies. This clause is, therefore, superfluous, and, possibly, misleading.

§ 672. Old Device, New Use — Non-Patentable.

That the use of a device for mixing concrete which had been used for mixing tea does not involve invention, see — Ransome *v.* United Concrete, 177 Fed. 413; 101 C. C. A. 217.

Potts *v.* Creager, 155 U. S. 597; Mast *v.* Stover, 177 U. S. 485.

That where a wood lining had been previously used as a lining for pumps, it did not involve invention to employ that lining for pipes for dredgers for carrying sand and gravel, see — Lewis *v.* Semple, 177 Fed. 407; 101 C. C. A. 411.

Even if the Brayton engine had been used only for stationary purposes, it is by no means certain that its mere selection for incorporation in a motor vehicle without adaptation would have involved invention. — Columbia *v.* Duerr, 184 Fed. 893; 107 C. C. A. 215.

Faure's Appeal, 52 O. G. 754; Shaw *v.* Worthington, 77 Fed. 992.

The true test is whether Cadman produced a new result or an improved method of producing an old result. Clearly he did not. At the most he applied an old and well-known combination of elements, each one performing its original function, to a new use. Such was not invention. — Warner *v.* Stewart, 185 Fed. 507; 107 C. C. A. 607.

Webster *v.* Dunham, 181 Fed. 836.

That the art of pasteurizing beer is analogous to that of curing fish, see — Model Bottling Mach. *v.* Anheuser-Busch, 190 Fed. 573; 111 C. C. A. 389.

Brown *v.* Piper, 91 U. S. 37; Crescent *v.* Gottfried, 128 U. S. 158; Aron *v.* Manhattan, 132 U. S. 84; Thomson-Houston *v.* Railway, 95 Fed. 660; Burns *v.* Mills, 143 Fed. 325; Am. Brake Shoe *v.* Railway, 143 Fed. 540.

It does not involve invention to apply an old process or machine or idea to a similar or analogous subject, with no change in the manner of application and no substantially different result. — Myers *v.* Fairbanks, 194 Fed. 971; 114 C. C. A. 546.

Blake *v.* San Francisco, 113 U. S. 679.

§ 673. Old Device, New Use — Patentable.

Such an application of an old machine or device found in an analogous art, to a new use is invention and is patentable where its applicability would not be perceived by a person of ordinary mechanical skill, where it would not perform the same function requisite for the new use without substantial modification, and where it was not designed by its maker, or adapted, or actually used, to perform such functions. — Wayne *v.* Benbow-Brammer, 168 Fed. 271; 93 C. C. A. 573.

Topliff *v.* Topliff, 145 U. S. 156; Potts *v.* Creager, 155 U. S. 597; Hobbs *v.* Beach, 180 U. S. 383.

Unless the uses are so analogous that the application of the old device to the use of the new would occur to a person of ordinary mechanical skill,

inventive faculty may be involved in such new application. — Electric *v.* Westinghouse, 171 Fed. 83; 96 C. C. A. 187.

Potts *v.* Creager, 155 U. S. 597.

§ 674. Old Elements, New Result.

The elements of a combination may be all old. In making a combination the inventor has the whole field of mechanics to draw from. — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

Leeds *v.* Victor, 123 U. S. 318.

§ 675. Old Elements, Old Result.

There could have been no invention in bringing these old elements into a new combination, where each would perform the same service as they did in the earlier art. — Yost *v.* Perkins, 179 Fed. 511; 103 C. C. A. 116.

Burt *v.* Evory, 133 U. S. 349; Florsheim *v.* Schilling, 137 U. S. 77; Burnham *v.* Union, 110 Fed. 765; Overweight *v.* Vogt, 102 Fed. 957; Campbell *v.* Duplex, 101 Fed. 282.

Familiar rule and familiar cases cited in — Sheffield *v.* D'Arcey, 194 Fed. 686; — C. C. A. —.

§ 676. Old Process, New Use — Non-Patentable.

That the discovery of new possibilities of an old process or apparatus producing better but analogous results is not patentable, see — Carmichael *v.* Jackson, 192 Fed. 937; 113 C. C. A. 327.

§ 679. Patentability — Definition.

Patents may be obtained for any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof, or any new, original, and ornamental design for any article of manufacture. Aside from these specific classes of patentable inventions, no invention or improvement is patentable, however useful and novel it may be. While many devices and many novel combinations of materials used in the construction of houses are within the protection of the patent laws, it has never been held, so far as we are advised, that any particular form of construction of a room in a house, or of a recess in a room, is patentable, whether considered by itself or taken in combination with any conceivable use to which it may be put. — Am. Disappearing Bed *v.* Arnaelsteen, 182 Fed. 324; 105 C. C. A. 40.

Jacobs *v.* Baker, 7 Wall. 295; Fond du Lac *v.* May, 137 U. S. 395; Milligan *v.* Upton, Fed. Cas. 9607; distinguishing Crier *v.* Innes, 170 Fed. 324.

§ 680. Patentability — Patentable Difference.

The presumption is that two patents do not cover the same invention, and the burden is heavily on him who asserts to the contrary. It would require cogent proof to convince the court that the Patent Office would, within a month, issue two patents for the same invention to the same inventor. — Gould Storage Battery *v.* Electric Storage Battery, 192 Fed. 28; 112 C. C. A. 416.

§ 682. Patentability — Mental Conception.

The invention must of necessity, if it be such, consist in the device of the patent, and not in the conception of the principle to be utilized. — Gray Tel. *v.* Baird, 174 Fed. 417; 98 C. C. A. 353.

Sewall *v.* Jones, 91 U. S. 171.

§ 684. Patentability — Miscellaneous Rules.

Semble that a mere architectural expedient is not patentable, see — Tayntor *v.* Goetchius, 183 Fed. 130; 105 C. C. A. 420.

§ 690. Result or Function.

When we are dealing with electricity, an invisible, intangible agency, and in itself of different kinds, and when we know that in its different phases it may effect, or be affected by, metals and appliances in different ways and with wholly different results, we must guard against being misled by the mere superficial resemblances of the appliances and machines used in connection with it; for from an electrical standpoint the real significance of such appliances lies, not in their material, external appearance, but in their working effect under the influence of diverse electrical factors. — Westinghouse *v.* Allis-Chalmers, 176 Fed. 362; 100 C. C. A. 408.

§ 691. Scientific Principles and Laws.

And how can it take from his merit that he may not know all of the forces which he has brought into operation? It is certainly not necessary that he understand or be able to state the scientific principles underlying his invention, and it is immaterial whether he can stand a successful examination as to the speculative ideas involved. — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 Fed. 527; 31 S. Ct. 444.

Andrews *v.* Cross, 8 Fed. 269; Eames *v.* Andrews, 122 U. S. 40; St. Louis *v.* Quinby, Fed. Cas. 12,240; Pfeifer *v.* Dixon, 55 Fed. 390; Cleveland *v.* Detroit, 131 Fed. 853; Van Epps *v.* United, 143 Fed. 869; Westmoreland *v.* Hogan, 167 Fed. 327.

True, Parsons had no patent on the law of the structure as such. But he was the first to see the advantage of such a structure and to construct accordingly. And what he has done and patented cannot be trespassed upon with impunity simply because the law of the structure necessarily turns what, in pretense of appearance, may be called a tight fitting device, into a loose fitting device. — Excelsior Supply *v.* Weed Chain, 192 Fed. 35; 113 C. C. A. 1.

§ 692. Simplicity — Does not Negative Invention.

Its simplicity should not blind us as to its character. Many things, and the patent law abounds in illustrations, seem obvious after they have been done, and, "in the light of the accomplished result," it is often a matter of wonder how they so long "eluded the search of the discoverer and set at defiance the speculations of inventive genius." — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

Pearl *v.* Ocean, Fed. Cas. 10,876.

§ 693. Simplicity — Ex post facto Judgment.

Knowledge after the event is always easy, and problems once solved present no difficulties, indeed, may be represented as never having had any, and expert witnesses may be brought forward to show that the new thing which seemed to have eluded the search of the world was always ready at hand and easy to be seen by a merely skillful attention. But the law has other tests of invention than subtle conjectures of what might have been seen and yet was not. It regards a change as evidence of novelty, the acceptance and utility of change as a further evidence, even as demonstration. — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

The invention of Peller, like the rubber button in Frost *v.* Cohn, 112 Fed. 1009, and 119 Fed. 505, and the collar button in Krementz *v.* Cottle, 148 U. S. 556, was one of those fortunate discoveries which seem obvious after it has been made. — Waterbury *v.* Aston, 183 Fed. 120; 105 C. C. A. 410.

After a thing of this kind is accomplished, the point of view makes it seem a simple contrivance, but in dealing with the question of invention, the essential view is from the state of the art existing at the time the necessary problem was sought to be solved. — General Electric *v.* Hartman, 187 Fed. 131; 109 C. C. A. 49.

§ 696. Substitution — New Material — Non-Patentable.

It is a matter of common knowledge that the use of the screw, the nut and bolt, and the rivet as means of uniting or attaching together two or more pieces or parts of material, were well known, and the mechanical equivalents of each other. — Boss *v.* Thomas, 182 Fed. 811; 105 C. C. A. 243.

Peters *v.* Hansen, 129 U. S. 541.

§ 697. Substitution — New Material — Patentable.

Practical inventions of great merit are often based upon comparatively simple changes in form or material. And in this connection it should be borne in mind that the various prior attempts in more complicated structures to use metal in place of wood, as exhibited in some seven or eight patents, had proved failures, and that the Houghton device was the first successful attempt to remedy the defects in the old wooden finger-head. — Whitin *v.* Houghton, 178 Fed. 444; 101 C. C. A. 344.

For quotations from authorities holding change of material patentable, see — Frost *v.* Samstag, 180 Fed. 739; 105 C. C. A. 37.

Frost *v.* Cohn, 119 Fed. 505; Hicks *v.* Kelsey, 18 Wall. 670; Union *v.* Selchow, 112 Fed. 1006.

§ 698. Systems and Arrangements.

That a system, such as a block-signaling system, may be patentable when there is interaction and one unit modifies or controls the action of an adjacent unit, see — Hall *v.* General, 169 Fed. 290; 94 C. C. A. 580.

The patent covered a mileage book in which the units were in terms of currency instead of miles. *Held:* Unquestionably, the idea embodied in this ticket is a happy one. Possibly it has followed naturally, and without the employment of inventive thought, the wider use of interchangeable tickets. Possibly the wider use of interchangeable tickets has followed the embodiment of this idea. Which is cause and which is effect, we have no means of determining. * * * All that we know is, that it was not used before appellee's patent, and that it has been followed by the widest use. This, it seems to us, implies that the conception of this ticket, at least, helped to bring about the idea of a wide interchangeable use. — Rand, McNally *v.* Exchange, 187 Fed. 984; 110 C. C. A. 322.

Note: To this holding Judge Carpenter dissents with a substantial review of the authorities. While one is not able to judge a holding of this kind, without the record and exhibits in view, the logic and the law would seem to be with Judge Carpenter.

But where " Arrangement " or " Adjustment " makes operative and practicable what was before inoperative and impracticable, and is not itself so obvious that its utilization is not of higher merit than the mechanic's skill,

"Arrangement" or "Adjustment" may be the basis of invention. — Excelsior Supply *v.* Weed Chain, 192 Fed. 35; 113 C. C. A. 1.

§ 701. Transposition of Parts.

In a broad way it may be said that Dean simply reversed the position of White's sealed chamber, but neither the White patent nor anything else in the prior art would have told the mechanic why the changes ought to be made. — International *v.* Kellogg, 171 Fed. 651; 96 C. C. A. 395.

That merely to make one part stationary and another moving when the reverse condition had obtained is not invention, see — Duner *v.* Grand Rapids, 171 Fed. 863; 96 C. C. A. 531.

Campbell *v.* Duplex, 101 Fed. 282; Sargent *v.* Larned, Fed. Cas. 12,364; Abbott *v.* Bonn, 51 Fed, 223; Machine Co. *v.* Murphy, 97 U. S. 120.

There would be no patentability in a mere reversal of functions, accomplishing the same result by making the blade rigid and the guard adjustable. — Zinn *v.* Auto Strop, 175 Fed. 78; 99 C. C. A. 100.

§ 702. Utility.

An improvement which reduces, in any degree, the chances of derailment and collision, and thus safeguards life and property, is entitled to greater consideration than one which deals only with economies. — Hall *v.* General, 169 Fed. 290; 94 C. C. A. 580.

Utility alone cannot support a patent monopoly. — Trethaway *v.* Bertels, 180 Fed. 730; 104 C. C. A. 96.

Mere useful and economic administrative methods, however valuable, while they may and usually are incident to invention, do not themselves constitute invention. — Krupp *v.* Midvale, 191 Fed. 588; 112 C. C. A. 194.

JOINT INVENTIONS.

§ 704. General Statement and Rules.

The patent was for a combination, and while the evidence would justify a conclusion that one of the Vroomans only first perceived the crude form of the elements, and saw that by their adaptation they might be made to accomplish a useful result, yet it only shows that one of the inventors, looking through a glass darkly, saw something of the elements which were finally composed and adapted to their places for their proper work. It would constantly be happening in the case of joint inventions that the illuminating idea was seen by one before it was seen by the other. But between that and the issuing of the patent there is, in many instances, a long stretch of time devoted to experiments and the consideration of the form or forms in which it may be best used. The law contemplates this and gives time for it. — Vrooman *v.* Penhollow, 179 Fed. 296; 102 C. C. A. 484.

JURISDICTION.

§ 714. Contracts.

That the license agreement (attached to the machine) constitutes a contract not to use the machine in a prohibited manner, is plain. The defendants might be sued upon the broken contract, or for its enforcement or for the forfeiture of the license, is likewise plain. But if by the use of the machine in a prohibited way Miss Skou infringed the patent, then she is also liable to an action under the patent law for infringement. Now that is pri-

marily what the bill alleged, and this suit is one brought to restrain the defendants as aiders and abettors to her proposed infringing use. That the patentee may waive the tort and sue upon the broken contract, or in assumpsit, is elementary. But if the patentee elect to waive the tort and sue upon the covenants or for a breach of contract, the suit would not be one dependent upon or arising out of the patent law, and a Federal court would have no jurisdiction unless diversity of citizenship existed. — Henry *v.* Dick, 224 U. S. 1; 56 L. Ed. 645; 32 S. Ct. 364.

Rob. Pat. §§ 1225, 1250 & n.; Steam Cutter *v.* Sheldon, 15 Fed. 608; Pope *v.* Owsley, 27 Fed, 100; Button Fastener Cases, 77 Fed. 288, 291; Wilson *v.* Sanford, 10 How. 99; Magic Ruffle *v.* Elm City, Fed. Cas. 8949; Goodyear *v.* Union, Fed. Cas. 5586; Goodyear *v.* Congress, Fed. Cas. 5565.

That where the gravamen of the bill arises out of contractual relations and a minor charge of infringement is imperfectly pleaded, such minor allegations will not give jurisdiction under the patent statute, see — Reliable *v.* Stahl, 105 Fed. 663; 44 C. C. A. 657.

The bill was for infringement and there was a subsisting contract of license, the bill not alleging that the contract had been rescinded, but alleging that defendants had forfeited the contract by denying the validity of the patent. *Held:* Are there existing contracts between these parties? Has the conduct of the respondents been such as to preclude them from availing themselves of the license granted by said contracts? Does the law give the complainant a right to ignore the contracts and enforce the monopoly of its patent? Stripped of all verbiage and extraneous matter, the question to which this case would ultimately come is one of contract rights. — Am. Graphophone *v.* Victor, 188 Fed. 428; 110 C. C. A. 308.

Following Wilson *v.* Sanford, 10 How. 99; Hartell *v.* Tilghman, 99 U. S. 547; distinguishing White *v.* Rankin, 144 U. S. 635; citg. McMullen *v.* Bowers, 102 Fed. 494; American Co. *v.* Jones, 122 Fed. 803; White *v.* Lee, 3 Fed. 222; Adams *v.* Meyrose, 7 Fed. 208; Standard Co. *v.* National, 95 Fed. 291.

The Federal courts have exclusive jurisdiction of all cases arising under the patent laws, but not of all questions in which a patent may be the subject-matter of the controversy. For courts of a state may try questions of title, and may construe and enforce contracts relating to patents. — New Marshall Engine *v.* Marshall, 223 U. S. 473; 56 L. Ed. 513; 32 S. Ct. 238.

Wade *v.* Lawder, 165 U. S. 627.

§ 715. Court of Claims.

That where the Government, with the consent of the owner of a patent, and without denial or contest of the validity of the patent, uses the invention, a contract by implication arises which is justiceable in the Court of Claims, see — Crozier *v.* Krupp, 224 U. S. 290; 56 L. Ed. 771; 32 S. Ct. 488.

§ 717. Equity — Expiration of Patent Pendente Lite.

The bill was filed the 15th, subpoena served the 17th, and the patent expired the next day, the 18th. The bill was demurred to as without equity, because complainant had a plain, adequate and complete remedy at law, and because the bill was filed so shortly before the expiration of the patent that no motion for an injunction could have been regularly noticed. It is manifest that complainant in an action at law could recover nominal damages only. He could not prove loss of license fees, because he had no established license fee; nor could he show lost sales, because he was not in fact selling at all; nor could he show reduction in prices through competition,

because there was no competition; nor that his market was destroyed by the infringer, because he was not undertaking to establish a market. The patentee's remedy at law would seem to be inadequate, if because of his failure to establish a license fee, or to endeavor to market his invention, he had lost the right to recover more than nominal damages, while under a suit in equity there could be recovered the actual profits, possibly large, which the defendant made by his unlawful piracy of plaintiff's invention. The case stated in the bill seems to bring it within the category set forth in Root *v.* Railway. — Tompkins *v.* International, 183 Fed. 773; 106 C. C. A. 529.

Root *v.* Railway, 105 U. S. 189; Clark *v.* Wooster, 119 U. S. 322; Miller *v.* Schwarner, 130 Fed. 561; Am. Cable *v.* Chicago, 41 Fed. 522; Bragg *v.* Hartford, 56 Fed. 292; Davis *v.* Smith, 19 Fed. 823; Diamond *v.* Seus, 150 Fed. 497; Suffolk *v.* Hayden, 70 U. S. 315; Coupe *v.* Royer, 155 U. S. 565; refusing to concur in McCune *v.* Baltimore, 154 Fed. 63.

§ 718. Equity — Rule.

The remedy which the complainant seeks may often determine whether the suit is one arising under the patent law and cognizable only in a court of the United States, or one upon a contract between the patentee and his assigns or licensees, and, therefore, cognizable only in a state court, unless there be diversity of citizenship. Thus, a bill to enforce a contract concerning the title to a patent, or an interest therein, or to declare a forfeiture of an assignment of an interest in a patent, or even a license to make, sell or use the patented thing or an action to recover damages for a breach of contract relating to a patent or a license thereunder, would not, because of the character of remedy or relief sought, be a suit cognizable in a United States court, although the facts stated might have justified a suit for infringement in a United States court, if the complainant had elected that remedy. To sustain the contention that a breach of the implied agreement not to use the machine in question except in a particular way might have supported a suit to forfeit the license, or an action for damages upon the broken contract, counsel have cited and commented at great length upon the cases of Wilson *v.* Sanford, 10 How. 99; Dale *v.* Hyatt, 125 U. S. 46; Albright *v.* Teas, 106 U. S. 613; Hartell *v.* Tilghman, 99 U. S. 547; Pratt *v.* Paris, 168 U. S. 255; Keeler *v.* Standard, 157 U. S. 659, and Bement *v.* National, 186 U. S. 70; but an examination of these cases will disclose that while in some of them a suit for infringement might have been brought, the complainants had in fact brought suits to set aside or enforce contracts relating to patents, or licenses under patents. They were, therefore, not "patent cases," but cases determinable upon principles of general law. * * * The test of jurisdiction is this: Does the complainant "set up some right, title or interest under the patent laws of the United States, or make it appear that some right or privilege will be defeated by one construction, or sustained by another, of those laws?" — Henry *v.* Dick, 224 U. S. 1; 56 L. Ed. 645; 32 S. Ct. 364.

Quoting Excelsior *v.* Pacific, 185 U. S. 282; citg. Pratt *v.* Paris, 168 U. S. 255; White *v.* Rankin, 144 U. S. 628.

§ 721. Infringement.

Obviously, a suit for infringement, which must turn upon the scope of the monopoly or privilege secured to a patentee, presents a case arising under the patent law. — Henry *v.* Dick, 224 U. S. 1; 56 L. Ed. 645; 32 S. Ct. 364.

§ 722. Licensor and Licensee.

Whether a patentee may lawfully impose such restrictions (restrictions to use the machine only with supplies sold by the patentee), and whether

their violation constitutes an infringement, are obviously questions arising under the patent law. — Henry *v.* Dick, 224 U. S. 1; 56 L. Ed. 645; 32 S. Ct. 364.

Littlefield *v.* Perry, 21 Wall. 205.

Were the court to assume supervision of this continuous contract now, and enforce its performance by its injunction, it must continue this supervision, and see to it during the whole existence of the contract that both parties fulfill their mutual obligations. This has been repeatedly declared to be outside of the functions of a court of equity. — Berliner *v.* Seaman, 110 Fed. 30; 49 C. C. A. 99.

Strang *v.* Railroad, 101 Fed. 511; Marble *v.* Ripley, 10 Wall. 339; Texas & P. *v.* Marshall, 136 U. S. 405; Ross *v.* Railway, Fed. Cas. 12,181.

§ 723. Residence.

That an assignment of a cause of action merely to give jurisdiction is ineffective, see — Consolidated *v.* Ferguson, 183 Fed. 756; 106 C. C. A. 330.

§ 724. State Court.

That an action to rescind a contract respecting a patent is not a Federal question, see — Wade *v.* Lawder, 165 U. S. 624; 41 L. Ed. 851; 17 S. Ct. 425.

LACHES.

§ 727. Application.

If during Dean's suspension of activities, McCormick had either patented the device or brought it into public use without a patent, the public would have been indebted to McCormick for benefits conferred, and Dean might well be held estopped by his delay from claiming the public grant; but in our judgment neither reason nor authority sanctions an estoppel against the first and true inventor unless the later comer has cut in between and made the public his debtor by being the first to get to the patent office or the market. International *v.* Kellogg, 171 Fed. 657; 96 C. C. A. 395.

Kendall *v.* Winsor, 21 How. 328; Consolidated *v.* Wright, 94 U. S. 92; Savary *v.* Lauth, Fed. Cas. 12,389; White *v.* Allen, Fed. Cas. 17,535; Universal *v.* Comptograph, 146 Fed. 984.

It is urged that we should regard unfavorably the patent on account of this delay in the Patent Office, should seek to avoid giving it a broad construction, and should permit the alleged abuse of the law to weigh against the standing of the complainants in a court of equity. But the patentee acted wholly within his rights. He merely took advantage of the delays which the law permitted him. He followed strictly the statutes and rules of procedure, and the courts cannot exact a greater measure of diligence from him. When the patent was granted under the authority of the law, it became entitled to the construction accorded to any other patent. If the statutes and rules permit unnecessary delays, they should be changed; but we reject the view that this court owes a duty to relieve against their operation. This patent, even if it be useful only for tribute, must be viewed without prejudice and with absolute judicial impartiality. — Columbia *v.* Duerr, 184 Fed. 893; 107 C. C. A. 215.

§ 728. Bringing Suit.

The proofs show that the complainant waited for 12 years before bringing this action, and is guilty of such laches as will preclude a recovery for profits

and damages. — Safety Car Heating *v.* Consolidated, 174 Fed. 658; 98 C. C. A. 412.

LAW ACTIONS.

§ 735. Findings.

Where the jury has decided the questions of invention and infringement in one way, and no error is found in the conduct of the trial, it is not for us to set aside their verdict merely because, if the same questions were submitted to us as triers of the facts upon the same record, we might have reached a different conclusion. — Heide *v.* Panoulias, 188 Fed. 914; 110 C. C. A. 656.

Tucker *v.* Spalding, 13 Wall. 455.

LETTERS PATENT.

§ 741. Contract Theory.

The judge of the Circuit Court was of opinion that inventors should be held strictly to the wording of their claims because patents are monopolies given out of the sovereign's generosity and given ex parte. We, however, think that patents are grants made in consideration of discoveries which "promote the progress of science and useful arts" (Const. art. 1, § 8), and that they are to be construed liberally so as to effect their real intent. — Bossert *v.* Pratt, 179 Fed. 385; 103 C. C. A. 45.

Grant *v.* Raymond, 6 Pet. 240; Blanchard *v.* Sprague, Fed. Cas. 1517.

A patent is a contract made by the acceptance by the government of the offer which the patentee by his application makes to disclose his invention, in consideration that the United States will secure to him the exclusive use and sale of it for 17 years. The offer embodied in the application becomes the specification of his patent, if his offer is accepted, and with his claims evidences the terms of the agreement. — Century Electric *v.* Westinghouse, 191 Fed. 350; 112 C. C. A. 8.

An American patent is a written contract between an inventor and the government. The contract consists of mutual, interrelated considerations moving from each party to the other for such contract. The consideration given on the part of the inventor to the government is the disclosure of his invention in such plain and full terms that anyone skilled in the art to which it appertains may practise it. The consideration on the part of the government given to the patentee for such disclosure is a monopoly for 17 years of the invention disclosed to the extent of the claims allowed in the patent. — Krupp *v.* Midvale, 191 Fed. 588; 112 C. C. A. 194.

§ 744. Monopoly.

The manufacturing company had the right to select its customers, and to sell and to refuse to sell to whomsoever it chose, and the provision making the Creamery Company its sole sales agent was a usual and reasonable method of providing for the disposition of its product. The effect of this contract, if, indeed, it had any effect, upon interstate or international commerce was only incidental and indirect. — Virtue *v.* Creamery, 179 Fed. 115; 102 C. C. A. 413.

Union Pacific *v.* U. S. 173 Fed. 737; Whitwell *v.* Continental, 125 Fed. 454; Cincinnati *v.* Bay, 200 U. S. 179.

The mere fact that the Creamery Company was a party to an unlawful combination would not deprive it of the right to sue and recover damages

against an infringer of patents owned by it, or to bring suit if it believed the patents were being infringed. — Virtue *v.* Creamery, 179 Fed. 115; 102 C. C. A. 413.

Strait *v.* National, 51 Fed. 819.

Monopoly in production and use being the legitimate purpose of the grant, the sole test of right thereto is the validity and scope of the patent. — Gen. Electric *v.* Winona, 183 Fed. 418; 105 C. C. A. 652.

Note: In connection with this decision attention is called to the circuit court decision in United States *v.* Standard Sanitary Co. 191 Fed. 172.

§ 745. Nature of Grant.

A patent is not the grant of a right to make or use or sell. It does not, directly or indirectly, imply any such right. It grants only the right to exclude others. The supposition that a right to make is created by the patent grant is obviously inconsistent with the established distinctions between generic and specific patents, and with the well-known fact that a very considerable portion of the patents granted are in a field covered by a former relatively generic or basic patent, and are tributary to such earlier patent, and cannot be practised unless by license thereunder. — Herman *v.* Youngstown, 191 Fed. 579; 112 C. C. A. 185.

LICENSE.

§ 755. Forfeiture.

The license contained a forfeiture clause, operative on failure of licensee to pay royalties, or render accounts, after notice from licensor. The licensor gave such notice in writing terminating the license. The licensee paid all accrued royalties. Complainant brought this suit for infringement, and defendant filed a cross-bill for a decree holding the license to be in force and effect. The cross-bill was stricken out, and the bill of complainant dismissed for want of equity. *Held:* We think that the defendant asking affirmative relief followed the better practice in filing the cross-bill. It seems to us that payment of the royalty in licenses is, so far as the licensor is concerned, the main object of the contract, and that a court of equity ought to relieve against the forfeiture if payment with interest will fully compensate him, and this whether the provision as to forfeiture is self executing or at the option of the licensor or in a mode prescribed, as in this case, by giving notice in writing. The complainant contends that, the parties having agreed upon their respective rights in a precise manner, the court would be making a new contract for them if it relieved against the cancellation of the license (on the authority of White *v.* Lee, 3 Fed. 222; Hammacher *v.* Wilson, 26 Fed. 239; Platt *v.* Fire Extinguisher, 59 Fed. 897). We can go with these authorities so far as to hold that, when the contract provides the manner in which the licensor may forfeit the license, he need not apply for assistance to any court, but not to say that in such a case a court of equity is without power to relieve against the forfeiture at the instance of the licensee. Royalties having been paid in full at the time the bill was filed, though with a little delay, and the licensee being ready, willing, and able to pay punctually thereafter, the licensor was not injured, and we think the court properly dismissed the bill. — Foster *v.* Taylor, 184 Fed. 71; 106 C. C. A. 467.

Giles *v.* Austin, 62 N. Y. 486; Horton *v.* N. Y. Central, 12 Abb. N. C. 30; Atkins *v.* Chilson, 11 Metc. 112; Klein *v.* Ins. Co. 104 U. S. 88; N. Y. Life *v.* Statham, 93 U. S. 24; distinguishing Wilson *v.* Sanford, 10 How. 99; Hartell *v.* Tilghman, 99 U. S. 547; White *v.* Lee, *supra;* Hammacher *v.* Wilson, *supra;* Platt *v.* Fire Extinguisher, *supra.*

That where the license agreement did not contain definite terms of forfeiture, *held:* In the absence of any such provision, mere delay in payment, though long continued, would, of course, give a right to sue for royalties but would not ipso facto operate to annul the contract. — Rowland *v.* Biesecker, 185 Fed. 515; 107 C. C. A. 615.

That a licensee holding a non assignable license to make and sell may organize a corporation which he controls and have that corporation manufacture the articles for him exclusively, he accounting personally to the licensor, without forfeiture of his license, see — Foster *v.* Taylor, 191 Fed. 1003; 111 C. C. A. 667.

§ 758. Non-Assignable.

The inventor assigned patents to the West Virginia company with the restriction, among others, that it should not assign the contract without the inventor's consent. By bill of sale the company conveyed all its contracts, good will and property to the Ohio company, its successor without the consent of the inventor. *Held:* The Ohio company was not the successor (or heir) of the West Virginia company. Hibbard's contract, being personal, could not pass to the Ohio company save by assignment, and the assignment could not be effective without Hibbard's consent. — Niagara *v.* Hibbard, 179 Fed. 844; 103 C. C. A. 330.

Dillingham *v.* Snow, 5 Mass. 554; Overseers *v.* Sears, 39 Mass. 122; Hapgood *v.* Hewitt, 119 U. S. 226; Boston *v.* Potter, 123 Mass. 28; Bowers *v.* Lake Superior, 149 Fed. 983.

§ 759. Parol.

The license was oral, it is true; but that is no objection to its validity. — St. Louis *v.* Sanitary, 178 Fed. 923; 103 C. C. A. 565.

Sharples *v.* Moseley, 75 Fed. 595; Gayler *v.* Wilder, 10 How. 477.

§ 760. Royalties.

The licensee gave a sub license, receiving $20,000 lump sum for the first 800,000 articles, regardless of the validity of the patent and regardless of whether the sub-licensee took that number or not; and a further royalty of one cent each on all articles over 800,000. The licensee contended that the $20,000 was a bonus to him, for which he did not have to account to his licensor. *Held:* We cannot assent to this construction. It is immaterial when the banks were made, or whether the whole number are ever made. Royalties freeing them from the patent have been paid once for all, under an agreement not to make reclamation for any part of them, should the patent be held invalid. To the extent of the 800,000 his licensors are entitled to look to Brigham for the royalties he agreed to pay to them at the stipulated rate of one cent each. — Reizenstein *v.* Koopman, 178 Fed. 546; 101 C. C. A. 462.

That where a licensee consigned a shipment of goods and the same were destroyed by fire in transit and the licensee collected insurance on the goods, the licensor was entitled to regular royalties on the same — the insurance company being regarded as a purchaser, see — Reizenstein *v.* Koopman, 178 Fed. 546; 101 C. C. A. 462.

§ 761. Scope of.

That when defendants agreed to pay plaintiff $500 upon demonstration of his invention and the further sum of $2500 from sales under the patent, and plaintiff failed to obtain a patent and one of the defendants subsequently

obtained a patent on the device, *held:* Treating the action as in tort, which was the theory on which it was tried, to recover damages for the wrongful appropriation by the defendants of plaintiff's invention, the measure of damages is obviously the value of the invention. But the proof showed that no clutch was manufactured or sold between the date of the patent to Forman and the trial. The evidence is that the invention was commercially a failure. What the defendants had agreed they would pay the plaintiff upon a contingency which never happened, viz., $2000 out of the first profits earned, is no evidence of the actual value of the invention. — Childs *v.* LeBrocq, 178 Fed. 719; 102 C. C. A. 211.

A limited license conveys only the rights defined therein, and if the licensee makes any other or different use, either as to time or place, than that authorized by the license, he becomes an infringer, and his limited license is no justification. — St. Louis *v.* Sanitary, 178 Fed. 923; 103 C. C. A. 565.

Heaton *v.* Eureka, 77 Fed. 288.

§ 762. Termination of.

The license provided: "This agreement to extend 5 years from date with privilege of 10 years, or terminate at any time if by mutual consent of both parties." *Held:* Defendant's privilege of continuing for 10 years was one which he could exercise *ex parte*. The case differs materially from Seal *v.* Bookkeeper, 130 Fed. 449, relied on by complainant, where it was provided that the second party might renew for an extended period "by mailing first party written notice of his intention so to do." — Rowland *v.* Biesecker, 185 Fed. 515; 107 C. C. A. 615.

§ 764. Miscellaneous.

Neither does the fact that the license was granted after the application was filed, but before the issuance of the letters patent, render it invalid. — St. Louis *v.* Sanitary, 178 Fed. 923; 103 C. C. A. 565.

Brush *v.* California, 59 Fed. 945.

MACHINE AND PROCESS.

§ 770. General Rules.

A process and an apparatus by which it is performed are distinct things. They may be found in one patent; they may be made the subject of different patents. — Leeds *v.* Victor, 213 U. S. 301; 53 L. Ed. 805; 29 S. Ct. 495.

That the fact that the patented process cannot be used without the patented apparatus, or the apparatus without the process, does not make them the same invention and not separately patentable, and that as the statute makes no such distinction, the courts may not, see — Century Electric *v.* Westinghouse, 191 Fed. 350; 112 C. C. A. 8.

Armour *v.* United States, 153 Fed. 1.

MANUFACTURE.

§ 774. Novelty.

A new article of commerce is not necessarily a new article patentable as such. But patentable novelty in a case like the present may be founded upon superior efficiency; upon superior durability, including the ability to retain a permanent form when exposed to the atmosphere; upon a lesser tendency to breakage and loss; upon purity, and, in connection with other things, upon comparative cheapness. So, as supplementing other considerations, commercial success may properly be compared with mere laboratory

experiments. — Union Carbide *v.* Am. Carbide, 181 Fed. 104; 104 C. C. A. 522.

MARKING "PATENTED."

§ 777. Rulings under the Statute.

The design was used upon a belt and upon a hatband. To all the belts he made and sold he affixed the notice "Lichtenstein Pennant Belt, Pat. Jan. 15, 1907." To the hatbands, however, which he made, placed on women's sailor hats and sold with the hats, he affixed no notice; but upon the lining in the inside of the hats he printed the notice, "Lichtenstein Pennant Sailor, Pat. Jan. 15, 1907." We do not think it can be fairly said that the label inside on the lining of the hat was affixed to the band, or that the hat was a package within which one or more bands were enclosed. Inasmuch as complainant admits that no labels other than these were affixed to anything, he has failed to make sufficient proof of notice to entitle him to recover damages, profits, or statutory penalty. — Lichtenstein *v.* Phipps, 168 Fed. 578; 93 C. C. A. 483.

Note: This case is believed to be the climax of this sort of hair-splitting that has been indulged in of late in the misinterpretation of the statute. While we must bow to the dictates of this court, we sincerely hope it will not be long before the Supreme Court puts a stop to this line of decisions, and reverses a goodly number of them.

The testimony is unpersuasive that all the monuments sold were marked. Indeed, the evidence with respect to several — the Coon monument, for example — is convincing that they were not marked. The complainant has failed to establish a case in which damages can be recovered. — Crier *v.* Innes, 170 Fed. 324; 95 C. C. A. 508.

Note: This is carrying the rule as to marking a step beyond what has ever before been held. Not only must the complainant have marked *every* article sold, but the *burden of proof* is apparently upon him to establish that fact. While this is a holding with reference to a penalty in a design case, with the present tendency of this court on this subject, the next step may be to extend this rule generally to all cases.

The opinion of Judge Brown covers the following points in qui tam actions under § 4921, R. S.:

1. That the statute does not prescribe a distinct penalty for each individual article marked, but merely a penalty for the offense of marking, and that, therefore, where the marking is all done on the same day and at the same time, so that it is practically a single, continuous act, but one offense is committed and only a single penalty is recoverable, though more than one article may have been marked. Hotchkiss *v.* Cupples, 53 Fed. 1018; Hoyt *v.* Computing, 96 Fed. 250; Taft *v.* Stephens, 38 Fed. 28.

2. As the penalty is not measured by the extent of publication of the false statement, the statute must be read as making the fraudulent purpose or intent to deceive the public the gravamen of the offense, and the marking as the overt act whereby the intent is made manifest. U. S. Condensed *v.* Smith, 101 N. Y. Supp. 129.

3. That a plaintiff, in order to recover more than a single penalty, must go further than to prove the marking of a number of unpatented articles. The proof must be sufficiently specific as to the time and circumstances to show a number of distinct offenses, and to negative the possibility that the marking of the different articles was in the course of a single and continuous act.

4. Though a single violation of the statute may be proved by general evidence that the article was falsely marked within the period of the statute of limitations, yet concerning the article of the character in question in this suit there can arise no presumption that each act of marking was so separated from the others as to constitute a distinct offense.

5. In order to prove distinct offenses, however, it was not essential that the plaintiff should be able to prove the specific date of marking. It was sufficient if the evidence showed such divergence of time and circumstances as to make one act of marking separable and distinct from the other acts of marking.

6. The commission of a single offense could be proved by evidence that the marking was done within the period of limitations. The ruling that the plaintiff was bound to prove some specific date of marking, and could not recover without doing so, was error.

7. That where the evidence is sufficient to raise the question of commission of an act of marking, it should be submitted to the jury.

8. The purpose to deceive the public is an essential element of the offense, and the burden is upon the plaintiff to establish this purpose, as well as the fact that the article is unpatented. The statute does not extend to one who has an honest, though mistaken, belief that upon a proper construction of the patent, it covers the article which he marks. The question of guilt does not depend upon such close or exact construction of the patent as is usual upon bills for infringement where the issue is as to the extent of the patentee's right under letters patent.

9. Where the article marked is obviously very remote from the patent referred to in justification of the marking, this difference alone may be sufficient to show an intention to deceive; but where the difference is slight, and the question of the breadth of the invention or of the claims is so close as to permit of an honest difference of opinion, then it may become necessary for the plaintiff to adduce testimony additional to the fact that the article is unpatented, in order to show guilty knowledge as distinguished from erroneous opinion.

10. Though the article was without the terms of the patent, the question of the defendant's good faith in assuming it to be within the patent was a question of fact for the jury.

11. The defendant contends that this offense is one that cannot be committed by a corporation; but we are of opinion that this objection is without merit. N. Y. Central *v.* U. S. 212 U. S. 481; United States *v.* Union, 215 U. S. 50.

12. An officer of a defendant corporation may not refuse to testify on the ground that he is privileged. Hale *v.* Henkel, 201 U. S. 43. — London *v.* Dunbar, 179 Fed. 506; 103 C. C. A. 130.

That where complainant alleged "that it has applied the said improvements to practical use, and has always stood ready and now stands ready to supply any and all demands of the public for said improvement," etc., and upon giving supplemental proofs before the master asserts that it never gave notice required by § 4900 because one of the patented articles had been in existence, in order to avoid the force and effect of that section; *held:* We think such a contention cannot be sustained. What right of recovery of profits or damages the complainant might have had, if in its bill it had substituted for the allegations above quoted allegations showing that it had locked up its patent and had not used it, we need not consider. It is sufficient for us at present to say that the defendant was not called on by the bill to defend against the complainant's present contention. — Lorain *v.* N. Y. Switch, 184 Fed. 301; 106 C. C. A. 443.

OATH.

§ 779. Statutory Requirements and General Rule.

That it is not perjury under § 5392, R. S. for an applicant to swear that he is the sole inventor when in fact he is a joint inventor, see — Patterson *v.* U. S. 181 Fed. 970; 104 C. C. A. 434.

§ 780. Supplemental Oath.

He made no claim for a process and disclosed no invention of a device. This being so, the amendment required an oath that Dolan might have found it difficult to make, and for want of it the patent is void. — Steward *v.* American, 215 U. S. 161; 54 L. Ed. 139; 30 S. Ct. 46.

R. S. § 4892; Chicago *v.* Sayles, 97 U. S. 554; Eagleton *v.* West, 111 U. S. 490; Kennedy *v.* Hazleton, 128 U. S. 667; De La Vergne *v.* Featherstone, 147 U. S. 209.

That where a claim is added by amendment without supplemental oath, if the claim is narrower than the invention previously claimed and the subject-matter is shown, it is not invalid for want of oath, see — General *v.* Morgan-Gardner, 168 Fed. 52; 93 C. C. A. 474.

PATENT OFFICE.

§ 787. Miscellaneous.

For an instance of the inadequacy and superficiality of some Patent Office actions, see — Am. Specialty *v.* New England, 176 Fed. 557; 100 C. C. A. 193.

PLEADING AND PRACTICE.

§ 790. Bill of Review.

That where, upon the affirmance of a decree dismissing a bill, the complainant files a disclaimer and asks amendment of the mandate to permit the filing of a supplemental bill in the nature of a bill of review, such motion is made in season, see — Fellows *v.* Borden's, 187 Fed. 1005; 109 C. C. A. 535.

§ 794. Multifariousness.

That where judgment has been had against several defendants for infringement and execution returned unsatisfied, in a suit brought to reach the property of one of the defendants — the liability of the several defendants not being identical — the bill is not multifarious as joining different causes and conditions, see — Hobbs *v.* Gooding, 176 Fed. 259; 100 C. C. A. 83.

§ 795. Notice.

That where a substantial defense of anticipation, not pleaded, was developed upon cross-examination of complainant's witnesses, and no objection to want of statutory notice was made, such objection cannot be raised for the first time on the appeal; and to allow further evidence to be taken after decision in the Circuit Court of Appeals would introduce a novel practice, and one which should not be encouraged. — Dey *v.* Bundy, 178 Fed. 812; 102 C. C. A. 260.

Objection is made to certain testimony of anticipation and prior use because notice was not given of it in the answer. It was admissible to show the

state of the art, to show what was old, to distinguish what is new, and to aid the court in the construction of the patent. — Stevens *v.* Rodgers, 186 Fed. 631; 108 C. C. A. 495.

Dunbar *v.* Myers, 94 U. S. 187; May *v.* Juneau, 137 U. S. 408.

§ 803. Sufficiency.

We do not intend to approve the action of the complainant in withholding the prior application until after the defendant's proofs had been taken and the introduction of rebutting testimony had commenced. It would seem that defendant is entitled to know by allegations in the bill when the application for patent was filed and prepare his defense accordingly. — Corrington *v.* Westinghouse, 178 Fed. 711; 103 C. C. A. 479.

That where the answer to a bill on several patents was a general denial of infringement, and the proofs showed two separate causes of action, so that the bill might have been treated as multifarious, the answer cannot be treated as a denial of one cause and an admission of the other, see — Perry *v.* Chicago, 178 Fed. 449; 101 C. C. A. 433.

§ 804. Suit on Plurality of Patents.

The only difference in the two patents consists in the fact that the invention of the patent of 1901 improved one of the elements of the combination of the earlier patent. The infringement was of both patents, in the same machine, and by the same parties. We think there could be no valid objection to the joinder of the patents in one suit, and that it was warranted by the precedents. — Vrooman *v.* Penhollow, 179 Fed. 296; 102 C. C. A. 484.

Walk. Pat. § 417, and cases cited.

§ 805. Supplemental Bills.

That while leave to file a supplemental bill is discretionary with the court, in a case where the officers of a defendant corporation have dissipated the assets of the company to avoid paying damages, the proper course is by a creditor's bill, see — Brookfield *v.* Novelty, 170 Fed. 960; 96 C. C. A. 127.

10 Cyc. 665; Jackson *v.* Ludeling, 21 Wall. 616; Weston *v.* Empire, 166 Fed. 869.

§ 806. Titie.

That where it appears that a party apparently holding a legal interest should have been made a party complainant, the court will permit amendment to bring in such party, see — Snead *v.* Scheble, 175 Fed. 570; 99 C. C. A. 578.

Clark *v.* Wooster, 119 U. S. 322; Busch *v.* Jones, 184 U. S. 598; Carnegie *v.* Colorado, 165 Fed. 195.

That where the record shows a legal part interest in the patent outstanding in a corporation assignee, although such corporation may never have actually assumed title and although such corporation may have been closed out by a receiver, in the absence of positive record showing that the entire title has been reinvested in complainant, such corporation will be presumed to be in existence and must be made a party, see — Snead *v.* Scheble, 175 Fed. 570; 99 C. C. A. 578.

Railroad *v.* Trimble, 10 Wall. 367.

§ 807. Miscellaneous Rules of Practice and Pleading.

The Circuit Court was right in striking out the file-wrapper and contents and the prior patents as amendments to the bill, it still being improper to plead evidence. — Lange *v.* McGuin, 177 Fed. 219; 101 C. C. A. 389.

That a statement in pleading which might be construed as an admission of a fact is not to be so interpreted and held when the context of the pleading is to the contrary and the other party has not been misled thereby, see — American Stoker *v.* Underfeed, 188 Fed. 314; 110 C. C. A. 292.

PRIORITY.

§ 812. Miscellaneous Holdings.

If the two applications disclose substantially the same subject-matter, in the absence of any other evidence of the date of invention, the date of the first application would be prima facie taken as the date of the first invention. — Electric *v.* Westinghouse, 171 Fed. 83; 96 C. C. A. 187.

Drewson *v.* Hartje, 131 Fed. 734.

In view of the action of the patentee in requesting the suppression of the earlier application it is contended by the defendant that it cannot be used to enable the patentee to avail himself of an earlier application date than that stated in the patent. Though the question is not free from doubt, we have concluded that the reasoning of the judge of the circuit court in this regard is sustained by the weight of authority and we therefore accept May 16, 1903 (the date of filing of the first and abandoned application), as the filing date of the application. In so deciding we do not intend to approve the action of the complainant in withholding the prior application until after the defendant's proofs had been taken and the introduction of rebutting testimony had commenced. — Corrington *v.* Westinghouse, 178 Fed. 711; 103 C. C. A. 479.

Victor *v.* Am. Graphophone, 145 Fed. 350; Tooth Crown *v.* Richmond, 30 Fed. 775.

PROCESS.

§ 817. Mechanical.

It is undoubtedly true, and all the cases agree, that the mere function or effect of the operation of a machine cannot be the subject-matter of a lawful patent. But it does not follow that a method of doing a thing, so clearly indicated that those skilled in the art can avail themselves of mechanism to carry it into operation, is not the subject-matter of a valid patent. The contrary has been declared in decisions of this court. We therefore reach the conclusion that an invention or discovery of a process or method involving mechanical operations, and producing a new and useful result, may be within the protection of the Federal statute, and entitle the inventor to a patent for a discovery. — Expanded *v.* Bradford, 214 U. S. 366; 53 L. Ed. 1034; 29 S. Ct. 652.

Cochrane *v.* Deener, 94 U. S. 780; Tilghman *v.* Proctor, 102 U. S. 707; Eastern *v.* Standard, 30 Fed. 63; Union *v.* Waterbury, 39 Fed. 389; Travers *v.* American, 64 Fed, 771; Carnegie *v.* Cambria, 185 U. S. 403; Telephone Cases, 126 U. S. 1; Leeds *v.* Victor, 213 U. S. 301: distinguishing Westinghouse *v.* Boyden, 170 U. S. 537; Wicke *v.* Ostrum, 103 U. S. 461.

Note: While this case merely distinguishes the process from such as that in the Westinghouse case, it is the entering wedge for the reversal of the bad law of that case.

That a mechanical process, such as making wire glass, is patentable, see — Western Glass *v.* Schmertz, 185 Fed. 788; 109 C. C. A. 1.

Expanded *v.* Bradford, 214 U. S. 366; Streator *v.* Wire Glass, 97 Fed. 950.

§ 819. Patentability.

The word " process " is not used in the statute. The inventor of a new and useful art is distinctly entitled to the benefit of the statute as well as he who invents a machine, manufacture, or composition of matter. The word " process " has been brought into the decisions because it is supposedly an equivalent form of expression, or included in the statutory designation of a new and useful art. — Expanded *v.* Bradford, 214 U. S. 366; 53 L. Ed. 1034; 29 S. Ct. 652.

That where the steps of the process produce a chemical change, the process is patentable, see — Byerley *v.* Sun, 184 Fed. 455; 106 C. C. A. 455.

PROFITS.

§ 830. Deductions — Manufacturer's Profits.

We are clear that the complainants are entitled to recover from the defendant what are termed " manufacturer's profits; " that is, profits which the defendant company made in the manufacture and sale of weather strips embodying complainant's patent. — Nat. Metal *v.* Bredin, 186 Fed. 490; 108 C. C. A. 468.

§ 836. Master in Chancery.

In view of this well settled rule, we think the court below would not have been warranted in setting aside the finding of fact to which we have referred, and that therefore this court, of course, should not do so. — Cimiotti *v.* American, 168 Fed. 529; 93 C. C. A. 546.

In the absence of manifest error, it is not the province of this court to disturb the findings of a master reached upon conflicting testimony, which findings have been examined and adopted by the Circuit Court. — Brown *v.* Drohen, 175 Fed. 576; 99 C. C. A. 192.

His conclusion was reviewed on exceptions by the learned trial judge. Both of them found against the contention. There being no obvious error of law or serious mistake of fact, their findings will be accepted as true. — Dowagiac *v.* Minnesota, 183 Fed. 314; 105 C. C. A. 526.

Moline *v.* Carson, 72. Fed. 387; Brown *v.* Lanyon, 179 Fed. 309.

§ 837. Measure of — Actual Gains.

The portion of the profit paid out in dividends during the accounting period and the sums paid for legal and expert services in the litigation over the patent were added together, and from the sum was deducted the deficit existing at the end of the accounting period. Assuming that the company paid no exorbitant salaries, and that it did not in any other manner unfairly dispose of its earnings, we think the method was as fair a one as could have been adopted. — Nat. Metal *v.* Bredin, 186 Fed. 490; 108 C. C. A. 468.

A manufacturer who devises a machine that he honestly believes he has a right to use * * * is not to be mulcted in punitive damages. Equity is satisfied if he accounts for all the pecuniary benefits he derived from the use of the infringing machine. If there were no other way of obtaining the result, he might rightly be held for all the profits he made from the output of his

establishment. But if, as here, other machines for doing the same work, though less effectively, were available at the date of the patent, the whole advantage would lie in the increase of efficiency. * * * If, however, he should adopt a machine that finally was adjudged to be an infringement, all that he would actually gain by the infringement would be the excess of effectiveness of the machine over the later, available, competitive machines. (That is, machines available later than the date of the infringed patent.) — Columbia Wire *v.* Kokomo, 194 Fed. 108; 114 C. C. A. 186.

Note: This evidently extends the well-known rule of the cases cited in the foot-note, page 109, to include all machines which are available at the time the infringement occurred. Would this include machines subsequently patented to others? This opens a serious question.

§ 838. Measure of — Entire Profits.

No doubt the saving or advantage to the defendants is the true measure. Cawood Pat. 94 U. S. 695. But this may well be taken as represented by the difference between profitable and unprofitable commercial manufacture. More accurately, it would be the difference between the cost of insulators as made by the machine of the patent and the cost as made by those open to the defendants. But for all practical purposes, the two under the evidence are the same. If salable articles, in other words, could not be made at the ruling prices by the old methods, without a loss, while with the machine of the patent there would be a profit, the profit so made has certainly been saved or gained from the invention. — Novelty *v.* Brookfield, 170 Fed. 946; 95 C. C. A. 516.

When the entire profit of a business results from the use of the patented invention, the patentee will be entitled to recover the entire profits if he elects that remedy. — Nat. Metal *v.* Bredin, 186 Fed. 490; 108 C. C. A. 468.

Crosby *v.* Safety Valve, 141 U. S. 452; Wales *v.* Waterbury, 101 Fed. 126; Orr *v.* Murray, 163 Fed. 54; Elizabeth *v.* Pavement Co. 97 U. S. 126.

Complainant made sewing machines containing the combinations of an expired patent and a valid, living patent. Defendant bought up old machines of complainant's make containing the combination of the expired patent, rebuilt the machines and added the combination of the living patent. The master reported entire profits of defendant upon the ground that the salability of the machines was due to the presence of the valid combination. Affirming the decree it was *held:* The general rule relied upon by the appellant in regard to the recovery of profits in infringement cases is that quoted from Westinghouse *v.* N. Y. Air Brake Co. 140 Fed. 545–9 (quoting). But, in stating this rule, the court called attention to circumstances which may except a case from its application, as where the " profits and damages are to be calculated on the whole machine, for the reason that the entire value of the whole machine, as a marketable article, is properly and legally attributable thereto " (i. e., to the patented feature). There are many cases in which this rule is affirmed, and there is no controversy as to its propriety. The only questions that arise are as to its applicability to the peculiar circumstances of a given case. — Maimin *v.* Union Special Mach. Co. 187 Fed. 123; 109 C. C. A. 41.

Goulds *v.* Cowing, 105 U. S. 253.

§ 840. Measure of — Savings by Use.

It is not as though they were being charged for infringing *sales* of the machine, where the profits recoverable would properly be confined to those realized from the features which constituted the patentable advance on the

prior art. Force *v.* Sawyer, 143 Fed. 894. The infringement here is in the *use* of the patented machine, and response must be made in consequence for the saving effected, not from any particular part, but from the whole. — Novelty *v.* Brookfield, 170 Fed. 946; 95 C. C. A. 516.

Instead of making money in carrying out his contract with the government, he lost money, and the decree against him is sustained upon the theory that but for the use of the infringing machines, he would have lost more money. — Brown *v.* Drohen, 175 Fed. 576; 99 C. C. A. 192.

The comparison between the cost of doing the work by hand labor and by the patented machine was correctly adopted as the proper standard by which to measure the defendant's profits. As there were no machines existing prior to the date of the inventions covered by the complainant's patents, which could do the work, hand labor was the only available standard of comparison. If the defendant had not used infringing machines he would have been compelled to use hand labor. — Brown *v.* Drohen, 175 Fed. 576; 99 C. C. A. 192.

§ 841. Measure of — Trustee ex Maleficio Rule.

For the full and final delimitation of the rule of trustee ex maleficio, see extended excerpt from Westinghouse *v.* Wagner, 225 U. S. 604; 56 L. Ed. —; 32 S. Ct. 691; under § 845.

The infringement in this case was deliberate, with every means taken to avoid being responsible for it, and if there are any uncertainties in the situation, it is for the defendants, and not the complainants, to clear them up. — Novelty *v.* Brookfield, 170 Fed. 946; 95 C. C. A. 516.

Rose *v.* Hirsh, 94 Fed. 177; Regina *v.* Otto, 114 Fed. 508.

§ 843. Segregation — Burden of Proof.

The general rule in patent cases, like all others, is that a complainant is entitled to recover damages for the loss he has sustained by reason of the wrongful acts of the infringer, and the burden is on him to show how much it is. — Dowagiac *v.* Minnesota, 183 Fed. 314; 105 C. C. A. 526.

Garretson *v.* Clark, 111 U. S. 120.

If the Ottofy device as limited had any special value when used as but a small part of a large completed structure, the complainant as owner of the patent should have introduced evidence of the profits realized by the infringer and ascribable to the particular device in question, so that they could be ascertained and stated by the master. — Am. Street Flushing Mach. *v.* St. Louis, 192 Fed. 121; 112 C. C. A. 582.

Westinghouse *v.* Wagner, 173 Fed. 361; Brown *v.* Lanyon, 179 Fed. 309; Dowagiac *v.* Plow Co. 183 Fed. 314.

§ 845. Segregation — General Rules.

The final rule of the Supreme Court.

After more than a quarter of a century of misconstruction of the statute and academic refinement and sophistry centering about the old Mop Case, the Supreme Court in reversing Westinghouse *v.* Wagner, 175 Fed. 361, and following the masterly dissenting opinion of Judge Sanborn, has put on sound foundations the rules of segregation and trustee ex maleficio. So important and far-reaching is this decision, it is excerpted liberally.

The writ was issued in view of the holding that, though the master found that the defendant had made a profit of $132,000 from the sale of infringing

transformers, the plaintiff could yet only recover one dollar because it failed to separate the profits made by its patent from those made by the defendant's addition.

1. The question as to who has the burden of proof, in cases like this, is one of great practical importance and constantly arises in patent causes. There has been much controversy on the subject and a conflict in the decisions. * * * It will be sufficient for the present purposes to say that —

(a) Where the infringer has sold or used a patented article, the plaintiff is entitled to recover all of the profits.

(b) Where a patent, though using old elements, gives the entire value to the combination, the plaintiff is entitled to recover all the profits. (Hurlbut *v.* Shillinger, 130 U. S. 472.)

(c) Where profits are made by the use of an article patented as an entirety, the infringer is liable for all the profits — " unless he can show — and the burden is on him to show — that a portion of them is the result of some other thing used by him." (Elizabeth *v.* Paving Co. 97 U. S. 127.)

(d) But there are many cases in which the plaintiff's patent is only a part of the machine and creates only a part of the profits. His invention may have been used in combination with valuable improvements made, or other patents appropriated by the infringer, and each may have jointly, but unequally, contributed to the profits. In such case, if plaintiff's patent only created a part of the profits, he is only entitled to recover that part of the net gains. He must, therefore, " give evidence tending to separate or apportion the defendant's profits and the patentee's damages between the patented feature and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative; or he must show, by equally reliable and satisfactory evidence, that the profits and damages are to be calculated on the whole machine, for the reason that the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature." (Garretson *v.* Clark, 111 U. S. 121.)

The real controversy arises in applying this principle to those cases where it is impossible to separate the single profit into its component parts.

In considering the question presented by the record here, it is to be borne in mind that Congress has legislated (R. S. 4921) with a view of affording the patentee ample redress against the infringer. It not only makes the latter liable for damages — sometimes threefold damages — but for all profits derived from the use or sale of plaintiff's invention. The rule as to the burden of proof has, however, been so applied that this statutory right has been often nullified by those infringers who had ingenuity enough to smother the patent with improvements belonging to themselves or to third persons. In such cases the greater the wrong the greater the immunity; the greater the number of improvements the greater the difficulty of separating the profits. And if that difficulty could only be converted into an impossibility the defendant retained all of the gains, because the injured patentee could not separate what the guilty infringer had made impossible of separation. Manifestly such consequences demonstrate that either the rule or its application is wrong. The rule is sound, for it but announces the general proposition that the plaintiff must prove its case and carry the burden imposed by law upon every person seeking to recover money or property from another. But the principle must not be pressed so far as to override others equally important in the administration of justice. * * *

The plaintiff proved its patent and that it had been infringed. * * * But no matter how great its presumptive or actual value, it did not follow that the defendant had made a profit by the sale of the infringing transformers. And so, having sued for profits, the Westinghouse Company was under the burden of showing they had been made. This it did to the satisfaction of the master. The defendant then had the right either to disprove the plain-

tiff's case or to offer evidence in mitigation, or both. Accordingly it submitted evidence tending to show that the spaces added by the defendants were non-infringing and valuable improvements which had contributed to the making of the profits. In reply the Westinghouse Company insisted that claim 4 was an entirety. * * * For that reason the plaintiff contended that it had shown that all the gains were "legally attributable to the patented feature." (Garretson *v.* Clark, 111 U. S. 121; Elizabeth *v.* Pavement Co. 97 U. S. 127; Crosby *v.* Safety Valve, 141 U. S. 454; Keystone *v.* Adams, 151 U. S. 144.) This view was sustained by the master. But if it be assumed as was found to be the fact by the court, that the spaces were non-infringing and valuable improvements, it may then have prima facie appeared that these changes had contributed to the profits. If so, the burden of apportionment was then logically on the plaintiff, since it was only entitled to recover such part of the commingled profits as was attributable to the use of its invention.

3. Lindley, L. J., said in Siddell *v.* Vickers, 9 Rep. Pat. Cas. 162, that there "was no form of account more difficult to work out than an account of profits." But that is no reason why the plaintiff should be denied its rights. The problem here, though different, was in many respects analogous to that presented in those cases where it was necessary to separate interstate from intrastate earnings made by a railroad. * * * The courts, "while recognizing the impossibility of reaching a conclusion that is mathematically exact," have, in addition to the other evidence bearing on the question, received "the testimony of experts as to the relative cost of doing a local and through business." (Chicago *v.* Tompkins, 176 U. S. 178.) The converse is true. What is permissible in an effort to separate costs may also be done in a patent case where it is necessary to separate profits (Root *v.* Railway, 105 U. S. 198. See also Rubber Co. *v.* Goodyear, 9 Wall. 802). * * *

4. Having, by books and other data, proved to the satisfaction of the master the existence of profits, the plaintiff had carried the burden imposed by law, and established every element necessary to entitle it to a decree, except one. As to that, the act of the defendant had made it not merely difficult but impossible to carry the burden of apportionment. But plaintiff offered evidence tending to establish a legal equivalent. It had proved the existence of a fact which, whether treated as a rule of evidence or as a matter of substantive law, would entitle it to a decree for all the profits. The method was different from that mentioned in the second branch of the rule in the Garretson Case, but the plaintiff had now presented proof to demonstrate its right to the whole of the fund because of the fact that the defendant had inextricably commingled and confused the parts composing it. This result would not be in conflict with the principle which in the first instance imposed the burden of proof on the plaintiff, but merely gave legal effect to a new fact which as a matter of law entitled the patentee to a particular judgment. It presented a case where the court was called on to determine the liability of a trustee ex maleficio, who had confused his own gains with those which belonged to the plaintiff. One party or the other must suffer. The inseparable profit must be given to the patentee or infringer. The loss had to fall on the innocent or the guilty. In such an alternative the law places the loss on the wrongdoer.

5. It is said, however, that the rule does not apply in patent cases. Why it should be limited does not appear. It is admitted that an injunction may be granted against selling infringing devices, even though the result will be to prevent the defendant from using valuable appliances confused with the patented device. And Lord Eldon treated this conceded right to enjoin as an application of the rule relating to the confusion of goods. He therefore restrained the publication of a book, a large portion of which was original, because copyright matter was incorporated therein. * * * (Mawman *v.*

Tegg, 2 Russ. 390.) This case was cited and approved in Callaghan *v.* Myers, 128 U. S. 658, where the infringer who had blended his own with copyright matter, in a volume which sold for a profit, was made to "abide the consequences on the same principle that he who has wrongfully produced a confusion of goods must alone suffer." * * * In both, as in patent cases, the infringer was a "trustee for the plaintiff in respect of profits." (Root *v.* Railway, 105 U. S. 214.) And the liability is not lessened because the confusion is due to a wrongful appropriation by a trustee de son tort instead of carelessness of a trustee lawfully appointed.

6. * * * This conclusion is said to be in conflict with the Garretson and other decisions which, it is claimed, justify the conclusion that the defendant is entitled to retain all of the profits even where the patentee is unable to make an apportionment. (Warren *v.* Keep, 155 U. S. 265.) An analysis of the facts of those cases will show that they do not sustain so extreme a doctrine. For they deal with instances where the plaintiff apparently relied on the theory that the burden was on the defendant, and for that, or other reasons, made no attempt whatever to separate the profits. None of the cases cited discuss the rights of the patentee who has exhausted all available means of apportionment, who has resorted to the books and employees of the defendant, and by them, or expert testimony, proved that it was impossible to make a separation of the profits. This distinction, between difficulty and impossibility, is involved in the ruling * * * in Brennan *v.* Dowagiac, 162 Fed. 476, where the Garretson Case was distinguished. * * *

It may be argued that, in its last analysis, this is but another way of saying that the burden of proof is on the defendant. And no doubt such, in the end, will be the practical result in many cases. But such burden is not imposed by law; nor is it so shifted until after the plaintiff has proved the existence of profits attributable to his invention and demonstrated that they are impossible of accurate or approximate apportionment. If then the burden of separation is cast on the defendant, it is one which justly should be borne by him, as he wrought the confusion. — Westinghouse *v.* Wagner, 225 U. S. 604; 56 L. Ed. —; 32 S. Ct. 691.

These authorities make it clear, we think, that an apportionment of profits between the patented and unpatented parts of the drill was indispensably necessary. The invention did not inhere in the entire machine as an entirety, but was only an improvement in a single element of an otherwise well-known device. — Dowagiac *v.* Minnesota, 183 Fed. 314; 105 C. C. A. 526.

Garretson *v.* Clark, 111 U. S. 120; Tilghman *v.* Proctor, 125 U. S. 136; McCreary *v.* Pennsylvania, 141 U. S. 459; Crosby *v.* Supply, 141 U. S. 441; Sessions *v.* Romadka, 145 U. S. 29; Keystone *v.* Adams, 151 U. S. 139; Westinghouse *v.* Wagner, 173 Fed. 361; Brown *v.* Lanyon, 179 Fed. 309.

§ 846. Segregation — Miscellaneous Rules.

That where the main efficiency of the machine depends entirely upon the patent in suit, and where subsequent minor patented improvements have been added which contribute in some measure to the machine, segregation is not necessary, see — Novelty *v.* Brookfield, 170 Fed. 946; 95 C. C. A. 516.

That where the patented article consisted of three elements, only one of the elements being covered by the patent, the profits should be limited to the patented element, see — Nat. Metal *v.* Bredin, 186 Fed. 490; 108 C. C. A. 468.

§ 847. Miscellaneous Rules Concerning Profits.

Even if James Bredin's claim as licensee could have been properly joined with the claim of the owners of the patent, it was not so joined, and the award to the complainants jointly of profits arising, not from the manufacture and sale of the strips, which did belong to the complainants, but from the installation of the strips, which belonged exclusively to the licensee, was to extend the decree quite beyond the scope of the pleadings. — Nat. Metal *v.* Bredin, 186 Fed. 490; 108 C. C. A. 468.

Brookfield *v.* Novelty, 170 Fed. 960.

PUBLIC USE.

§ 851. Experiment.

He did not sell or lease his completed device; he did not permit others to use it; he did not use it himself. He did, to the knowledge of others, couple it to a telephone line to see whether it would do what he hoped. He lost nothing by such a use. — International *v.* Kellogg, 171 Fed. 651; 96 C. C. A. 395.

Elizabeth *v.* Pavement, 97 U. S. 126.

§ 856. Single Use.

The fact that there was only a single sale of a single machine does not save the patent. One sale before the two years' period will invalidate a patent as well as many. — National *v.* American, 178 Fed. 79; 101 C. C. A. 569.

Smith *v.* Sprague, 123 U. S. 249; Consolidated *v.* Wright, 94 U. S. 92; Covert *v.* Covert, 106 Fed. 183; Henry *v.* Francestown, 2 Fed. 78.

REDUCTION TO PRACTICE.

§ 861. Diligence.

The question is not which of the two, Boothroyd or Tillinghast, ran the faster in giving to the world a material and practical exhibit of his conception. It is simply whether Tillinghast, the first to conceive the improvement, was reasonably diligent in putting into a practical and useful form the idea which he expressed to others in July, 1890. If he was, his patent is valid notwithstanding the later conception of Boothroyd was given to the world before Tillinghast had succeeded in putting into actual use one of his tires. — Continental *v.* Single Tube, 178 Fed. 452; 101 C. C. A. 436.

Reed *v.* Cutter, Fed. Cas. 11,645; Marshall *v.* Mee, Fed. Cas. 9129; White *v.* Allen, Fed. Cas. 17,535; McCormick *v.* Minneapolis, 42 Fed. 152; Christie *v.* Seybold, 55 Fed. 69; Automatic *v.* Pneumatic, 166 Fed. 288.

§ 862. Essential to Patentability.

In contemplation of law an invention does not exist until the inventor's ideas have been reduced to practical form. — American *v.* Leeds, 170 Fed. 327; 95 C. C. A. 511.

Standard *v.* Peters, 77 Fed. 630.

It seems to us that Drawing N shows little more than a tentative illustration of an untried experiment. Certainly if the invention were fully developed at that time and understood by the inventor, he showed no diligence in perfecting and reducing it to practice. We have been unable to discover any satisfactory proof to establish the complainant's contention that the invention was made in July, 1901. He may have had a mental conception thereof, but, so far as the testimony shows, there was no tangible reduction to practice, no practical illustration until the date of the drawings in April,

1903. The patentee may have had a well defined theory of what he could accomplish in 1901; he may have conversed eloquently and persuasively upon the subject, but it is requisite that something more tangible than a mental conception must be proved. — Corrington *v.* Westinghouse, 178 Fed. 711; 103 C. C. A. 479.

Clark *v.* Willimantic, 140 U. S. 481; Machine Co. *v.* Pneumatic, 166 Fed. 288.

REISSUES.

§ 871. Broadening — Not Permissible — In General.

That where a disclaimer has been filed for the purpose of avoiding references and such disclaimer has been acted upon by the public, a reissue to eliminate such disclaimer and correspondingly broaden the patent is void, see — Cassin *v.* Collins, 174 Fed. 341; 98 C. C. A. 213.

That where a domestic and foreign patent are taken in identical form, a reissue of the domestic patent omitting limitations to avoid the prior art common to the original and the foreign patent is unduly broadened, see — Potthoff *v.* Hanson, 174 Fed. 983; 98 C. C. A. 595.

The application to recast the claims now under consideration was made, not for the purpose of narrowing the original patent because the patentee had claimed too much, but rather for the purpose of holding a wider monopoly than could have been built up under the invention described and disclosed in the original patent. Such an attempt must be held futile. — Gen. Electric *v.* Richmond, 178 Fed. 84; 102 C. C. A. 138.

Miller *v.* Brass Co. 104 U. S. 250; and see foot-note 178 Fed. 90.

The following is the law of the Seventh Circuit affecting change of claim in reissues:

1. The Commissioner of patents is without power to reissue a patent to *broaden* the claims when the specification (the description, not the claim) is sufficient.

By settled interpretation the word "specification" in the first sentence of § 4916, R. S., may cover the entire original patent. The inquiry, therefore, is what are the conditions under which a reissue may lawfully be granted in lieu of an original patent unaltered save by the addition of enlarging claims? One condition is that, on surrender of the original patent, a new patent "for the same invention" shall be issued. Other conditions, emphasizing the one just stated, are that "no new matter shall be introduced into the specification;" and, the original and reissue here being for a machine, and no model being filed, that "the drawings shall not be amended." * * * But if enlargement is to come, not from evidence contained in the original patent (or in the proceedings to obtain it) but from what the inventor subsequently says (truthfully or untruthfully) was in his mind prior to filing the original application, a region of danger, of temptation to fraud and deception, would be opened wide, which Congress has commanded should be kept closed. For the reissue must be limited to the same invention that the inoperative patent discloses as the invention. — McDowell *v.* Ideal, 187 Fed. 814; 109 C. C. A. 574.

Seymour *v.* Osborne, 11 Wall. 516; Gill *v.* Wells, 22 Wall. 1; Russell *v.* Dodge, 93 U. S. 460; Powder Co *v.* Powder Works, 98 U. S. 126; Parker *v.* Yale, 123 U. S. 87; Electric *v.* Boston, 139 U. S. 481; Freeman *v.* Asmus, 145 U. S. 226; Huber *v.* Nelson, 148 U. S. 270.

Authority to grant reissues is now derived exclusively from the statute. R. S. § 4916. And the Commissioner goes beyond his jurisdiction if he grants

a reissue for an invention (though conceded to be the invention of the applicant) which is not the same invention that was disclosed and described as the applicant's invention (not merely that lurked in the drawings or description of the machine as a machine) in the original patent, which, by reason of inadvertence, accident, or mistake, is inoperative to secure the monopoly it shows on its face was intended to be secured. — Moneyweight *v.* Toledo, 187 Fed. 826; 109 C. C. A. 586.

McDowell *v.* Ideal, *supra.*

2. That when reissue is applied for promptly and there are no intervening rights, where the combination sought to be covered by the reissue has not been abandoned by previous rejection and amendment, where the specification and drawings disclose the combination, and where the failure to claim arose through inadvertence, accident, or mistake — in such case a reissue with a *specific claim* covering such unclaimed combination is valid.

The original patent and the file wrapper and contents were on their face sufficient proof that, if a claim adequate to cover the improved scale was ever drawn, it had been omitted, by accident in copying or otherwise, from presentation to the Patent Office. The original specification alone on its face was sufficient proof that, if a claim adequate to cover the improved scale was never drawn, the failure came from the lack of attentive comparison of the submitted claims with the invention particularly pointed out in the specification. This was inadvertence, "lack of heedfulness or attentiveness," irrespective of the real competence or incompetence of the solicitors. Was this inadvertence excusable? After the solicitors delivered the patent to their client, they could not be expected to give the matter any further attention. De Vilbiss (the patentee) was a layman and may be supposed to have been inexpert in construing patents. He may have rested on the assumption that his solicitors had procured a fully operative patent. How far such a reliance may go generally is not necessary to determine in this instance. Here the situation is the same as if De Vilbiss had applied for the reissue the very hour the patent issued, for no intervening rights of any sort accrued. Respecting the other reissue claims, it is sufficient to say that, while the original specification was notice of what the invention as an entirety was, the allowed claims were notice that the invention also covered combinations of less than all the parts; that none of the reissue claims corresponds with the subject-matter of any abandoned claim; and that no reissue claim is broader than the allowed claims. — Moneyweight *v.* Toledo, 187 Fed. 826; 109 C. C. A. 586.

Note: These two cases are in accord with previous tendencies in the Seventh Circuit, and may be regarded as extreme interpretations of the Supreme Court rules; but whether within these rules remains to be determined by the Supreme Court. The writer goes no farther than to say that it would seem that we have, with this line of decision, another situation of mixed and variable law, varying with no other logic than the arbitrary lines between circuit and circuit established by statute.

The inference seems plain that it was only when he found that chains with pintles composed of more than two parts would operate successfully that he sought by a reissue to compel them to pay tribute. The reissue statute was not intended to produce a result so inequitable. — Morse Chain *v.* Link Belt, 189 Fed. 584; 110 C. C. A. 564.

§ 873. Broadening — When Permissible.

A patentee by a reissue is not permitted to extend the invention which he described and intended to be protected in his original patent. In the original

patent in this case the features of the appellee's invention are clearly described. One of them is the use of the cardboard backings. The other is the arrangement of the record sheets and the carbon sheets. Both are covered by a single claim, but the patent did not cover the use of either when not combined with the other. Therein was the defect. — Kitchen *v.* Levison, 188 Fed. 658; 110 C. C. A. 424.

Note: From a reading of this case it would seem that here is direct conflict with the present rule of the Seventh Circuit. Certainly the claim is broadened in this case.

§ 880. Decisions of Commissioner.

Findings by the Commissioner that a legal condition exists and is available are conclusive in so far as they depend upon credibility and weight of evidence; but, in so far as they depend upon the legal interpretation and effect of admittedly genuine documents or other undisputed evidence, they are reviewable in court. — Gen. Electric *v.* Richmond, 178 Fed. 84; 102 C. C. A. 138.

From the reissuance of the patent it is to be presumed that the law was complied with, and the proceedings can only be impeached for fraud. — Kitchen *v.* Levison, 188 Fed. 658; 110 C. C. A. 424.

Seymour *v.* Osbourne, 11 Wall. 516.

§ 881. Different Invention.

Patent No. 607,304 was a mechanical invention, the process one of art, and complainant could not, under an application for a reissue, have included the process claim, as the machine and the process are separate inventions. — Model Bottling Mach. *v.* Anheuser-Busch, 190 Fed. 573; 111 C. C. A. 389.

Powder *v.* Powder, 98 U. S. 126; Eachus *v.* Broomall, 115 U. S. 429.

§ 883. General Rules.

That the fact that the claims in the original patent were functional and did not cover patentable subject-matter is not ground within the statute for obtaining a reissue, see — Penn *v.* Conroy, 185 Fed. 511; 107 C. C. A. 611.

§ 884. Grounds for.

Without the existence of one or the other of two conditions precedent, the Commissioner of Patents is not authorized to grant a reissue. Either the original specification must be defective or insufficient, or the original claims must embrace more than the patentee had a right to claim as new. Neither condition is available unless the error arose from inadvertence, accident, or mistake, and without any fraudulent or deceptive intention. — Gen. Electric *v.* Richmond, 178 Fed. 84; 102 C. C. A. 138.

Note: This statement is in accord with previous expressions of Judge Baker, but it is believed that it is too broad. A literal construction of the statement would bar, absolutely, every reissue containing a broader claim than the original, regardless of promptitude or absence of intervening rights.

§ 885. Inadvertence, Accident, or Mistake.

The inadvertence of his solicitors was the applicant's inadvertence, and might therefore be availed of by him, if it existed. On the other hand, his solicitors' erroneous judgment in submitting to the rejections is his erroneous judgment, and he would be estopped from presenting any of the rejected

claims in an application for a reissue. — Moneyweight *v.* Toledo, 187 Fed. 826; 109 C. C. A. 586.

Yale *v.* Berkshire, 135 U. S. 342; Corbin *v.* Eagle, 150 U. S. 38.

§ 887. Surrender — Effect of.

The bill was based upon the reissue. And inasmuch as there existed none of the conditions precedent to the right of the Commissioner to grant a reissue, the grant is utterly void. — Gen. Electric *v.* Richmond, 178 Fed. 84; 102 C. C. A. 138.

General *v.* Blackmore, 156 Fed. 968.

RES JUDICATA.

§ 893. Conclusiveness.

Our prior ruling was made upon an appeal from an interlocutory decree granting an injunction, but that did not render it less obligatory upon the Circuit Court, and does not except it from the settled rule that propositions once decided by an appellate court are not open to consideration in that court upon a subsequent appeal or writ of error. — Brown *v.* Lanyon, 179 Fed. 309; 102 C. C. A. 497.

Smith *v.* Vulcan, 165 U. S. 518; *In re* Potts, 166 U. S. 263; United States *v.* California, 148 U. S. 31; *In re* Sanford, 160 U. S. 247; Illinois *v.* Illinois Central, 184 U. S. 77; Bissell *v.* Goshen, 72 Fed. 545; Burns *v.* Cooper, 153 Fed. 148; Crotty *v.* Chicago, 169 Fed. 593; Messinger *v.* Anderson, 171 Fed. 785.

That where the complainant declared on certain claims which were held void, such decree is conclusive as to the entire patent in favor of the defendant and all in privity to the suit, see — Marshall *v.* Bryant, 185 Fed. 499; 107 C. C. A. 599.

ROYALTIES.

§ 897. General Statement and the Decisions.

The contract provided "That the Goodyear Co. * * * doth agree to pay to the said Dancel in each year while the letters patent remain in force as a valid patent the sum of $5000 as an annuity, such annuity to be payable monthly." Dancel died before the expiration of the patent. *Held:* If it had been the intention of the parties that the payments should cease with the life of Dancel, that intention could have been easily expressed. We think such was not the intention of the parties. — Goodyear *v.* Dancel, 119 Fed. 692; 56 C. C. A. 300.

SALE OF PATENTED ARTICLE.

§ 899. General Statement and Holdings.

By a sale of a patented article subject to no conditions the purchaser undeniably acquires the right to use the article for all the purposes of the patent so long as it endures. He may use it where, when and how he pleases, and may dispose of the same unlimited right to another. * * * An absolute and unconditional sale operates to pass the patented thing outside the boundaries of the patent, because such a sale implies that the patentee consents that the purchaser may use the machine so long as its identity is preserved. * * * The argument for the defendants ignores the distinction between the property right in the materials composing a patented machine, and the right to use for the purpose and in the manner pointed out by the patent. The latter may be and often is the greater element of value, and the buyer may desire it only to apply to some or all of the uses included in the invention. But the two things are separable rights. If sold unreservedly the right to

the entire use of the invention passes, because that is the implied intent; but this right to use is nothing more nor less than an unrestricted license presumed from an unconditional sale. A license is not an assignment of any interest in the patent. It is a mere permission granted by the patentee. It may be a license to make, sell and use, or it may be limited to any one of these separable rights. If it be a license to use, it operates only as a right to use without being liable as an infringer. If a licensee be sued, he can escape liability to the patentee for the use of his invention by showing that the use is within his license. But if his use be one prohibited by the license, the latter is of no avail as a defense. As a license passes no interest in the monopoly, it has been described as a mere waiver of the right to sue by the patentee. We repeat. The property right to a patented machine may pass to a purchaser with no right to use, or with only the right to use in a specified way, or at a specified place, or for a specified purpose. The unlimited right of exclusive use which is possessed by and guaranteed to the patentee will be granted if the sale be unconditional. But if the right of use be confined by specific restriction, the use not permitted is necessarily reserved to the patentee. If that reserved control of use of the machine be violated, the patent is thereby invaded. This right to sever ownership and use is deducible from the nature of a patent monopoly and is recognized in the cases. — Henry *v.* Dick, 224 U. S. 1; 56 L. Ed. 645; 32 S. Ct. 364.

Note: This is the final authority on this question. Justice Lurton reviews all the leading cases, and in a foot-note gives a list of previous holdings. Reference thereto is sufficient.

However men may differ -- as do the dissenting minority by the opinion of Chief Justice White — upon the moral and economic aspect of this particular case, there is little doubt that the opinion of the majority is enforced by prior decisions, both American and English; and since motion for rehearing — in which the Attorney General joined — has been denied, the law is fixed.

If the manufacture of a machine upon an order for its construction, followed by its delivery and acceptance, constitutes a " sale " within the meaning of the patent statute, a sale is shown here. The transaction was completed by the delivery and acceptance of the machine. The title then passed. — National *v.* American, 178 Fed. 79; 101 C. C. A. 569.

Campbell *v.* Mayor, 36 Fed. 263; Eastman *v.* New York, 134 Fed. 844.

SPECIFICATION.

§ 901. General Statement.

By settled interpretation the word " specification " in the first sentence of § 4916, R. S., may cover the entire original patent. — McDowell *v.* Ideal, 187 Fed. 814; 109 C. C. A. 574.

§ 905. Sufficiency — Accuracy.

An objection is that the specification is so vague and indefinite that no one could learn from it how to practise the alleged invention. The preferred proportions are stated, and if that is not a sufficient direction to those " skilled in the art or science to which the invention appertains, or with which it is most nearly connected," the deficiency will have to be established by evidence. — Westrumite *v.* Commissioners, 174 Fed. 144; 98 C. C. A. 178.

A patent is granted for solving a problem, not for stating one. Its description must explain the invention itself, the manner of making it, and the mode of putting it in practice. In the absence of knowledge upon these points, the invention is not available to the public without further experi-

ments and further exercise of inventive skill. — Columbia *v.* Duerr, 184 Fed. 893; 107 C. C. A. 215.

§ 907. Sufficiency — Amb.guity.

The teaching of the specification and the disclosure by the patentee must be such that, after the patent has expired, a user thereof shall not be left to the blind groping of experimental work, but by the plain teaching of the specification be enabled to use the process with certainty. — Krupp *v.* Midvale, 191 Fed. 588; 112 C. C. A. 194.

§ 908. Su ̈ ciency — Distinguishing New from Old.

The specification does not indicate how much is new, or what is the improvement on the old art. The claims would indicate that the entire device was the product of Jacobs. It is fairly obnoxious to the criticisms expressed of a similar obscure and misleading patent in Evans *v.* Eaton, 7 Wheat. 356. — Jacobs *v.* Almond, 177 Fed. 935; 101 C. C. A. 215.

§ 915. Sufficiency — Rules for Determining.

To allow this negligible, unnoted, and indeed unlettered extreme section of the drawing to be made, as it must be, the foundation upon which this new claim rests, would be to base the monopoly on possible, instead of certain, disclosure. — Hestonville *v.* McDuffee, 185 Fed. 798; 109 C. C. A. 606.

§ 916. Sufficiency — Scientific Knowledge.

He must, indeed, make such disclosure and description of his invention that it may be put into practice. In this he must be clear. He must not put forth a puzzle for invention or experiment to solve, but the description is sufficient if those skilled in the art can understand it. This satisfies the law, which only requires as a condition of its protection that the world be given something new and that the world be taught how to use it. It is no concern of the world whether the principle upon which the new construction acts be obvious or obscure, so that it inheres in the new construction. — Diamond Rubber *v.* Consolidated, 220 U. S. 428; 55 L. Ed. 527; 31 S. Ct. 444.

STATE STATUTES AND REGULATIONS AFFECTING PATENT RIGHTS.

§ 920. General Statement and Decisions.

That the Arkansas statute (Kirby's Dig. §§ 513-6) which makes void a promissory note given in payment for a patented article, unless it shows upon its face that it was so given is void, is constitutional, see — Ozan *v.* Union County, 207 U. S. 251; 52 L. Ed. 195; 28 S. Ct. 89.

See — Union County *v.* Ozan, 179 Fed. 710.

That the statute of Arkansas (Kirby's Dig. §§ 513-6) which makes a note given in payment of a patented article void unless stated on its face to be so given, which statute was held constitutional in 207 U. S. 251, applies to notes given in usual course of business, notwithstanding the provisions of § 516, see — Union County *v.* Ozan, 179 Fed. 710; 103 C. C. A. 584.

Note: This is a most technical construction of the statute. Special attention is called to the dissenting opinion of Judge Hook, which I regard as a most masterful and sound statement.

THREATS.

§ 924. General Statement.

That the owner of a patent may notify infringers of his claims, and warn them that, unless they desist, suits will be brought to protect him in his legal rights, is sustained by numerous decisions. The only limitation on the right to issue such warnings is the requirement of good faith. — Virtue *v.* Creamery, 179 Fed. 115; 102 C. C. A. 413.

Kelley *v.* Ypsilanti, 44 Fed. 19; Computing *v.* National, 79 Fed. 962; Farquhar *v.* National, 102 Fed. 714; Warren *v.* Landauer, 151 Fed. 130; Mitchell *v.* International, 169 Fed. 145; 30 Cyc. 1054.

TITLE.

§ 927. Miscellaneous Rules.

That where, through oversight, complainant fails to prove his title, and the omission is not discovered until the case is before the appellate court, the case may be remanded for the taking of further proofs on condition of the payment of costs of both courts by the complainant, see — St. Claire *v.* Union Jack, 184 Fed. 989; 106 C. C. A. 667.

WORDS AND PHRASES.

§ 936. "Means."

The word "means" appearing in claim 4 alleged to be infringed must be construed as referring to the condenser mentioned in the specifications. — Kellogg *v.* Dean, 182 Fed. 991; 105 C. C. A. 545.

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