TEXT-BOOK

OF

THE PATENT LAWS

OF

THE UNITED STATES OF AMERICA.

BY

ALBERT H. WALKER,

OF THE HARTFORD BAR.

THIRD EDITION.

NEW YORK:

BAKER, VOORHIS AND COMPANY.

1895.

W178K
2nd 3

COPYRIGHT, 1888, 1889 and 1895.

BY

ALBERT H. WALKER.

Rec. Jan. 22, 1896.

PREFACE TO THE THIRD EDITION.

The Supreme Court of the United States has lately decided the last of the patent cases, which were taken to that tribunal before the judiciary act of 1891 put a practical period to nearly the whole of its patent law jurisdiction. At this distinguished stage of legal evolution, the existing patent statutes, together with the thousands of patent decisions which have been made by the Supreme Court, and by the lower Federal courts under its guidance, contain materials for a nearly complete and a beautifully symmetrical science of the subject. To the study of the laws thus embodied and developed, I have devoted enthusiastic efforts for twenty years; and during the last eighteen of those years, I have practiced in these laws, in fifteen of the United States. This edition of my book is a result of that experience, and of my careful revision and enlargement of the second edition, into accurate conformity with the present law. The differences between this edition and the second, are far more numerous and important than those between the second and the first. No book so old as the second edition, nor even one a year younger, can be a reliable guide through the patent laws of to-day; but it is not probable that any development of those laws during any six years of the future, until Congress enacts a new system of patent statutes, will be nearly so extensive or important,

as that of the six years which have passed since 1889. Except in the event of such an enactment, a necessity for another edition of this book, cannot now be foreseen; and therefore I present this edition to the bench and to the bar, as probably my final contribution to the literature of the patent law.

A. H. W.

HARTFORD, CONNECTICUT,
November 16, 1895.

PREFACE TO THE SECOND EDITION.

THE patent laws of the United States, as those laws exist at this beginning of the second century of the national government, are stated and explained in this edition of this book. The differences between it and the first edition, consist in omitting eleven whole sections which have become obsolete since 1883, together with parts of many other sections for the same reason; and in inserting three new sections, and many new points in many other sections, which have been enacted in the statutes or developed in the decisions since that year; and in so changing or qualifying the statements of law in many other places as to make them conform to those relevant and often radical decisions of the courts which have been rendered since the first edition of the book was published. The work of making these changes began as soon after the publication of the first edition as new decisions were published, and has continued from that time to this, and has involved my careful study and analysis of the more than six hundred new decisions which are incorporated with the more than twelve hundred old ones in the table of cited cases. The generous judgment which has been passed upon the first edition of the work, has been made known through numerous citations of the book in the decisions of the courts, and through numerous letters received by me from my professional

brethren. Sincere thanks for the exceeding generosity of that judgment are now returned; and I am thereby encouraged to propose a third edition of the book in 1895, and a fourth edition at the beginning of the twentieth century.

A. H. W.

HARTFORD, CONNECTICUT,
April 30, 1889.

PREFACE TO THE FIRST EDITION.

THE Constitution and the statutes of the United States, together with twelve hundred and forty-six Federal and State judicial decisions, are the principal sources from which the materials for this text-book were drawn. The most extensive treatise heretofore published on the same subject, was published in 1873; but it cited only two hundred and eighty American cases, together with one hundred and sixty-one English adjudications. The inadequacy, to the needs of the profession, of a treatise so limited in scope, was clearly impressed upon me when I entered, in 1877, upon a somewhat extended practice in patent litigation. During the next four years, I was called upon to argue several patent cases in the Supreme Court, and many others in many of the Circuit Courts of the United States; and in preparing those arguments, I was forced to make many laborious researches, from which a complete text-book would have largely relieved me. Under these circumstances, I resolved, early in 1881, to undertake the production of a treatise so much needed by the profession. I began writing on the first day of May of that year, and soon became so much interested in the work, that I largely suspended my active practice of the law, in order to give the book the freshest of my efforts, and thus the greatest degree of merit consistent with my abilities. The resulting

treatise covers the entire field of the patent laws of the United States, as those laws were enacted in the statutes and developed in the decisions, from the foundation of the national government in 1789, down to the first day of September, 1883. How accurately and well it covers that field, is a question which belongs to the bar and to the bench; and to the generous judgment of the bench and of the bar, I commit the result of my long and interesting labor.

A. H. W.

HARTFORD, CONNECTICUT,
September 26, 1883.

TABLE OF CONTENTS

CHAPTER I.

THE SUBJECTS OF PATENTS.....Pages 1-17

1. Constitutional and statutory foundation of the patent laws.
2. Patent law meaning of the word "discovery."
3. Patent law meaning of the word "art."

3*a*. Mechanical processes.

7. Difference between a "process" and a "principle" inquired into.
8. Illustrated by the case of McClurg *v.* Kingsland.
9. Illustrated by the case of O'Reilly *v.* Morse.
10. Illustrated by the case of Mowry *v.* Whitney.
11. Illustrated by the case of Tilghman *v.* Proctor.

11*a*. Illustrated by the Telephone Cases.

12. Illustrated by the five cases when compared.
13. Illustrated by the five cases when contrasted.
14. Deduced from the five cases as compared and contrasted.
15. Illustrated by the eighth claim of Morse.
16. Machines, and improvements of machines.
17. Manufactures.
18. Compositions of matter.
19. Distinction between machines, manufactures, and compositions of matter.
20. Designs.
21. On whose invention designs are patentable.
22. Utility and beauty of designs.

CHAPTER II.

INVENTION.....Pages 18-51

23. Invention necessary to patentability.
24. Many negative rules, but no affirmative rule, for determining the presence or absence of invention.
25. Mere mechanical skill is not invention.

26. Circumstances indicating difference between invention and mechanical skill.
27. Excellence of workmanship is not invention.
28. Substitution of materials is not invention.
29. Exception to the last rule.
30. Enlargement is not invention.
31. Change of degree is not invention.
31*a*. Exception to the last rule.
32. Aggregation is not invention.
33. Simultaneousness of action is not necessary to invention.
34. Duplication is not invention.
35. Omission is not generally invention.
36. Substitution of equivalents is not invention.
37. New combination without new mode of operation is not invention.
38. Using old thing for new purpose is not invention.
39. Cases to which the last rule does not apply.
40. Doubts relevant to invention, when otherwise insoluble, are solved by ascertaining comparative utility.
41. Form.
41*a*. Proportion.
42. Questions of invention are questions of fact.
43. Questions of invention sometimes investigated in the light of the state of the art.
44. Joint and sole inventions.
45. How made.
46. How distinguished.
47. Suggestions to an inventor.
48. Information sought by an inventor.
49. Mechanical skill not necessary to invention.
50. Sole patent to one joint inventor is void.
51. Joint patent to sole inventor and another is void.

CHAPTER III.

NOVELTY.....Pages 52–70

52. Novelty necessary to patentability.
53. Novelty defined.
54. Not negatived by knowledge or use in a foreign country.
55. Not negatived by private patent granted in a foreign country.
56. Prior printed publications.
57. Fulness of prior patents and printed publications.
58. Novelty not negatived by any abandoned application.
59. Qualification of the last rule.
60. Successful prior applications.
61. Novelty not negatived by any unpublished drawing, or prior model.
62. Novelty not negatived by anything substantially different.
63. Abandoned experiments.
64. Novelty in cases of designs.
65. Novelty not negatived by anything apparently similar or chemically identical, but practically useless.
66. Novelty not negatived by antiquity of parts.

67. Novelty not negatived by prior accidental and not understood production.
68. Novelty not negatived by anything neither designed, nor apparently adapted, nor actually used for the same purpose as the invention.
69. Comparative dates.
70. Dates of patented inventions.
71. Novelty is negatived by one instance of prior knowledge and use in this country.
72. Novelty is negatived by prior making without using.
73. Inventor's lack of knowledge of anticipating matter is immaterial.
74. Old thing derived from new source.
75. Questions of novelty are questions of fact.
76. Burden of proof relevant to novelty.

CHAPTER IV.

UTILITY.. ... .Pages 71-76

77. Utility necessary to patentability.
78. Utility is negatived by lack of function.
79. Perfection not necessary to utility.
80. Beauty has utility,
81. Utility is negatived where function is evil.
82. Functions which sometimes work evil and sometimes work good.
83. Functions thought by some to be good and by others to be bad.
84. Good functions in wrong places.
85. Doubts relative to utility to be solved against infringers.

CHAPTER V.

ABANDONMENT..... .....Pages 77-92

86. The several sorts of abandonment.
87. Abandonment of inventions.
88. Actual abandonment of inventions.
89. Actual abandonment by express declaration
90. Actual abandonment by formal disclaimer.
91. Actual abandonment resulting from laches before application.
92. Actual abandonment resulting from laches after application and before issue of letters patent.
93. Constructive abandonment before application.
94. "Public use," defined and delineated.
95. Experimental use.
96. "On sale," delineated and defined.
97. Sale of inchoate right to a patent.

98. Degree of identity necessarily involved between the thing constructively abandoned and the thing patented.
99. Making, works no constructive abandonment.
100. Public knowledge, works no constructive abandonment.
101. Public use or sale in a foreign country.
103. Constructive abandonment after application and before issue of letters patent.
104. Rules of constructive abandonment are inflexible.
105. Surrender of letters patent.
106. Abandonment of invention after letters patent, unknown to the law.
107. Acquiescence in unlicensed use of patented invention.
108. Questions of abandonment are questions of fact.

CHAPTER VI.

APPLICATIONS.....Pages 93-127

109. Constituents of applications for patents.
110. The petition.
111. Constituents of specifications.
112. The preamble.
113. The general statement of the invention.
114. The description of the drawings.
115. The detailed description of the invention.
116. The claim or claims.
117. Claims in machine patents.
117*a*. Methods of specifying parts in claims.
118. Claims in patents for manufactures.
119. Claims in patents for compositions of matters.
120. Claims in process patents.
120*a*. Claims in design patents.
121. The signatures.
122. The form of the oath.
123. The constituents of the oath.
124. Affirmations.
125. The Patent Office fees.
126. Drawings.
127. Models.
128. Specimens of compositions of matter.
129. Dates of applications.
130. The examination by the Patent Office.
131. Notification of rejection.
132. Appeals.
133. Appeals to the Court of Appeals of the District of Columbia.
134. Bills in equity to compel the Commissioner to grant patents.
135. Amendment of applications.
136. The foundation of the right of amendment.
137. When an applicant may amend.
138. How an applicant may amend.
139. When an applicant must amend.
140. Interferences.
141. Number of interferences.
142. Decision on interference is not conclusive.
143. Caveats.
144. Appeals from decrees on bills in equity.

145. Abandonment of applications.
146. Constructive abandonment of applications.
147. Constructive abandonment of application working constructive abandonment of invention.
148. Effect of Commissioner's decision on questions relevant to applications.

CHAPTER VII.

LETTERS PATENT..... .....Pages 128-174

149. No exclusive right to inventions at common law.
150. Constitutional exclusive right to inventions in the United States.
151. Patents are property.
152. Dignity of property in patents.
153. Patents are not odious monopolies.
154. Patent rights are absolute, not qualified.
155. Patent rights are beyond State interference.
156. Patent rights are not subject to common law executions, but may be subjected to creditors' bills in equity.
157. Patent rights are as exclusive of the government, as they are of any citizen.
158. Patents do not cover specimens purchased of the inventor, or made with his knowledge and consent, before application therefor.
159. The foregoing rule has no application to patents for processes.
160. Territorial scope of United States patents.
161. Operation of United States patents on the decks of ships.
162. Duration of patents.
163. Duration of United States patents for inventions first patented in a foreign country, according to the statute of 1870.
164. Duration of United States patents for inventions first patented in a foreign country, according to the statute of 1839.
165. Duration of United States patents for inventions first patented in a foreign country, according to the statute of 1861.
170. Beginning of the terms of United States patents.
171. To whom letters patent are granted by the government.
172. Letters patent as documents.
173. The specification.
174. The description.
175. The description.
176. The claim or claims.
177. The claim or claims.
178. Particularity in descriptions and claims, are conditions precedent to validity.
179. Questions of sufficiency of particularly of descriptions and claims, are questions of fact, and not of law.
180. Plurality of inventions in a single letters patent.
180*a*. Plurality of letters patent for different parts or combinations in a machine or apparatus.
181. Construction of letters patent.

182. Claims to be construed in the light of descriptions.
182*a*. Construction of claims which employ reference letters or numerals.
183. Construction of functional claims.
184. Claims construed in the light of the state of the art.
185. Proper liberality of construction.
186. Proper strictness of construction.
187. Construction in the light of contemporaneous understanding of the inventor.
187*a*. Patent Office limitations.
188. Construction in the light of contemporaneous statutes.
189. Questions of construction are questions of law, and not of fact.
190. Letters patent presumed to be for same invention as the application therefor.
191. Letters patent are constructive notice of their contents to every person.

CHAPTER VIII.

DISCLAIMERS.....Pages 175–188

192. Statutory authorization of disclaimers.
193. Statutory prescriptions, relevant to disclaimers.
194. Errors which justify disclaimers.
195. Mistakes of fact, relevant to novelty.
196. Mistakes of law, relevant to invention.
197. Claims void for want of utility.
198. Combination claims.
199. Compound claims.
200. Immaterial claims.
201. Reissue claims.
202. Fraudulent or deceptive intention.
203. Effect of unreasonable delay to file a disclaimer.
204. Beginning of unreasonable delay to file a disclaimer.
205. Costs, where a necessary disclaimer has not been filed.
206. Extent of disclaimant's interest.
207. Construction of letters patent after a disclaimer.
208. Disclaimers filed pending litigation.
209. Disclaimers demanded by judicial decisions.

CHAPTER IX.

REISSUES.....Pages 189–215

210. Beginning of the history of reissues.
211. First statute providing for reissues, 1832.
212. Reissues under the Patent Act of 1836.
213. Amendments made in the reissue law by the Patent Act of 1837.

214. Reissues under the Patent Act of 1870.
215. Reissues under the Revised Statutes.
216. Subjects of reissues.
216*a*. Narrowed reissues.
217. The words "specification," "defective," and "insufficient" defined.
218. Faults which justify reissues.
218*a*. Reissues correcting patents without changing their scopes.
219. Broadened reissues.
220. Inadvertence, accident, and mistake.
221. Question of the conclusiveness of the Commissioner's decision relevant to existence of reissuable faults, and relevant to the existence of inadvertence, accident, or mistake.
226. The doctrine of the case of Miller *v.* Brass Co.
227. The length of the delay contemplated by the doctrine of Miller *v.* Brass Co.
229. The statute relevant to two years' prior use or sale has no application to reissues as such.
230. Surrender of patent.
231. Effect of surrender with, and also without, reissue.
232. Reissues of reissued patents and of extended patents, but not of expired patents, are proper.
233. Same invention.
239. "Where there is neither model nor drawing."
240. New matter.
242. Reissues must be for same invention as prior reissues, and also for same invention as originals.
243. Legal presumption of sameness of invention.
244. Omission, as it affects sameness of invention.
245. Reissues for sub-combinations.
246. Reissues for single devices.
247. Reissues as affected by substitution of equivalents.
248. Reissues entitled to a liberal construction.
249. Reissued patents may be valid as to some claims while void as to others.
250. Executors, administrators, and assigns may procure reissues.
251. One of several executors may procure a reissue.
252. Rights of assignees in reissues.
253. The rights of grantees in reissues.
254. The legal effect of reissued patents.

CHAPTER X.

EXTENSIONS.....Pages 216–227

255. Constitutional foundation of extensions.
256. Congressional extensions.
257. Mode of Congressional extension.
25 Effect of Congressional extensions.
259. Patent Office extensions.
260. Statutory foundation of Patent Office extensions.
261. Who might apply for Patent Office extensions.
262. Points of time whereon Patent Office extensions were grantable.

268. Patent Office extension might be granted to an inventor patentee, even if he had parted with all interest in the first term of his patent.
264. Patent Office extensions grantable only where inventors would possess, or at least participate in, the benefit thereof.
265. Patent Office extensions, how effectuated.
266. Force of the Commissioner's decision in extension cases.
267. Facts which justify extensions.
268. Proceedings preliminary to extensions.
269. Remedy for fraud in procuring or in granting extensions.
270. "The benefit of the extension of a patent shall extend to the assignees and grantees of the right to use the thing patented, to the extent of their interest therein."
271. Adjudged meaning of the statute quoted in the last section.

CHAPTER XI.

TITLE.....Pages 228-249

272. The nature of titles, and the methods of their acquisition.
273. Title by occupancy.
274. Title by assignment.
275. Characteristics, authentication, and effect of assignments.
276. Dormant assignments.
277. Assignments of rights of action for past infringements.
278. Construction of assignments.
279. Reformation of assignments.
280. Assignments of extensions.
281. Recording and notice.
282. Warranty of title.
283. No implied warranty of validity.
284. Express warranties of validity.
285. Equitable titles; how created.
286. Equitable titles; how treated.
287. Title by grant.
288. Extra-territorial rights conveyed by grants.
288*a*. Mortgages of patents.
289. Title by creditor's bill.
290. Title by bankruptcy.
291. Title by death.
292. Tenancy in common. Joint-tenancy.
294. Rights of tenants in common as against each other.
295. Partition.

CHAPTER XII.

LICENSES.....Pages 250-266

296. Licenses defined and described.
297. Express licenses to make, with implied leave to use, or implied leave to sell the things made.
298. Express licenses to use, with implied leave to make for use.
299. Express licenses to sell, with implied leave to the vendees to use and to sell the things they purchase.
300. Licenses to make and use, without implied leave to sell.

301. Licenses to make and sell, or to use and sell, with implied leave to the vendees to use and to sell the articles they buy.
302. Express licenses so restricted as not to convey implied rights.
303. Written and oral licenses.
304. Recording and notice.
305. Licenses given by one of several owners in common, and licenses given to one of several joint users.
306. Construction of licenses.
307. Warranty and eviction.
308. Clauses of forfeiture.
309. Effects of forfeiture.
310. Assignability of licenses.
311. Purely implied licenses.
312. Implied licenses from conduct, and first by acquiescence.
313. Implied license from conduct by estoppel.
314. Implied license from actual recovery of a full license fee.

CHAPTER XIII.

INTERFERING PATENTS.....Pages 267-273

315. Causes and characteristics of interfering patents.
316. Actions in equity between interfering patents.
317. The proper issues in such actions.
318. The force of the decision of the Commissioner of Patents on a prior interference in the Patent Office.
319. Injunctions in interference actions.
320. The proper decrees in such actions.

CHAPTER XIV.

REPEAL OF PATENTS.....Pages 274-275

321. Patents obtained by fraud, or granted by mistake.
322. Jurisdiction of equity to repeal patents so obtained or so granted.
323. Practice in such cases.

CHAPTER XV.

QUI TAM ACTIONS.....Pages 276-282

324. *Qui tam* actions, defined and described as they exist in the patent laws.
325. The wrongs which are the foundations of such actions.
326. The first two of those three classes of wrongs.
327. The third of those three classes of wrongs.
328. Wrongs of either class are completed when the articles are illegally marked, without any subsequent using or selling.

329. The amount of the recovera-
ble penalty.
330. The parties in *qui tam* patent
cases.
331. The forum for *qui tam* patent
actions.
332. The form of the suit, and the
requisites of a declaration, in
such an action.
333. Injunctions to restrain the
commission of wrongs of
either of the first two classes.
334. Appeals in *qui tam* patent
cases.

CHAPTER XVI.

INFRINGEMENT ....Pages 288-311

335. Infringement of process pat-
ents, illustrated by the case of
Tilghman *v.* Proctor.
336. Illustrated by the case of
Mowry *v.* Whitney.
337. Illustrated by the case of
Cochrane *v.* Deener.
338. Equivalents in processes and
additions thereto.
339. Infringement of patents for
machines or manufactures.
340. Comparative results.
341. The test of comparative modes
of operation.
342. Comparative modes of opera-
tion as illustrated by the case
of the Cawc patent.
343. As illustrated by the Driven-
Well cases.
344. As illustrated by Blanchard's
patent for turning irregular
forms
345. As illustrated by Hayden's
Brass-Kettle machine.
346. As illustrated by the case of
Burr *v.* Duryee.
346*a*. As illustrated by The Electric
Signal case
347. Addition.
348. Transposition of parts.
349. Omission.
350. Substitution of equivalents.
352. The test of sameness of func-
tion, of equivalents.
353. The test of substantial same-
ness of way of performance.
354. Question of the necessity of
age in equivalents.
359. Primary and secondary inven-
tions in respect of the doc-
trine of equivalents
362. Review of the matters consid-
ered in Section 359.
363. Changes of form considered
in respect of questions of
infringement.
364. Subject of the last section
illustrated by the case of
Strobridge *v.* Lindsay.
365. Illustrated by the case of Ives
v. Hamilton.
366. Illustrated by the case of
Morey *v.* Lockwood.
367. Illustrated by the case of the
American Diamond Rock Bor-
ing Co. *v.* The Sullivan Ma-
chine Co.
368. Illustrated by the case of
Elizabeth *v.* Pavement Co.
369. Infringement of patents for
compositions of matter.
370. Substitution of ingredients.
371. Substitution of ingredients as
illustrated by the Giant-Pow-
der cases.

372. Disclaimers of particular equivalents.
373. Changes of the proportion in compositions of matter.
374. The various classes of compositions of matter.
375. Infringements of patents for designs.
376. Comparative utility not a criterion of infringement.
377. Knowledge of a patent not a necessary element in its infringement.

CHAPTER XVII.

COURTS, PARTIES AND CAUSES.....Pages 312-340

378. Introductory explanation.
379. Jurisdiction of United States courts of first resort in patent cases.
380. Non-jurisdiction of State courts in patent cases.
388. Jurisdiction of State courts over controversies growing out of contracts relevant to patents.
389. Jurisdiction of individual United States courts of first resort in patent cases.
390. Qualifications of the rule of the last section.
391. Jurisdiction of the Court of Claims.
392. Absence of jurisdiction of the Court of Claims over causes of action based on unauthorized making, using, or selling by the United States Government of specimens of a patented process or thing.
393. Presence of jurisdiction of United States Circuit Courts over actions brought against agents of the United States Government, and based on unauthorized making, using, or selling, by those agents on behalf of the Government, of specimens of a patented process or thing.
394. Who may be a plaintiff or complainant in a patent action.
395. Who may be plaintiff or complainant in an action based on an assigned accrued right of action for infringement.
396. Executors and administrators as plaintiffs and complainants.
397. Assignees of executors or administrators as plaintiffs and complainants.
398. Attorneys in fact cannot be nominal plaintiffs or complainants.
399. Owners in common as joint plaintiffs or complainants.
400. Licensees cannot be nominal plaintiffs, nor sole nominal complainants.
401. Who may be made a defendant in a patent action.
402. Minors, married women, and lunatics as defendants
403. Agents, salesmen, and employees as defendants.
404. Employers as defendants.
405. Persons as defendants who have caused others to infringe.
406. Joint infringers as defendants.
407. What facts constitute joint infringement.
408. Partners as defendants.
409. Private corporations as defendants.

410. Officers, directors, and stockholders of corporations as defendants.
411. The same subject continued.
412. Stockholders of corporations.
413. Officers of corporations.
414. Directors of corporations.
415. Statutory liability of officers, directors, and stockholders of corporations.
416. Consolidated corporations as defendants in actions based on infringements committed by their constituent corporations.
417. Causes of action based on a plurality of patents, or on both terms of an extended patent, or on a patent and a trade-mark.

CHAPTER XVIII.

ACTIONS AT LAW.....Pages 341-423

418. Actions of trespass on the case.
419. The question of the propriety of actions of assumpsit for infringements of patents, considered in the light of precedents.
420. Considered in the light of expediency.
421. Forms of civil actions prescribed by State codes and statutes, where applicable to patent cases.
422. Declarations in trespass on the case.
423. The statement of the right of action, in respect of the inventor.
424. In respect of the novelty and utility of the invention.
425. In respect of the absence of public use or sale more than two years before application for a patent.
426. In respect of the patentee, where he is another than the inventor.
427. In respect of the application for the patent.
428. In respect of the letters patent.
429. In respect of a reissue.
430. In respect of a disclaimer.
431. In respect of an extension.
432. In respect of the plaintiff's title.
433. In respect of profert of title.
433*a*. In respect of marking "patented."
434. In respect of infringement.
435. In respect of the time of infringement.
436. In respect of the damages.
437. The conclusion of the declaration.
438. Substantial and not technical accuracy required in declarations.
439. Dilatory pleas.
440. Twenty-seven defences pleadable in bar in patent actions.
441. The twenty-seven defences reviewed in respect of their natures and effects.
442. Special pleading.
443. The general issue accompanied by a statutory notice of special matter.
444. Notices of special matter.
445. Defences based on facts of which courts take judicial notice, need not be pleaded.
446. The first and second defences.
447. The third defence.

448. The fourth defence.
449. The fifth and sixth defences.
450. The seventh defence.
451. The eighth defence.
452. The ninth and tenth defences.
453. The eleventh defence.
454. The twelfth defence.
455. The thirteenth defence.
456. The fourteenth defence.
457. The fifteenth defence.
458. The sixteenth defence.
459. The seventeenth defence.
460. The eighteenth defence.
461. The nineteenth defence.
462. The twentieth defence.
463. The twenty-first defence.
464. The twenty-second defence.
465. The twenty-third and twenty-fourth defences.
466. The twenty-fifth defence.
467. The twenty-sixth defence: estoppel.
468. Estoppel by matter of record: *res judicata*.
469. Estoppel by matter of deed.
470. The twenty-sixth defence; how pleaded.
471. The twenty-seventh defence; statutes of limitations.
472. The national statute of limitation.
476. State statutes of limitations do not apply to any right of action which is attended to by a national statute of limitation.
477. State statutes do apply to all rights of action which are not attended to by a national statute of limitation.
478. Replications, rejoinders, and sur-rejoinders, where licenses or releases are pleaded.
479. Replications, where the national statute of limitation is pleaded.
480. Replications and rejoinders where a State statute of limitation is pleaded.
481. The similiter.
482. Demurrers.
483. Demurrers to declarations.
484. Demurrers to pleas.
486. Joinders in demurrer.
487. Trial of actions at law for infringement of patents.
488. Trial by jury.
489. Rules of practice.
490. Rules of evidence.
491. Letters patent as evidence.
492. Reissue letters patent are *prima facie* evidence of their own validity.
494. Letters patent presumed to be in force till the end of the term expressed on their face.
495. Evidence of title.
496. Neither licenses, nor releases, need be negatived in a plaintiff's *prima facie* evidence.
497. Evidence of the defendant's doings.
498. Expert evidence of infringement.
499. Hypothetical questions for experts.
500. Expert testimony relevant to the state of the art.
501 Cross-examination of experts.
502. Evidence of damages.
503. Defendant's evidence in chief.
504. Evidence to sustain the first defence
505. To sustain the second defence.
506. To sustain the third defence, when based on prior patents.
507. When based on prior printed publications.
508. When based on prior knowledge or use.
509. Rebutting evidence to the third defence, when based on prior knowledge or use.
510. Rebutting evidence to the third defence, however based.

511. Evidence to sustain the fourth defence.
512. To sustain fifth defence.
513. The sixth defence.
514. The seventh defence.
515. The eighth defence.
516. The ninth defence.
517. The tenth defence.
518. The eleventh defence.
519. The twelfth defence.
520. The thirteenth defence.
521. The fourteenth defence.
522. The fifteenth defence.
523. The sixteenth defence
524. The seventeenth defence.
525. The eighteenth defence.
526. The nineteenth defence.
527. The twentieth defence.
528. The twenty-first defence.
529. The twenty-second defence.
530. The twenty-third defence.
531. The twenty-fourth defence.
532. The twenty-fifth defence.
533. The twenty-sixth defence.
534. The twenty-seventh defence.
535. How testimony is taken in actions at law.
536. When the judge may direct the jury to return a verdict for the defendant.
537. Instructions to juries.
538. Verdicts.
539. New trials.
540. Trials by a judge without a jury.
541. Trial by referee.
542. Judgments.
543. Costs.
544. Costs under the statute.
545. Attorney's docket fees.
546. Clerk's fees.
547. Magistrate's fees.
548. Witness fees.
549. Taxation of costs.
550. Writs of error.
551. Bills of exception.
552. Erroneous instructions, and refusals to instruct.
553. Exception to instructions, and to refusals to instruct.
554. Time when exceptions must be noted, and time when bills of exception must be drawn up and signed.

CHAPTER XIX.

DAMAGES..... .....Pages 424-439

555. The generic measure of damages.
556. Established royalties as specific measures of damages.
557. Tests applied to royalties on behalf of defendants.
558. Tests applied to royalties on behalf of plaintiffs.
559. Money paid for infringement already committed, is no measure of damages in another case.
560. Royalties reserved on sales of patents.
561. Royalties for licenses to make and use, and royalties for licenses to make and sell.
562. Proportion of licensed to unlicensed practice of an invention.
563. Measure of damages in the absence of an established royalty.
564. Damages for unlicensed making, without unlicensed selling or using.
565. Evidence of damages.
566. Indirect consequential damages.
567. Exemplary damages.
568. Increased damages.

569. Actual damages not affected by infringement being unintended.
570. Counsel fees and other expenses.
571. Interest on damages.
571*a*. Damages in design cases.

CHAPTER XX.

ACTIONS IN EQUITY.....Pages 440-499

572. Jurisdiction of equity in patent causes.
573. Jurisdiction of equity to assess and decree damages.
574. The complainant.
575. The defendant.
576. Original bills.
577. The title of the court.
578. The introductory part.
579. The stating part.
580. The prayer for relief.
581. The interrogating part.
582. The prayer for process.
583. The signature.
584. The oath.
585. Bills to perpetuate testimony.
586. Amendments to bills, when allowed.
587. Amendments to bills, when necessary.
588. Demurrers, pleas and answers.
589. Pleas in equity.
590. Arguments upon pleas, and replications to pleas.
591. Defences in equity cases.
592. Non-jurisdiction of equity.
593. The same subject continued.
594. Non-jurisdiction in equity, how set up as a defence.
595. Prior adjudication at law is not necessary to jurisdiction in equity.
596. Laches.
597. Laches, how set up.
598. The first of the twenty-seven defences.
599. The second defence.
600. The third defence.
601. The fourth defence.
602. The fifth and sixth defences.
603. The seventh defence.
604. The eighth defence.
605. The ninth and tenth defences.
606. The eleventh defence.
607. The twelfth defence.
608. The thirteenth defence.
609. The fourteenth defence.
610. The fifteenth defence.
611. The sixteenth defence.
612. The seventeenth defence.
613. The eighteenth defence.
614. The nineteenth defence.
615. The twentieth defence.
616. The twenty-first defence.
617. The twenty-second defence.
618. The twenty-third defence.
619. The twenty-fourth defence.
620. The twenty-fifth defence.
621. The twenty-sixth defence.
622. The twenty-seventh defence.
623. Replications.
624. Subordinate bills in aid of original bills.
625. Supplemental bills.
626. Bills in the nature of supplemental bills.
627. Bills of revivor.
628. Bills in the nature of bills of revivor.
629. Bills of revivor and supplement.
630. Leave of court to file supplemental bills, and bills in the nature of supplemental bills.

631. Demurrers, pleas and answers to supplemental bills and to bills in the nature of supplemental bills.
632. Hearings.
633. Interlocutory hearings.
634. Questions of law arising on hearings.
635. Questions of fact arising on hearings.
636. Evidence in support of the bill.
637. Evidence in support of defences.
638. Testimony.
639. Depositions.
640. Depositions taken in other cases.
641. Documentary evidence.
642. Trial by jury in equity cases.
643. Hearings by masters in chancery.
644. Interlocutory decrees.
644*a*. Appeals from interlocutory decrees.
645. Petitions for rehearings.
646. Rehearings for matter apparent on the record.
647. Rehearings on account of newly discovered evidence.
648. Supplemental bills in the nature of bills of review.
649. Final decrees
650. Bills of review.
651. Bills of review to correct errors apparent on the pleadings or final decree.
652. Bills of review to introduce evidence discovered after the entry of the final decree.
653. Bills in the nature of bills of review.
654. Appeals
655. Hearings on appeals.
656. Decisions on appeals.
657. Certificates of division of opinion.

CHAPTER XXI.

INJUNCTIONS..... .....Pages 500-542

658. Jurisdiction to grant injunctions.
659. Preliminary injunctions.
660. Bills for preliminary injunctions.
661. Notices of motions for preliminary injunctions.
662. Motions for preliminary injunctions.
663. Suspensions of motions for preliminary injunctions.
664. Temporary restraining orders.
665. Elements of *prima facie* rights to preliminary injunctions.
666. Prior adjudication.
667. Public acquiescence.
668. Duration of public acquiescence in a strict monopoly.
669. Duration of public acquiescence in a licensed monopoly.
670. Public acquiescence need not be universal to be efficacious.
671. Decrees *pro confesso*.
672. Consent decrees.
673. Defendant's admission of validity.
674. Interference decision.
675. The complainant's title.
676. Infringements.
677. Defences to motions for preliminary injunctions; and first by way of traverse.
678. Defences by way of confession and avoidance.
679. Averting effect of prior adjudication.

680. Averting effect of public acquiescence.
681. Averting preliminary injunction by proving repeal or expiration of patent, or fault in title thereto.
682. Averting preliminary injunction by proving license.
683. By proving estoppel.
684. By showing laches.
685. Preliminary injunction must generally follow a cause and an application therefor.
686. Bonds instead of injunctions, where complainant grants licenses.
687. Where infringing machinery embodies non-infringing features, also in some other cases.
688. Bonds required from complainants in certain cases.
689. Injunctions not averted by the existence of a remedy at law.
690. Injunctions. *pro confesso* on withdrawal of opposition to a motion for an injunction.
691. Discretion of the court in granting or refusing injunctions.
692. Motions to dissolve preliminary injunctions.
693. Motions to dissolve for errors in point of law.
694. Motions to dissolve on account of newly discovered evidence.
695. Reinstatement of dissolved injunctions.
696. Consequences of obedience or disobedience to injunctions which are subsequently dissolved.
696*a*. Appeals from preliminary injunctions.
697. Permanent injunctions.
698. Refusal of permanent injunction, because the patent has expired.
699. Because the complainant has assigned the patent.
700. Because the defendant is dead, or, if a corporation, is dissolved.
701. Cessation of infringement no ground for refusal to enjoin.
702. Postponement of permanent injunctions.
703. Suspension of permanent injunctions pending appeals therefrom.
704. Dissolution of permanent injunctions.
705. Injunctions granted independent of other relief, and against complainants in certain cases.
706. The duration of injunctions generally limited by the term of the patent.
707. The duration of injunctions granted by district judges in vacation.
708. Attachments for contempt.
709. Improper defences to motions for attachments.
710. Penalties for violations of injunctions.

CHAPTER XXII.

PROFITS..... .....Pages 543–567

711. The infringer's profits recoverable in equity.
712. In cases of joint infringement.
713. In cases of infringement partly unprofitable.
714. What spaces of time an account of profits may cover.
715. The generic rule for ascertaining infringer's profits.

716. Complainant's damages no criterion of defendant's profits.
717. Defendant's profits in cases of unlawfully making and selling articles covered by the complainant's patent.
718. Method of ascertaining cost of making and selling infringing articles.
719. Burden of proof when it is necessary to separate profits due to patented features, from profits due to other features of an infringing article.
720. Method of making the separation where defendant made and sold the patented invention separately, as well as in connection with other things.
721. Method where defendant pays royalty for right to make and sell the features not covered by the patent in suit.
722. Cases where no separation is required or allowed.
723. Method of making the separation by the criterion of comparative cost.
723*a*. Defendant's profits in design cases.
724. Defendant's profits in cases of unlawfully selling articles partly or wholly covered by complainant's patent.
725. Defendant's profits in cases of unlawful using of patented processes or things.
729. Affirmative gain.
730. Saving from loss.
731. Affirmative gain and saving from loss.
732. Standard of comparison need not have been used by the infringer.
734. Method of selecting the proper standard of comparison.
735. The rule as to using has only a limited application to cases of infringement by making or by selling.
736. Interest on infringer's profits.
739. Proceedings before masters.
740. Evidence before masters.
741. Objections to evidence before masters.
742. Questions of the extent of the defendant's infringement.
743. Questions relevant to different sorts of defendant's alleged infringement.
744. Master's Reports.
745. Exceptions to master's report.
746. Defendants' exceptions to master's reports.
747. Defendants' affirmative exceptions to master's reports.
748. Defendants' negative exceptions to master's reports.
749. Complainants' exceptions to master's reports.
750. Outline of practice relevant to master's findings.

APPENDIX.

THE PATENT STATUTES.

THE REPEALED STATUTES.....Pages 571-652

	PAGE
Patent Act of 1790	571
" 1793	575
" 1794	580
" 1800	581
" 1819	582
" July 8, 1832	583
" July 13, 1832	585
" 1836	586
" 1837	600
" 1839	607
" 1842	611
" 1848	613
Patent Act of 1849	615
" 1852	615
" Feb. 18, 1861	616
" March 2, 1861	617
" 1862	624
" 1863	624
" 1864	625
" 1865	626
" 1866	626
" 1870	627
" March 3, 1871	651
" March 24, 1871	651

THE REVISED STATUTES.....Pages 652-678

SECTION.

440. Clerks and employees.
441. Secretary of the Interior.
475. Establishment of the Patent Office.
476. Officers and employees.
477. Salaries.
478. Seal.
479. Bonds of Commissioner and Chief clerk.
480. Restrictions upon officers and employees.
481. Duties of Commissioner.
482. Duties of examiners-in-chief.
483. Establishment of regulations.
484. Arrangement and exhibition of models, &c.
485. Disposals of models on rejected applications.
486. Library.
487. Patent-agents may be refused recognition.
488. Printing of papers filed.
489. Printing copies of claims, laws, decisions, &c.
490. Printing specifications and drawings.
491. Additional specifications and drawings.
492. Lithographing and engraving.
493. Price of copies of specifications and drawings.
494. Annual report of the Commissioner.
496. Disbursements for Patent Office.
629. Jurisdiction of Circuit Courts.

SECTION.
890. Writs of error and appeals, without reference to amount.
892. Copies of records, &c., of Patent Office.
893. Copies of foreign letters patent.
894. Printed copies of specifications and drawings of patents.
973. Costs where disclaimers are necessary.
4883. Patents, how issued, attested, and recorded.
4884. Their contents and duration.
4885. Date of patent.
4886. What inventions are patentable.
4887. Patents for inventions previously patented abroad.
4888. Requisites of specification and claim.
4889. Drawings, when requisite.
4890. Specimens of ingredients, &c.
4891. Model, when requisite.
4892. Oath required from applicant.
4893. Examination and issuing patent.
4894. Limitation upon time of completing application.
4895. Patents granted to assignees.
4896. When, and on what oath, executor or administrator may obtain patent.
4897. Renewal of application in cases of failure to pay fees in season.
4898. Assignment of patents.
4899. Persons purchasing of inventor before application may use or sell the thing purchased.
4900. Patented articles must be marked as such.
4901. Penalty for falsely marking or labelling articles as patented.

SECTION.
4902. Filing and effect of caveats.
4903. Notice of rejection of claim for patent to be given to applicant.
4904. Interferences.
4905. Affidavits and depositions.
4906. Subpœnas to witnesses.
4907. Witness fees.
4908. Penalty for failing to attend or refusing to testify.
4909. Appeals from primary examiners to examiners-in-chief.
4910. From examiners-in-chief to Commissioner.
4911. From the Commissioner to the Supreme Court, D. C.
4912. Notice of such appeal.
4913. Proceedings on appeal to Supreme Court, D. C.
4914. Determination of such appeal and its effect.
4915. Patents obtainable by bill in equity.
4916. Reissue of defective patents.
4917. Disclaimer.
4918. Suits touching interfering patents.
4919. Suits for infringement; damages.
4920. Pleading and proof in actions for infringement.
4921. Power of courts to grant injunctions and estimate damages.
4922. Suit for infringement where specification is too broad.
4923. Patent not void on account of previous use in foreign country.
4924. Extension of patents granted prior to March 2, 1861.
4925. What notice of application for extension must be given.
4926. Applications for extension to whom to be referred.

SECTION.
4927. Commissioner to hear and decide the question of extension.
4928. Operation of extension.
4929. Patents for designs authorized.
4930. Models of designs.
4931. Duration of patents for designs.
SECTION.
4932. Extension of patents for designs.
4933. Patents for designs subject to general rules of patent law.
4934. Fees in obtaining patents, &c.
4935. Mode of payment.
4936. Refunding.

PAGE.
THE PATENT STATUTE OF 1875 678
THE PATENT STATUTE OF 1887 679
THE PATENT STATUTE OF 1888 680
THE JUDICIARY ACT OF 1891 681
THE JUDICIARY ACT OF 1893 683

FORMS OF PATENT PLEADINGS.

PAGE.
DECLARATION 685
PLEA IN BAR 688
REPLICATION 690
REJOINDER 691
SUR-REJOINDER 692
BILL OF COMPLAINT 692
PLEA IN EQUITY 697
ANSWER 699
REPLICATION IN EQUITY 702

TABLE OF CITED CASES.

Names of Cases.	Where reported.	Pages in this book
Abbett *v.* Zusi	5 Bann. & Ard	242
Abbott Machine Co. *v.* Bonn	51 Fed. Rep	40
Accumulator Co. *v.* Edison Illuminating Co	63 Fed. Rep	521
Accumulator Co. *v.* Julien Electric Co	57 Fed. Rep	145
Accumulator Co. *v.* Storage Co	53 Fed. Rep	518, 525, 539
Acme Hay Harvesting Co. *v.* Martin	33 Fed. Rep	42
Adams *v.* Bellaire Stamping Co	28 Fed. Rep	23
Adams *v.* Brown	7 Cushing	567
Adams *v.* Burke	17 Wallace	150, 244, 251, 254
Adams *v.* Howard	19 Fed. Rep	414, 455
Adams *v.* Howard	22 Fed. Rep	260, 261
Adams *v.* Iron Co	26 Fed. Rep	455, 457
Adams *v.* Jones	1 Fisher	98
Adams *v.* Keystone Mfg. Co	41 Fed. Rep	550, 561
Adams *v.* Loft	4 Bann. & Ard	42
Adams *v.* Mfg. Co	3 Bann. & Ard	295
Adams *v.* Stamping Co	141 U. S	33, 44, 62
Adams *v.* Stamping Co	25 Fed. Rep	321
Adams *v.* Stamping Co	28 Fed. Rep	426
Adams Electric Ry. Co. *v.* Lindell Ry. Co	63 Fed. Rep	42
Adee *v.* Peck	42 Fed. Rep	25
Adee *v.* Thomas	41 Fed. Rep	5, 375
Adriance *v.* McCormick Mach. Co.	55 Fed. Rep	316, 326
Agawam Co. *v.* Jordan	7 Wallace	48, 81, 215, 217, 218, 223, 230, 364, 366, 397, 461
Ager *v.* Murray	105 U. S	136, 245, 246
Aiken *v.* Bemis	3 Woodbury & Minot	298, 410, 411
Aiken *v.* Dolan	3 Fisher	44, 187
Aiken *v.* Print Works	2 Cliff	227
Alabastine Co. *v.* Payne	27 Fed. Rep	331
Albany Steam Trap Co. *v.* Felthousen	20 Fed. Rep	414

Names of Cases.	Where reported.	Pages in this book.
Albright *v.* Teas	106 U. S	315
Alden *v.* Dewey	1 Story	410
Allen *v.* Blunt	2 Woodbury & Minot	410
Allen *v.* Deacon	21 Fed. Rep	300
Allen *v.* Steele	24 Fed. Rep	28, 45
Allis *v.* Buckstaff	13 Fed. Rep	462
Allis *v.* Stowell	5 Bann. & Ard	489
Allis *v.* Stowell	19 Off. Gaz	588
Allis *v.* Stowell	16 Fed. Rep	530
Allison *v.* Brooklyn Bridge	29 Fed. Rep	162, 164
Allred *v.* Bray	41 Missouri	329
Alteneck's Appeal	23 Off. Gaz	109
Am Ende *v* Seabury	43 Fed. Rep	431, 547
American Ballast Log Co. *v.* Cotter	11 Fed. Rep	479
American Bell Telephone Co. *v.* Albright	32 Fed. Rep	265
American Bell Telephone Co. *v.* Brown Tel Co	58 Fed. Rep.	519
American Bell Telephone Co. *v.* Cushman	57 Fed. Rep	143, 328
American Bell Telephone Co. *v.* Cushman Telephone Co	35 Fed. Rep	78
American Bell Telephone Co. *v.* Cushman Telephone Co	36 Fed. Rep	533
American Bell Telephone Co. *v.* Dolbear	15 Fed. Rep	203
American Bell Telephone Co. *v.* Globe Telephone Co	31 Fed. Rep	69
American Bell Telephone Co. *v.* Kitsell	35 Fed. Rep	487
American Bell Telephone Co. *v.* McKeesport Telephone Co	57 Fed. Rep	508
American Bell Telephone Co. *v.* National Telephone Co	27 Fed. Rep	275, 374
American Bell Telephone Co. *v.* People's Telephone Co	22 Fed. Rep	69
American Bell Telephone Co. *v.* Service Co	45 Off. Gaz	134
American Bell Telephone Co. *v.* Southern Telephone Co	34 Fed. Rep	351, 354, 445, 458, 480
American Bell Telephone Co. *v* Spencer	8 Fed. Rep	184, 303
American Bell Telephone Co. *v.* United States	68 Fed. Rep	82, 275
American Box' Machine Co. *v.* Day	32 Fed. Rep	297

Names of Cases.	Where reported.	Pages in this book.
American Cable Ry. Co. *v.* Chicago City Ry. Co	41 Fed. Rep.	456
American Cable Ry. Co. *v.* New York	56 Fed. Rep.	25
American Clay Bird Co. *v.* Clay Pigeon Co.	31 Fed. Rep.	271
American Cotton Tie Supply Co. *v.* McCready	17 Blatch	536
American Cotton-Tie Co. *v.* Simmons	106 U. S.	254
American Diamond Drill Co. *v.* Machine Co.	32 Fed. Rep.	559
American Diamond Rock Boring Co. *v.* Marble Co.	2 Fed. Rep.	532
American Diamond Rock Boring Co. *v.* Sheldon	1 Fed. Rep.	532
American Diamond Rock Boring Co. *v.* Sheldon	18 Blatch.	488
American Diamond Rock Boring Co. *v.* Sullivan Machine Co.	14 Blatch.	305
American Dunlop Tire Co. *v.* Erie Rubber Co.	66 Fed. Rep.	165
American Electric Co. *v.* Consumers' Gas Co.	47 Fed. Rep	258
American Feather Duster Co. *v.* Levy	43 Fed. Rep.	26
American Graphophone Co. *v.* Edison Phonograph Works	72 Off Gaz.	453
American Hide and Leather Splitting Machine Co. *v.* Machine Co.	4 Fisher	107
American Insurance Co. *v.* Canter	1 Peters.	497
American Linoleum Co. *v.* Nairn Linoleum Co	44 Fed. Rep.	386
American Middlings Purifier Co. *v.* Atlantic Milling Co.	3 Bann. & Ard.	523
American Middlings Purifier Co. *v.* Christian	3 Bann. & Ard.	478, 480, 507, 520, 522, 534
American Middlings Purifier Co. *v.* Vail.	15 Blatch.	526
American Nicholson Pavement Co. *v.* Elizabeth	4 Fisher	517, 525
American Nicholson Pavement Co. *v.* Elizabeth	1 Bann. & Ard	548
American Paper Bag Co. *v.* Van Nortwick	52 Fed. Rep.	255

Names of Cases.	Where reported.	Pages in this book.
American Paper Pail Co. *v.* National Folding Box Co.	51 Fed. Rep.	532
American Road Machine Co. *v.* Pennock & Shark Co.	45 Fed. Rep.	42
American Roll Paper Co. *v.* Knopp.	44 Fed. Rep.	208
American Roll Paper Co. *v.* Weston.	45 Fed. Rep.	53, 54, 209
American Roll Paper Co. *v.* Weston.	51 Fed. Rep.	59
American Roll Paper Co. *v.* Weston.	59 Fed. Rep.	70
American Saddle Co. *v.* Hogg.	6 Fisher	490
American Shoe Tip Co. *v.* Protector Co.	2 Bann. & Ard.	199
Ames *v.* Howard.	1 Sumner	158, 411
Ames *v.* Spring Bed Co.	24 Fed. Rep.	84
Ames & Frost Co. *v.* Woven Wire Mach. Co	59 Fed. Rep.	402
Anderson *v.* Eller.	46 Fed. Rep.	83, 92
Anderson *v.* Eller.	50 Fed. Rep.	264
Anderson *v.* Monroe.	55 Fed. Rep.	86
Anderson *v.* Pittsburgh Lumber Co.	47 Fed. Rep.	439, 552
Anderson *v.* Saint	46 Fed. Rep.	19, 60, 96, 439
Andrews *v.* Carman.	2 Bann. & Ard.	62
Andrews *v.* Hovey.	123 U. S.	83, 86, 396
Andrews *v.* Hovey.	124 U. S.	396
Andrews *v.* Long.	12 Fed. Rep.	290
Andrews *v.* Spear.	3 Bann. & Ard.	522
Anilin *v.* Higgin.	15 Blatch	198
Anson *v.* Woodbury	12 Off. Gaz.	120
Ansonia Co. *v.* Electrical Supply Co.	144 U. S.	42, 43
Ansonia Brass & Copper Co. *v.* Electrical Supply Co.	32 Fed. Rep.	42
Ansonia Brass & Copper Co. *v.* Electrical Supply Co.	35 Fed. Rep.	42
Appleton *v.* Ecaubert.	62 Fed. Rep.	271
Appleton Mfg. Co. *v.* Starr Mfg. Co.	51 Fed. Rep.	34
Appleton Mfg. Co. *v.* Starr Mfg. Co.	60 Fed. Rep.	6
Arey *v.* DeLoriea.	55 Fed. Rep.	409
Armstrong *v.* Savannah Soap Works	53 Fed. Rep.	334
Arnold *v.* Bishop	1 McArthur's Patent Cases	50, 120
Arnold *v.* Chesebrough.	35 Fed. Rep.	483
Arnold *v.* Phelps	20 Fed. Rep.	287

Names of Cases	Where reported.	Pages in this book.
Aron *v.* Manhattan Ry. Co	26 Fed. Rep	42
Aron *v.* Railway Co	132 U. S	42
Arthur *v.* Griswold	55 New York	333
Asbestine Mfg. Co. *v.* Hopp	30 Fed. Rep	327
Asbestos Felting Co. *v.* Salamander Felting Co	13 Blatch	272, 586
Ashcroft *v.* Walworth	1 Holmes	237, 238, 246
Ashton Valve Co. *v.* Muller Co	8 U. S. App	155
Asmus *v.* Alden	27 Fed. Rep	25
Asmus *v.* Freeman	34 Fed. Rep	427, 430
Aspinwall Mfg. Co. *v.* Gill	32 Fed. Rep	236, 241, 248
Atkins *v.* Park	61 Fed. Rep	248
Atlantic Works *v.* Brady	107 U. S	10, 22
Atlantic Giant Powder Co. *v.* Dittmar Powder Mfg. Co	9 Fed. Rep	538
Atlantic Giant Powder Co. *v.* Goodyear	3 Bann. & Ard	307, 518
Atlantic Giant Powder Co. *v.* Mowbray	2 Bann. & Ard	307
Attorney General *v.* Rumford Chemical Works	2 Bann. & Ard	275
Atwood *v.* Portland Co	10 Fed. Rep	208, 347
Avery *v.* Wilson	20 Fed. Rep	328
Babcock *v.* Clarkson	63 Fed. Rep	375
Babcock *v.* Degener	1 McArthur's Patent Cases	79, 396
Babcock & Wilcox Co. *v.* Pioneer Iron Works	34 Fed. Rep	42
Badische Anilin & Soda Fabrik *v.* Cummins	4 Bann. & Ard	68
Badische Anilin & Soda Fabrik *v.* Hamilton Mfg Co	3 Bann. & Ard	145
Bagley & Sewall Co. *v.* Wood Pulp Co	58 Fed. Rep	34
Bailey *v.* Bussing	28 Connecticut	403
Bailey Wringing Machine Co. *v.* Adams	3 Bann. & Ard	517
Baker *v.* Whiting	1 Story	490
Baker Mfg. Co. *v.* Washburn & Moen Mfg. Co	18 Fed. Rep	259
Baldwin *v.* Bernard	5 Fisher	523
Baldwin *v.* Sibley	1 Clifford	260
Ball *v.* Langles	102 U. S	200
Ball Glove Fastening Co. *v* Socket Fastener Co	53 Fed. Rep	561
Ballard *v.* McClusky	58 Fed. Rep	187
Ballard *v.* Pittsburg	12 Fed. Rep	5, 81, 534

Names of Cases.	Where reported.	Pages in this book.
Ballard *v.* Searls	130 U. S.	408
Baltimore Car-Wheel Co. *v.* Bemis	29 Fed. Rep.	449
Baltimore & Potomac Railroad Co. *v.* Fifth Baptist Church	108 U. S.	333
Bancroft *v.* Acton	7 Blatch	442
Bank of Augusta *v.* Earle	13 Peters	317
Bank of Orleans *v.* Skinner	9 Paige	447
Bank of United States *v.* Daniel	12 Peters	471
Bantz *v.* Frantz	105 U. S.	203
Barbed Wire Patent	143 U. S.	24, 44, 64, 69, 70, 163
Barker *v.* Shoots	18 Fed. Rep.	484
Barker *v.* Stowe	15 Blatch	462
Barker *v.* Stowe	4 Bann. & Ard	489
Barnard *v.* Gibson	7 Howard	534
Barnes Sprinkler Co. *v.* Walworth Mfg. Co	51 Fed. Rep.	57, 480
Barnes Co. *v.* Sprinkler Walworth Co	60 Fed. Rep.	57
Barney *v.* Peck	16 Fed. Rep.	340
Barrett *v.* Hall	1 Mason	50, 386
Barron *v.* Baltimore	7 Peters	131, 138
Barry *v.* Mfg. Co	22 Fed. Rep.	263
Bartlett *v.* Holbrook	1 Gray	257
Bate Refrigerating Co. *v.* Eastman	11 Fed. Rep.	540
Bate Refrigerating Co. *v.* Eastman	24 Fed. Rep.	171
Bate Refrigerating Co. *v.* Gillett	13 Fed. Rep.	143
Bate Refrigerating Co. *v.* Gillett	20 Fed. Rep.	144
Bate Refrigerating Co. *v.* Gillett	24 Fed. Rep.	538
Bate Refrigerating Co. *v.* Gillett	28 Fed. Rep.	559
Bate Refrigerating Co. *v.* Gillett	30 Fed. Rep.	331, 538, 539
Bate Refrigerating Co. *v.* Gillett	31 Fed. Rep.	310
Bate Refrigerating Co. *v.* Hammond	129 U. S.	144, 145
Bate Refrigerating Co. *v.* Sulzberger	157 U. S.	143
Bates *v.* Coe	98 U. S.	61, 340, 461
Bates *v.* Railroad Co	32 Fed. Rep.	430
Bath *v.* Caton	37 Michigan	336
Battin *v.* Taggert	17 Howard	68, 80, 90, 92, 160, 198, 209
Beach *v.* Box Machine Co	63 Fed. Rep.	24, 62, 118, 200, 300, 303, 366
Bean *v.* Smallwood	2 Story	42
Beane *v.* Orr	2 Bann. & Ard	519
Bedford *v.* Hunt	1 Mason	66, 73
Beecher Mfg. Co. *v.* Atwater Mfg. Co	114 U. S.	33

Names of Cases.	Where reported.	Pages in this book.
Boodle *v.* Bennett	122 U. S.	81, 85, 455
Bolding *v.* Turner	8 Blatch.	200
Boll *v.* Daniels	1 Bond	92
Boll *v.* Daniels	1 Fisher	72, 122
Boll *v.* Hearne	19 Howard	151
Boll *v.* Stamping Co	32 Fed. Rep	481, 559
Bollas *v.* Hays	5 Sargeant & Rawle	392
Bone *v* Jeantet	120 U. S.	159
Bonnet *v.* Fowler	8 Wallace	404
Berry *v.* Stockwell	9 Off. Gaz	120
Bevin *v.* Bell Co	9 Blatch	124
Bicknell *v.* Todd	5 McLean	252
Bierce *v* Stocking	11 Gray	387
Bigelow *v.* Louisville	3 Fisher	256
Bignall *v.* Harvey	5 Bann. & Ard	69
Bignall *v.* Harvey	18 Blatch	347, 582
Birdsall *v.* Coolidge	93 U. S.	347, 430. 436
Birdsall *v.* McDonald	1 Bann. & Ard	81, 92
Birdsall *v.* Mfg. Co	2 Bann. & Ard	538
Birdsall *v* Mfg. Co	1 Hughes	536
Birdsall *v.* Perego	5 Blatch	257
Birdsell *v.* Shalliol	112 U. S.	265, 487
Bischoff *v.* Wethered	9 Wallace	68, 396
Black *v.* Hubbard	3 Bann. & Ard	226
Black *v.* Munson	14 Blatch	427, 428
Black *v.* Stone	33 Alabama	237
Black *v.* Thorn	10 Blatch	320
Black Diamond Coal Co. *v* Excelsior Coal Co.	156 U. S.	163, 296
Blades *v.* Rand	27 Fed. Rep.	162, 164
Blagrove *v.* Ringgold	2 Cranch's Circuit Court Reports.	419
Blair *v.* Lippincott Glass Co	52 Fed. Rep	325
Blake *v.* Robertson	94 U. S.	300, 550
Blake *v.* San Francisco	113 U. S.	42
Blanchard *v.* Beers	2 Blatch	310
Blanchard *v.* Eldridge	1 Wallace, Jr.	325
Blanchard *v.* Putnam	8 Wallace	405, 421
Blanchard *v.* Reeves	1 Fisher	291, 515
Blanchard *v.* Sprague	1 Cliff	262
Blanchard's Gun-Stock Turning Factory *v.* Warner	1 Blatch	218
Blandy *v.* Griffith	3 Fisher	47, 124, 464
Blandy *v.* Griffith	6 Fisher	489, 490
Blessing *v.* Copper Works	34 Fed. Rep.	350, 460
Bliss *v.* Brooklyn	8 Blatch	215
Bliss *v.* Brooklyn	10 Blatch	71

Names of Cases.	Where reported.	Pages in this book.
Bliss *v.* Brooklyn	4 Fisher	327
Bliss *v.* Haight	3 Fisher	298
Bliss *v.* Merrill	38 Fed. Rep	54
Bloomer *v.* Gilpin	4 Fisher	261
Bloomer *v.* McQuewan	14 Howard	136, 178, 217, 218, 226, 254
Blount *v.* Societe	58 Fed. Rep	509, 511, 582
Blumenthal *v.* Burrell	48 Fed Rep	20
Board of Commissioners *v.* Gorman	10 Wallace	495
Boesch *v.* Graff	133 U. S	231, 244, 431, 432, 497, 568
Bogart *v.* Hinds	25 Fed. Rep	325, 351
Bolton *v.* Commissioner of Patents	31 Off. Gaz	5
Bonsack Machine Co. *v.* Cigarette Co	64 Fed. Rep	540
Bonsack Machine Co. *v.* Elliott	63 Fed. Rep	4, 5
Bonsack Machine Co. *v.* Hulse	57 Fed Rep	241
Boomer *v.* Powder Press Co	13 Blatch	533
Booth *v.* Severs	19 Off. Gaz	265
Bottle Seal Co. *v.* De La Vergne Co.	47 Fed. Rep	460
Boston Electric Co. *v.* Holtzer	41 Fed. Rep	516
Boston Iron Co. *v.* King	2 Cushing	567
Boston Lasting Machine Co. *v.* Woodward	53 Fed. Rep	34, 167, 301
Boston Woven Hose Co. *v.* Starr Rubber Co	40 Fed. Rep	334
Bourne *v.* Goodyear	9 Wallace	275
Bowers *v.* Von Schmidt	63 Fed. Rep	32, 57, 66, 158, 303
Bowker *v.* Dows	3 Bann. & Ard	331
Bowman *v.* DeGraw	60 Fed. Rep	69
Boyd *v.* Cherry	50 Fed. Rep	5, 331
Boyd *v.* Janesville Hay Tool Co	158 U. S	302
Boyd *v.* McAlpin	3 McLean	237, 516
Boyden *v.* Burke	14 Howard	174
Braddock Glass Co. *v.* Macbeth	64 Fed. Rep	542
Bradford *v.* Bradford	5 Connecticut	374
Bradley *v.* Dull	19 Fed. Rep	247
Bradley & Hubbard Mfg. Co. *v.* Charles Parker Co	17 Fed. Rep	519
Bradley Mfg. Co. *v.* Eagle Mfg. Co.	57 Fed. Rep	373, 374, 446
Bradley Mfg. Co. *v.* Eagle Mfg. Co.	58 Fed. Rep	470
Bragg Mfg. Co. *v.* Hartford	56 Fed. Rep	455, 456
Bragg *v.* Stockton	27 Fed. Rep	443
Brainard *v.* Cramme	12 Fed. Rep	4, 186, 210
Brammer *v.* Jones	3 Fisher	525
Bray *v.* Denning	56 Fed. Rep	330
Bray *v.* Hartshorn	1 Cliff	410

Names of Cases.	Where reported.	Pages in this book.
Brickill *v.* Baltimore	50 Fed. Rep	84
Brickill *v.* Baltimore	60 Fed. Rep	424, 426, 482
Brickill *v.* Hartford	49 Fed. Rep	84, 368, 375, 464, 470
Brickill *v.* Hartford	57 Fed. Rep	88, 360, 364, 365, 377, 460
Brickill *v.* New York	5 Bann. & Ard	140
Bridgeport Wood Finishing Co. *v.* Hooper	5 Fed. Rep	61
Brig Struggle *v.* United States	9 Cranch	278
Briggs *v.* Central Ice Co	54 Fed. Rep	387
Brinkerhoff *v.* Aloe	146 U. S	88
Britton *v.* White Mfg. Co	61 Fed. Rep	54, 55, 102, 364, 398
Broadnax *v.* Transit Co	5 Bann. & Ard	208
Bromley Bros.' Carpet Co. *v.* Stewart	51 Fed. Rep	24
Bronson *v.* Kinzie	1 Howard	131
Brooks *v.* Ashburn	9 Georgia	329
Brooks *v.* Bleknell	3 McLean	224, 383, 525
Brooks *v.* Byam	2 Story	237, 255, 261
Brooks *v.* Fiske	15 Howard	156, 295
Brooks *v.* Jenkins	3 McLean	183, 185, 225, 247, 392, 408
Brooks *v.* Miller	28 Fed Rep	455
Brooks *v.* Norcross	2 Fisher	53
Brown *v.* Davis	116 U. S	296, 299
Brown *v.* Deere	6 Fed. Rep	534
Brown *v.* District of Columbia	130 U. S	23, 26
Brown *v.* District of Columbia	3 Mackey	330
Brown *v.* Duchesne	19 Howard	129, 130, 141
Brown *v.* Hall	6 Blatch	462
Brown *v.* Jackson	3 Wheaton	238
Brown *v.* Lapham	27 Fed. Rep	259
Brown *v.* Piper	91 U. S	41, 390, 460, 498
Brown *v.* Shannon	20 Howard	315
Brown Mfg. Co. *v.* Bradley Mfg. Co	51 Fed. Rep.	156
Brown Mfg. Co. *v.* Deere	21 Fed. Rep	25
Brown Mfg. Co. *v.* Deere	51 Fed. Rep	488
Brown Mfg. Co. *v.* Mast	53 Fed. Rep	43, 479
Browning *v.* Telephone Co	61 Fed. Rep	42
Bruise *v.* Peck	54 Fed. Rep	373
Brunner's Appeal	1 Off. Gaz	111
Brush *v.* Condit	132 U. S	66, 299
Brush Electric Co. *v.* Accumulator Co	47 Fed. Rep	27, 145, 187, 287
Brush Electric Co. *v.* Accumulator Co	50 Fed. Rep	525
Brush Electric Co. *v.* California Electric Light Co	52 Fed. Rep.	239, 251, 255, 258, 261, 326

Names of Cases.	Where reported.	Pages in this book.
Brush Electric Co. *v.* Electric Imp. Co.	52 Fed. Rep.	101, 167, 303
Brush Electric Co. *v.* Electric Co. of San Jose	40 Fed. Rep.	326
Brush Electric Co. *v.* Electric Co. of San Jose	51 Fed. Rep.	496
Brush Electric Co. *v.* Ft. Wayne Electric Co.	44 Fed. Rep.	78, 101, 177, 303
Brush Electric Co. *v.* Julien Electric Co.	41 Fed. Rep.	27, 145, 287
Brush Electric Co. *v.* Storage Battery Co.	64 Fed. Rep.	515, 516, 520, 521
Brush Electric Co. *v.* Western Electric Co.	48 Fed. Rep.	101, 303
Brush-Swan Electric Light Co. *v.* Electric Co.	48 Fed. Rep.	326
Buckingham *v.* Iron Co.	51 Fed. Rep.	42
Buerk *v.* Imhaeuser	2 Bann. & Ard.	540
Buffington's Iron Building Co. *v.* Eustis	65 Fed. Rep.	156, 287
Bull *v.* Pratt	1 Connecticut	260
Bullock Printing Press Co. *v.* Jones	3 Bann. & Ard.	534
Bundy Mfg. Co. *v.* Columbian Co.	59 Fed. Rep.	164
Bundy Mfg. Co. *v.* Time Recorder Co.	64 Fed. Rep.	302
Bunker *v.* Stevens	26 Fed. Rep.	415
Burdell *v.* Comstock	15 Fed. Rep.	456
Burdell *v.* Denig	92 U. S.	256, 347, 388, 402
Burden *v.* Corning	2 Fisher	183, 464
Burdett *v.* Estey	5 Bann. & Ard.	184
Burdett *v.* Estey	15 Blatch	186
Burdett *v.* Estey	3 Fed. Rep.	148, 558
Burdsall *v.* Curran	31 Fed. Rep.	375
Burney *v.* Goodyear	11 Cushing	211
Burns *v.* Myer	100 U S.	170
Burr *v.* Duryea	1 Wallace	201, 292, 298, 300
Burr *v.* Duryea	2 Fisher	257, 259
Burr *v.* Ford	70 Off. Gaz.	121
Burrall *v.* Jewett	2 Paige	71
Burrell *v.* Hackley	35 Fed. Rep.	204, 453
Burt *v.* Evory	133 U. S.	19, 38, 62
Busell Trimmer Co. *v.* Stevens	137 U. S.	42
Busell Trimmer Co. *v.* Stevens	28 Fed. Rep.	42
Buss *v.* Putney	38 N. H.	255
Bussard *v.* Catalino	2 Cranch's Circuit Court Reports	417

Names of Cases.	Where reported	Pages in this book.
Bussey *v.* Mfg. Co	110 U. S	88
Butler *v.* Bainbridge	20 Fed. Rep	307, 397
Butler *v.* Stoekel	137 U. S	23, 26
Butterworth *v.* Hill	114 U. S	113
Butterworth *v.* Hoe	112 U. S	110, 114
Button Fastener Co. *v.* Lucas	28 Fed. Rep	51
Butz Thermo-Electric Co. *v.* Electric Co	36 Fed. Rep	301, 302
Buzzell *v.* Fifield	7 Fed. Rep	26
Byam v. Eddy	2 Blatch	306
Byam *v.* Farr	1 Curtis	308
Cahill *v.* Brown	8 Bann. & Ard	55
Cahoon *v.* Ring	1 Cliff	57, 300, 387
Cahoone Mfg. Co. *v.* Harness Co.	45 Fed. Rep	19, 42, 328, 334
Caldwell *v.* Jackson	7 Cranch	416
Caldwell *v.* Waters	4 Cranch's Circuit Court Reports	527
California Electric Works *v.* Fink	47 Fed. Rep	469
California Electrical Works *v.* Henzel	48 Fed. Rep	515, 534
California Paving Co. *v.* Molitor	113 U. S	490, 540
Calkins *v.* Oshkosh Carriage Co.	27 Fed. Rep	23
Callaghan *v.* Myers	128 U. S	545, 549, 566
Cammack *v.* Johnson	2 New Jersey Equity	527
Cammeyer *v.* Newton	94 U. S	130, 136
Campbell *v.* Bailey	45 Fed Rep	34, 62
Campbell *v.* Day	16 Vermont	236
Campbell *v.* Haverhill	155 U. S	338, 376, 473
Campbell *v.* New York	35 Fed. Rep	83, 108, 488, 491
Campbell *v.* New York	36 Fed. Rep	87
Campbell *v.* New York	47 Fed. Rep	86
Campbell *v.* Ward	12 Fed. Rep	455
Campbell Printing Press Co. *v.* Manhattan Ry. Co	49 Fed. Rep	134, 478
Campbell Printing Press Co. *v.* Marden	64 Fed. Rep	62, 70, 100, 158, 164, 166
Canan *v.* Mfg. Co	23 Fed. Rep	145
Cansler *v.* Eaton	2 Jones' Equity Cases	239
Canter *v.* Insurance Companies	3 Peters	418
Canton Steel Roofing Co. *v.* Kanneberg	51 Fed. Rep	445
Cantrell *v.* Wallick	117 U. S	14, 15, 61, 69, 300
Carew *v.* Fabric Co	1 Holmes	212
Carey *v.* Miller	34 Fed. Rep	516
Carlton *v.* Bokee	17 Wallace	158 167, 368
Carnick *v.* McKesson	8 Fed. Rep	461, 463
Carpenter Machine Co. *v.* Searle	52 Fed. Rep	207

Names of Cases.	Where reported.	Pages in this book.
Carr *v.* Rice	1 Fisher	155, 215, 294
Carroll *v.* Morse	9 Off. Gaz	214
Carstendt *v* Corset Co	13 Blatch	542
Carter *v.* Baker	4 Fisher	483, 484
Carter *v.* Baker	1 Sawyer	309, 387
Carter *v.* Fry	54 Fed. Rep	517
Carter *v.* Wollschlaeger	58 Fed. Rep	70, 508 511, 522
Carter Crume Co. *v.* Ashley	68 Fed. Rep	511, 516, 519
Cartridge Co. *v.* Cartridge Co	112 U. S	179, 308
Carver *v.* Hyde	16 Peters	156
Carver *v.* Mfg. Co	2 Story	97, 338
Cary *v.* Lovell Mfg. Co	31 Fed. Rep	478
Cary *v.* Mfg. Co	31 Fed. Rep	479
Cary *v.* Spring Bed Co	26 Fed. Rep	528
Cary *v.* Wolff	24 Fed. Rep	48
Case *v.* Brown	2 Wallace	168, 206
Case *v.* Morey	1 New Hampshire	231
Case *v.* Redfield	4 McLean	287
Castle *v.* Hutchinson	25 Fed. Rep	185
Catlin *v.* Insurance Co	1 Sumner	355
Caverly *v.* Deere	52 Fed. Rep	20, 70
Cawood Patent	94 U. S	55, 289, 486, 553, 554, 561
Celluloid Mfg. Co. *v.* American Zylonite Co	35 Fed. Rep	27
Celluloid Mfg. Co. *v.* Arlington Mfg. Co	44 Fed. Rep	301
Celluloid Mfg. Co. *v.* Cellonite Mfg. Co	40 Fed. Rep	555, 560, 563, 584
Celluloid Mfg. Co. *v.* Cellonite Mfg. Co	42 Fed. Rep	167
Celluloid Mfg. Co. *v.* Chandler	27 Fed. Rep	416
Celluloid Mfg. Co. *v.* Chrolithion Collar & Cuff Co	23 Fed. Rep	25
Celluloid Mfg. Co. *v.* Crane Chemical Co	36 Fed. Rep	27
Celluloid Mfg. Co. *v.* Crofut	24 Fed. Rep	80
Celluloid Mfg. Co. *v.* Eastman Dry Plate Co	42 Fed. Rep	516
Celluloid Mfg. Co. *v.* Mfg. Co	34 Fed. Rep	516
Celluloid Mfg. Co. *v.* Noyes	25 Fed. Rep	42
Celluloid Mfg. Co. *v* Russell	37 Fed. Rep	153, 367
Celluloid Mfg. Co. *v.* Tower	26 Fed. Rep	37, 479
Celluloid Mfg. Co. *v.* Vulcanite Co	13 Blatch	448
Celluloid Mfg. Co. *v.* Zylonite Co	27 Fed. Rep	205
Celluloid Mfg. Co. *v.* Zylonite Co	30 Fed. Rep	23, 331

Names of Cases.	Where reported.	Pages in this book.
Colluloid Mfg. Co. *v.* Zylonite Co.	...31 Fed. Rep.	5
Colluloid Mfg. Co. *v.* Zylonite Co.	...34 Fed. Rep.	348
Chaffee *v.* Belting Co.	...22 Howard.	226, 254
Chambers *v.* Smith	...5 Fisher.	253, 255, 261
Chandler *v.* Ladd	...1 McArthur's Patent Cases.	19
Chase *v.* Fillebrown	...58 Fed. Rep.	55, 62, 367, 383
Chase *v.* Tuttle	...27 Fed. Rep.	449
Chase *v.* Walker	...3 Fisher.	285
Cheever *v.* Wilson	...9 Wallace.	405
Chicago Fruit House Co. *v.* Busch.	2 Bissell.	309
Chicopee Folding Box Co. *v.* Rogers	...32 Fed. Rep.	271
Child *v.* Adams	...1 Fisher	104
Child *v.* Iron works	...19 Fed. Rep.	425, 442
Christman *v.* Rumsey	...17 Blatch.	186
Cincinnati Ice Machine Co. *v.* Brewing Co.	...31 Fed. Rep.	289
City of Concord *v.* Norton	...16 Fed. Rep.	372
Clark *v.* Wilson	...30 Fed. Rep.	302
Clark *v.* Wooster	...119 U. S.	388, 425, 455, 456
Clark Thread Co. *v.* Willimantic Linen Co.	...140 U. S.	63, 65, 70
Clinton Wire cloth Co. *v.* Wire Cloth Co.	...65 Fed. Rep.	62
Clodfelter *v.* Cox	...1 Sneed.	236
Clough *v.* Mfg. Co.	...106 U. S.	300
Clow *v.* Barker	...36 Fed. Rep.	271, 484
Cluett *v.* Claflin	...140 U. S.	23
Cluett *v.* Claflin	...30 Fed. Rep.	23
Clum *v.* Brewer	...2 Curtis	224, 248, 507, 514, 515, 517
Coburn *v.* Clark	...15 Fed. Rep.	515
Cochrane *v.* Badische Anilin & Soda Fabrik	...111 U. S.	68
Cochrane *v.* Deener	...94 U. S.	4, 5, 63, 286, 294, 299, 300, 313, 457, 499
Cochrane *v.* Waterman	...1 McArthur's Patent Cases.	14, 37, 122
Coes *v.* Collins Co.	...9 Fed. Rep.	167
Coffee *v.* Guerrant	...68 Off. Gaz.	65
Coffin *v.* Ogden	...18 Wallace	66, 69
Cohansey Mfg. Co. *v.* Wharton	...28 Fed. Rep.	69
Cohn *v.* Rubber Co.	...3 Bann. & Ard.	259
Coleman *v.* Grubb	...23 Penn. State.	234
Colgate *v.* Compagnie Francaise	...23 Fed. Rep.	385
Colgate *v.* Gold & Stock Telegraph Co.	...16 Blatch.	523

Names of Cases.	Where reported.	Pages in this book.
Colgate *v.* Gold & Stock Telegraph Co.	4 Bann. & Ard.	522
Colgate *v.* Telegraph Co.	10 Fed. Rep.	490
Colgate *v.* Mfg. Co.	28 Fed. Rep.	420
Colgate *v.* Ocean Telegraph Co.	17 Blatch.	141
Collar Co *v.* Van Duson	23 Wallace	200
Collignon *v.* Hayes	8 Fed. Rep.	520, 521
Collins *v.* Hathaway	Olcott's Reports	419
Collins Chemical Co. *v.* Capitol City Mfg. Co.	12 Fed. Rep.	470
Colt *v.* Arms Co	1 Fisher	288
Colt *v.* Young	2 Blatch.	225, 522
Columbus Watch Co. *v.* Robbins	148 U. S.	496
Columbus Watch Co. *v.* Robbins	34 Fed. Rep.	167, 487
Combined Can Co. *v.* Lloyd	11 Fed. Rep.	33
Commercial Mfg. Co. *v.* Fairbank Co.	135 U. S.	143, 145
Commercial Mfg. Co. *v.* Fairbank Co.	27 Fed. Rep.	143
Commissioners of Hamilton County *v.* Mighels	7 Ohio State	327
Commissioner of Patents *v.* Whiteley	4 Wallace	110, 111, 213
Comstock *v.* Sandusky Seat Co.	3 Bann. & Ard.	87, 92
Cone *v.* Morgan Envelope Co.	4 Bann. & Ard.	40
Conover *v.* Mers	3 Fisher	522
Conover *v.* Mevs	11 Blatch.	555
Conover *v.* Rapp	4 Fisher	387
Conover *v.* Roach	4 Fisher	72, 298, 387
Consolidated Apparatus Co. *v.* Brewing Co.	28 Fed. Rep.	507
Consolidated Apparatus Co. *v.* Brewing Co.	30 Fed. Rep.	42
Consolidated Apparatus Co. *v.* Woerle	20 Fed. Rep.	397
Consolidated Brake Shoe Co. *v.* Detroit Spring Co.	47 Fed. Rep.	350
Consolidated Brake Shoe Co. *v.* Detroit Spring Co.	59 Fed. Rep.	118
Consolidated Cable Co. *v.* Pacific Railway Co.	58 Fed. Rep.	487
Consolidated Electric Light Co. *v.* Edison Electric Light Co.	25 Fed. Rep.	148, 229
Consolidated Electric Light Co. *v.* Electric Light Co.	20 Fed. Rep.	340

Names of Cases.	Where reported.	Pages in this book.
Consolidated Electric Light Co. v. McKeesport Light Co.	34 Fed. Rep.	148
Consolidated Electric Light Co. v. McKeesport Light Co.	40 Fed. Rep.	366
Consolidated Electric Storage Co. v. Accumulator Co.	55 Fed. Rep.	532
Consolidated Fruit Jar Co. v. Stamping Co.	27 Fed. Rep.	79, 82
Consolidated Fruit Jar Co. v. Stamping Co.	28 Fed. Rep.	23
Consolidated Fruit Jar Co. v. Whitney	1 Bann. & Ard	261, 525
Consolidated Fruit Jar Co. v. Whitney	2 Bann. & Ard	242, 255, 373
Consolidated Fruit Jar Co. v. Wright	94 U. S.	79, 80, 83, 84, 86, 130
Consolidated Oil Well Packer Co. v. Eaton	12 Fed. Rep.	322
Consolidated Purifier Co. v. Gullder	9 Fed. Rep.	375
Consolidated Purifier Co. v. Wolf.	28 Fed. Rep.	258, 259
Consolidated Roller Mill Co. v. Barnard & Leas Mfg. Co.	43 Fed. Rep.	478
Consolidated Roller Mill Co. v. Coombs	39 Fed. Rep.	61, 134, 170, 295
Consolidated Roller Mill Co. v. Richmond Mill Works	40 Fed. Rep.	524
Consolidated Roller Mill Co. v. Walker	138 U. S.	23, 144, 164, 166
Consolidated Valve Co. v. Valve Co.	113 U. S.	154
Consumers Gas Co. v. Electric Co.	50 Fed. Rep.	258
Continental Store Service Co. v. Clark	100 N. Y.	314
Continental Windmill Co. v. Empire Windmill Co.	8 Blatch.	237, 240, 256
Converse v. Matthews	58 Fed. Rep.	67
Cook v. Bidwell	8 Fed. Rep.	241
Coon v. Wilson	113 U. S.	197, 201, 203
Coop v. Physical Institute	47 Fed. Rep.	350, 446
Coop v. Physical Institute.	48 Fed. Rep.	446
Cooper v. Mattheys	3 Penn. Law Journal Reports.	504, 517
Corbin Cabinet Lock Co. v. Eagle Lock Co.	150 U. S.	161, 172, 207
Corbin Lock Co. v. Eagle Lock Co.	37 Fed. Rep.	25

Names of Cases.	Where reported.	Pages in this book.
Corbin Lock Co. *v.* Yale & Towne Mfg. Co	58 Fed. Rep	375, 511
Cornely *v.* Marckwald	131 U. S	428, 431, 432
Cornely *v.* Marckwald	32 Fed. Rep	428
Corning *v.* Burden	15 Howard	4, 5, 156, 174, 405
Corning *v.* Troy Iron & Nail Factory	15 Howard	407, 408
Corn-Planter patent	23 Wallace	23, 56, 57, 67, 98, 104 198, 200, 200
Corser *v.* Overall Co	50 Fed. Rep	507
Coston *v.* Paih	47 Fed. Rep	23
Cote *v.* Moffitt	15 Fed. Rep	210, 400
Cotter *v.* Copper Co	18 Fed. Rep	287
Cottler *v.* Stimson	18 Fed. Rep	348
Cottle *v.* Krementz	31 Fed. Rep	68
Coupe *v.* Royer	155 U. S	71, 173, 409, 424, 482, 544
Coupe *v.* Weatherhead	37 Fed. Rep	488
Covert *v.* Curtis	25 Fed. Rep	500
Covert *v.* Sargent	38 Fed. Rep	265, 426, 545
Covert *v.* Sargent	42 Fed. Rep	442
Cowing *v.* Rumsey	8 Blatch	347, 411, 424, 436
Cox *v.* Griggs	1 Bissell	387
Cramer *v.* Fry	32 Fed. Rep	328, 407
Crandell *v.* Plano Mfg. Co	24 Fed. Rep	259
Crary *v.* Smith	2 Comstock	526
Craver *v.* Weyhrich	31 Fed. Rep	80, 81
Crawford *v.* Heisinger	123 U. S	166, 171
Creamer *v.* Bowers	35 Fed. Rep.	431, 432, 433, 438, 455, 546
Crescent Brewing Co. *v.* Gottfreid	128 U. S	42, 165
Crompton *v.* Belknap Mills	3 Fisher	103, 222
Crompton *v.* Knowles	7 Fed. Rep	45
Crosby Valve Co *v.* Safety Valve Co	141 U. S	431, 544, 545, 551, 558
Cross *v.* Mackinnon	11 Fed. Rep	299
Crouch *v.* Roemer	103 U. S	37
Crowell *v.* Parmeter	3 Bann. & Ard	520
Cummings *v.* Plaster Co	6 Blatch	417
Curran *v.* Arkansas	15 Howard	389
Curran *v.* Burdsall	20 Fed. Rep	264
Curran *v.* Car Co	32 Fed. Rep	332, 449
Curtis *v.* Atlanta Street Railway Co	56 Fed. Rep	70
Curtis *v.* Overman Wheel Co	58 Fed. Rep	532
Cutter Co. *v.* Sheldon	10 Blatch	287
Cutting *v.* Myers	4 Washingtou	351, 354
C. W. Siemens' Appeal	11 Off. Gaz	206

Names of Cases.	Where reported.	Pages in this book.
Dable Grain Shovel Co. *v.* Flint	137 U. S	120, 137
Dalby *v.* Lynos	64 Fed Rep	28, 67
Dale *v.* Rosevelt	1 Paige	374, 484
Dalton *v.* Nelson	13 Blatch	27
Dalzell *v.* Dueber Mfg. Co	140 U. S	230, 231, 241, 458
Dare *v.* Boylston	6 Fed. Rep	258
Davidson *v.* Lewis	1 McArthur's Patent Cases	66
Davidson's Ex'rs *v.* Johnson	16 New Jersey Equity	453
Davis *v.* Fredericks	19 Fed. Rep	25
Davis *v.* Murphy	2 Rich	374
Davis *v.* Palmer	2 Brook	44
Davis *v.* Smith	19 Fed. Rep	456
Davis Electrical Works *v.* Edison Electric Light Co	60 Fed. Rep	254
Davis Wheel Co. *v.* Davis Wagon Co	20 Fed. Rep	237
Dawes *v.* Taylor	14 Reporter	457
Day *v.* Car Spring Co	3 Blatch	362, 504
Day *v.* Hartshorn	3 Fisher	518
Day *v.* Railroad Co	132 U. S	23
Day *v.* Railroad Co	28 Fed. Rep	23
Day *v.* Rubber Co	20 Howard	408
Day *v.* Stellman	1 Fisher	408
Day *v.* Woodworth	13 Howard	414, 436, 438
Dayton Crupper Co. *v.* Ruhl	55 Fed. Rep	28, 461
Dean *v.* Mason	20 Howard	497, 544
Dedekam *v.* Vose	3 Blatch	415, 419
Dederick *v.* Fox	50 Fed. Rep	124, 162, 267, 457
Dederick *v.* Seigmund	51 Fed. Rep	167, 300, 302
Deering *v.* Winona Harvester Works	155 U. S	64, 70, 78, 99, 156
De Florez *v.* Reynolds	14 Blatch	103
De Florez *v.* Reynolds	17 Blatch	146, 147, 401, 467
Delamater *v.* Deeley	53 Fed. Rep	87
Delamater *v.* Reinhardt	43 Fed. Rep	385
Delamater *v.* Heath	58 Fed. Rep	84
Delano *v.* Scott	Gilpin	328
De La Vergne Machine Co. *v.* Featherstone	147 U. S	119, 149, 246
De La Vergne Machine Co. *v.* Featherstone.	49 Fed. Rep	372
Delaware Coal & Ice Co. *v.* Packard	5 Bann. & Ard	162, 164
Delaware Telephone Co. *v.* Delaware	50 Fed. Rep	135
DeLoriea *v.* Whitney	63 Fed. Rep	407
Delvin *v.* Heise	43 Fed. Rep	23

Names of Cases.	Where reported.	Pages in this book.
Donnis *v.* Eddy	12 Blatch	417
Donsmore *v.* Tanite Co	32 Fed. Rep	258
Dental Vulcanite Co. *v.* Davis	102 U. S	297
Dental Vulcanite Co. *v.* Van Antwerp	2 Bann. & Ard	425
Dental Vulcanite Co. *v.* Wetherbee	2 Cliff	204, 211
Derby *v.* Thompson	146 U. S	68, 168, 200
Detroit Lubricator Mfg. Co. *v.* Renchard	9 Fed. Rep	57
Detwiller *v.* Bosler	58 Fed. Rep	488
Detweiler *v.* Voege	8 Fed. Rep	254
Devlin *v.* Paynter	64 Fed. Rep	205
De Ver Warner *v.* Bassett	7 Fed. Rep	518
DeWitt *v.* Mfg. Co.	5 Hun	240
Dexter *v.* Arnold	5 Mason	480, 494
Dexter *v.* Arnold	2 Sumner	567
Dey *v.* Stellman	1 Fisher	256
Dezell *v.* Odell	3 Hill	263
Diamond Match Co. *v.* Oshkosh Match Works	63 Fed. Rep	481
Dibble *v.* Augur	7 Blatch	322
Dick *v.* Struthers	25 Fed. Rep.	324, 455
Dick *v.* Supply Co	25 Fed. Rep	460
Dickerson *v.* Colgrove	100 U. S	372
Dickerson *v.* Greene	53 Fed. Rep	351
Dickerson *v.* Machine Co	35 Fed. Rep.	506, 507
Dickerson *v.* Matheson	57 Fed. Rep	244
Dittmar *v.* Rix	1 Fed. Rep	287
Dixon-Woods Co. *v.* Pfeifer	51 Fed. Rep	479
Dixon-Woods Co. *v.* Pfeifer	55 Fed. Rep	154
Dobson *v.* Cubley	149 U. S	163, 296
Dobson *v.* Dornan	118 U. S	96, 102, 481, 550
Dobson *v.* Graham	49 Fed. Rep	481
Dobson *v.* Hartford Carpet Co	114 U. S	102, 160, 550
Dobson *v.* Lees	137 U. S	199, 201, 399
Dodge *v* Card	2 Fisher	514
Donnell *v.* Insurance Co	2 Sumner	507
Dorlon *v.* Guie	25 Fed. Rep	62
Dorman *v.* Keefer	49 Fed. Rep	120
Dorsey Harvester Rake Co. *v.* Marsh	6 Fisher	523, 524, 534
Dorsey Rake Co. *v.* Mfg. Co	12 Blatch	250, 255
Doubleday *v.* Roess	11 Fed. Rep	38
Doubleday *v.* Sherman	4 Fisher	542
Doughty *v.* West	6 Blatch	274
Doughty *v.* West	2 Fisher	461, 507, 509

Names of Cases.	Where reported.	Pages in this book.
Douglas *v.* Abraham	50 Fed. Rep	172
Dowell *v.* Mitchell	105 U. S	455
Downton *v.* Allis	9 Fed. Rep	282, 285
Downton *v.* Mfg. Co	9 Fed. Rep	282
Downton *v.* Milling Co	108 U. S	6, 55
Doyle *v.* Spalding	19 Fed. Rep	68
Drainage Construction Co. *v* Chelsea	41 Fed. Rep	263
Drainage Construction Co. *v.* Englewood Sewer Co	67 Fed. Rep	460
Draper *v.* Hudson	1 Holmes	588
Draper *v.* Potomska Mills	8 Bann. & Ard	57
Draper *v.* Wattles	3 Bann. & Ard	87, 108
Droskill *v.* Parish	5 McLean	417
Dreyfus *v.* Schneider	25 Fed. Rep	69
Dreyfus *v.* Searle	124 U. S	42
Dryfoos *v.* Friedman	18 Fed Rep	309
Dryfoos *v.* Wiese	124 U. S	298
Du Bois *v.* Kirk	158 U. S	24, 495, 533
Dubolse *v.* Railroad Co	5 Fisher	372, 373
Dudley E. Jones Co *v.* Munger Mfg. Co	49 Fed. Rep	101
Dudley E. Jones Co. *v.* Munger Mfg. Co	50 Fed. Rep	486, 487
Dueber Watch Case Co. *v.* Dalzell	38 Fed. Rep	237
Duer *v.* Look Co	149 U. S	23, 44, 45
Duesh *v.* Medlar Co	30 Fed. Rep	34
Duff *v.* Pump Co	107 U. S	302
Duffy *v.* Reynolds	24 Fed. Rep	69
Dukes *v.* Bauerle	41 Fed. Rep	19, 102
Dunbar *v.* Myers	94 U. S	34, 163, 185, 296, 372
Dunham *v.* Dennison Mfg Co	154 U. S	203
Dunham *v.* Railroad Co	7 Bissell	248, 256
Dunlap *v.* Schofield	152 U. S	354, 371, 385, 468
Duponti *v* Mussy	4 Washington	450
Durand *v* Schulz	61 Fed. Rep	157
Durham *v.* Seymour	71 Off. Gaz	113, 114
Dyer *v.* Rich	1 Metcalf	232, 238
Dyson *v.* Danforth	4 Fisher	398
Eachus *v.* Broomall	115 U. S	208, 372
Eagle Lock Co. *v.* Corbin Lock Co	64 Fed. Rep	487
Eagle Mfg. Co. *v.* Bradley Mfg. Co.	50 Fed. Rep	374
Eagle Mfg. Co *v.* Miller	41 Fed. Rep	374
Eagle Mfg Co. *v.* Plow Co	36 Fed. Rep	523

Names of Cases.	Where reported.	Pages in this book.
Eagle Pencil Co. *v.* American Pencil Co	53 Fed. Rep	19
Eagleton Mfg. Co. *v.* West Mfg. Co	111 U. S	118
Eames *v.* Andrews	122 U. S	4, 55
Eames *v.* Cook	2 Fisher	289
Eames *v.* Godfrey	1 Wallace	163, 206, 298
Earle *v.* Hall	22 Pickering	378
Eastern Paper Bag Co. *v.* Nixon	35 Fed. Rep	478, 523
Eastern Paper Bag Co. *v.* Standard Paper Bag Co	30 Fed. Rep	5
Eastman *v.* Bodlish	1 Story	355
Eastman *v.* Hinckel	5 Bann. & Ard	308
Eby *v.* King	158 U. S	201, 204
Ecaubert *v.* Appleton	47 Fed. Rep	463
Ecaubert *v.* Appleton	67 Fed. Rep	70, 78, 419, 472, 482
Eclipse Mfg. Co. *v.* Adkins	36 Fed. Rep	460
Eclipse Mfg. Co. *v.* Adkins	44 Fed. Rep	19
Eclipse Windmill Co. *v.* Windmill Co	24 Fed. Rep	261
Economy Heater Co. *v.* Lamprey Protector Co	65 Fed. Rep	126
Edison Electric Light Co. *v.* Beacon Electric Co	54 Fed. Rep	506, 518
Edison Electric Light Co. *v.* Bloomingdale	65 Fed. Rep	478
Edison Electric Light Co. *v.* Boston Lamp Co	62 Fed. Rep	300
Edison Electric Light Co. *v.* Buckeye Electric Co	59 Fed. Rep	152, 528
Edison Electric Light Co. *v.* Electric Mfg. Co	57 Fed. Rep	518
Edison Electric Light Co. *v.* Electric Supply Co	60 Fed. Rep	401
Edison Electric Light Co. *v.* Electric Supply Co	66 Fed. Rep	499
Edison Electric Light Co. *v.* Equitable Life Co	55 Fed. Rep	453, 458, 459
Edison Electric Light Co. *v.* Goelet	65 Fed. Rep	254
Edison Electric Light Co. *v.* Mt. Morris Electric Light Co	57 Fed. Rep	134, 458
Edison Electric Light Co. *v.* Mt. Morris Electric Light Co	58 Fed. Rep	522, 524
Edison Electric Light Co. *v.* New Haven Electric Co	35 Fed. Rep	241

Names of Cases.	Where reported.	Pages in this book.
Edison Electric Light Co. *v.* Packard Electric Co	61 Fed. Rep	334
Edison Electric Light Co. *v.* Perkins Electric Lamp Co	42 Fed. Rep	144
Edison Electric Light Co. *v.* Philadelphia Trust Co	60 Fed. Rep	287, 480, 508
Edison Electric Light Co. *v.* Sawyer-Man Electric Co	58 Fed. Rep	184, 522, 524
Edison Electric Light Co. *v.* United States Electric Lighting Co	35 Fed. Rep	148
Edison Electric Light Co. *v.* United States Electric Lighting Co	45 Fed. Rep	484
Edison Electric Light Co. *v.* United States Electric Lighting Co	47 Fed. Rep	172
Edison Electric Light Co. *v.* United States Electric Lighting Co	52 Fed Rep	27, 29, 46, 151, 154, 164
Edison Electric Light Co. *v.* United States Electric Lighting Co	59 Fed. Rep	528
Edison Electric Light Co. *v.* Waring Electric Co	59 Fed. Rep	148
Edison Electric Light Co. *v.* Westinghouse Electric Co	54 Fed. Rep	540
Edward Barr Co. *v.* Sprinkler Co	32 Fed. Rep	506, 514
Egbert *v.* Lippmann	104 U. S	84, 85
Elastic Fabrics Co. *v.* Smith	100 U. S	182, 418, 499
Elder *v.* Bemis	2 Metcalf	343
Electric Gas Co. *v.* Boston Electric Co	139 U. S	201
Electric Gas Lighting Co. *v.* Fuller	59 Fed. Rep	497
Electric Mfg. Co. *v.* Edison Electric Light Co	31 Fed. Rep	518
Electric Ry. Co. *v.* Jamaica R. R. Co	61 Fed. Rep	25, 40
Electric Signal Co. *v.* Hall Signal Co	114 U. S	293
Electrical Accumulator Co. *v* Brush Electric Co	44 Fed. Rep	269
Electrical Accumulator Co. *v.* Brush Electric Co	52 Fed. Rep	148, 179
Electrical Accumulator Co. *v.* Julien Electric Co	38 Fed. Rep	35, 44, 54, 59, 177, 180

Names of Cases.	Where reported.	Pages in this book
Electrical Accumulator Co. *v.* Julien Electric Co	47 Fed Rep	528
Electrical Accumulator Co. *v.* New York & Harlem R. Co	50 Fed. Rep	195
Elgin Wind Power Co. *v.* Nichols	65 Fed. Rep	258, 314, 316, 453
Eliot *v.* Piersol	1 Peters	580
Elizabeth *v.* Pavement Co	97 U. S	68, 84, 85, 88, 205, 305, 330, 544, 545, 547, 550, 558
Ellithorp *v.* Robertson	4 Blatch	57
Elmendorf *v.* Taylor	10 Wheaton	471
Elm City Co. *v.* Wooster	6 Fisher	87
Ely *v.* Mfg. Co	4 Fisher	504, 522
Emack *v.* Kane	34 Fed. Rep	449
Emerson *v.* Hogg	2 Blatch	96, 107
Emerson *v.* Hubbard	34 Fed. Rep	472
Emerson *v.* Lippert	31 Fed. Rep	143
Emerson *v.* Simm	6 Fisher	425, 437
Emigh *v.* Chamberlin	2 Fisher,	260
Emigh *v.* Railroad Co	6 Fed. Rep	428, 442, 546, 556, 557
Empire State Nail Co. *v.* American Button Co	61 Fed. Rep	508, 514
Empire State Nail Co. *v.* Faulkner	55 Fed Rep	238
Enterprise Mfg. Co. *v.* Deisler	43 Fed. Rep.	478
Enterprise Mfg. Co. *v.* Sargent	28 Fed. Rep	37
Enterprise Mfg. Co. *v.* Sargent	48 Fed. Rep	540
Enterprise Mfg. Co. *v.* Snow	67 Fed. Rep	351
Erie Railway Co. *v.* Ramsay	45 New York	530
Estey *v.* Burdett	109 U. S	29
Eunson *v.* Dodge	18 Wallace	226
Evans *v.* Eaton	3 Wheaton	173, 362, 364, 394
Evans *v.* Eaton	7 Wheaton	422
Evans *v.* Hettich	7 Wheaton	407
Evans *v.* Jordan	9 Cranch	217
Everest *v.* Oil Co	20 Fed. Rep	69
Everest *v.* Oil Co	22 Fed. Rep	488
Everett *v.* Thatcher	3 Baun. & Ard	511
Evory *v.* Burt	15 Fed. Rep	300
Ewart Mfg. Co. *v.* Iron Co	31 Fed. Rep	303
Ex parte Robinson	2 Bissell	135
Ex parte Schollenberger	96 U. S	317

Facer *v.* Midvale Steel Works Co.	38 Fed. Rep	534
Falley *v.* Giles	29 Indiana	234
Farley *v.* Steam Gauge Co	1 McArthur's Patent Cases	64

Names of Cases.	Where reported.	Pages in this book.
Farmer's Mfg. Co. *v.* Corn Planter Co.	128 U. S.	208
Farrington *v.* Detroit	4 Fisher	227
Farrington *v.* Gregory	4 Fisher	255
Fassett *v.* Ewart Mfg. Co.	58 Fed. Rep	102
Fassett *v.* Ewart Mfg. Co.	62 Fed. Rep	102
Faulks *v.* Kamp	17 Blatch	289
Fay *v.* Cordesman	109 U. S.	157, 168, 296
Featherstone *v.* Cycle Co.	58 Fed. Rep.	157, 330, 332
Featherstone *v.* Cycle Co.	57 Fed. Rep.	201
Fermentation Co. *v.* Maus	122 U. S.	4, 5
Ferrett *v.* Atwill	1 Blatch	280, 281
Fetter *v.* Newhall	17 Fed. Rep	288
Field *v.* De Comeau	116 U. S.	289
Filley *v.* Stove Co	30 Fed. Rep.	185, 294
Fischer *v.* Hayes	6 Fed. Rep	355, 385, 471
Fischer *v.* Hayes	16 Fed. Rep	503
Fischer *v.* Hayes	39 Fed. Rep	540
Fischer *v.* Neil	6 Fed. Rep	230
Fish *v.* Manning	31 Fed. Rep	281
Fisher *v.* Amador Mine	25 Fed. Rep	265
Fisk Clark & Flagg *v.* Hollander	MacArthur & Mackay	160, 282
Fitch *v.* Bragg	16 Fed. Rep	431
Flint *v.* Smoke Burner Co.	38 Fed. Rep	449
Florsheim *v.* Schilling	137 U. S.	26, 38, 62, 167
Flower *v.* Detroit	127 U. S.	207
Fond Du Lac County *v.* May	137 U. S	33, 42
Foos Mfg. Co. *v.* Thresher Co.	44 Fed. Rep.	23, 164
Foote *v.* Silsby	1 Blatch	365
Foote *v.* Stein	35 Fed. Rep	489
Forbes *v.* Stove Co.	2 Cliff	212
Forbush *v.* Bradford	1 Fisher	518, 528
Forbush *v.* Cook	2 Fisher	34, 99
Forehand *v.* Porter	15 Fed. Rep	455
Forgie *v.* Oil Well Supply Co.	57 Fed. Rep	42
Forgie *v.* Oil Well Supply Co.	58 Fed. Rep	49
Fornerook *v.* Root	127 U. S.	298
Forschner *v.* Baumgarten	26 Fed. Rep	26
Fosdick *v.* Lowell Machine Shop	58 Fed. Rep	458
Foss *v.* Herbert	1 Bissell	288
Foss *v.* Herbert	2 Fisher	298
Foster *v.* Moore	1 Curtis	510, 525
Foster *v.* Crossin	23 Fed. Rep	60, 506, 513
Foster *v.* Crossin	44 Fed. Rep.	19, 42
Fougeres *v.* Murberger	44 Fed. Rep.	449, 460
Fox *v.* Perkins	52 Fed. Rep	44

Names of Cases.	Where reported.	Pages in this book.
Fraim *v.* Iron Co	27 Fed. Rep	517
Francis *v.* Flinn	118 U. S	449
Freeman *v.* Asmus	145 U. S	161, 207
Freese *v.* Swartchild	35 Fed. Rep	386
French *v.* Carter	187 U. S	29, 45
French *v.* Carter	25 Fed Rep	28
French *v.* Edwards	21 Wallace	412
French *v.* Rogers	1 Fisher	140, 205
Fry *v.* Quinlan	13 Blatch	112
Fry *v.* Yeaton	1 Cranch's Circuit Court Reports	416
Fuller *v.* Yentzer	94 U. S	168, 167, 206
Gage *v.* Herring	107 U. S	181, 210, 400
Gage *v.* Kellogg	26 Fed. Rep	488
Gallahue *v.* Butterfield	10 Blatch	209
Galliher *v.* Cadwell	145 U. S	458
Gamewell Telegraph Co. *v.* Brooklyn	14 Fed. Rep	251, 325
Gamewell Telegraph Co. *v.* Chillicothe	7 Fed. Rep	340
Gamewell Telegraph Co. *v.* Municipal Signal Co	61 Fed. Rep	532
Gandy *v.* Belting Co	143 U. S	24, 44, 76, 89, 350
Gandy *v.* Belting Co	28 Fed. Rep	89
Gandy *v.* Marble	122 U. S	114, 115
Garretson *v.* Clark	111 U. S	550
Garretson *v.* Clark	4 Bann. & Ard	550
Gardner *v.* Herz	118 U. S	19, 26
Gardner *v.* Howe	2 Cliff	141
Gates Iron Works *v.* Fraser	153 U. S	42
Gates Iron Works *v.* Fraser	42 Fed Rep	23, 40
Gay *v.* Cornell	1 Blatch	113, 229
Gayler *v.* Wilder	10 Howard	59, 66, 229, 230, 231, 242, 250, 325
Gear *v.* Fitch	3 Bann. & Ard	236
Gear *v.* Grosvenor	1 Holmes	223
Geis *v.* Kimber	36 Fed. Rep	331
Gelpcke *v.* Dubuque	1 Wallace	355
Geo. Ertel Co. *v.* Stahl	65 Fed. Rep	509, 515
Gerard *v.* Safe & Lock Co	48 Fed. Rep	470
Germain *v.* Wilgus	67 Fed. Rep	351, 448
Giant Powder Co. *v.* Nitro Powder Co	19 Fed. Rep	188, 205, 454
Gibbs *v.* Hoefner	19 Fed. Rep	73, 201
Gibson *v.* Cook	2 Blatch	235, 237
Gibson *v.* Gifford	1 Blatch	218
Gibson *v.* Harris	1 Blatch	205

Names of Cases.	Where reported.	Pages in this book.
Gibson *v.* Van Dresar	1 Blatch	522, 525
Gilbert & Barker Mfg. Co. *v.* Bussing	12 Blatch	265, 525
Giles *v.* Heysinger	150 U. S.	87
Gill *v.* Wells	22 Wallace	98, 208, 209, 295
Gillespie *v.* Cummings	3 Sawyer	340
Gilmore *v.* Anderson	38 Fed. Rep	516
Gilmore *v.* Golay	3 Fisher	272
Gilpin *v.* Consequa	3 Washington	488
Glaenzer *v.* Wiederer	33 Fed. Rep	517
Gloucester Isinglass Co. *v.* Brooks	19 Fed. Rep	121
Gloucester Isinglass Co. *v.* Le Page	30 Fed. Rep	42, 378
Glue Co. *v.* Upton	97 U. S	28
Godfrey *v.* Eames	1 Wallace	124
Goebel *v.* Supply Co	55 Fed. Rep	350, 446, 460
Gold & Silver Ore Co. *v.* Disintegrating Ore Co	6 Blatch	162, 267
Gold & Stock Telegraph Co. *v.* Pearce	19 Fed. Rep	540
Gold & Stock Telegraph Co. *v.* Telegram Co	23 Fed. Rep	143, 146
Goldie *v.* Iron Co	64 Fed. Rep	44, 404
Goldsmith *v.* Collar Co	18 Blatch	324
Goodyear *v.* Allyn	6 Blatch	401, 447, 468, 517
Goodyear *v.* Berry	3 Fisher	510
Goodyear *v.* Bishop	4 Blatch	325
Goodyear *v.* Bishop	2 Fisher	424, 431, 438
Goodyear *v.* Cary	4 Blatch	235
Goodyear *v.* Hills	3 Fisher	525
Goodyear *v.* Hullihen	3 Fisher	212
Goodyear *v.* McBurney	3 Blatch	325
Goodyear *v.* Mullee	5 Blatch	328, 541
Goodyear *v.* Mullee	3 Fisher	507
Goodyear *v.* Phelps	3 Blatch	334
Goodyear *v.* Railroad Co	1 Fisher	242, 507
Goodyear *v.* Rubber Co	3 Blatch	262, 520
Goodyear *v.* Rubber Co	1 Cliff	226
Goodyear *v.* Vulcanite Co	2 Fisher	45
Goodyear Dental Vulcanite Co. *v.* Davis	3 Bann. & Ard	478
Goodyear Dental Vulcanite Co. *v.* Folsom	5 Bann. & Ard	537
Goodyear Dental Vulcanite Co. *v.* Willis	1 Bann. & Ard	479
Gordon *v.* Anthony	16 Blatch	322, 347

Names of Cases.	Where reported.	Pages in this book.
Gordon *v.* Harvester Works	28 Fed. Rep	382
Gordon *v.* Warder	150 U. S	299
Gorham *v.* White	14 Wallace	309
Goss *v.* Cameron	14 Fed. Rep	4
Gottfried *v.* Brewing Co	5 Bann & Ard	397
Gottfried *v.* Brewing Co	13 Fed Rep	455
Gottfried *v.* Brewing Co	22 Fed. Rep	428
Gottfried *v.* Miller	104 U. S	282
Gottfried *v* Moerlein	14 Fed. Rep	455
Gould *v.* Sessions	67 Fed. Rep	539, 541
Gould *v.* Spicer	15 Fed Rep	210, 409
Graham *v.* Crawford Mfg. Co	11 Fed. Rep	162
Graham *v.* Johnston	21 Fed. Rep	82
Graham *v.* Mason	1 Holmes	545, 550
Graham *v.* Mason	5 Fisher	300
Graham *v.* McCormick	5 Bann. & Ard	64, 86, 124, 162
Graham *v.* McCormick	11 Fed. Rep	160
Graham *v.* Mfg. Co	11 Fed. Rep	64, 86, 160, 443
Graham *v.* Mfg. Co	24 Fed. Rep	424, 425
Graham *v* Teter	25 Fed. Rep	113
Grammo Electrical Co. *v* Electric Co	17 Fed. Rep	143
Grant *v.* Raymond	6 Peters	90, 127, 150, 190, 198, 204, 214, 224, 362, 409
Grant *v.* Walter	148 U. S	155
Gray *v.* Halkyard	28 Fed. Rep	485
Gray *v.* James	1 Peters' Circuit Court Reports	91 350, 398
Gray *v.* Railroad Co	1 Woolworth	537, 538
Green *v.* Austin	22 Off. Gaz	328
Green *v.* Barney	19 Fed. Rep	458
Green *v.* Biddle	8 Wheaton	131
Green *v.* Bishop	1 Cliff	565, 567
Green *v.* Bogue	158 U. S	453
Green *v.* City of Lynn	55 Fed. Rep	374, 478, 480, 481
Green *v.* French	4 Bann. & Ard	458, 520, 522
Green *v.* French	11 Fed. Rep	69
Green *v.* Gardner	22 Off. Gaz	329
Greenleaf *v.* Mfg. Co	17 Blatch	428
Greenwood *v.* Bracher	1 Fed. Rep	514
Grier *v.* Baynes	46 Fed. Rep	261
Grier *v.* Baynes	49 Fed. Rep	248
Grier *v.* Wilt	120 U. S	372
Griffith *v.* Segar	29 Fed. Rep	340
Griggs *v.* Gear	3 Gilman	492
Groth *v.* Postal Supply Co	61 Fed. Rep	171

Names of Cases.	Where reported.	Pages in this book
Grover & Baker Sewing Machine Co. *v.* Williams	2 Fisher	508, 510, 511
Guaranty Trust Co. *v.* Railroad Co.	130 U. S	106, 288, 488
Guldot *v.* Brooklyn	105 U. S	28
Guldot *v.* Palmer	10 Blatch	524
Gullle *v.* Swan	19 Johnson	320
Gunn *v.* Savage	30 Fed. Rep	165
Gustin *v.* Rall Mill Co	47 Fed. Rep	28
Guyon *v.* Sorrell	1 Blatch	435
Haffeke *v.* Clark	46 Fed. Rep	2, 154
Haffeke *v.* Clark	50 Fed. Rep	261
Halles *v.* Stove Co	133 U. S	176, 177, 179, 207
Halles *v.* Van Wormer	20 Wallace	80
Haines *v.* McLaughlin	135 U. S	408, 409
Haines *v.* Peck	26 Fed. Rep	208
Hake *v.* Brown	37 Fed. Rep	186
Hake *v.* Brown	44 Fed. Rep	491
Hale & Kilbourn Mfg. Co. *v.* Hartford Mattress Co	36 Fed. Rep	42
Hall *v.* Macneal	107 U. S	39, 87
Hall *v.* Stern	20 Fed. Rep	431
Hall *v.* Wiles	2 Blatch	181, 435
Halstead *v.* Grinnan	152 U. S	458
Halstead *v.* Manning	34 Fed. Rep	316
Hamilton *v.* Kingsbury	15 Blatch	254, 260
Hamilton *v.* Kingsbury	17 Blatch	251, 254, 256
Hamilton *v.* Rollins	3 Bann & Ard	233
Hamilton *v.* Simons	5 Blssell	541
Hammacher *v.* Wilson	26 Fed. Rep	258
Hammacher *v.* Wilson	32 Fed. Rep	567
Hammerschlag *v.* Garrett	10 Fed. Rep	287
Hammerschlag *v.* Seamoni	7 Fed. Rep	55
Hammerschlag Mfg. Co. *v.* Spalding	35 Fed. Rep	479
Hammond *v.* Hunt	4 Bann. & Ard	325
Hammond *v.* Organ Co	92 U. S	261
Hammond's Appeal	2 Off. Gaz	110
Hammond Buckle Co. *v.* Goodyear Rubber Co	49 Fed. Rep	516
Hammond Buckle Co. *v.* Goodyear Rubber Co	58 Fed. Rep	44
Hancock Inspirator Co. *v.* Jenks	21 Fed. Rep	99, 103, 156
Hancock Inspirator Co. *v.* Regester	35 Fed. Rep	479
Hanger *v.* Abbott	6 Wallace	338
Hanlon *v.* Primrose	56 Fed. Rep	460
Hapgood *v.* Hewitt	119 U. S	230, 260

Names of Cases.	Where reported.	Pages in this book.
Hapgood *v.* Rosenstock	23 Fed. Rep	242
Harding *v.* Handy	11 Wheaton	505, 507
Harmon *v.* Bird	22 Wendell	231
Harmon *v.* Struthers	48 Fed. Rep	85, 302, 308
Harmon *v.* Struthers	48 Fed. Rep	378
Harmon *v.* Struthers	57 Fed. Rep	85
Harper *v.* Butler	2 Peters	324
Harper & Reynolds Co. *v.* Wilgus	50 Fed. Rep	388
Harris *v.* Allen	15 Fed. Rep	208
Hartell *v.* Tilghman	99 U. S	315
Hartshorn *v.* Barrel Co	119 U. S.	166, 202, 208
Hartshorn *v.* Day	19 Howard	233
Hartshorn *v.* Roller Co	18 Fed. Rep	208
Harwood *v.* Mfg. Co	3 Fisher	300
Haselden *v.* Ogden	3 Fisher	435
Haslem *v.* Pittsburgh Plate Glass Co	71 Off. Gaz	24
Hasselman *v.* Gaar	20 Fed. Rep	23
Hatch *v.* Moffitt	15 Fed. Rep	4, 26
Hatfield *v.* Smith	44 Fed. Rep	250
Hathaway *v.* Roach	2 Woodbury & Minot.	415, 416, 417, 418
Hat Pouncing Machine Co. *v.* Hedden	148 U. S	37, 44
Hat-Sweat Mfg. Co. *v.* Porter	46 Fed. Rep	257
Hat-Sweat Mfg. Co. *v.* Sewing Machine Co	32 Fed. Rep	519
Hat-Sweat Mfg. Co. *v.* Waring	46 Fed. Rep	257
Hausknecht *v.* Claypool	1 Black	338, 382, 420
Havana Press Drill Co. *v.* Ashurst.	148 Ill	314
Havemeyer *v.* Randall	21 Fed. Rep	210, 394
Hawes *v.* Antisdel	2 Bann. & Ard	69
Hawes *v.* Cook	5 Off. Gaz	478
Hayden *v.* Oriental Mills	15 Fed. Rep	338
Hayden *v.* Oriental Mills	22 Fed. Rep	376
Hayes *v.* Bickelhoupt	21 Fed. Rep	33
Hayes *v.* Bickelhoupt	23 Fed. Rep	340, 386
Hayes *v.* Dayton	8 Fed. Rep	340
Hayes *v.* Leton	5 Fed. Rep	513
Hayward *v* Andrews	106 U. S	250, 322, 456
Hayward *v.* Andrews	12 Fed. Rep	233
Hazelip *v.* Richardson	10 Off. Gaz	111
Head *v.* Porter	48 Fed. Rep	320
Heald *v.* Rice	104 U. S	39
Heath Cycle Co. *v.* Hay	67 Fed. Rep	32
Heath *v.* Hildreth	1 McArthur's Patent Cases.	19, 64, 122
Heaton Button Fastener Co. *v.* Macdonald	57 Fed. Rep	544

Names of Cases.	Where reported.	Pages in this book.
Hebert *v.* Joly	5 Louisiana	448
Heaton-Peninsular Button Fastener Co. *v.* Button Fastener Co	58 Fed. Rep	62
Heckers *v.* Fowler	2 Wallace	381, 382, 413, 414, 419
Henderson *v.* Stove Co	2 Bann. & Ard	167
Hendrie *v.* Sayles	98 U. S	140, 220, 235, 242, 347
Hendy *v.* Iron Works	127 U. S	38, 42, 460
Henry *v.* Stove Co	2 Bann. & Ard	322
Henry *v.* Stove Co	5 Bann. & Ard	87, 108
Henry *v.* Tool Co.	3 Bann. & Ard	144
Henzel *v.* California Electrical Works	51 Fed. Rep	584
Herbert *v.* Butler	97 U. S	420
Herman *v.* Herman	20 Fed. Rep.	263
Herring *v.* Gage	3 Bann. & Ard	545, 546
Herring *v.* Nelson	3 Bann. & Ard	209
Heulings *v.* Reid	58 Fed. Rep	50
Hewett *v.* Swift	3 Allen	336
Heysinger *v.* Rouss.	40 Fed. Rep	378
Hiatt *v.* Twomey	1 Deveroux & Battle's Equity Cases	230
Hicks *v.* Kelsey	18 Wallace	26
Higby *v.* Rubber Co	18 Fed. Rep	540
Hill *v.* Biddle	27 Fed. Rep	188
Hill *v.* Dunklee	1 McArthur's Patent Cases	66
Hill *v.* Epley	31 Penn. State	268
Hill *v.* Smith	32 Fed. Rep	491
Hill *v.* Thuermer	18 Indiana	231
Hill *v.* Whitcomb	1 Holmes	250
Hill *v.* Wooster	132 U. S	19, 115
Himely *v.* Rose	5 Cranch	497
Hipp *v.* Babin	19 Howard	408
Hisey *v.* Peters.	71 Off. Gaz	111, 119, 121
Hitchcock *v.* Tremaine	9 Blatch	489
Hitchcock *v.* Tremaine	4 Fisher	167
Hitchcock *v.* Tremaine	5 Fisher	490
Hobbie *v.* Jennison	149 U. S	244
Hobbie *v.* Smith	27 Fed. Rep	69, 424, 431
Hockholzer *v.* Eager	2 Sawyer	520, 521
Hodge *v.* Railroad Co	6 Blatch	227, 319, 505, 520, 523
Hodge *v.* Railroad Co	4 Fisher	323
Hodge *v.* North Missouri Railroad Co	1 Dillon	247
Hoe *v.* Boston Daily Advertiser	14 Fed. Rep	524
Hoe *v.* Kahler	12 Fed. Rep	103

Names of Cases.	Where reported.	Pages in this book.
Hoe *v.* Knap	27 Fed. Rep	157, 524
Hooltgo *v.* Hoeller	2 Bond	209
Hoff *v.* Iron Clad Mfg. Co	120 U. S	26
Hoffholms *v.* Brandt	3 Fisher	212
Hogg *v.* Emerson	6 Howard	160
Hogg *v.* Emerson	11 Howard	165, 410
Hohorst *v.* Howard	37 Fed. Rep	455
Holbrook *v.* Small	3 Bann. & Ard	488
Holden *v.* Curtis	2 New Hampshire	231, 237
Holliday *v.* Matthoson	24 Fed. Rep	254
Holmes *v.* Truman	67 Fed. Rep	388, 408, 432
Holmes Alarm Tel. Co. *v.* Telephone Co	42 Fed. Rep	34, 143
Holmes Protective Co. *v.* Alarm Co	21 Fed. Rep	144
Holmes Protective Co. *v.* Alarm Co	22 Fed. Rep	143
Holmes Protective Co. *v.* Alarm Co	31 Fed. Rep	517
Holliday *v.* Pickhardt	12 Fed. Rep	514
Holliday *v.* Pickhardt	20 Fed. Rep	171, 268
Hollister *v* Benedict Mfg. Co	113 U. S	19, 20, 28, 44
Holloway *v.* Dow	54 Fed. Rep	99, 156, 383
Horman Patent Mfg. Co. *v.* Railroad Co	15 Blatch	340
Horn *v.* Detroit Co	150 U. S	453
Hoskin *v.* Fisher	125 U. S	203, 207, 400
Hotchkiss *v.* Greenwood	11 Howard	26
Hotchkiss *v.* Greenwood	4 McLean	50
Hotchkiss *v.* Oliver	5 Denio	367
Hotchkiss *v.* Wooden Ware Co	53 Fed. Rep	278, 279, 280
Howard *v.* Mast	33 Fed. Rep	540
Howard *v.* Plow Works	35 Fed. Rep	69, 334
Howe *v.* Morton	1 Fisher	516, 523, 525
Howe *v.* Russell	36 Maine	567
Howe *v.* Williams	2 Cliff	287
Howe Machine Co. *v.* National Needle Co	134 U. S	42, 165, 166, 171
Howe Machine Co. *v.* Needle Co	21 Fed. Rep.	42
Howes *v.* McNeal	3 Bann. & Ard	81, 124
Howes *v.* McNeal	5 Bann & Ard	57
Howes *v.* Nute	4 Cliff	347, 436
H. T. Slemmer's Appeal	58 Penn	50
Hubbell *v.* De Land	14 Fed. Rep	451
Hubel *v.* Dick	28 Fed. Rep	64, 268, 299, 303
Hubel *v.* Tucker	24 Fed. Rep	121

Names of Cases.	Where reported.	Pages in this book.
Hubor *v.* Nelson Mfg. Co	148 U. S	144, 201
Hubor *v.* Sanitary Depot	34 Fed. Rep	325, 340
Hudson *v.* Draper	4 Fisher	387
Hull *v.* Commissioner of Patents	7 Off. Gaz; 8 Off. Gaz	100, 115
Hulse *v.* Bonsack Machine Co	65 Fed. Rep	241
Humphreys *v.* Douglas	10 Vermont	327
Hunnicutt *v.* Peyton	102 U. S	428
Hunt *v.* Garsed	51 Fed. Rep	40
Hunt Bros. Fruit Packing Co. *v.* Cassidy	53 Fed. Rep	45, 60, 207, 388, 426, 480, 482, 460, 461
Hunt Bros. Fruit Packing Co. *v.* Cassidy	64 Fed. Rep	482
Huntington *v.* Heel Plate Co	33 Fed. Rep	528
Hupfeld *v.* Automaton Piano Co	60 Fed. Rep	314, 326
Hurd *v.* Snow	35 Fed. Rep	29
Hurlbut *v.* Schillinger	130 U. S	551
Hussey *v.* Whitely	2 Fisher	528
Ide *v.* Engine	31 Fed. Rep	440, 530
Ide *v.* Engine Co	39 Fed. Rep	34
Illingworth *v.* Atha	42 Fed. Rep	113, 114
Illinois Central Railroad Co. *v.* Turlll	110 U. S	553
Imhaeuser *v.* Buerk	101 U. S	61, 297, 299
Imlay *v.* Railroad Co	4 Blatch	347
India Rubber Comb Co. *v.* Phelps	4 Fisher	489
Indianapolis & St. Louis Railroad Co. *v.* Horst	93 U. S	422, 423
Indurated Fibre Co. *v.* Grace	52 Fed. Rep	355, 461
Ingalls *v.* Tice	14 Fed. Rep.	325
Ingersoll *v.* Jewett	16 Blatch	374
Ingersoll *v.* Musgrove	3 Bann. & Ard	432
In re Brosnahan	18 Fed. Rep	136
In re Chinnock	21 D. C. R	110
In re Corbin and Martlett	1 McArthur's Patent Cases	73
In re Drawbaugh	66 Off. Gaz	112
In re Drawbaugh	67 Off. Gaz	83
In re Haberman Mfg. Co	147 U. S	531, 534
In re Hebard	1 McArthur's Patent Cases	38, 298
In re Hemiup	3 Paige	565, 567
In re Hohorst	150 U. S	269, 314, 317
In re Hoeveler & McTighe	21 D. C. R	110, 111
In re Kemper	1 McArthur's Patent Cases	2
In re Maynard	1 McArthur's Patent Cases	26

Names of Cases.	Where reported.	Pages in this book.
In re Schaefer	66 Off. Gaz	56
In re Seeley	1 McArthur's Patent Cases	19
Insurance Co. *v.* Eggleston	96 U. S	259
Insurance Co. *v.* Lanier	95 U. S	420
Insurance Co. *v.* Sea	21 Wallace	411, 412
International Crown Co. *v.* Carmichael	44 Fed. Rep	449
International Crown Co. *v.* Gaylord	140 U. S	84, 85, 87
International Crown Co. *v.* Richmond	30 Fed. Rep	88, 124
International Terra-Cotta Co. *v.* Maurer	44 Fed. Rep	210, 388, 394, 466
Iowa Barb Steel Wire Co. *v.* Barbed Wire Co	30 Fed. Rep	384, 541
Irwin *v.* McRoberts	4 Bann. & Ard	524
Isaacs *v.* Cooper	4 Washington	511
Ives *v.* Hamilton	92 U. S	304
Jackson *v.* Nagle	47 Fed. Rep.	382
Jacob *v.* United States	1 Brockenbrough	281
Jacobs *v.* Baker	7 Wallace	15
Jacobs *v.* Hamilton County	4 Fisher	327
Jacobson *v.* Alpi	46 Fed. Rep	517
James *v.* Campbell	104 U. S	130, 137, 201, 399
Jaros Underwear Co. *v.* Fleece Underwear Co	60 Fed. Rep	251, 340
Jenkins *v.* Greenwald	1 Bond	547
Jenkins *v.* Greenwald	2 Fisher.	347, 516, 534
Jenkins *v.* Ruberg	39 Fed. Rep	516
Jenkins *v.* Stetson	32 Fed. Rep	198, 209
Jennings *v.* Dolan	29 Fed. Rep	330, 563
Jennings *v.* Kibbe	10 Fed. Rep	386
Jennings *v.* Kibbe	24 Fed. Rep	69
Jennisons *v.* Leonard	21 Wallace	412
Johnsen *v.* Fassman	1 Woods	81
Johnson *v.* Brooklyn Co	37 Fed. Rep	536
Johnson *v.* Johnston	60 Fed. Rep	15
Johnson *v.* McCullough	4 Fisher	57, 222
Johnson *v.* Olsen	61 Fed Rep	172
Johnson *v.* Railroad Co	105 U. S	203, 209
Johnson *v.* Railroad Co	33 Fed. Rep	61
Johnson *v.* Root	2 Cliff	410
Johnson *v.* Root	1 Fisher	387
Johnson Co. *v.* Steel Co	67 Fed. Rep	26

Names of Cases.	Where reported.	Pages in this book.
Johnson Signal Co. *v.* Union Switch & Signal Co.	55 Fed. Rep.	252
Johnson Signal Co. *v.* Union Signal Co	50 Fed. Rep.	230
Johnson Street Rail Co. *v.* North Branch Steel Co.	48 Fed. Rep.	483
Johnston *v.* Mining Co.	148 U. S	458
Jonathan Mills Mfg. Co. *v.* Whitehurst	50 Fed. Rep.	281
Jonathan Mills Mfg. Co. *v.* Whitehurst	60 Fed. Rep.	400
Jones *v.* Bank	5 Howard.	527
Jones *v.* Barker	11 Fed. Rep.	84, 170
Jones *v.* Berger	58 Fed. Rep.	233, 255, 409, 470
Jones *v.* Buckell	104 U. S	422
Jones *v.* Clow	39 Fed. Rep.	84
Jones *v.* Moorehead	1 Wallace	407
Jones *v.* Wetherell	1 McArthur's Patent Cases	122
Jones Co. *v.* Munger Co	40 Fed. Rep.	300
Jordan *v.* Dobson	2 Abbott	217, 218, 224, 532
Jordan *v.* Dobson	4 Fisher	209
Joslin *v.* Northern Pacific Ry. Co.	55 Fed. Rep.	302
Judson *v.* Bradford	3 Bann. & Ard	426, 430
Judson *v.* Cope	1 Fisher	54
Judson *v.* Cook	11 Barbour	329
Judson L. Thomson Mfg. Co. *v.* Hatheway	41 Fed. Rep.	516
J. L. Mott Iron Works *v.* Cassidy	31 Fed. Rep.	20
J. L. Mott Iron Works *v.* Skirm	30 Fed. Rep.	34
J. L. Mott Iron Works *v.* Standard Mfg. Co.	53 Fed. Rep.	172
Kaaps *v.* Hartung	23 Fed. Rep.	40
Kaolatype Engraving Co. *v.* Hoke	30 Fed. Rep.	233, 460
Kearney *v.* Railroad Co.	27 Fed. Rep.	231
Kearney *v.* Railroad Co.	32 Fed. Rep.	64
Keeler *v.* Folding Bed Co.	157 U. S	244
Keep *v.* Fuller	42 Fed. Rep.	567
Kelley *v.* Ypsilanti Mfg. Co	44 Fed. Rep	265, 449
Kendall *v.* Winsor	21 Howard	79, 80, 133, 137
Kendrick *v.* Emmons	2 Bann. & Ard	143, 154
Kendrick *v.* Emmons	3 Bann. & Ard.	298
Kennedy *v.* Hazelton	128 U. S	241
Kennedy *v.* Penn. Iron & Coal Co.	67 Fed. Rep.	523
Kenrick *v.* United States	1 Gallison	281
Keplinger *v.* DeYoung	10 Wheaton	330

Names of Cases.	Where reported.	Pages in this book.
Kerosene Lamp Heater Co. *v.* Fisher	5 Bann. & Ard	560
Kerosene Lamp Heater Co. *v.* Littell	8 Bann. & Ard	209
Kotchum Harvester Co. *v.* Johnson Harvester Co.	8 Fed. Rep.	433
Keyes *v.* Grant	118 U. S	407
Keyes *v.* Mining Co	158 U. S	202, 402, 456
Keyes *v.* Refining Co	31 Fed. Rep.	513, 518
Keyes *v.* Refining Co	43 Fed. Rep.	428
Keystone Bridge Co. *v.* Iron Co.	95 U. S.	165, 170
Keystone Mfg. Co. *v.* Adams	151 U. S	41, 44, 544, 550
Kidd *v.* Horry	28 Fed. Rep.	449
Kidd *v.* Horry	33 Fed. Rep.	23
Kidd *v.* Ransom	35 Fed. Rep.	478
Kilbourne *v.* Bingham Co.	47 Fed. Rep.	26
Kilmer Mfg. Co. *v* Griswold	67 Fed. Rep.	487
Kimberly *v.* Arms	129 U. S	566
King *v.* Gallun	100 U. S	42
King *v.* Frostol	4 Bann. & Ard.	23
Kinsman *v.* Parkhurst	18 Howard	497
Kirby *v.* Mfg. Co	10 Blatch	208
Kirby Bung Mfg. Co. *v.* White	1 McCrary	515, 523, 524
Kirk *v.* Commissioner of Patents	37 Off. Gaz.	113, 114, 125
Kirk *v.* Du Bois	28 Fed. Rep	455, 473
Kirk *v.* Du Bois	33 Fed. Rep.	121
Kittle *v* De Graff	30 Fed. Rep.	455
Kittle *v.* Hall	29 Fed. Rep.	245, 458
Kittle *v.* Hall	30 Fed. Rep.	183
Kittle *v.* Rogers	33 Fed. Rep.	455
Klein *v.* Russell	19 Wallace	75, 170, 208, 407
Knapp *v.* Morss	150 U. S.	100, 166, 302
Knapp *v.* Shaw	15 Fed. Rep.	484
Knickerbocker Co. *v.* Rogers	61 Fed. Rep.	62, 70, 154
Knight *v.* Railroad Co	Taney's Circuit Court Decisions.	201, 208
Knox *v.* Loweree	1 Bann. & Ard	81
Knox *v.* Quicksilver Mining Co.	6 Sawyer	295, 546, 547, 561
Korn *v.* Wiebusch	33 Fed. Rep.	453, 470
Kraus *v.* Fitzpatrick	34 Fed. Rep.	60
Krementz *v.* Cottle Co.	148 U. S.	24, 44
Krick *v.* Jansen	52 Fed. Rep.	353, 460
La Baw *v.* Hawkins	2 Bann. & Ard	424, 429, 549, 550
Ladd *v.* Cameron	25 Fed. Rep.	517

Names of Cases.	Where reported.	Pages in this book.
Lake Shore R. R. Co. *v.* Car Brake Shoe Co	110 U. S	104
Lalance & Grosjean Mfg. Co. *v.* Haberman Mfg. Co	53 Fed. Rep	287
Lalance & Grosjean Mfg. Co. *v.* Haberman Mfg. Co	55 Fed. Rep	153
Lalance & Grosjean Mfg Co. *v.* Mosholm	48 Fed. Rep	460
Lamprey Protector Co. *v.* Economy Heater Co	62 Fed. Rep	125
Lamson Cash Reg. Co. *v.* Koplinger	45 Fed. Rep	170
Landesmann *v.* Jonasson	32 Fed. Rep	28
Lane & Bodley Co. *v.* Look	150 U. S	261, 268, 458
Lapham Dodge Co. *v.* Severin	40 Fed. Rep	178
LaRue *v.* Electric Co	28 Fed. Rep	166
LaRue *v.* Electric Co	31 Fed. Rep	76, 166
Lawther *v.* Hamilton	124 U S	5, 37
Lawther *v.* Hamilton	64 Fed. Rep	544, 553
Leach *v.* Chandler	18 Fed. Rep	268
Leake *v.* Gilchrist	2 Devereaux	324
Lee *v.* Pillsbury	49 Fed. Rep	482
Lee *v.* Upson & Hart Co	42 Fed. Rep	26
Lee *v.* Upson & Hart Co	43 Fed. Rep	69
Loffingwell *v.* Warren	2 Black	388
Leggett *v.* Avery	101 U. S	79, 399
Leggett *v.* Standard Oil Co	149 U. S	23, 208
Lehigh Valley Railroad Co. *v.* Kearney	158 U. S	100, 166
Lehnbeuter *v.* Holthaus	105 U. S	76
Lenox *v.* Roberts	2 Wheaton	322
Leonard *v.* Lovell	29 Fed. Rep	63
LePage Co. *v.* Russia Cement Co	51 Fed. Rep	355
Le Roy *v.* Tatham	14 Howard	156
Levy *v.* Dattlebaum	63 Fed. Rep	234
Lewis *v.* Johns	34 California	329
Lewiston Falls Mfg. Co. *v.* Franklin Co	54 Maine	502
Lexington & Ohio Railroad Co. *v.* Applegate	8 Dana	531
Liddle *v.* Cory	7 Blatch	540, 541
Lightner *v.* Railroad Co	1 Lowell	260
Ligowski Clay Pigeon Co. *v.* Clay Bird Co	34 Fed. Rep	124, 161, 297, 414, 460
Lilliendahl *v.* Detweller	18 Fed. Rep	3[illegible]9
Lincoln *v.* Power	151 U. S	409

Names of Cases.	Where reported.	Pages in this book.
Lindsay *v.* Stoln	10 Fed. Rep	126
Little *v.* Downing	37 New Hampshire	401
Littlefield *v.* Perry	21 Wallace	205, 231, 240, 242, 243, 325, 326, 443
Livingston *v.* Jones	1 Fisher	387
Livingston *v.* Woodworth	15 Howard	544
Locke *v.* Lane Co	35 Fed. Rep	307
Lockwood *v.* Cleveland	6 Fed. Rep	269
Lockwood *v.* Cleveland	20 Fed. Rep	271
Locomotive Truck Co. *v.* Railway Co	10 Blatch	340
Locomotive Truck Co. *v.* Railroad Co	2 Fed. Rep	438, 442, 546, 556
Loerolier *v.* Crandall	11 Fed. Rep	208
Loewer *v.* Ford	55 Fed. Rep	43
Loom Co. *v.* Higgins	105 U. S	25, 64, 158, 173, 174, 367, 398
Loomis *v.* Loomis	26 Vermont	286
Lord *v.* Machine Co	24 Fed. Rep	457
Lorillard *v.* Dohan	9 Fed. Rep	5
Lorillard *v.* Ridgway	4 Bann. & Ard	28
Loring *v.* Booth	52 Fed. Rep	521
Lovell Mfg. Co. *v.* Cary	147 U. S	43
Lovell *v.* Davis	101 U. S	421
Low *v.* Stove Co	36 Fed. Rep	40
Lowell Mfg. Co. *v.* Hartford Carpet Co	2 Fisher	536
Lowrey *v.* Aluminum Co	56 Fed. Rep	234, 452, 467
Lowrey *v.* Aluminum Co	68 Fed. Rep	234
Lyell *v.* Miller	6 McLean	415
Lyman Ventilating & Refrigerator Co. *v.* Lalor	1 Bann. & Ard	56
Mabie *v.* Haskell	2 Cliff	44, 289, 297
Macauley *v* Machine Co	9 Fed. Rep	516
Macbeth *v.* Braddock Glass Co	54 Fed. Rep	542
Macbeth *v.* Gillinder	54 Fed. Rep	173, 309, 478, 542
Macbeth *v.* Lippincott Glass Co	54 Fed. Rep	516
Machesney *v.* Brown	29 Fed. Rep	232
Machine Co. *v.* Murphy	97 U. S	298
Mack *v.* Levy	49 Fed. Rep	540
Mack *v.* Levy	59 Fed. Rep	540
Mack *v.* Levy	60 Fed. Rep	373, 374
Mack *v.* Optical Mfg. Co	52 Fed. Rep	43
Mackaye *v.* Mallory	12 Fed. Rep	233
MacKay *v.* Jackman	12 Fed. Rep	4
MacKnight *v.* McNiece	64 Fed. Rep	23, 329
Maddock *v.* Coxon	45 Fed. Rep	162, 164

Names of Cases.	Where reported.	Pages in this book.
Magic Ruffle Co. *v.* Douglas	2 Fisher	73, 481
Magin *v.* Karle	150 U. S	19
Magowan *v.* Bolting Co	141 U. S	28, 44
Mahn *v.* Harwood	112 U. S	201, 202
Mahn *v.* Harwood	3 Bann. & Ard	40
Mahon *v.* McGuire Mfg. Co	51 Fed. Rep	26, 38
Maitland *v.* Gibson	68 Fed. Rep	28
Mallory Mfg. Co. *v.* Hickok	20 Fed. Rep	516
Maltby *v.* Bobo	14 Blatch	328
Mann's Car Co. *v.* Monarch Car Co	84 Fed. Rep	42 414
Manufacturing Co. *v.* Cowing	105 U. S	549, 551
Manufacturing Co. *v.* Ladd	102 U. S	210
Many *v.* Jagger	1 Blatch	303
Many *v.* Sizer	1 Fisher	68, 310, 387, 515
Marchand *v.* Emkin	132 U. S	42
Marchand *v.* Emkin	26 Fed. Rep	42
Market St. Ry. Co. *v.* Rowley	155 U. S	407
Marks Chair Co. *v.* Wilson	48 Fed. Rep	414
Marsh *v.* Commissioner	8 Bissell	82
Marsh *v.* Dodge	4 Hun	257
Marsh *v.* Nichols	128 U. S	130, 151, 315, 546
Marsh *v.* Seymour	97 U. S	198, 442
Marsh *v.* Stove Co	51 Fed. Rep	388
Marston *v.* Sweet	66 N. Y	257
Martin Cash Carrier Co. *v.* Martin	67 Fed. Rep	375
Marvin *v.* Gotshall	36 Fed. Rep	45
Maryland Hominy Co. *v.* Dorr	46 Fed. Rep	154
Mason *v.* Graham	23 Wallace	300, 550
Mason *v.* Railroad Co	52 Maine	567
Masseth *v.* Johnston	59 Fed. Rep	437
Masseth *v.* Palm	51 Fed. Rep	298
Masseth *v.* Relber	59 Fed. Rep	134
Massie's Heirs *v.* Graham's Adm'rs.	3 McLean	493
Mast, Foos & Co. *v.* Windmill & Pump Co	68 Fed. Rep	484
Matthews *v.* Flower	25 Fed. Rep	195, 399
Matthews *v.* Machine Co.	105 U. S	203
Matthews *v.* Mfg. Co	18 Blatch	340
Matthews *v.* Mfg. Co	19 Fed. Rep	479
Matthews *v.* Schoneberger	4 Fed. Rep	164
Matthews *v.* Skates	1 Fisher	307, 310
Matthews *v.* Spangenberg	14 Fed. Rep	186. 428
Matthews *v.* Spangenberg	19 Fed. Rep	483
Maxwell *v.* Kennedy	8 Howard	459, 486
May *v.* Chaffee	2 Dillon	234, 249, 254

Names of Cases.	Where reported.	Pages in this book
May v. County of Buchanan	20 Fed. Rep	180, 327, 376
May v. County of Cass	30 Fed. Rep	327
May v. County of Juneau	30 Fed. Rep	288, 327
May v. County of Logan	30 Fed. Rep	322, 324, 327, 370
May v. County of Mercer	30 Fed. Rep	327, 338, 348
May v. County of Ralls	31 Fed. Rep	327
May v. County of Saginaw	32 Fed. Rep.	233
May v. Juneau County	187 U. S	364, 408
May v. LeClaire	11 Wallace	238
Maynard v. Pawling	5 Bann. & Ard	331
Mayor of New York v. American Cable Ry. Co.	30 Fed. Rep	384
McAleer v. United States	150 U. S	263
McArthur v. Supply Co	10 Fed. Rep	203, 210
McBride v. Plow Co	40 Fed. Rep	316
McBride v. Plow Co	44 Fed. Rep	102, 104
McClain v. Ortmayer	141 U. S	21, 37, 44, 163, 166, 169, 171, 296
McClain v. Ortmayer	38 Fed. Rep	30
McClery v. Baker	63 Fed. Rep	23
McCluny v. Silliman	3 Peters	338
McClure v. Jeffrey	8 Indiana	240
McClurg v. Kingsland	1 Howard	7, 131, 140, 173
McComb v. Brodie	1 Woods	160, 161, 288, 289, 424, 426
McComb v. Ernest	1 Woods	72, 288, 511
McCormick v. Jerome	3 Blatch	538
McCormick v. Seymour	2 Blatch	92, 396
McCormick v. Seymour	3 Blatch	438
McCormick v. Talcott	20 Howard	167, 301
McCormick Machine Co. v. Harvester Works	42 Fed. Rep	66, 121
McCoy v. Nelson	121 U. S	457
McCreay v Pennsylvania Canal Co.	141 U. S	553
M'Culloch v. Maryland	4 Wheaton	376
McCulloh v. Association	45 Fed. Rep	246
McDonald v. Whitney	24 Fed. Rep	69
McDonald v. Whitney	39 Fed. Rep	492
McFarland v. Spencer	23 Fed. Rep	25
McKay & Copeland Mach. Co. v. Claflin	58 Fed. Rep	164, 388
McKay v Jackman	16 Reporter	531
McKay v. Smith	39 Fed. Rep	257, 258
McKay v. Wooster	2 Sawyer	254
McKeever v. United States	23 Off. Gaz	263
McKenna v. Fisk	1 Howard	349
McKernan v. Hite	6 Indiana	237

Names of Cases.	Where reported.	Pages in this book
McMahon *v.* Tyng	14 Allen	302
McMickin *v.* Perin	18 Howard	568
M'Millin *v.* Barclay	5 Fisher	125, 203
McMillin *v.* Conrad	16 Fed. Rep	523
M'Millin *v.* Rees	5 Bann. & Ard	63, 64, 161, 162, 164
McMillin *v.* Transportation Co	18 Fed. Rep	351
McMurray *v.* Mallory	111 U. S	182
McMurray *v.* Miller	16 Fed. Rep	28
McNab *v.* Mfg. Co	32 Fed. Rep	28
McNeil *v.* Holbrook	12 Peters	338
McNish *v.* Everson	5 Bann. & Ard	59
McWilliams *v.* Webb	32 Iowa	286
McWilliams Mfg. Co. *v.* Blundell	11 Fed. Rep	525
Meers *v.* Kelly	31 Fed. Rep	19
Merchant *v.* Lewis	1 Bond	414
Morgenthaler Co. *v.* Press Pub. Co.	57 Fed. Rep	72, 303
Morgenthaler Co. *v.* Seymour	66 Off. Gaz	113
Morriam *v* Drake	5 Fisher	208
Morriam *v.* Smith	11 Fed. Rep	322
Morrill *v.* Yeomans	94 U. S	133
Morrow *v.* Shoemaker	59 Fed. Rep	66, 300
Morshon *v.* Furnace Co	24 Fed. Rep	456
Moys *v.* Conover	125 U. S	205, 554
Mowes' Appeal	2 Off Gaz	111
Meyer *v.* Bailey	2 Bann. & Ard	212
Meyer *v.* Pritchard	1 Bann. & Ard	42
Michaels *v.* Roessler	34 Fed. Rep	154
Michigan Cent. R R. Co. *v.* Car Heating Co	67 Fed. Rep	118, 366, 463
Middletown Tool Co. *v.* Judd	3 Fisher	212
Miller *v.* Androscoggin Pulp Co	5 Fisher	5
Miller *v.* Brass Co	104 U. S	198, 201, 206, 369
Miller *v* Eagle Co	151 U. S	99, 161, 162, 300, 302
Miller *v.* Foree	116 U. S	6, 42
Miller *v.* McIntyre	6 Peters	471
Miller *v.* Wheeler & Wilson Mfg. Co.	46 Fed. Rep	316
Miller-Magee Co. *v.* Carpenter	34 Fed. Rep	313
Milligan *v.* Mfg. Co	21 Fed. Rep	239
Milligan & Higgins Glue Co. *v.* Upton	1 Bann. & Ard	210
Millner *v.* Schofield	4 Hughes	331
Millner *v.* Voss	4 Hughes	35
Minneapolis Harvester Works *v.* Machine Co	28 Fed. Rep	507
Minturn *v.* Seymour	4 Johnson's Chancery	527
Mitchell *v.* Hawley	16 Wallace	226, 227, 251. 255

Names of Cases.	Where reported.	Pages in this book.
Moat *v.* Holbein	2 Edward's Chancery	530
Moffitt *v.* Garr	1 Black	204
Montrose *v.* Mabie	30 Fed. Rep	261
Moody *v.* Fiske	2 Mason	288
Moore *v.* Bare	11 Iowa	237
Moore *v.* Marsh	7 Wallace	233, 242, 321, 324
Morey *v.* Lockwood	8 Wallace	60, 198, 304
Morgan *v.* Daniells	153 U. S	121
Morgan Envelope Co. *v.* Albany Paper Co	152 U. S	28, 171, 172, 254
Morgan Envelope Co. *v.* Albany Paper Co	40 Fed. Rep	38
Morley Machine Co. *v.* Lancaster	120 U. S	107, 302
Morris *v.* Barrett	1 Bond	288
Morris *v.* Kempshall Mfg Co	20 Fed. Rep	102
Morris *v.* Mfg. Co	3 Fisher	518, 524
Morris *v.* Mfg. Co	20 Fed Rep	270
Morris *v.* McMillin	112 U. S	19, 23
Morris *v.* Shelbourne	4 Fisher	524
Morse *v.* Knapp	35 Fed. Rep	536
Morse *v.* Knapp	37 Fed. Rep	373, 540
Morton *v.* Infirmary	5 Blatch	3, 364
Mosler Safe & Lock Co. *v.* Mosler	22 Fed. Rep	33
Moulton *v.* Commissioner of Patents	61 Off. Gaz	4
Mowry *v.* Railroad Co	5 Fisher	514
Mowry *v.* Whitney	14 Wallace	8, 225, 274, 275, 285, 554
Muller *v.* Ellison	27 Fed. Rep	23
Mumma *v.* Potomac Co	8 Peters	330, 533
Mundy *v.* Mfg. Co	34 Fed. Rep	538, 540
Munson *v.* New York	124 U. S	19
Munson *v.* New York	11 Fed. Rep	489, 490
Munson *v.* New York	19 Fed. Rep	535
Murdock *v.* Finney	21 Missouri	236
Murphy *v.* Trenton Rubber Co	45 Fed. Rep	29, 300
Myers *v.* Cunningham	44 Fed. Rep	314, 348, 361
Myers *v.* Dunbar	1 Bann. & Ard	495
Myers *v.* Frame	8 Blatch	186
Nathan Mfg. Co. *v.* Craig	47 Fed. Rep	271, 350
Nathan Mfg. Co. *v.* Craig	49 Fed. Rep	162, 267
National Box & Paper Co. *v.* American Paper Box Co	48 Fed. Rep	479
National Bunching Machine Co. *v.* Williams Co	44 Fed. Rep	34

Names of Cases.	Where reported.	Pages in this book.
National Cable Ry. Co. *v.* Sioux City Cable Ry. Co.	42 Fed. Rep	23, 524
National Car Brake Shoe Co. *v.* Mfg. Co.	19 Fed. Rep	310, 334, 386, 428, 434
National Cash Register Co. *v.* American Cash Register Co.	47 Fed. Rep	479
National Cash Register Co. *v.* American Cash Register Co.	53 Fed. Rep	32, 158, 300, 301, 303, 480
National Cash Register Co. *v.* Boston Cash Recorder Co.	41 Fed. Rep	536
National Cash Register Co. *v.* Lamson Store Service Co	60 Fed. Rep	65, 270
National Co. *v.* Belcher	68 Fed. Rep	24
National Device Co. *v.* Lloyd	40 Fed. Rep	78
National Machine Co. *v.* Brown	36 Fed. Rep	64, 414
National Machine Co. *v.* Hedden	20 Fed. Rep	517
National Machine Co. *v.* Thom	25 Fed. Rep	156
National Mfg. Co. *v.* Meyers	15 Fed. Rep	23
National Pump Cylinder Co. *v.* Gunnison	17 Fed. Rep	210
National Roofing Co. *v.* Garwood	35 Fed. Rep	26
National Rubber Co. *v.* Rubber Shoe Co	41 Fed. Rep	258
National Spring Co. *v.* Mfg. Co	12 Blatch	198
National Typewriter Co. *v.* Pope Mfg. Co	56 Fed. Rep	316
National Typographic Co. *v.* New York Typograph Co	46 Fed. Rep	172, 302, 509, 510
Neale *v.* Neals	9 Wallace	450
Neale *v.* Walker	1 Cranch's Circuit Court Reports.	375
Nellis *v.* McLanahan	6 Fisher	340
Nellis *v.* Mfg. Co	13 Fed. Rep	340
Nelson *v.* McMann	4 Bann. & Ard	325
Nesmith *v.* Calvert	1 Woodbury & Minot	240
Nevins *v.* Johnson	3 Blatch	347
New *v.* Warren	22 Off. Gaz	4, 203
New American File Co. *v.* Nicholson File Co	8 Fed. Rep	145, 222
New Departure Bell Co. *v.* Bevin Mfg. Co	64 Fed. Rep	43, 62, 161, 302, 450
New Departure Bell Co. *v.* Hardware Co	62 Fed. Rep	268
New Departure Bell Co. *v.* Hardware Specialty Co	72 Off. Gaz	479
New Home Sewing Machine Co. *v.* Singer Mfg. Co	68 Fed. Rep	164

Names of Cases.	Where reported.	Pages in this book.
Newell *v.* West	13 Blatch	247
New York *v.* Ransom	23 Howard	425, 433
New York & Baltimore Coffee Polishing Co. *v.* New York Coffee Polishing Co	9 Fed. Rep	275, 448
New York Belting Co. *v.* Gutta Percha Mfg. Co	56 Fed. Rep	515
New York Belting Co. *v.* New Jersey Rubber Co	137 U. S	460
New York Belting Co *v.* Rubber Co.	30 Fed. Rep	460
New York Belting Co. *v.* Rubber Co.	32 Fed. Rep	491
New York Belting Co. *v.* Rubber Co.	47 Fed. Rep	321, 455
New York Belting Co. *v.* Rubber Co.	48 Fed. Rep	60, 455
New York Belting Co. *v.* Rubber Co.	58 Fed. Rep	309
New York Filter Co. *v.* Filter Co.	62 Fed. Rep	489
New York Filter Co. *v.* Schwarzwalder	58 Fed. Rep	265, 287, 449
New York Grape Sugar Co. *v.* American Grape Sugar Co	10 Fed. Rep	507, 518, 523
New York Grape Sugar Co. *v.* American Grape Sugar Co	42 Fed. Rep	545
New York Grape Sugar Co. *v.* Buffalo Grape Sugar Co	24 Fed. Rep	458
New York Packing Co. *v.* Magowan	27 Fed. Rep	532
New York Paper Bag Machine Co. *v.* Union Paper Bag Machine Co	32 Fed. Rep	236, 242
New York Pharmical Association *v.* Tilden	14 Fed. Rep	232, 360
New York Sugar Co. *v.* Sugar Co.	20 Fed. Rep	450
New York Sugar Co. *v.* Sugar Co.	35 Fed. Rep	489
Ney Mfg. Co. *v.* Drill Co	56 Fed. Rep	508, 522
Nichols *v.* Newell	1 Fisher	279
Nicholson Pavement Co. *v.* Jenkins	14 Wallace	229
Nicodemus *v.* Frazier	19 Fed. Rep	33
Nims *v.* Johnson	7 California	401
Northwestern Fire Extinguisher Co. *v.* Philadelphia Fire Extinguisher Co	1 Bann. & Ard	56, 59, 148, 151, 212, 247, 323
North Western Horse Nail Co. *v.* Horse Nail Co	28 Fed. Rep	295
Norton *v.* California Can Co	45 Fed. Rep	298, 300, 534
Norton *v.* Eagle Can Co	57 Fed. Rep	310, 458

Names of Cases.	Where reported.	Pages in this book.
Norton *v.* Eagle Can Co	59 Fed. Rep	405, 542
Norton *v.* Eagle Can Co	61 Fed. Rep	524
Norton *v.* Jonson	49 Fed. Rep	289, 301, 387
Nourse *v.* Allen	3 Fisher	340
Noyes *v.* Willard	1 Woods	454
O'Brien *v.* Gallagher	25 Conn	102
Odell *v.* Stout	22 Fed. Rep	57, 187, 201, 209
Odiorne *v.* Winkley	2 Gallison	389
Office Specialty Co. *v.* Globe Co	65 Fed. Rep	183
Office Specialty Co. *v.* Winter-night Mfg. Co	67 Fed. Rep	478, 480
Olds *v.* Brown	41 Fed. Rep	78, 164
Olin *v.* Timken	155 U. S	37, 44, 201
Oliphant *v.* Salem Flouring Mills Co.	5 Sawyer	278
Oliver *v.* Chemical Works	109 U. S	261
Oliver *v.* Platt	3 Howard	238
Ondordonk *v.* Fanning	5 Bann. & Ard.	540
Oregon Imp. Co. *v.* Excelsior Coal Co	132 U. S	370
O'Reilly *v.* Morse	15 Howard	3, 7, 40, 58, 96, 147, 156, 158, 178, 181, 182, 184, 187, 199, 208, 288, 297, 300, 303, 364, 367, 398, 499
Orr *v.* Littlefield	1 Woodbury & Minot	503, 506, 510, 525
Osborn *v.* Judd	29 Fed. Rep	19
Osborne *v.* Glazier	31 Fed. Rep	69
Otis Mfg. Co. *v.* Crane Mfg. Co	27 Fed. Rep	325
Otley *v.* Watkins	36 Fed. Rep	296, 306
Overman Wheel Co. *v.* Elliott Cycle Co	49 Fed. Rep	350
Pacific Bank *v.* Robinson	57 California	245
Pacific Cable Ry. Co. *v.* Butte City Ry. Co	52 Fed. Rep	270, 271
Pacific Cable Ry. Co. *v.* Butte City Ry. Co	55 Fed. Rep	69, 85, 164, 303
Pacific Cable Ry. Co. *v.* Butte City Ry. Co	58 Fed. Rep	63, 165, 298, 367
Pacific Contracting Co. *v.* Bingham	62 Fed. Rep	37
Pacific Iron Works *v.* Newhall	34 Connecticut	257
Packet Co. *v.* Sickles	5 Wallace	344
Packet Co. *v.* Sickles	19 Wallace	344, 347, 365, 425
Page *v.* Buckley	67 Fed. Rep	372

Names of Cases.	Where reported.	Pages in this book.
Page *v.* Ferry	1 Fisher	97, 387
Page *v.* Telegraph Co	18 Blatch	400, 517
Page Fence Co. *v.* Land	40 Fed. Rep	104
Pallard *v.* Bruno	20 Fed. Rep	144
Paine *v.* Snowden	40 Fed. Rep	60
Paine *v.* Trask	50 Fed. Rep	384
Palmer *v.* Corning	150 U. S	28
Palmer *v.* Gatling Gun Co	8 Fed. Rep	107
Palmer *v.* Mills	57 Fed. Rep	507, 528
Paper Bag Cases	105 U. S	220, 254, 325, 418
Paper Stock Co. *v.* Disinfecting Co.	147 Mass	262
Parham *v.* Buttonhole Mach. Co	4 Fisher	99, 107
Parker *v.* Bigler	1 Fisher	385, 415
Parker *v.* Brant	1 Fisher	445, 502, 504, 517
Parker *v.* Dickinson	38 Fed. Rep	44
Parker *v.* Ferguson	1 Blatch	97
Parker *v.* Hall	2 Fisher	338
Parker *v.* Hatfield	4 McLean	476, 485
Parker *v.* Hawk	2 Fisher	338
Parker *v.* Haworth	4 McLean	810, 855
Parker *v.* Hulme	1 Fisher	86, 810, 485
Parker *v.* Sears	1 Fisher	582
Parker *v.* Stiles	5 McLean	182, 183
Parker *v.* The Judges	12 Wheaton	538
Parker & Whipple Co. *v.* Yale Clock Co	123 U. S	161, 197, 206, 209
Parkhurst *v.* Kinsman	1 Blatch	528
Parkhurst *v.* Kinsman	2 Blatch	472
Parks *v.* Booth	102 U. S	61, 99, 127, 415, 418, 499
Parrott *v.* Wikoff	1 Louisiana An'l	234
Patent Clothing Co. *v.* Glover	141 U. S	42, 498
Pattee Plow Co. *v.* Kingman & Co	129 U. S	19, 207
Patterson *v.* Duff	20 Fed. Rep	25
Patterson *v.* Kentucky	97 U. S	135
Patterson *v* Lyttle	11 Penn. State	263
Patterson *v.* Stapler	7 Fed. Rep	443
Paynes *v.* Coles	1 Munford	374, 484
Pearce *v.* Mulford	102 U. S	19
Pearce *v.* Rice	142 U. S	453
Peard *v.* Johnson	23 Fed. Rep	33, 298
Pearl *v.* Ocean Mills	2 Bann. & Ard	209
Peck *v.* Bacon	18 Connecticut	237
Peck *v.* Collins	103 U. S	204
Peek *v.* Frame	9 Blatch	436
Peek *v.* Frame	5 Fisher	181, 184

Names of Cases.	Where reported	Pages in this book.
Pelton *v.* Waters	1 Bann. & Ard	62
Pennington *v.* Gibson	16 Howard	405
Pennington *v.* Hunt	20 Fed. Rep	373
Pennington *v.* King	7 Fed. Rep	63
Pennock *v.* Dialogue	2 Peters	70, 80, 88, 422
Pennsylvania Drill Co. *v.* Simpson	20 Fed. Rep	57
Pennsylvania Drill Co. *v.* Simpson	30 Fed. Rep	540
Pennsylvania Railroad Co. *v.* Truck Co	110 U. S	42
Pentlarge *v.* Beeston	14 Blatch	507, 514
Pentlarge *v.* Beeston	1 Fed. Rep	541
Pentlarge *v.* Kirby	19 Fed. Rep	279, 281
Pentlarge *v.* New York Bushing Co	20 Fed. Rep	162
Pentlarge *v.* Pentlarge	19 Fed. Rep	271
People *v.* Sturtevant	5 Seldon	530
Peoria Target Co. *v.* Cleveland Target Co	47 Fed. Rep	201
Peoria Target Co. *v.* Cleveland Target Co	58 Fed. Rep	200
Perkins *v.* Lumber Co	51 Fed. Rep	27
Perrigo *v.* Spaulding	13 Blatch	265
Perry *v.* Cornell	1 McArthur's Patent Cases	64
Perry *v.* Corning	7 Blatch	239
Perry *v.* Corning	6 Blatch	347, 436
Perry *v.* Foundry Co	12 Fed. Rep	33, 37
Perry *v.* Starrett	3 Bann. & Ard	60, 309
Peters *v.* Active Mfg. Co	120 U. S	28, 42
Peters *v.* Hanson	120 U. S	42
Peterson *v.* Chemical Bank	32 N. Y	324
Pfansehmidt *v.* Mercantile Co	32 Fed. Rep	490
Phelps *v.* Brown	4 Blatch	366, 397
Phelps *v.* Classen	1 Woolworth	234
Phelps *v.* Mayer	15 Howard	423
Philadelphia & Reading Railroad Co. *v.* Derby	14 Howard	329
Philadelphia & Trenton R. R. Co. *v.* Stimpson	14 Peters	66, 200, 421
Philadelphia Trust Co. *v.* Edison Electric Light Co	65 Fed. Rep	265, 518
Philip *v.* Nock	17 Wallace	425, 426, 438
Phillips *v.* Comstock	4 McLean	365
Phillips *v.* Detroit	111 U. S	33, 390
Phillips *v.* Detroit	3 Bann. & Ard	539, 541
Phillips *v.* Page	24 Howard	27, 363
Phipps *v.* Yost	26 Fed. Rep	34

Names of Cases.	Where reported.	Pages in this book.
Phœnix Caster Co. *v.* Spiegel	138 U. S	17
Pickering *v.* McCullough	104 U. S	31, 59
Picquet *v.* Swan	3 Mason	322
Pierce *v* Wóst's Executors	1 Peters' Circuit Court Reports	471
Pierson *v* Screw Co	3 Story	137, 140
Pike *v.* Potter	3 Fisher	154
Piper *v.* Brown	1 Holmes	544, 559, 568, 567
Pirkl *v.* Smith	42 Fed. Rep	430
Pitts *v.* Hall	2 Blatch	47, 92, 235, 248, 307, 464
Pitts *v.* Jameson	15 Barbour	243
Pitts *v.* Womple	1 Bissell	134, 165, 309
Pitts *v.* Womple	2 Fisher	67, 288
Pitts *v.* Whitman	2 Story	237, 288
Pittsburgh Reduction Co. *v.* Aluminum Co	55 Fed. Rep	62, 70, 79, 155
Pittsburgh Reduction Co. *v.* Aluminum Co	64 Fed. Rep	490
Planing Machine Co. *v.* Keith	101 U. S.	28, 79, 80, 82, 124, 125, 363, 461
Platt *v.* Fire Extinguisher Mfg. Co.	50 Fed. Rep	231, 258
Plimpton *v.* Winslow	14 Fed. Rep	86
Pohl *v.* Anchor Brewing Co	134 U. S	144
Pohl *v.* Heyman	58 Fed. Rep	144
Poillon *v.* Schmidt	3 Fisher	5
Pomace Holder Co. *v.* Ferguson	110 U. S	23
Pontiac Boot Co. *v.* Merino Shoe Co	31 Fed. Rep	240
Pope Mfg. Co. *v.* Clark	46 Fed. Rep	230, 325
Pope Mfg. Co. *v.* G. & J. Mfg. Co.	144 U. S.	23, 63, 75, 230, 251, 259, 302
Pope Mfg. Co. *v.* G. & J. Mfg. Co.	34 Fed. Rep	303
Pope Mfg Co. *v.* Johnson	40 Fed. Rep	521
Pope Mfg. Co. *v.* Owsley	27 Fed. Rep	257, 258
Poppenhusen *v.* Comb Co	2 Fisher	72
Poppenhusen *v.* Falke	4 Blatch	334
Poppenhusen *v.* Falke	5 Blatch	45
Poppenhusen *v.* Falke	2 Fisher	508, 519
Porter Needle Co. *v.* Needle Co	17 Fed. Rep	253
Porter Needle Co. *v.* Needle Co	22 Fed. Rep	430
Post *v.* Hardware Co	25 Fed. Rep	351
Post *v.* Hardware Co	26 Fed. Rep	26
Potts *v.* Creager	155 U. S	24, 27, 43, 44, 161
Potter *v.* Braunsdorf	7 Blatch	222, 223
Potter *v.* Crowell	3 Fisher	328, 516, 533, 534
Potter *v.* Dixon	5 Blatch	272
Potter *v* Dixon	2 Fisher	120
Potter *v.* Fuller	2 Fisher	507, 522
Potter *v.* Holland	4 Blatch	212, 213, 325

Names of Cases.	Where reported.	Pages in this book.
Potter *v.* Holland	1 Fisher	522
Potter *v.* Mack	3 Fisher	532, 584
Potter *v.* Muller	1 Bond	541
Potter *v* Stewart	18 Blatch	208, 300
Potter *v.* Whitney	1 Lowell	183
Powder Co. *v.* Powder Works	98 U. S.	207, 466
Power *v.* Semmes	1 Cranch's Circuit Court Reports	417
Pratt *v.* Marcon	25 Ill. App.	244
Pratt *v* Seneenbaugh	64 Fed. Rep.	70, 480
Pratt *v.* Wilcox Mfg. Co.	64 Fed. Rep	256
Pratt *v.* Wright	65 Fed. Rep.	480
Preston *v.* Manard	116 U. S.	29
Provost *v.* Gratz	1 Peter's Circuit Court Reports	490
Priestly *v.* Montague	47 Fed. Rep.	51
Prime *v.* Mfg. Co.	16 Blatch.	286, 287
Proctor *v.* Brill	16 Fed. Rep.	184
Prouty *v.* Ruggles	16 Peters	101, 163, 206, 404
Puetz *v.* Bransford	31 Fed. Rep.	229
Pullman *v.* Railroad Co	5 Fed. Rep.	515
Pullman Palace Car Co. *v.* Wagner Palace Car Co	44 Fed. Rep.	508, 518
Purnell *v.* Danieli	8 Iredell's Equity Reports	503
Putnam *v.* Bottle Stopper Co	38 Fed. Rep.	479
Putnam *v.* Yerrington	2 Bann. & Ard	208, 479
Railroad Co. *v.* Duboise	12 Wallace	156, 263, 274
Railroad Co. *v.* Howard	7 Wallace	339
Railroad Co. *v.* Mellon	104 U. S.	166
Railroad Co. *v.* Smith	21 Wallace	421
Railroad Co. *v.* Trimble	10 Wallace	229, 233
Railway Co. *v.* Sayles	97 U. S. 72, 118, 167, 297, 301, 366,	404
Railway Mfg. Co. *v.* Railroad Co.	26 Fed. Rep.	488
Railway Mfg. Co. *v.* Railroad Co.	30 Fed. Rep.	298
Railway Register Co. *v.* Railroad Co	23 Fed. Rep	191
Ransom *v.* New York	1 Fisher	50, 62, 92, 127
Rapid Store Service Ry. Co. *v.* Taylor	43 Fed. Rep.	43, 99, 155, 156, 303
Rapp *v.* Kelling	41 Fed. Rep.	230, 326
Raymond *v.* Woven Hose Co	39 Fed. Rep.	509
Read *v.* Bowman	2 Wallace	234
Read *v.* Miller	2 Bissell	362
Reay *v.* Raynor	19 Fed. Rep.	4, 455, 532
Reckendorfer *v.* Faber	92 U. S.	31, 160, 390
Redway *v.* Ohio Stove Co	38 Fed. Rep	19, 60, 309

Names of Cases.	Where reported.	Pages in this book.
Reece Button Hole Machine Co. *v.* Globe Button Hole Machine Co	61 Fed. Rep	164, 298, 303
Reed *v.* Chase	25 Fed. Rep	297
Reed *v.* Cutter	1 Story	66, 121, 184, 186
Reedy *v.* Scott	23 Wallace	472
Reeves *v.* Bridge Co	5 Fisher	54
Reeves *v.* Keystone Bridge Co	2 Bann. & Ard	489, 490
Regan Vapor Engine Co. *v.* Pacific Gas Engine Co	47 Fed. Rep	288
Rein *v.* Clayton	87 Fed. Rep	147
Reiter *v.* Jones	35 Fed Rep	45
Reutgen *v.* Kanowrs	1 Washington	380
Reynes *v.* Dumont	130 U. S	457
Reynolds *v* Standard Paint Co	68 Fed Rep	168
Rhodes *v.* Lincoln Press Drill Co	64 Fed. Rep	178
Rice *v.* Boss	46 Fed. Rep	250, 251
Rich *v.* Lippencott	2 Fisher	66, 306
Rich *v.* Ricketts	7 Blatch	338
Richards *v.* Elevator Co	158 U. S	33, 459
Richards *v.* Railroad Co	40 Fed. Rep	34, 460
Richards *v* West	2 Green's Chancery	530
Richardson *v.* Hicks	1 McArthur's Patent Cases	395
Richmond *v.* Atwood	52 Fed. Rep	486, 487, 491
Riddick *v.* Moore	65 N. C	324
Riddle *v.* Mandeville	5 Cranch	322
Rifle & Cartridge Co. *v.* Arms Co	118 U. S	78, 79, 81, 82
Ring Refrigerator Co. *v.* St. Louis Mfg Co	67 Fed. Rep	330, 332
Ripley *v.* Edison Glass Co	49 Fed. Rep	439, 552
Risdon Locomotive Works *v.* Medart	158 U. S	6, 19, 26, 459, 460
Ritter *v.* Serrell	2 Blatch	243
Robbins *v.* Columbus Watch Co	50 Fed. Rep	332
Roberts *v.* Buck	1 Holmes	462
Roberts *v* Dickey	4 Fisher	5, 55
Roberts *v.* Harnidon	2 Cliff.	300, 309
Roberts *v.* Nail Co	53 Fed. Rep	99, 156
Roberts *v.* Roter	5 Fisher	287
Roberts *v.* Ryer	91 U. S	41, 161, 165
Roberts *v.* Schuyler	12 Blatch	410
Roberts *v.* Walley	14 Fed. Rep	385
Robinson *v.* Randolph	4 Bann. & Ard	517, 528
Rochester Coach Lace Co. *v.* Schaefer	46 Fed. Rep	6, 69
Rocker Spring Co. *v.* Thomas	68 Fed. Rep.	118

Names of Cases.	Where reported.	Pages in this book.
Rodebaugh *v.* Jackson	37 Fed. Rep	40
Roemer *v.* Bornholm	132 U. S	400, 407
Roemer *v.* Neumann	26 Fed. Rep	340, 378
Roemer *v.* Peddle	132 U. S	172
Roemer *v.* Peddle	27 Fed. Rep	162, 164
Roemer *v.* Simon	95 U. S	401, 402
Roemer *v.* Simon	2 Bann. & Ard	408
Roemer *v.* Simon	20 Fed. Rep	294
Roemer *v.* Simon	31 Fed. Rep	431
Rogers *v.* Abbot	4 Washington	447, 504
Rogers Typograph Co. *v.* Morgenthaler Co	64 Fed. Rep	308
Roller Mill Patent	156 U. S	167, 208
Roosevelt *v.* Electric Co	20 Fed. Rep	258
Roosevelt *v.* Telegraph Co	33 Fed. Rep	299
Root *v.* Railway Co	105 U. S	326, 347, 436, 442, 454, 546
Root *v.* Sontag	47 Fed. Rep	400
Root *v.* Third Avenue Railroad Co.	146 U. S	84
Roso *v.* Hurley	39 Indiana	240
Rosenwasser *v.* Spieth	129 U. S	54
Ross *v.* Ft. Wayne	58 Fed. Rep	350
Ross *v.* Ft. Wayne	63 Fed. Rep	472, 473
Ross *v.* Montana Ry. Co	45 Fed. Rep	132
Ross *v.* Prentiss	4 McLean	492, 498
Roth *v.* Keebler	30 Fed. Rep	23
Rowe *v.* Blanchard	18 Wisconsin	71, 395
Rowell *v.* Lindsay	113 U. S	163, 206, 208
Royer *v.* Belting Co	135 U. S	408
Royer *v.* Belting Co	40 Fed. Rep	40
Royer *v.* Coupe	146 U. S	172, 287
Royer *v.* Coupe	29 Fed. Rep	50, 107, 294, 310
Royer *v.* Coupe	38 Fed. Rep	40
Royer *v.* Mfg. Co	20 Fed. Rep	42, 403
Royer *v.* Roth	132 U. S	33
Rubber Co. *v.* Goodyear	9 Wallace	101, 157, 169, 198, 201, 209, 212, 225, 260, 261, 322, 323, 462, 494, 544, 546, 547, 548, 549, 551, 553
Rubber Trimming Co. *v.* Rubber Comb Co	35 Fed. Rep	42, 478
Rude *v.* Westcott	130 U. S	426, 428, 443
Ruggles *v.* Eddy	10 Blatch	223
Ruggles *v.* Eddy	11 Blatch	490
Rumford Chemical Works *v.* Hooker	2 Bann. & Ard	331, 373, 479, 532
Rumford Chemical Works *v.* Vice	14 Blatch	516, 522, 534
Russell *v.* Barney	6 McLean	405

Names of Cases.	Where reported.	Pages in this book
Russell *v.* Dodge	93 U. S	208
Russel *v.* Hyde	39 Fed. Rep	516
Russell *v.* Kern	58 Fed. Rep	230, 248
Russell *v.* Kern	64 Fed. Rep	370, 466
Russell *v.* Kern	72 Off. Gaz	168, 456
Russell *v.* Newark Machine Co	55 Fed. Rep	278, 279
Russell *v.* Place	94 U. S	157
Russell *v.* Place	9 Blatch	410, 430
Russell *v.* Place	5 Fisher	485
Ryan *v.* Gould	32 Fed. Rep	491
Ryan *v.* Hard	145 U. S	28, 20
Ryan *v.* Lee	10 Fed. Rep	245
Sackett *v.* Smith	42 Fed. Rep	171
Salt Lake City *v.* Hollister	118 U. S	333
Sanford *v.* Messer	1 Holmes	250, 325
San Francisco Bridge Co. *v.* Keating	68 Fed. Rep	84, 407
Sargent *v.* Burgess	129 U. S	208
Sargent *v.* Covert	152 U. S	28
Sargent *v.* Larned	2 Curtis	257
Sargent *v.* Lock Co	114 U. S.	168, 166, 296
Sargent *v.* Mfg. Co	17 Blatch	431
Sargent *v.* Seagrave	2 Curtis	509, 510, 511
Sarven *v.* Hall	9 Blatch	298
Saunders *v.* Allen	60 Fed. Rep	54
Sauvinet *v.* Poupono	14 Louisiana	448
Sawyer Spindle Co. *v.* Eureka Spindle Co	33 Fed. Rep.	205
Sawyer Spindle Co. *v.* Morrison Co	52 Fed. Rep	294
Sawyer Spindle Co. *v.* Taylor	56 Fed. Rep	508, 518
Saxe *v.* Hammond	1 Holmes	331
Saxton *v.* Aultman	15 Ohio State	237
Sayles *v.* Dubuque & Sioux City R. R. Co	5 Dillon	221, 223, 241, 347
Sayles *v.* Grand Trunk Railway Co.	Manuscript, 1879	318
Sayles *v.* Lake Shore Railway Co.	Manuscript, 1878	339
Sayles *v.* Oregon Central Railroad Co	4 Bann. & Ard	376
Sayles *v.* Railway Co	2 Fisher	82
Sayles *v.* Railway Co	4 Fisher	59, 67
Sayles *v.* Richmond, Fredericksburg & Potomac R. R. Co	4 Bann. & Ard	345
Sayre *v.* Scott	55 Fed. Rep	547
Schillinger *v.* Brewing Co	24 Off. Gaz	210

Names of Cases.	Where reported.	Pages in this book.
Schillinger *v.* Cranford	37 Off. Gaz.	208
Schillinger *v.* Gunther	17 Blatch	181, 185
Schillinger *v.* Gunther	2 Bann. & Ard	540, 542
Schillinger *v.* United States	155 U. S	320
Schlicht & Field Co. *v.* Sewing Machine Co.	36 Fed. Rep	51, 397
Schmid *v.* Mfg. Co	37 Fed. Rep	34, 42, 414
Schneider *v.* Bassett	18 Fed. Rep	507, 511
Schneider *v.* Pountney	21 Fed. Rep	331
Schneider *v.* Thill	5 Bann. & Ard	155
Schoerken *v.* Swift & Courtney & Boecher Co	7 Fed. Rep	302
Schott *v.* Benson	1 Blatch	418
Schreiber *v.* Sharpless	17 Fed. Rep.	280
Schreiber & Sons Co. *v.* Grim	65 Fed. Rep	42, 460
Schultz Belting Co. *v.* Belting Co	40 Fed. Rep	62
Schuyler Electric Co. *v.* Electric Supply Co	66 Fed. Rep	302
Schwarzwalder *v.* Filter Co	66 Fed. Rep	185, 284
Scott *v.* Watson	46 Maine	327
Screw Co. *v.* Sloan	1 McArthur's Patent Cases	19
Seabury *v.* AmEnde	152 U. S.	153, 431, 549
Searls *v.* Bouton	12 Fed. Rep.	260
Searls *v.* Merriam	22 Off. Gaz.	39
Searls *v.* Railroad Co	2 Woods	537
Searls *v.* Worden	11 Fed. Rep.	479
Sears *v.* United States	1 Gallison	281
Sedgwick *v.* Cleveland	7 Paige	472
Seeley *v.* Brush Electric Co	44 Fed. Rep	298
Selbert Oil Cup Co. *v.* Lubricator Co	34 Fed. Rep	250, 258, 262, 459
Selbert Oil Co. *v.* Powell Co	35 Fed. Rep	143
Selden *v.* Gas Burner Co	19 Blatch	148
Selden *v.* Gas Burner Co	9 Fed. Rep	200, 205, 211, 212
Sessions *v.* Gould	49 Fed. Rep	507, 515
Sessions *v.* Gould	60 Fed. Rep	479
Sessions *v.* Gould	63 Fed. Rep	541
Sessions *v.* Romadka	145 U. S.	44, 176, 178, 186, 246, 302, 553, 556, 558
Sewall *v.* Jones	91 U. S	155, 171
Sewing Machine Co. *v.* Frame	24 Fed. Rep	25, 197
Seymour *v.* Marsh	6 Fisher	395
Seymour *v.* McCormick	16 Howard	344, 425, 435
Seymour *v* McCormick	19 Howard	183, 392
Seymour *v.* Osborne	11 Wallace	55, 72, 103, 130, 133, 156, 158, 164, 200, 208, 295. 340, 400, 461

Names of Cases.	Where reported,	Pages in this book.
Shannon *v.* Bruner	33 Fed. Rep	547
Sharp *v.* Reissner	110 U. S	168, 206
Sharp *v.* Reissner	9 Fed. Rep	470
Shaver *v.* Mfg. Co	30 Fed. Rep	309
Shaw *v* Boylan	10 Indiana	385
Shaw *v.* Cooper	7 Peters	91
Shaw *v.* Lead Co	11 Fed. Rep	72, 204, 322
Shaw Stocking Co. *v.* Pearson	48 Fed. Rep	173
Shaw Valve Co. *v.* New Bedford	19 Fed. Rep	247
Sheffield Ry. Co. *v.* Gordon	151 U. S	564, 565
Shelly *v.* Brannan	4 Fisher	525
Shenfield *v.* Mfg. Co	187 U. S	23
Shenfield *v.* Mfg. Co	27 Fed. Rep	42
Shepard *v.* Carrigan	116 U. S	168, 171, 206
Sherman *v.* Nutt	35 Fed. Rep	515
Shields *v.* Barrow	17 Howard	450
Shirley *v.* Sanderson	8 Fed. Rep	69
Shoemaker *v.* Morrow	31 Fed. Rep	205
Shoup *v.* Henrici	2 Bann. & Ard	59
Shute *v.* Morley Co	64 Fed. Rep	486
Shuter *v.* Davis	16 Fed. Rep	45
Sickles *v.* Borden	3 Blatch	298, 300
Sickles *v.* Borden	4 Blatch	530, 541
Sickles *v.* Mfg. Co	1 Fisher	347
Sickles *v.* Mitchell	3 Blatch	507, 522
Sickles *v.* Tileston	4 Blatch	522
Siebert Oil Cup Co. *v.* Beggs	32 Fed. Rep	320
Siemens' Adm'r *v.* Sellers	123 U. S	54, 147
Silsby *v.* Foote	14 Howard	157, 185, 296, 362, 389
Silsby *v.* Foote	20 Howard	309, 485, 495
Silsby *v.* Foote	1 Blatch	485
Simmonds *v.* Morrison	44 Fed. Rep	69
Simmons *v.* Standard Oil Co	62 Fed. Rep	70
Simons Mach. Co. *v.* Knox	39 Fed. Rep	479
Simpson *v.* Davis	12 Fed. Rep	60
Simpson *v.* Davis	22 Fed. Rep	442, 547
Simpson *v.* Pond	2 Curtis	280
Sinclair *v.* Backus	5 Bann. & Ard	85
Singer *v.* Braunsdorf	7 Blatch	64, 118
Singer *v.* Walmsley	1 Fisher	154, 182, 183, 288, 310
Singer Mfg. Co. *v.* Brill	54 Fed. Rep	295, 383
Singer Mfg. Co. *v.* Foundry Co	34 Fed. Rep	254
Singer Mfg. Co. *v.* Schenck	68 Fed. Rep	70
Singer Mfg. Co. *v.* Wilson Mach. Co	38 Fed. Rep	455
Sisson *v.* Gilbert	9 Blatch	89

Names of Cases.	Where reported.	Pages in this book.
Sizer *v.* Many	16 Howard	418
Slack *v.* Walcott	3 Mason	474
Slawson *v.* Railroad Co	107 U. S	19, 85, 390, 460
Smead *v.* School District	44 Fed. Rep	186
Smith *v.* Baker's Administrators	1 Bann. & Ard	347, 486
Smith *v.* Davis	34 Fed. Rep	69
Smith *v.* Dental Vulcanite Co	93 U. S	27, 44, 80, 124, 165
Smith *v.* Downing	1 Fisher	288, 289
Smith *v.* Folt	50 Barbour	329
Smith *v.* Halkyard	16 Fed. Rep	507
Smith *v.* Halkyard	19 Fed. Rep	540
Smith *v.* Macbeth	67 Fed. Rep	164
Smith *v.* Mercer	3 Penn. L. J. Reports	218
Smith *v.* Merriam	6 Fed. Rep	200
Smith *v.* Murray	27 Fed. Rep	29
Smith *v.* Nichols	21 Wallace	87, 185
Smith *v.* Saddle Co	148 U. S	17, 19, 42
Smith *v.* Selden	1 Blatch	234
Smith *v.* Stewart	55 Fed. Rep	50, 309, 439, 552
Smith *v.* United States	1 Gallison	281
Smith *v.* Walton	51 Fed. Rep	277
Smith *v.* Walton	56 Fed. Rep	277
Smith *v.* Woodman	8 Foster	343
Smith & Davis Mfg. Co. *v.* Mellon	58 Fed. Rep	87
Smith & Egge Mfg. Co. *v.* Bridgeport Chain Co	46 Fed. Rep	167
Smith & Griggs Mfg. Co. *v.* Sprague	123 U. S	85, 86, 108
Snow *v.* Railway Co	121 U. S	295
Snow *v.* Taylor	4 Bann. & Ard	23
Snyder *v.* Bunnell	29 Fed. Rep	331
Solomons *v.* United States	137 U. S	136, 230, 263
Solomons *v.* United States	21 and 22 Court of Claims	231, 263
Sone *v.* Palmer	28 Missouri	237
Southard *v.* Russell	16 Howard	492, 494
Spaeth *v.* Barney	22 Fed. Rep	352
Sparhawk *v.* Wills	5 Gray	567
Sparkman *v.* Higgins	1 Blatch	50, 529
Spaulding *v.* Page	1 Sawyer	265
Spaulding *v.* Tucker	4 Fisher	417
Spaulding *v.* Tucker	Deady	387
Spering's Appeal	71 Pennsylvania State	336
Sperry *v.* Ribbans	3 Bann. & Ard	521
Spill *v.* Celluloid Mfg. Co	21 Fed. Rep	42, 488
Spill *v.* Mfg. Co	28 Fed. Rep	491
Sprague *v.* Mfg. Co	12 Fed. Rep	84
Spring *v.* Sewing Machine Co	4 Bann. & Ard	513, 521

Names of Cases.	Where reported.	Pages in this book.
Spring *v.* Sewing Machine Co	18 Fed. Rep	457
Stafford *v.* Hair Cloth Co	2 Cliff	410
Stahl *v.* Ertel	62 Fed. Rep	531, 539, 542
Stahl *v.* Williams	52 Fed. Rep	172
Stahl *v.* Williams	64 Fed. Rep	300
Stainthorp *v.* Humiston	2 Fisher	523, 525
Stainthorp *v.* Humiston	4 Fisher	57
Standard Elevator Co. *v.* Crane Elevator Co	56 Fed. Rep	506, 515
Standard Folding Bed Co. *v.* Osgood	51 Fed. Rep	302
Standard Folding Bed Co. *v.* Osgood	58 Fed. Rep	299
Standard Oil Co. *v.* Southern Pacific Co	42 Fed. Rep	460
Standard Oil Co. *v.* Southern Pacific Railroad Co	48 Fed. Rep	33
Standard Oil Co. *v.* Southern Pacific Co	54 Fed. Rep	332
Standard Paint Co. *v.* Bird	65 Fed. Rep	165, 307
Star Salt Caster Co. *v.* Crossman	4 Bann. & Ard	442
Starling *v.* St. Paul Plow Works	32 Fed. Rep	256
Starling *v.* Weir Plow Co	49 Fed. Rep	480
Starling *v.* Weir Plow Co	53 Fed. Rep	480
Steam Gauge & Lantern Co. *v.* Kennedy	41 Fed. Rep	186
Steam Gauge & Lantern Co. *v.* Mfg. Co	28 Fed. Rep	299
Steam Gauge & Lantern Co. *v.* Mfg. Co	29 Fed. Rep	288
Steam Gauge & Lantern Co. *v.* Meyrose	27 Fed. Rep	374
Steam Gauge & Lantern Co. *v.* Miller	8 Fed. Rep	513
Steam Gauge & Lantern Co. *v.* Miller	11 Fed. Rep	528
Steam Gauge & Lantern Co. *v.* Rogers	29 Fed. Rep	302
Steam Gauge & Lantern Co. *v.* Williams	42 Fed. Rep	34
Steam Gauge & Lantern Co. *v.* Williams	50 Fed. Rep	170
Steam Stone Cutter Co. *v.* Mfg. Co.	17 Blatch	265, 545, 548
Steam Stone Cutter Co. *v.* Sheldon	10 Blatch	252, 259
Steam Stone Cutter Co. *v.* Sheldon.	15 Fed. Rep	345
Steam Stone Cutter Co. *v.* Shortsleeves	16 Blatch	251, 252

Names of Cases.	Where reported.	Pages in this book.
Stearns *v.* Board	46 Fed. Rep	60
Stearns *v.* Davis	1 McArthur's Patent Cases	50
Stearns *v.* Phillips	43 Fed. Rep	381
Stegner *v.* Blake	36 Fed. Rep	161, 488
Stelger *v.* Heidelberger	4 Fed. Rep	328
Stein *v.* Goddard	1 McAllster	320
Steiner Extinguisher Co. *v.* Adrian	52 Fed. Rep	42, 161
Steiner Extinguisher Co. *v.* Adrian	50 Fed. Rep	42
Stephens *v.* Cady	14 Howard	136, 253
Stephens *v.* Felt	2 Blatch	434
Stephens *v.* Salisbury	1 McArthur's Patent Cases	65, 66
Stephenson *v.* Railroad Co	114 U. S	19, 33
Stephenson *v.* Railroad Co	14 Fed. Rep	59
Sterrick *v.* Pugsley	1 Central Law Journal	504
Stevens *v.* Baltimore & Ohio Railroad Co	6 Fed. Rep	347
Stevens *v.* Gladding	17 Howard	136, 253
Stevens *v.* Kansas Pacific Railway Co	5 Dillon	347
Stevens *v.* Pritchard	2 Bann. & Ard	160
Stevenson *v.* Magowan	31 Fed. Rep	170
Stewart *v.* Tenk	32 Fed. Rep	50
Stiles *v.* Rice	29 Fed. Rep	171
Still *v.* Reading	20 Off. Gaz	326, 355
Stillwell & Bierce Mfg. Co. *v.* The Cincinnati Gas Light & Coke Co	1 Bann. & Ard	57
Stimpson *v.* Pond	2 Curtis	281
Stimpson *v.* Railroad Co	4 Howard	200, 215
Stimpson *v.* Railroads	1 Wallace Jr	410, 438
Stimpson *v.* Rogers	4 Blatch	148, 443
Stimpson *v.* Woodman	10 Wallace	38
Stirrat *v.* Excelsior Mfg. Co	61 Fed. Rep	167
Stitt *v.* Railroad Co	22 Fed. Rep	67
St. Germain *v.* Brunswick	135 U. S	42
St. Louis Stamping Co. *v.* Quinby	4 Bann. & Ard	154
St. Paul Plow Works *v.* Starling	140 U. S	257, 258, 395, 411
Stohlmann *v.* Parker	53 Fed. Rep	25
Stokes Bros. Mfg. Co. *v.* Heller	56 Fed. Rep	481
Stonementz Mach. Co. *v.* Brown Mach. Co	46 Fed. Rep	268
Stonementz Mach. Co. *v.* Brown Mach. Co	57 Fed. Rep	162, 267
Story *v.* Livingston	13 Peters	563
Stow *v.* Chicago	104 U. S	54

Names of Cases.	Where reported.	Pages in this book.
Stow *v.* Chicago	3 Bann. & Ard	20, 30
Stralt *v.* Harrow Co	51 Fed. Rep	448
Stroat *v.* White	35 Fed. Rep	50
Strobridge *v.* Lindsay	6 Fed. Rep	308, 542
Stuart *v.* Thorman	37 Fed. Rep	517
Studebaker Mfg. Co *v.* Illinois Bolt Co	42 Fed. Rep	28, 460
Sturges *v.* Van Hagan	6 Fisher	272
Sturgis *v.* Knapp	33 Vermont	581
Stutz *v.* Armstrong	20 Fed. Rep	33
Stutz *v.* Armstrong	25 Fed. Rep	205
Suffolk Co *v.* Hayden	3 Wallace. 68, 64, 161, 162, 260, 424, 432	
Sugar Apparatus Co. *v.* Yaryan Mfg. Co	43 Fed. Rep	35, 380
Sugar Refinery Co. *v.* Mathiesson	3 Cliff	568
Sullivan *v* Judah	4 Paige	580
Sullivan *v.* Railroad Co	94 U. S	459
Sutro Bros. Braid Co. *v.* Schloss	44 Fed. Rep	309
Sutter *v.* Robinson	119 U. S	171
Suydam *v.* Day	2 Blatch	242
Swift *v.* Jenks	29 Fed. Rep	268
Swift *v.* Whison	2 Bond	212
Sykes *v.* Manhattan Co	6 Blatch	525
S. S. White Dental Mfg. Co. *v.* Johnson	56 Fed. Rep	516
Tack Co. *v.* Mfg. Co	109 U. S	23, 33
Tannage Patent Co. *v.* Zahn	66 Fed. Rep	96, 152
Tarr *v.* Folsom	1 Bann. & Ard	127
Tatham *v.* Lowber	4 Blatch	205, 545
Tatum *v.* Gregory	51 Fed. Rep	431
Taylor *v.* Archer	8 Blatch	175, 180
Taylor *v.* Porter	4 Hill (N. Y.)	131, 138
Teese *v.* Huntingdon	23 Howard	362, 436, 438, 462
Telephone Cases	126 U. S	4, 10, 19, 43, 95, 145, 157, 164, 303
Temple Pump Co. *v.* Mfg. Co	30 Fed. Rep	164
Temple Pump Co. *v.* Mfg. Co	31 Fed. Rep	540
Terhune *v.* Phillips	99 U. S	20
Terry Clock Co. *v.* New Haven Clock Co	4 Bann. & Ard	25
Thatcher Heating Co. *v.* Burtis	121 U. S	33
Thayer *v.* Hart	20 Fed. Rep	69
Theberath *v.* Trimming Co	15 Fed. Rep	17, 87
The Baltimore	8 Wallace	415

Names of Cases.	Where reported.	Pages in this book.
The Commander-in-Chief	1 Wallace	505, 507
The Fire Extinguisher Case	21 Fed. Rep	217
The Santa Maria	10 Wheaton	407
Thomas v. Harvie's Heirs	10 Wheaton	402
Thomas v. Quintard	5 Duer	289
Thompson v. Boisseller	114 U. S	19
Thompson v. Donnell Mfg. Co	40 Fed. Rep	161, 479
Thompson v. Gildersleeve	34 Fed. Rep	161
Thompson v. Mendelsohn	5 Fisher	516
Thompson v. Wooster	114 U. S	198
Thomson v. Citizens' National Bank	58 Fed. Rep	181
Thomson Electric Welding Co. v. Two Rivers Mfg. Co	68 Fed. Rep	509
Thomson-Houston Co. v. Elmira Ry. Co	60 Fed. Rep	168
Thomson-Houston Electric Co. v. Western Electric Co	65 Fed. Rep	28
Tibbe Mfg. Co. v. Heineken	37 Fed. Rep	518
Tilghman v Mitchell	9 Blatch	222, 225
Tilghman v. Mitchell	4 Fisher	507, 525
Tilghman v. Morse	5 Fisher	5
Tilghman v. Proctor	102 U. S	4, 5, 9, 62, 155, 284
Tilghman v. Proctor	125 U. S	425, 478, 544, 546, 547, 556, 558, 566
Time Telegraph Co. v. Himmer	19 Fed. Rep	386, 507
Timken v. Olin	37 Fed. Rep	60, 488
Timken v. Olin	41 Fed. Rep	425, 427, 437
Tobey Furniture Co. v. Colby	35 Fed. Rep	525
Toledo Reaper Co. v. Harvester Co.	24 Fed. Rep	532
Tompkins v. Butterfield	25 Fed. Rep	279
Tompkins v. Gage	5 Blatch	158
Tomkinson v. Mfg. Co	23 Fed. Rep	309
Tonduer v. Chambers	37 Fed. Rep	104, 298
Toohey v. Harding	4 Hughes	287
Topliff v. Topliff	145 U. S	44, 62, 80, 100, 167, 169, 198, 200, 203, 234, 435, 563
Toppan v Tiffany Car Co	39 Fed Rep	332
Tracy v Torrey	2 Blatch	525
Trader v. Messmore	1 Bann. & Ard	171
Traver v Brown	62 Fed. Rep	385
Travers v. Beyer	26 Fed. Rep.	331
Travers v. Cordage Co	64 Fed. Rep	5, 393
Travers v. Spreader Co	35 Fed. Rep	517
Trecothick v. Austin	4 Mason	324

Names of Cases.	Where reported,	Pages in this book.
Tremolo Patent	28 Wallace	450, 552
Troy Iron & Nail Factory *v.* Corning	6 Blatch	548, 561, 568
Troy Iron & Nail Factory *v.* Corning	7 Blatch	415
Troy Machinery Co. *v.* Bunnell	27 Fed. Rep	34, 40
Troy Nail Factory *v.* Corning	14 Howard	252, 260
Truax *v.* Detweiler	40 Fed. Rep	540
Tuck *v.* Bramhill	6 Blatch	157, 180, 186
Tucker *v.* Carpenter	1 Hempstead	530
Tucker *v.* Spalding	18 Wallace	41, 410, 436
Tufts *v* Tufts	3 Woodbury & Minot	488
Turnbull *v.* Plow Co	6 Bissell	237, 238
Turrell *v.* Spaeth	3 Bann. & Ard	200, 207, 290
Turrill *v.* Illinois Central R. R. Co.	20 Fed. Rep	558
Turrill *v.* Railroad Co	1 Wallace	68, 160, 400
Tuttle *v.* Claflin	62 Fed. Rep	555
Tuttle *v.* Matthews	28 Fed. Rep	150, 265, 287, 449
Tyler *v.* Boston	7 Wallace	101, 158, 300, 388
Tyler *v.* Galloway	12 Fed. Rep	181, 186
Tyler *v.* Hyde	2 Blatch	273
Tyler *v.* Savage	143 U. S	457
Uhlman *v.* Brewing Co	53 Fed. Rep	5
Union Bank *v.* Kerr	2 Maryland Chancery	502
Union Edge Setter Co. *v.* Keith	139 U. S	33
Union Edge Setter Co. *v.* Keith	31 Fed. Rep	40
Union Mfg. Co. *v.* Lounsbury	41 New York	227
Union Mfg. Co. *v.* Lounsbury	42 Barbour	259
Union Metallic Cartridge Co. *v.* United States Cartridge Co	2 Bann. & Ard	297
Union Paper Bag Machine Co. *v.* Binney	5 Fisher	503, 517, 521, 524
Union Paper Bag Machine Co. *v.* Crane	1 Bann. & Ard	121
Union Paper Bag Machine Co. *v.* Crane	1 Holmes	271
Union Paper Bag Machine Co. *v.* Murphy	97 U. S	300
Union Paper Bag Machine Co. *v.* Newell	11 Blatch	502, 529
Union Paper Bag Machine Co. *v.* Waterbury	39 Fed. Rep	5, 195, 199, 203
Union Paper Collar Co. *v.* Leland	1 Bann. & Ard	40
Union Stone Co. *v.* Allen	14 Fed. Rep	289

Names of Cases.	Where reported.	Pages in this book.
Union Sugar Refinery *v.* Matthiessen	2 Fisher	308
Union Switch & Signal Co. *v.* Johnson Signal Co	31 Fed. Rep	265
United Nickel Co. *v.* Electrical Works	25 Fed. Rep	258
United Nickel Co. *v.* Pendleton	15 Fed. Rep	300
United Nickel Co. *v.* Railroad Co.	30 Fed. Rep	427, 428
United Nickel Co. *v.* Worthington	18 Fed. Rep	328, 334
United States *v.* Bell Telephone Co	128 U. S	275
United States *v.* Bell Telephone Co.	150 U. S	496
United States *v.* Bell Telephone Co	20 Fed. Rep	186
United States *v.* Berdan Arms Co.	150 U. S	311, 320
United States *v.* Burns	12 Wallace	180
United States *v.* Butterworth	3 Mackey	111
United States *v.* Colgate	21 Fed. Rep	275
United States *v.* Colgate	32 Fed. Rep	112
United States *v.* Commissioner of Patents	7 Off. Gaz	119
United States *v.* Commissioner of Patents	22 Off. Gaz	94
United States *v.* Commissioner of Patents	54 Off. Gaz	109
United States *v.* Delespine's Heirs	12 Peters	401
United States *v.* Hall	7 Mackey	50
United States *v.* Marble	2 Mackey	120
United States *v.* Morris	2 Bond	278, 280
United States *v.* Palmer	128 U. S	137, 263, 320
United States *v.* Samperyac	Hemstead's Circuit Court Reports	494
United States Annunciator Co. *v.* Sanderson	3 Blatch	387, 516, 524
United States Bung Mfg. Co. *v.* Independent Bung Co	31 Fed. Rep	44, 54
United States Credit System Co. *v.* Indemnity Co	51 Fed. Rep	460
United States Credit System Co. *v.* Credit Co	53 Fed. Rep	460
United States Credit System Co. *v.* Credit Indemnity Co	59 Fed. Rep	23
United States Electric Lighting Co. *v.* Consolidated Electric Light Co	33 Fed. Rep	462
United States Felting Co. *v.* Asbestos Felting Co	4 Fed. Rep	374
United States Packing Co. *v.* Tripp	31 Fed. Rep	374
United States Stamping Co. *v.* Jewett	7 Fed. Rep	229

Names of Cases.	Where reported.	Pages in this book.
United States Stamping Co. *v.* King	17 Blatch	215
United States Stamping Co. *v.* King	4 Bann. & Ard	518
Untermeyer *v.* Freund	37 Fed. Rep	19
Untermeyer *v.* Freund	58 Fed. Rep	58, 489, 546, 552
Upton *v.* Wayland	36 Fed. Rep	509
Urner *v.* Kayton	17 Fed. Rep	559
Vanbuskirk *v.* Hartford Fire Insurance Co	14 Connecticut	236
Vance *v.* Campbell	1 Black	72, 168, 180, 206, 388, 382, 461
Vance *v.* Campbell	1 Fisher	76
VanHook *v.* Pendleton	1 Blatch	468, 522
Van Orden *v.* Nashville	37 Fed. Rep	324
Van Ostrand *v.* Reed	1 Wendall	240
Varick *v.* Briggs	6 Paige	288
Vattier *v.* Hinde	7 Peters	450, 474
Vaughan *v.* Central Pacific Railroad Co	3 Bann. & Ard	347
Vaughan *v.* East Tennessee, Virginia & Georgia Railroad Co	3 Bann. & Ard	347
Vermont Farm Machine Co. *v.* Gibson	50 Fed. Rep	316
Vermont Farm Machine Co. *v.* Marble	20 Fed. Rep	114
Vinton *v.* Hamilton	104 U. S	23
Vogler *v.* Semple	7 Bissell	300
Vose *v.* Singer	4 Allen	249
Vulcanite Paving Co. *v.* Pavement Co	36 Fed. Rep	426
Vulcanized Fiber Co. *v.* Taylor	49 Fed. Rep	26
Wade *v.* Metcalf	129 U. S	137
Waite *v.* Chair Co	45 Fed. Rep	455
Walker *v.* Hawxhurst	5 Blatch	278
Walker *v.* Rawson	4 Bann. & Ard	23
Wall *v.* Leck	61 Fed. Rep	460
Wall *v.* Leck	66 Fed. Rep	2
Wallace *v.* Holmes	9 Blatch	331
Wallace *v.* Noyes	13 Fed. Rep	25
Wanamaker *v.* Enterprise Mfg. Co.	53 Fed. Rep	480
Ward *v.* County of Hartford	12 Connecticut	327
Ward *v.* Plow Co	14 Fed. Rep	25
Warren *v.* Keep	155 U. S	497, 547
Washburn *v.* Gould	3 Story	183, 213, 233, 243, 411
Washburn & Moen Mfg. Co. *v.* Barbed Wire Co	22 Fed. Rep	520

Names of Cases.	Where reported.	Pages in this book.
Washburn & Moon Mfg. Co. *v.* Barbed Wire Co	33 Fed. Rep	40
Washburn & Moon Mfg. Co. *v.* Barbed Wire Co	42 Fed. Rep	258, 259
Washburn & Moon Mfg. Co. *v.* Freeman Wire Co	41 Fed. Rep	259
Washburn & Moon Mfg. Co. *v.* Haish	4 Bann. & Ard	230, 248, 282
Washburn & Moon Mfg. Co. *v.* Scutt Co	22 Fed. Rep	520
Washing Machine Co. *v.* Earle	3 Wallace, Jr.	242
Washing Machine Co. *v.* Tool Co.	20 Wallace	167
Waterbury Brass Co. *v.* Miller	9 Blatch	287, 292, 309
Waterbury Brass Co. *v.* New York Brass Co	3 Fisher	387, 388, 409
Waterman *v.* Mackenzie	138 U. S	230, 243, 245, 250, 321, 324, 325, 454
Waterman *v.* Shipman	55 Fed. Rep	245, 260, 326, 391
Waterman *v.* Shipman	130 N. Y	314
Waterman *v.* Thomson	2 Fisher	59
Water-Meter Co. *v.* Desper	101 U. S	296
Watson *v.* Railway Co	132 U. S	19
Watson *v.* Railway Co	23 Fed. Rep	38
Watson *v.* Stephens	47 Fed. Rep	42
Watt *v.* Starke	101 U. S	485
Wayne *v.* Winter	6 McLean	394
Weatherhead *v.* Coupe	147 U. S	163, 296
Weber *v.* Virginia	103 U. S	135
Webster *v.* New Brunswick Carpet Co	1 Bann. & Ard	81
Webster Loom Co. *v.* Higgins	4 Bann. & Ard	69
Webster Loom Co. *v.* Higgins	39 Fed. Rep	557
Webster Loom Co. *v.* Higgins	43 Fed. Rep	555
Weir *v.* Morden	125 U. S	23
Welling *v.* Crane	14 Fed. Rep	27
Welling *v.* La Bau	35 Fed. Rep	436
Welling *v.* Trimming Co	2 Bann. & Ard	540
Wells *v.* Gill	6 Fisher	504, 518, 524
Wells *v.* Reynolds	69 Off. Gaz	111
Wells *v.* Tatum	46 Fed. Rep	23
Wells Glass Co. *v.* Henderson	67 Fed. Rep	6
Werner *v.* King	96 U. S	298
West *v.* Barns	2 Dallas	419
West *v.* Rae	33 Fed. Rep	460
West Publishing Co. *v.* Co-operative Publishing Co	53 Fed. Rep	534

Names of Cases.	Where reported.	Pages in this book.
Westcott *v.* Rude	19 Fed. Rep	427, 428, 430
Western Electric Co. *v.* Ansonia Co.	114 U. S	6
Western Electric Co. *v.* LaRue	139 U. S	76, 101, 204, 207
Western Electric Co. *v.* Odell	18 Fed. Rep	19
Western Electric Co. *v.* Sperry Electric Co	58 Fed. Rep	126, 468
Western Telephone Construction Co. *v.* Stromberg	66 Fed. Rep	375, 515
Westinghouse *v.* Air-Brake Co	2 Bann. & Ard	164
Westinghouse *v.* Air-Brake Co	59 Fed. Rep	25, 62
Westinghouse *v.* Carpenter	43 Fed. Rep	583, 586
Westinghouse *v.* Duncan	66 Off. Gaz	111
Westinghouse *v.* Edison Electric Light Co	63 Fed. Rep	23, 171
Westinghouse *v.* Gas Co	43 Fed. Rep	57
Westinghouse *v.* Power Brake Co	66 Fed. Rep	173, 405
Westinghouse Air-Brake Co. *v.* Carpenter	32 Fed. Rep	528
Weston *v.* White	18 Blatch	124
Wetherell *v.* Keith	27 Fed. Rep	69
Wetherell *v.* Zinc Co	6 Fisher	226, 234, 256
Wetherill *v.* Zinc Co	1 Bann. & Ard	347, 539, 540, 546, 556
Wheeler *v.* McCormick	8 Blatch	454
Wheeler *v.* McCormick	11 Blatch	64, 162, 533
Wheeler *v.* McCormick	4 Fisher	516
Wheeler *v.* Reaper Co	10 Blatch	72, 208
Whipple *v.* Hutchinson	4 Blatch	538, 541
Whipple *v.* Mfg. Co	4 Fisher	387
Whipple *v.* Miner	15 Fed. Rep	114
Whitcomb *v.* Coal Co	47 Fed. Rep	42, 94, 148, 203, 211, 384
White *v.* Dunbar	119 U. S	166, 202, 210
White *v.* Hunter	47 Fed. Rep	507
White *v.* Lee	5 Bann. & Ard	258
White *v.* Lee	14 Fed. Rep	20, 257
White *v.* Mfg. Co	24 Off. Gaz	179
White *v.* Rankin	144 U. S	314, 316
White *v.* Surdam	41 Fed. Rep	507
White *v.* Walbridge	46 Fed. Rep	297, 516, 533
Whitely *v.* Swayne	4 Fisher	201
Whitford *v.* Clark County	119 U. S	407
Whiting *v.* Bank of the United States	13 Peters	492, 493
Whiting *v.* Graves	3 Bann. & Ard	231, 249
Whitney *v.* B. & A. R. Co	50 Fed. Rep	179
Whitney *v.* Mowry	3 Fisher	495
Whitney *v.* Mowry	4 Fisher	76

Names of Cases.	Where reported	Pages in this book.
Whittemore *v.* Cutter	1 Gallison	488, 488
Wicke *v* Kleinknecht	1 Bann. & Ard	255
Wickersham *v.* Singer	1 McArthur's Patent Cases	81
Wickersham's Case	4 Off. Gaz	221
Wickes *v.* Lockwood	65 Fed. Rep.	70
Wicks *v.* Stevens	2 Bann. & Ard	201
Wickwire *v.* Wire Fabric Co	41 Fed. Rep	480, 586
Wilbur *v.* Beecher	2 Blatch	435
Wilcox *v.* Jackson	13 Peters	580
Wilcoxon *v.* Bowles	1 Louisiana Ann'l	284
Wilder *v.* Kent	15 Fed. Rep	254
Wilder *v.* McCormick	2 Blatch	350, 351, 355, 357
Wiley *v.* Yale	1 Metcalf	348
Wilkin *v.* Covel	46 Fed. Rep	105
Wilkins *v.* Elliott	108 U. S	322
Wilkins *v.* Jordan	3 Washington	527
Willard *v.* Cooper	28 Fed. Rep	28
Williams *v.* Barnard	41 Fed. Rep	204
Williams *v.* Boston & Albany Railroad Co	4 Bann. & Ard	92
Williams *v.* Empire Transportation Co	3 Bann. & Ard	317
Williams *v.* Leonard	9 Blatch	549
Williams *v.* McNeely	56 Fed. Rep	516
Williams *v.* Rubber Shoe Co	49 Fed. Rep	171, 172
Williams *v.* Rubber Shoe Co	54 Fed. Rep	45
Williams *v.* Steam Gauge & Lantern Co	47 Fed. Rep	101
Williams *v.* Stolzenbach	28 Fed. Rep	296
Williames *v.* McNeely	64 Fed. Rep	187
Willimantic Linen Co. *v.* Clark Thread Co	24 Fed. Rep	489
Willimantic Thread Co. *v.* Clark Thread Co	27 Fed. Rep	430
Willis *v.* McCullen	29 Fed. Rep	331
Wilson *v.* Barnum	8 Howard	499
Wilson *v.* Chickering	14 Fed. Rep	325
Wilson *v.* Coon	18 Blatch	152, 196, 198, 399
Wilson *v.* Fire Alarm Co	52 Off. Gaz	136, 245
Wilson *v.* Janes	3 Blatch	410
Wilson *v.* Keeley	43 Off. Gaz	481
Wilson *v.* Mfg. Co	12 Fed. Rep	278
Wilson *v.* Rousseau	4 Howard	205, 221, 222, 224, 226, 235, 243, 320
Wilson *v.* Sanford	10 Howard	315
Wilson *v.* School District	32 New Hampshire	327

Names of Cases.	Where reported.	Pages in this book.
Wilson *v.* Sherman	1 Blatch	510, 520
Wilson *v.* Simpson	9 Howard	227
Wilson *v.* Stolley	3 McLean	253
Wilson *v.* Stolley	4 McLean	252, 451
Wilson *v.* Turner	Taney's Circuit Court Decisions	221, 222
Wilson Packing Co. *v.* Hunter	4 Bann. & Ard	317, 318
Wilton *v.* Railroad Co	1 Brightley's Federal Digest	75
Winans *v.* Denmead	15 Howard	44, 169, 178, 202
Winans *v.* Railroad Co	21 Howard	174
Winchester Arms Co. *v.* American Buckle Co	54 Fed. Rep	534
Winchester Arms Co. *v.* American Cartridge Co	62 Fed. Rep	549
Wing *v.* Warren	5 Fisher	211
Winne *v.* Snow	19 Fed. Rep	278, 280, 281
Wintermute *v.* Redington	1 Fisher	247
Wire Book Sewing Machine Co. *v.* Stevenson	11 Fed. Rep	271
Wirt *v.* Brown	30 Fed. Rep	294, 540
Wirt *v.* Hicks	46 Fed. Rep	445, 502, 533
Wiscott *v.* Agricultural Works	11 Fed. Rep	249
Wise *v.* Allis	9 Wallace	363
Wise *v.* Railway Co	33 Fed. Rep	351, 457
Wisner *v.* Grant	5 Bann. & Ard	158
Wisner *v.* Grant	7 Fed. Rep	210
Withington-Cooley Mfg. Co. *v.* Kinney	68 Fed. Rep	263
Wollensak *v.* Reiher	115 U. S	203, 400, 466
Wollensak *v.* Sargent	151 U. S	42, 203
Wollensak *v.* Sargent	33 Fed. Rep	503, 513
Wollensak *v.* Sargent	41 Fed. Rep	171
Wood *v.* Mill Co	4 Fisher	5, 69
Wood *v.* Railroad Co	2 Bissell	227
Wood *v.* Underhill	5 Howard.	153
Wood *v.* Wells	6 Fisher	259
Woodbridge *v.* Perkins	3 Day	236
Woodmanse & Hewitt Co. *v.* Williams	68 Fed. Rep	458, 459
Wood-Paper Patent	23 Wallace	208
Woodruff *v.* Barney	2 Fisher	417
Woodward *v.* Gas Stove Co	68 Fed. Rep	508, 519
Woodward *v.* Lasting Mach. Co.	60 Fed. Rep	375
Woodward *v.* Lasting Mach. Co.	63 Fed. Rep	498
Woodward *v.* Morrison	1 Holmes	306
Woodworth *v.* Cook	2 Blatch	235, 259
Woodworth *v.* Curtis	2 Woodbury & Minot	226, 227, 252

Names of Cases.	Where reported.	Pages in this book
Woodworth *v.* Edwards	3 Woodbury & Minot	218, 331, 447, 505
Woodworth *v.* Hall	1 Woodbury & Minot	211, 212
Woodworth *v.* Rogers	3 Woodbury & Minot	528, 529, 541
Woodworth *v.* Stone	3 Story	212, 213
Woodworth *v.* Wood	1 Blatch	259, 520
Woonsocket Rubber Co. *v.* Candee	23 Fed. Rep	29
Wooster *v.* Handy	21 Fed. Rep	488
Wooster *v.* Handy	23 Fed. Rep	415, 491
Wooster *v.* Machine Co	4 Bann. & Ard	522
Wooster *v.* Mfg. Co	23 Off. Gaz	259
Wooster *v.* Marks	17 Blatch	329
Wooster *v.* Sidenberg	18 Blatch	226
Wooster *v.* Simonson	16 Fed. Rep	430
Wooster *v.* Simonson	20 Fed. Rep	427
Wooster *v.* Taylor	14 Blatch	547
Worley *v.* Tobacco Co	104 U. S	84, 108
Worswick Mfg. Co. *v.* Buffalo	20 Fed. Rep	69
Worswick Mfg. Co. *v.* Philadelphia	30 Fed. Rep	479
Wortendyke *v.* White	2 Bann. & Ard	253, 520
Wright *v.* Bales	3 Black	338, 382
Wright *v.* Postel	44 Fed. Rep	80
Wright *v.* Randall	8 Fed. Rep	236, 238
Wright *v.* Wilson	11 Richardson	240
Wright *v.* Yuengling	155 U. S	33, 163, 296
Wright & Colton Wire Cloth Co. *v.* Wire Cloth Co	67 Fed. Rep	161
Wyeth *v.* Stone	1 Story	91, 185, 288
Yale & Greenleaf Mfg. Co. *v.* North	5 Blatch	534
Yale Lock Co. *v.* Berkshire Bank	135 U. S	79, 199, 201, 399
Yale Lock Co. *v.* Greenleaf	117 U. S	23
Yale Lock Co. *v.* National Bank	17 Fed. Rep	40
Yale Lock Co. *v.* Sargent	117 U. S	163, 181, 183, 184, 289, 296, 425, 426, 43
York & Cumberland Railroad Co. *v.* Meyers	18 Howard	419
York & Maryland Line Railroad Co. *v.* Winans	17 Howard	151, 326, 333, 337
Young *v.* Foerster	37 Fed. Rep	254, 328
Young *v.* Lippman	9 Blatch	504
Young *v.* Lippman	5 Fisher	528
Yuengling *v.* Johnson	1 Hughes	503, 506

Names of Cases.	Where reported.	Pages in this book.
Zano *v.* Pook	13 Fed. Rep	426
Zano *v.* Soffe	5 Bann & Ard	407
Zinn *v.* Weiss	7 Fed. Rep	289
Zinsser *v* Kruegor	45 Fed. Rep	478, 480
Zinsser *v* Kruegor	48 Fed. Rep	43

TABLE OF CITED STATUTES.

Names of Statutes	Sections of Statutes	Pages in this book.
Patent Act of 1790	1	180, 134, 216
" "	4	361
Patent Act of 1793	1	88, 134, 216
Patent Act of 1800	2	94
Patent Act of 1832; July 8	2	217
" " "	3	191, 194, 206, 214
Patent Act of 1832; July 13	1	90, 134
Patent Act of 1836	6	104, 107, 135, 192
" "	7	115, 192
" "	8	146, 147
" "	13	82, 194, 206, 214
" "	15	185
" "	18	218, 219, 221, 223, 224, 225
" "	21	217
Patent Act of 1837	5	192
" "	6	94, 220
" "	7	175, 195
" "	8	192
" "	9	175, 195
Patent Act of 1839	6	146
" "	7	88, 137, 140
Patent Act of 1842	3	17
Patent Act of 1848	1	220
Patent Act of 1861; March 2	11	17
" " "	16	142, 148, 219
Patent Act of 1870	22	142
" "	25	142
" "	33	193
" "	35	125
" "	37	138
" "	41	115
" "	46 to 52	193
" "	53	194, 204, 206, 207
" "	54	175
" "	55	375
" "	60	175

Names of Statutes.	Sections of Statutes.	Pages in this book.
Patent Act of 1870	61	88, 185
" "	63	232, 223
" "	63 to 67	220
" "	66	224
" "	67	225
" "	71	16
Patent Act of 1871; March 8	1	193, 211
Patent Act of 1875	2	457, 476, 485
Patent Act of 1887	1	438, 552
Patent Act of 1888	1	150, 351
Judiciary Act of 1891	6	123, 282, 419, 420, 495, 496
" "	11	492, 495, 499
Amendments of 1895	7	487, 527, 531
Judiciary Act of 1898	7	123, 420, 496
" "	8	128, 420, 497
" "	9	110, 111
Revised Statutes	1	105
"	488	94
"	490	391
"	591	537
"	592	537
"	593	537
"	594	537
"	595	537
"	596	537
"	608	348
"	609	537
"	611	537
"	617	537
"	618	537
"	629	118, 275, 313, 441
"	649	381, 411, 412
"	657	319, 349
"	693	499
"	699	138, 419
"	700	412, 420
"	701	493, 498
"	711	313
"	716	503
"	718	505
"	719	537, 538
"	720	503
"	721	281, 376, 413, 473
"	723	526
"	740	319
"	823	415

Names of Statutes.	Sections of Statutes.	Pages in this book.
Revised Statutes	824	416
"	848	417
"	868	400, 559
"	864	559
"	865	406, 559
"	866	448
"	892	108, 383, 391, 399
"	898	392
"	899	401
"	900	401
"	905	400
"	914	281, 347, 382, 413
"	917	578
"	945	448
"	978	414
"	983	415
"	1007	495
"	1012	495
"	1910	313
"	1911	313
"	4883	150, 351
"	4884	140, 150, 352
"	4885	106, 125, 147
"	4886	57 67, 71, 83, 109, 148, 350
"	4887	46, 53, 142, 370
"	4888	94, 96, 97, 152, 155, 367, 368
"	4889	94, 106,127
"	4890	94, 108
"	4891	94, 107, 127
"	4892	94, 103, 104
"	4893	94, 109
"	4894	125
"	4895	94, 148, 150, 211
"	4896	94, 105, 148, 149, 150, 246
"	4897	89
"	4898	230, 235, 354, 402, 469
"	4899	137
"	4900	277, 401, 467
"	4901	277, 280, 281
"	4902	122
"	4903	110, 116
"	4904	119, 268
"	4908	120
"	4909	110
"	4910	110
"	4911	110

Names of Statutes.	Sections of Statutes.	Pages in this book.
Revised Statutes	4012	111
"	4013	112
"	4014	112
"	4015	113, 114
"	4016	104, 198, 204, 206, 211, 214, 350, 399, 465
"	4017	177, 179, 185, 186, 352, 414
"	4018	121, 268
"	4019	320, 343, 348, 389, 414, 435, 436, 442
"	4020	135, 361, 362, 368, 365, 366, 367, 397, 463
"	4021	441, 442, 501
"	4022	177, 179, 184, 352, 368, 398, 414
"	4023	53
"	4024	222, 223
"	4924 to 4928	220
"	4927	224
"	4928	225
"	4931	142
"	4934	105
"	5045	246
"	5048	246
"	5053	246
"	5596	503

THE PATENT LAWS.

CHAPTER I.

THE SUBJECTS OF PATENTS.

1. Constitutional and statutory foundation of the patent laws.
2. Patent law meaning of the word "discovery."
3. Patent law meaning of the word "art."
3*a*. Mechanical processes.
7. Difference between a "process" and a "principle" inquired into.
8. Illustrated by the case of McClurg *v.* Kingsland.
9. Illustrated by the case of O'Reilly *v.* Morse.
10. Illustrated by the case of Mowry *v.* Whitney.
11. Illustrated by the case of Tilghman *v.* Proctor.
11*a*. Illustrated by the Telephone Cases.
12. Illustrated by the five cases when compared.
13. Illustrated by the five cases when contrasted.
14. Deduced from the five cases as compared and contrasted.
15. Illustrated by the eighth claim of Morse.
16. Machines, and improvements of machines.
17. Manufactures.
18. Compositions of matter.
19. Distinction between machines, manufactures, and compositions of matter.
20. Designs.
21. On whose invention designs are patentable.
22. Utility and beauty of designs.

§ 1. CONGRESS has power to promote the progress of science and useful arts, by securing for limited times to inventors the exclusive right to their respective discoveries.[1] This constitutional law is the foundation of all the patent laws of the United States. In accordance with the power it confers, and in pursuance of the object it mentions, Congress has, from time to time, enacted certain statutes. The principal enactment, in force at this writing, is Section 4886

[1] Constitution of the United States of America, Article I, Section 8.

of the Revised Statutes of the United States. Subject to certain conditions and limitations, hereafter to be explained in this book, that section 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. Statute law, identical with this, has been in force in the United States ever since April 10, 1790; except that the conditions and limitations attending it have varied somewhat from time to time; and except that compositions of matter were not mentioned in the statute prior to that of February 21, 1793, though they were doubtless covered by the word "manufacture," which the earlier statute contained.

§ 2. The word "discovery" does not have, either in the Constitution or the statute, its broadest signification. It means invention in those documents, and in them it means nothing else.[1] The "discoveries" of inventors are inventions. The same man may invent a machine and may discover an island or a law of nature. For doing the first of these things the patent laws may reward him, because he is an inventor in doing it; but those laws cannot reward him for doing either of the others, because he is not an inventor in doing either.[2] The statute provides that patents may be granted for four classes of things. These are arts, machines, manufactures, and compositions of matter. None of these things can be originally made known by discovery, as our continent was. They are not found, but created. They are results of original thought. They are inventions. Laws of nature, on the other hand, can never be invented by man, though they may be discovered by him. When discovered, they may be utilized by means of an art, a machine, a manufacture, or a composition of matter. It is the invention of one or more of these, for the purpose of utilizing a law of nature, and not the discovery of that law,

[1] *In re* Kemper, 1 McArthur's Patent Cases, 4, 1841; Haffcke *v.* Clark, 46 Fed. Rep., 772, 1891.

[2] Wall *v.* Lack, 66 Fed. Rep., 557, 1895.

that may be rewarded with a patent.[1] In a few published precedents there are phrases which seem to imply discord with those propositions; but there is no American case which invalidates them, and they are all implied and illustrated in the scientific and legal histories of the discoveries and inventions which pertain to the telegraph.

Stephen Gray, in 1729, discovered the electric current, and discovered that some substances are conductors, while other substances are non-conductors of that current; but he did not live to see those laws of nature utilized in any way. Œrsted, in 1820, discovered that an electric current will deflect a magnetic needle placed in its neighborhood. And Arago discovered soon afterward that an electric current will magnetize a piece of soft iron in its neighborhood, and that when the current is broken the magnetism in the iron instantly expires. This was the crowning discovery that made the electro-magnetic telegraph a possibility. Professor Morse, the inventor of that telegraph, had no share in making that discovery, nor in making either of those which preceded it. He was not a scientist. His profession pertained to the fine arts, and not to those commonly called useful. Being, however, a gentleman of reading, he was somewhat conversant with the principal known laws of electricity and electro-magnetism, and when he found his knowledge deficient, he resorted to those better informed than himself. During an ocean voyage in 1832, he conceived the invention, which he completed in 1837, patented in 1840, and embodied in 1844 in a working telegraph from Washington to Baltimore. Morse was as justly entitled to a patent for that invention as he would have been had he been the discoverer of all the laws of nature which it utilized. On the other hand, Stephen Gray, had he lived in the country of Morse, would not have been entitled to a patent for his discovery, splendid as it was, because what he made known was neither an art, a machine,

[1] O'Reilly *v.* Morse, 15 Howard, 112, 1853; Morton *v.* Infirmary, 5 Blatch., 116, 1862.

a manufacture, nor a composition of matter; and because to have given him an exclusive right to the electric current would have been to discourage and not to promote the progress of science and useful arts. It would have been to prohibit all others, during the life of that patent, from using any electric telegraph or telephone, should any be invented. It would have been to prohibit man from utilizing one of the laws of God.

§ 3. The word "art" also has a narrower meaning in the patent laws than it has in the dictionaries. In the dictionaries its significance is "the use of means to produce a result." In the patent laws it covers only a limited meaning of the word process. The generic definition of process is "an operation performed by rule to produce a result." Operations performed by rule may be classified as: 1, operations which consist partly or wholly in the employment of electricity, chemistry, pneumatics, pyronomics, hydraulics, or some other non-mechanical science; 2, operations which consist entirely of mechanical transactions, and which are only the peculiar functions of the respective machines which are constructed to perform them; 3, operations which consist entirely of mechanical transactions, but which may be performed by hand or by any of several different mechanisms or machines. It is settled that all processes which belong to the first class are subjects of patents;[1] and that all processes which belong to the second class are unpatentable in the United States.[2] But it is still debatable whether processes which belong to the third class are subjects of patents or not.

[1] Cochrane *v.* Deener, 94 U. S., 760, 1876; Tilghman *v.* Proctor, 102 U. S., 728, 1880; Eames *v.* Andrews, 122 U. S., 40, 1887; Fermentation Co. *v.* Maus, 122 U. S., 427, 1887; Telephone Cases, 126 U. S., 533, 1888.

[2] Corning *v.* Burden, 15 Howard, 267, 1853; MacKay *v.* Jackman, 12 Fed. Rep., 615, 1882; New *v.* Warren, 22 Off. Gaz., 587, 1882; Brainard *v.* Cramme, 12 Fed. Rep., 621, 1882; Goss *v.* Cameron, 14 Fed. Rep., 576, 1882; Hatch *v.* Moffitt, 15 Fed. Rep., 253, 1883; Reay *v.* Raynor, 19 Fed. Rep., 310, 1884; Moulton *v.* Commissioner of Patents, 61 Off. Gaz., 1480, 1892; Bonsack Machine Co. *v.* Elliot, 63 Fed. Rep., 837, 1894.

§ 3*a*. This question of the patentability of processes which consist entirely of mechanical transactions, but which may be performed by hand, or by any of several different mechanisms or machines, is the most important unsettled question known to the patent laws of the United States. It has never been certainly adjudicated in any reported case in any United States court, though thousands of patents on such processes have been granted and have expired, and other thousands of such patents have been granted and are still in being. Moreover there is no reported case which contains a clear discussion of the question, even in *obiter dicta*. The cases which can be thought to throw light upon the matter, fall into five classes, namely; 1. Cases which adjudge the patentability of processes of the first class, and which affirm that patentability in terms broad enough to perhaps cover processes of the third class, now in question.[1] 2. Cases which adjudge the non-patentability of processes of the second class, and which affirm that non-patentability in terms perhaps broad enough to include processes of the third class in the same category.[2] 3. Cases which decree the validity of patents on processes of the third class, but in which cases the hypothetical non-patentability of such processes was not apparently brought to the attention of the court.[3] 4. Cases which decree the invalidity of

[1] Cochrane *v.* Deener, 94 U. S. 787, 1876; Tilghman *v.* Proctor, 102 U. S 728, 1880; Fermentation Co. *v.* Maus, 122 U. S. 413, 1887; Lawther *v.* Hamilton, 124 U. S. 1, 1888; Poillon *v.* Schmidt, 3 Fisher, 476, 1869; Roberts *v.* Dickey, 4 Fisher, 533, 1871; Wood *v.* Cleveland Rolling Mill Co., 4 Fisher, 550, 1871; Celluloid Mfg. Co., *v.* Zylonite Co., 31 Fed. Rep., 904, 1887; Adee *v.* Thomas, 41 Fed. Rep. 346, 1890; Boyd *v.* Cherry, 50 Fed. Rep. 279, 1883; Uhlman *v.* Brewing Co., 53 Fed. Rep. 491, 1893.

[2] Corning *v.* Burden, 15 Howard, 267, 1853; Bolton *v.* Commissioner of Patents, 61 Off. Gaz. 1480, 1892; Bonsack Machine Co. *v.* Elliot, 63 Fed. Rep. 837, 1894.

[3] Tilghman *v.* Morse, 5 Fisher, 324, 1872; Miller *v.* Androscoggin Pulp Co., 5 Fisher, 340, 1872; Lorilliard *v.* Dohan, 9 Fed. Rep. 509, 1881; Ballard *v.* City of Pittsburgh, 12 Fed. Rep. 783, 1882; Eastern Paper Bag Co. *v.* Standard Paper Bag Co., 30 Fed. Rep. 63, 1887; Union Paper Bag Machine Co. *v.* Waterbury, 39 Fed. Rep. 392, 1889; Travers *v.* Cordage Co., 64 Fed. Rep. 771, 1894; Edison *v.* Hardie, 68 Fed. Rep. 488, 1895.

patents on processes of the third class, on other ground than their hypothetical non-patentability, without mentioning that defense.[1] 5. Cases wherein it is debatable whether the processes which were held therein to be void for non-patentability, were processes of the second class, or of the third class.[2] A wider range of reasons than those which appear to have been judicially weighed in any or all of these cases, will deserve, and will doubtless receive, due consideration in the courts, before the law of the subject is finally established.

§ 7. It was shown in Section 2 that the discovery of a law of nature is not patentable. That which was so denominated in that section is often spoken of as a "principle," and at other times as a "scientific principle," and again as a "scientific fact," and still again as a "fact in nature." By whatever name it is called it is certain that the thing referred to is not a material substance. It is not to be apprehended by the sense of touch, but when discovered finds a lodgment in the mind as a mental conception only. So also, a process is not a substance which can be handled. It is seen only by noting its constituent acts as they are being performed. Principles and processes are therefore alike in that they are intangible, and being so, they have sometimes been mistaken for each other.

Whether a given patent is one for a process or one for a principle, is a question upon which its validity may wholly depend. It is therefore important to ascertain what rule governs the decisions of such questions; to ascertain precisely wherein consists the difference between a principle and a process. Any search for that distinction made during the first half of this century was necessarily a speculative

[1] Downton *v.* Yeager Milling Co., 108 U. S. 466, 1883; Western Electric Co., *v.* Ansonia Co., 114 U. S. 447, 1885; Miller *v.* Foree, 116 U. S. 22, 1885; Rochester Coach-Lace Co. *v.* Schaefer, 46 Fed. Rep. 190, 1891.

[2] Risdon Locomotive Works *v.* Medart, 158 U. S. 68, 1895; Appleton Mfg. Co. *v.* Star Mfg. Co., 60 Fed. Rep. 411, 1894; Wells Glass Co., *v.* Henderson, 67 Fed. Rep. 930, 1895.

one, for lack of authoritative adjudged cases from which to reason. Now, however, when engaged in an investigation of the point, we have recourse to five very instructive Supreme Court decisions. The proper method of conducting the inquiry seems to be, to first set down the important relevant points of each of those cases, and then to ascertain what doctrine is consistent with them all. Such hypothetical rules as are found to be inconsistent with either of the cases may safely be rejected as not true rules; but if some one proposition is found to logically underlie all five decisions, it is safe to believe that the Supreme Court will never depart from it.

§ 8. In McClurg *v.* Kingsland [1] it appears that some method was long sought, by means of which rollers or cylinders could be so cast that the metal, when introduced into the moulds, would be given a rotary motion, to the end of throwing the flog or dross into the centre instead of the circumference of the casting. The *fact* that rotary motion would so result was an understood law of nature, an understood operation of centrifugal force. The problem was to produce such a motion more conveniently and more uniformly than by stirring the liquid metal with a circular movement of an implement inserted therein. That problem was solved in 1834 by James Harley, a workman in a foundry in Pittsburg, Pennsylvania. He discovered that the rotary motion desired could be imparted to melted metal by injecting that metal into a mould tangentially. A patent was granted to him in 1835, for "an improvement in the mode of casting chilled rollers and other metallic cylinders and cones." Litigation arose on the patent, and coming before the Supreme Court it was held to be a patent for a process.

§ 9. In O'Reilly *v.* Morse [2] it appears, as also it appears in Section 2 of this book, that Professor Morse was not the discoverer of either of the laws of nature which he utilized

[1] McClurg *v.* Kingsland, 1 Howard, 202, 1843.

[2] O'Reilly *v.* Morse, 15 Howard, 112, 1853.

in his telegraph. He did, however, invent a machine by means of which those laws could be made to carry information to a distant place. That machine was dependent for success on several laws of nature, and lacking any one of them it would have failed of its result. The chief of those was the electric current discovered by Gray. The one next in importance was that discovered by Œrsted and Arago, and known in natural philosophy as electro-magnetism. The eighth claim of Morse's patent was construed, by the Supreme Court, to be one for the use of the electric current, for marking intelligible signs at any distance. The Supreme Court held that claim to be void.

§ 10. In Mowry *v.* Whitney,[1] the following matters are set forth. It had long been known that sudden cooling of very hot cast-iron makes it hard, but brittle. On the other hand, the slow cooling of very hot cast-iron was known to make it soft, but tough. This is annealing. Cast-iron car-wheels require hardened peripheries and annealed hubs and plates, because the first have to endure friction and the last two have to endure strain. The early attempts to subject car-wheels to both hardening and annealing produced a weak and worthless article, resulting from the law of the expansion and contraction of metals. The peripheries of the wheels were hardened by chilling them, this chilling consisting in surrounding the moulds in which the wheels were cast with a circle of iron, and with only a thin film of sand between it and the peripheries of the wheels. This iron band being a rapid conductor of heat caused the peripheries of the wheels to suddenly cool, and thus be hardened, while the plates and hubs, being enclosed in a thick mass of sand, cooled very slowly, and were thus annealed. The sudden cooling of the rims of the wheels, however, materially contracted their circumference, and that contraction forced the still hot plates to contract their diameter. Then when the plates came to cool down, they themselves contracted still more, and thus tended to break away from

[1] Mowry *v.* Whitney, 14 Wallace, 620. 1871.

the rims, which, having entirely cooled some time before, had no more contracting to do. Wheels so made were therefore weak.

In this condition of affairs, Asa Whitney, of Philadelphia, discovered in 1848 that hardness once given to iron will not be destroyed or seriously impaired by the immediate reheating of the iron and its subsequent very slow cooling; and he also conceived a process by means of which that law of nature could be utilized to obviate the evil explained in the last paragraph. That process consisted in taking the wheels from the moulds very soon after their rims were chilled, and in putting them immediately into a chamber or furnace which had previously been heated about as hot as the then heat of the wheels, and thereupon in gradually raising the temperature of all parts of the interior of the chamber or furnace and its contents to an equally high point, and finally in causing all parts of the wheels to cool with equal slowness. In accordance with the law of nature discovered by Whitney, it turned out that the third stage of this process did not destroy or seriously impair the hardness of the peripheries of the wheels which were subjected to it. It did, however, cause the peripheries of the wheels to re-expand in circumference, and in so doing to stretch the still hot and ductile plates back to nearly the same diameter as that they had before the rims were contracted by the chill. The fourth stage of the process then served to contract all parts of the wheels harmoniously, and the result of the whole process was to remedy the evil at which it was aimed. Mr. Whitney obtained a patent for his invention, and the Supreme Court held it to be a patent for a process, and held it to be valid.

§ 11. The case of Tilghman *v.* Proctor [1] discloses the following facts: The celebrated French chemist, Chevreul, discovered in 1813 that fat is a regular chemical compound, consisting of glycerine and three kinds of fat acids. He also discovered that fat can be separated into those, its

[1] Tilghman *v.* Proctor, 102 U. S. 707, 1880.

constituent elements, by causing them to severally unite with an atomic equivalent of water. In 1853 Richard A. Tilghman, a Philadelphia chemist, discovered that those elements of fat can be caused so to unite with an atomic equivalent of water by mixing the fat with water, and by thereupon subjecting the mixture to a high degree of heat and to such a degree of pressure as will prevent the conversion of the water into steam. In 1854 Mr. Tilghman obtained a patent, in the specification of which he announced his discovery, and described a suitable apparatus in which to utilize that discovery in connection with the discoveries of Chevreul, and claimed "the manufacturing of fat acids and glycerine from fatty bodies by the action of water at a high temperature and pressure." The Supreme Court held that patent to be one for a process and to be valid.

§ 11*a*. The Telephone Cases [1] set forth the following fundamental facts: It has been known for centuries that articulate sounds can be reproduced at a distance from the place where they are originally uttered by means of two thin diaphragms, made of metal or membrane, and attached at their centres to the respective ends of a tightly drawn cord or wire; and that when a person speaks near and toward one of those diaphragms the sound vibrations which are produced by his voice cause that diaphragm to vibrate correspondingly; and that those corresponding vibrations are transmitted along the cord or wire to the other diaphragm, and cause it also to vibrate correspondingly; and that the second diaphragm thus vibrating causes corresponding vibrations in the air adjacent thereto; and that when those vibrations strike upon the drum of the ear of a listener they cause him to hear what was spoken toward the first diaphragm. Instruments like this are called string telephones, and they utilize that law of nature which causes such diaphragms as those employed therein to copy and to transmit the vibrations of air which occur adjacent thereto. It has been known ever since 1831, when it was discovered

[1] Telephone Cases, 126 U. S. 531, 1888.

by Michael Faraday, that when an armature is moved in front of an electro-magnet which is being magnetized by an electric current passing through its coil, the motion modifies the current, and that those modifications correspond to the movements of the armature in duration, in direction, and in strength; and it has long been known that the electric current thus modified will cause correspondingly modified movements in the armature of another electro-magnet through the coil of which the electric current thus modified is also passing. At this stage of knowledge of the relevant laws of nature, Alexander Graham Bell invented his telephone. That invention consisted in mounting two such diaphragms as those of the string telephone upon two armatures arranged, combined and movable as above described, and thus enabling one of those armatures to transmit, and the other one to receive, such minute and exceedingly variant vibrations as those caused in the air by the human voice; and it also consisted in the process of transmitting sounds telegraphically, by causing electrical undulations, similar in form to the vibrations of the air caused by the sounds, to occur upon the conducting wire. Mr. Bell obtained a patent for that invention in 1876, and the Supreme Court held it to be a patent for a process, as well as for an apparatus, and held the process claim to be valid.

§ 12. The last five sections present five cases, covering five subject-matters of claim, four of which the Supreme Court held to be patentable processes, and one of which that tribunal held to be an unpatentable principle, or law of nature. To learn the controlling distinction between a claim for a process and a claim for a principle, it is therefore sufficient to ascertain precisely wherein consists the controlling difference between the eighth claim of Morse, on the one hand, and the claims of Harley, Whitney, Tilghman, and Bell on the other.

That difference does not consist in the fact that Harley, Whitney, and Tilghman each discovered one of the laws of nature which he utilized, while the laws which Morse utilized were discovered by others; because the Supreme

Court did not rest its decision in the Morse case on the ground that he was not the discoverer of the electric current, but on the ground that, being a power in nature, it was not patentable to any person. Neither does that difference consist in anything outside of the use of laws of nature, because all five claims extended to accomplishing results by means of such law or laws, regardless of the particular apparatus used in the respective processes. The fact that tangential injection of molted metal into a cylindrical mould will give that metal a rotary motion; the fact that moderate reheating of a car wheel will not destroy its chill; the fact that very hot water will separate the elements of fat; the fact that mechanical motion may cause electrical undulations—every one of these is just as truly a law of nature, just as truly a "principle," as is the fact of the electric current. Nor was the apparatus described by Harley, Whitney, Tilghman, and Bell, respectively, for the purpose of utilizing the first four of these laws, respectively, claimed as their sole respective inventions any more than the particular telegraph described by Morse was made essential to his eighth claim.

§ 13. There is apparently but one radical distinction between the claims of the four patents of Harley, Whitney, Tilghman, and Bell, on the one hand, and the eighth claim of Morse on the other. That distinction is as follows: Harley, Whitney, Tilghman, and Bell each produced a process which utilized several laws of nature, and each of them claimed the entire process he produced, including the use of all those laws in the order and method described. Morse also made an invention which utilized several laws of nature, but instead of claiming his combined and methodical use of all those laws, his eighth claim was construed as confined to one of them alone. This difference, taken in connection with the fact that the Supreme Court sustained the patents of Harley, Whitney, Tilghman and Bell, and overthrew the eighth claim of Morse, and taken in connection with the fact that no other relevant and important difference can be detected, points to the soundness of the

doctrines stated in the next section, and illustrated in the section following that.

§ 14. A patent for a process is a patent for the described combined use of all the laws of nature utilized by that process. A patent for a principle is a patent for one only of the laws of nature used in a process. If a patent for a principle were granted and sustained, it would be much broader than a patent for a process, because it would cover all processes which aim at the same result, and which use the particular law of nature covered by the patent for a principle, no matter in what combination with other laws. A patent for a process, on the other hand, covers only its own method of using all of the laws of nature which it utilizes. To grant and sustain a patent for a principle, would induce an inventor to guess which of the laws of nature used in his process will always be found indispensable, and guessing rightly, would enable him, by claiming that particular law, to suppress all subsequent processes using it; to suppress all subsequent invention in the same field until such time as his patent might expire. A patent for a process, on the contrary, leaves the field open to ingenious men to invent and to use other processes using part of the laws used by the patented process, or using all of them in other combinations and methods.

§ 15. An illustration of the doctrines of the last section exists in the matter of the eighth claim of Morse, when considered in connection with other telegraphs than his. The subject of that claim was construed to be the use of the electric current for marking signs at any distance. The electric current is one thing and electro-magnetism is another. The first was discovered by Gray, in 1729, but the existence of the latter was not known until ninety-one years later. Morse used both in his telegraph, but his eighth claim was construed to cover the electric current with or without the other. But without electro-magnetism Morse's telegraph would not work. After Morse came Bain, who invented a telegraph which used the electric current, but did not use electro-magnetism. Its recording apparatus

operated electro-chemically, and not electro-magnetically like that of Morse. Bain's telegraph could work with a much feebler current than could that of Morse, and therefore the relay batteries of the latter were not wanted. The two telegraphs had nothing in common except that both used the electric current. If the eighth claim of Morse had been sustained as construed, it would have covered Bain's and every other electric telegraph, capable of marking signs at a distance. On the other hand, had that claim been so drawn as to cover the combined use of all the laws of nature utilized by the telegraph of Morse, when used as he used them, then it would have been a claim for a process, and not being obnoxious to either of the weighty objections which are set forth in the opinion of the Supreme Court, it would doubtless have been sustained by that tribunal. In that case, however, it would not have been infringed by the telegraph of Bain, nor by any other which, like his, dispensed with one or more of the laws of nature necessary to the process of Morse.

§ 16. Machines, and improvements of machines constitute the subjects of a majority of the American patents heretofore granted. A machine is a combination of moving mechanical parts, adapted to receive motion, and to apply it to the production of some mechanical result or results. All the parts of a machine may be old while the machine as a whole, and also the sub-combinations which are contained therein, are proper subjects of patents.[1] An improvement of a machine may consist of an addition thereto, or in a subtraction therefrom, or in substituting for one or more of its parts something different, or in so rearranging its parts as to make it work better than before. Whether or not a given improvement is a patentable one will always depend upon several considerations. In order to be so it must, first of all, be an invented improvement,[2] as distinguished from one which is the product of mere mechanical

[1] Cantrell *v.* Wallick, 117 U. S. 694, 1886.

[2] Cochrane *v.* Waterman, 1 McArthur's Patent Cases, 58, 1844.

skill in construction. This point of law is explained at large in the next chapter. So also it is explained in the chapter on infringement what improvements can be used, and what improvements cannot be used, without infringing the patents for the machines improved upon, if the latter happen to be patented. It is enough to say in this chapter, that patents are not void merely because they cover processes or things which include old inventions,[1] and that an improvement may or may not be an invention, and in either case may or may not be an infringement of a patent covering the machine improved.

§ 17. The word "manufacture" has a much narrower signification in the American patent laws than it has in those of England. In the latter it includes everything made by the hand of man, and also includes processes of manufacture. According to the former, processes are patentable because they are arts, while some of the things made by the hand of man are patentable as machines, and some others are patentable as compositions of matter, and some others are patentable as designs. Whatever is made by the hand of man, and is neither of these, is a manufacture, in the sense in which that word is used in the American patent laws.[2] The term should be held to justify a patent for the invention of a new and useful human habitation, or a new and useful improvement of such a structure. This statement is ventured, notwithstanding the facetious *obiter dictum* of Justice GRIER in the jail case.[3]

§ 18. The phrase "composition of matter," as used in the statutes, covers all compositions of two or more substances. It includes, therefore, all composite articles, whether they be the result of chemical union, or of mechanical mixture, or whether they be fluids, powders or solids. To be a proper subject of a patent, a composition of matter must, like a process, a machine, or a manufacture, be

[1] Cantrell *v.* Wallick, 117 U. S. 694, 1886.

[2] Johnson *v.* Johnston, 60 Fed. Rep. 620, 1894.

[3] Jacobs *v.* Baker, 7 Wallace, 297, 1868.

able to endure the relevant tests of invention, novelty, and utility, which are stated in the next three chapters of this book.

§ 19. The distinction between a machine and a manufacture cannot be so stated that its application to every case would be clear and satisfactory to every mind. The same remark is true of the distinction between manufactures and compositions of matter. In most instances, however, when something is invented by the mind and constructed by the hand of man, its classification under some one of those heads is sufficiently obvious. If an inventor is certain that his invention belongs to one or another of the three classes of things, but is uncertain as to which, no evil need result from the doubt. No inventor needs to state or to know whether the thing he has produced is a machine, a manufacture, or a composition of matter, provided he knows that it is one or the other of these. Seventeen-year patents may be lawfully granted for a thing which falls under either designation, but it never becomes vitally important to determine to which one of the three classes a particular thing really belongs.

§ 20. Designs are patentable under Section 4929 of the Revised Statutes. That section provides that any person who, by his own industry, genius, efforts, and expense, has invented and produced any new and original design for a manufacture, bust, statue, alto-relievo, or bas-relief, any new and original design for the printing of woollen, silk, cotton, or other fabrics, any new and original impression, ornament, patent, print, or picture to be printed, painted, cast, or otherwise placed on or worked into any article of manufacture, or any new, useful, and original shape or configuration of any article of manufacture, may, subject to certain conditions and limitations stated in the statute, obtain a patent therefor. That section is almost a literal transcript of Section 71 of the consolidated Patent Act of 1870,[1] except that in the latter the word "pattern" is found

[1] 16 Statutes at Large, Ch. 230, p. 209.

in the connection in which the word "patent" is printed in Section 4929. The change from "pattern" to "patent" was doubtless an error of the printers of the Revised Statutes. Those statutes were enacted as printed, and not as is the custom with shorter edicts, as engrossed in writing. The word "patent" is meaningless in that connection, and patterns, though not mentioned in the section, are doubtless covered by its other provisions.

§ 21. In like manner as Section 4929 of the Revised Statutes was enacted to take the place of Section 71 of the Patent Act of 1870, the latter was passed to take the place of Section 11 of the Patent Act of 1861.[1] The Act of 1870 differed from its predecessor mainly in conferring upon any person the rights to design patents which the Act of 1861 gave only to citizens and to aliens who, having resided one year in the United States, had taken an oath of intention to become citizens. Section 11 of the Act of 1861 was a modification of Section 3 of the Patent Act of 1842,[2] which latter was the first American statute authorizing patents for designs.

§ 22. Section 4929, like all three of its predecessors, provided for patents for a certain class of new, useful, and original designs, and for certain other classes of new and original designs, thus recognizing the fact that some designs are useful as well as ornamental, while others have no utility except to please the eye of the beholder.[3] It is questionable whether the framers of the constitutional provision relevant to encouragement of science and useful arts intended to provide for patents for designs which are useful only because they are ornamental. In our age, however, beauty is generally believed to have a utility of its own, and patents are therefore granted and sustained for designs which are useful only because they are beautiful.[4]

[1] 12 Statutes at Large, Ch. 88, p. 248.

[2] 5 Statutes at Large, Ch. 263, p. 543.

[3] Smith *v.* Whitman Saddle Co., 148 U. S. 678, 1893.

[4] Theberath *v.* Trimming Co., 15 Fed. Rep. 250, 1883.

CHAPTER II.

INVENTION.

23. Invention necessary to patentability.
24. Many negative rules, but no affirmative rule, for determining the presence or absence of invention.
25. More mechanical skill is not invention.
26. Circumstances indicating difference between invention and mechanical skill.
27. Excellence of workmanship is not invention.
28. Substitution of materials is not invention.
29. Exception to the last rule.
30. Enlargement is not invention.
31. Change of degree is not invention.
31*a*. Exception to the last rule.
32. Aggregation is not invention.
33. Simultaneousness of action is not necessary to invention.
34. Duplication is not invention.
35. Omission is not generally invention.
36. Substitution of equivalents is not invention.
37. New combination without new mode of operation, is not invention.
38. Using old thing for new purpose is not invention.
39 Cases to which the last rule does not apply.
40. Doubts relevant to invention, when otherwise insoluble, are solved by ascertaining comparative utility.
41. Form.
41*a*. Proportion.
42. Questions of invention are questions of fact.
43. Questions of invention sometimes investigated in the light of the state of the art.
44. Joint and sole inventions.
45. How made.
46. How distinguished.
47. Suggestions to an inventor.
48. Information sought by an inventor.
49. Mechanical skill not necessary to invention.
50. Sole patent to one joint inventor is void.
51. Joint patent to sole inventor and another is void.

§ 23. It has been shown that the word "discovered," in Section 4886 of the Revised Statutes, has the meaning of the word "invented."[1] It follows that patents are grantable for things invented, and not for things otherwise

[1] Section 2 of this book.

produced. Novelty and utility must indeed characterize the subject of a patent, but they alone are not enough to make anything patentable; for the statute provides that things to be patented must be invented things, as well as new and useful things.[1] The courts have therefore declared that not all improvement is invention, and entitled to protection as such, but that to be thus entitled, a thing must be the product of some exercise of the inventive faculties.[2] And the law stated in this section applies not only to processes, machines, manufactures, and compositions of matter, but also to designs.[3] But a patent may be sustained for an invention which resided in a theory, without a reduction to actual practice, at the time the patent was granted, if that theory afterwards proves to be correct,[4] and also where the correctness of the theory is self-evident.[5]

§ 24. The abstract rule stated in the last section is as certainly true as it is universally just, but its application to particular cases cannot be made without the guidance of

[1] Thompson *v.* Boisselier, 114 U. S. 11, 1884; Gardner *v.* Herz, 118 U. S. 191, 1885.

[2] Pearce *v.* Mulford, 102 U. S. 112, 1880; Atlantic Works *v.* Brady, 107 U. S. 199, 1882; Slawson *v.* Railroad Co., 107 U. S. 649, 1882; Morris *v.* McMillin, 112 U. S. 247, 1884; Hollister *v.* Benedict Mfg. Co., 113 U. S. 59, 1885. Stephenson *v.* Railroad Co., 114 U. S. 149, 1885; Munson *v.* New York City, 124 U. S. 601, 1888; Pattee Plow Co. *v.* Kingman & Co. 129 U. S. 294, 1889; Watson *v.* Railway Co., 132 U. S. 161, 1889; Hill *v.* Wooster, 132 U. S. 700, 1890; Burt *v.* Evory, 133 U. S. 349, 1890; Magin *v.* Karle, 150 U. S. 391, 1893; Risdon Locomotive Works *v.* Medart, 158 U. S. 81, 1895;

[3] Smith *v.* Saddle Co., 148 U. S. 679, 1893; Western Electric Mfg. Co. *v.* Odell, 18 Fed. Rep. 322, 1883; Osborn *v.* Judd, 29 Fed. Rep. 96, 1886; Meers *v.* Kelly, 31 Fed. Rep. 153, 1887; Untermeyer *v.* Freund, 37 Fed. Rep. 343, 1889; Redway *v.* Stove Co., 38 Fed. Rep. 583, 1889; Dukes *v.* Bauerle, 41 Fed. Rep. 733, 1890; Foster *v.* Crossin, 44 Fed. Rep. 63, 1890; Eclipse Mfg. Co. *v.* Adkins, 44 Fed. Rep. 282, 1890; Cahoone Mfg. Co. *v.* Harness Co., 45 Fed. Rep. 585, 1891; Anderson *v.* Saint, 46 Fed. Rep. 760, 1891; Eagle Pencil Co. *v.* American Pencil Co., 53 Fed. Rep. 388, 1892.

[4] Telephone Cases, 126 U. S. 535, 1888.

[5] Heath *v.* Hildreth, 1 McArthur's Patent Cases, 19, 1841; Screw Co. *v.* Sloan, 1 McArthur's Patent Cases, 210, 1853; *In re* Seely, 1 McArthur's Patent Cases, 249, 1853; Chandler *v.* Ladd, 1 McArthur's Patent Cases, 493, 1857.

more concrete propositions. In delivering an opinion of the Supreme Court, in January, 1885, Justice MATTHEWS used some language which may be thought to establish an affirmative rule by which to determine the presence or absence of invention in every case. Speaking of a simple device which the court held not to be an invention, he said that it "seems to us not to spring from that intuitive faculty of the mind put forth in search for new results or new methods, creating what had not before existed, or bringing to light what lay hidden from vision; but, on the other hand, to be the suggestion of that common experience which arose spontaneously, and by a necessity of human reasoning, in the minds of those who became acquainted with the circumstances with which they had to deal."[1] This language may be thought to mean that whatever new and useful process, machine, manufacture, composition of matter, or design is produced by intuition is an invention, and that whatever such thing is produced by reason is not an invention. But such an interpretation of the language would make it a *reductio ad absurdum*. Intuition may sometimes reach to a single brilliant result; but intuition can never conceive or correlate the mazes of movements and mechanisms which constitute a modern automatic machine. To enforce such a rule as that hypothetically implied in the language of Justice MATTHEWS would be to deny invention to those marvellous combinations of numerous metallic devices which compose American automatic machinery, and which work with such complexity and yet with such precision that they seem themselves to be endowed with reason. But fortunately the supposed interpretation of that language is evidently not the meaning of the court. The court does not deny invention to all the products of pure reason in the useful arts. It merely finds want of invention in those things which are conceived "spontaneously and by a necessity of human reasoning" in the minds of those who have their attention directed to the subject.

[1] Hollister *v.* Benedict Mfg. Co., 113 U. S. 72, 1885.

In a later case the Supreme Court, speaking by Justice BROWN of the meaning of the word "invention," said: "The truth is the word cannot be defined in such manner as to afford any substantial aid in determining whether a particular device involves an exercise of the inventive faculty or not. In a given case we may be able to say that there is present invention of a very high order. In another we can see that there is lacking that impalpable something which distinguishes invention from simple mechanical skill. Courts, adopting fixed principles as a guide, have by a process of exclusion determined that certain variations in old devices do or do not involve invention; but whether the variation relied upon in a particular case is anything more than ordinary mechanical skill is a question which cannot be answered by applying the test of any general definition."[1] Thus it has been settled by the Supreme Court that the ideal line which separates things invented from things otherwise produced can never be concisely defined; and that there is no affirmative rule by which to determine the presence or absence of invention in every case; and that such questions are to be determined by means of several negative rules which operate by a process of exclusion. Each of those rules applies to a large class of cases, and all of them are entirely authoritative and sufficiently clear. To formulate those rules, and to state their qualifications and exceptions, and to review and explain the adjudged cases from which those rules, qualifications, and exceptions are deducible, is the scope of several sections which immediately follow.

§ 25. It is not invention to produce a device or process which any skilful mechanic, electrician, or chemist would produce whenever required.

In holding a patent to be void the Supreme Court, speaking by Justice BRADLEY, delivered a paragraph of very instructive argument in support of the rule of this section: a paragraph so valuable as to call for its verbatim quotation in this text.

[1] McClain *v.* Ortmayer, 141 U. S. 427, 1891.

"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 is 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 manufactures. 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 lawsuits and vexatious accountings for profits made in good faith." [1]

Many other cases are cited for illustrations of the rule of this section; for the question whether a given process or mechanism evinces invention, or only shows skill, is frequently a difficult question to decide, and such decisions may often best be made by reasoning by analogy from cases.

[1] Atlantic Works *v.* Brady, 107 U. S. 199, 1882.

where skill has been found to be present and invention has been found to be absent.[1]

[1] The Corn-Planter Patent, 23 Wallace, 232, 1874; Vinton *v.* Hamilton, 104 U. S. 491, 1801; Tack Co. *v.* Mfg. Co. 100 U. S. 110, 1883; Morris *v.* McMillin, 112 U. S. 244, 1884; Hollister *v.* Benedict Mfg. Co. 113 U. S. 72, 1885; Yale Lock Co. *v.* Greenleaf, 117 U. S. 554, 1886; Pomace Holder Co. *v.* Ferguson, 119 U. S. 385, 1886; Weir *v.* Morden, 125 U. S. 98, 1888; Brown *v.* District of Columbia, 130 U. S. 87, 1889; Day *v.* Railroad Co. 132 U. S. 102, 1889; Butler *v.* Steckel, 137 U. S. 29, 1890; Shenfield *v.* Nashawannuck Mfg. Co. 137 U. S. 59, 1890; Consolidated Roller Mill Co. *v.* Walker, 138 U. S. 132, 1891; Cluett *v.* Claflin, 140 U. S. 180, 1891; Magowan *v.* Bolting Co. 141 U. S. 343, 1891; Pope Mfg. Co. *v.* Gormully Mfg. Co. 144 U. S. 259, 1892; Ryan *v.* Hard, 145 U. S. 246, 1892; Duer *v.* Lock Co. 149 U. S. 222, 1893; Leggett *v.* Standard Oil Co. 149 U. S. 295, 1893; Sargent *v.* Covert, 152 U. S. 516, 1894; Palmer *v.* Corning, 156 U. S. 342, 1895; Snow *v.* Taylor, 4 Bann. & Ard. 5, 1878; Walker *v.* Rawson, 4 Bann. & Ard. 180, 1879; King *v.* Frostel, 4 Bann. & Ard. 238, 1879; Lorillard *v.* Ridgway, 4 Bann. & Ard. 565, 1879; National Mfg. Co. *v.* Meyers, 15 Fed. Rep. 241, 1883; McMurray *v.* Miller, 16 Fed. Rep. 473, 1883; Day *v.* Railroad Co. 23 Fed. Rep. 189, 1885; French *v.* Carter, 25 Fed. Rep. 41, 1885; Calkins *v.* Oshkosh Carriage Co. 27 Fed. Rep. 296, 1886; Muller *v.* Ellison, 27 Fed. Rep. 456, 1886; Consolidated Fruit Jar Co. *v.* Bellaire Stamping Co. 28 Fed. Rep. 91, 1886; Adams *v.* Bellaire Stamping Co. 28 Fed. Rep. 362, 1886; Willard *v.* Cooper, 28 Fed. Rep. 750, 1886; Hasselman *v.* Gaar, 29 Fed. Rep. 318, 1886; Celluloid Mfg. Co. *v.* Zylonite Novelty Co. 30 Fed. Rep. 617, 1887; Roth *v.* Koebler, 30 Fed. Rep. 618, 1887; Cluett *v.* Claflin, 30 Fed. Rep. 922, 1887; McNab *v.* Mfg. Co. 32 Fed. Rep. 155, 1887; Landesmann *v.* Jonasson, 32 Fed. Rep, 500, 1887; Kidd *v.* Horry, 33 Fed. Rep. 712, 1888; Gates Iron Works *v.* Fraser, 42 Fed. Rep. 49, 1890; Studebaker Mfg. Co. *v.* Iron and Bolt Co. 42 Fed. Rep. 52, 1890; National Cable Ry. Co. *v.* Sioux City Cable Ry. Co. 42 Fed. Rep. 679, 1890; Delvin *v.* Heise, 43 Fed. Rep. 796, 1890; Foos Mfg. Co. *v.* Thresher Co. 44 Fed. Rep. 601, 1891; Wells *v.* Tatum, 46 Fed. Rep. 572, 189[illegible]; Coston *v.* Pain, 47 Fed. Rep. 66, 1891; Gustin *v.* Rail Mill Co. 47 Fed. Rep. 508, 1891; Dayton Crupper Co. *v.* Ruhl, 55 Fed. Rep. 651, 1893; United States Credit System Co. *v.* American Credit Indemnity Co. 59 Fed. Rep. 139, 1893; Maitland *v.* Gibson, 63 Fed. Rep. 128, 1894; Westinghouse *v.* Edison Electric Light Co. 63 Fed. Rep. 596, 1894; McClery *v.* Baker, 63 Fed. Rep. 843, 1894; MacKnight *v.* McNiece, 64 Fed. Rep. 115, 1894; Dalby *v.* Lynes, 64 Fed. Rep. 880, 1894; Allen *v.* Steele, 64 Fed. Rep. 796, 1894; Thomson-Houston Electric Co. *v.* Western Electric Co. 65 Fed. Rep. 615, 1895.

The absence of invention may be established in some cases, by evidence that a considerable number of persons who were not inventors, acting independently of each other, and without receiving any information from the patentee or his patent, did in fact contrive the improvement claimed therein, not long after he produced it.[1] And where that does not happen to be the case, want of invention can be proved by teaching a mechanic or other person the whole or a part of the prior art, and by proving that, without exercising any invention, he promptly produced the patented improvement, without any knowledge on the subject except what he had thus learned.[2] But it does not tend to prove want of invention to show that a skilful mechanic who had seen the patented thing, can reconstruct some older thing so as to make it similar to that covered by the patent.[3]

§ 26. But if a particular result was long desired and sometimes sought, but never attained, want of invention cannot be predicated of a device or process which first reached that result, on the ground that the simplicity of the means is so marked that many believe they could readily have produced it if required.[4] That is the opinion of many relevant to some real inventions, because solved problems often seem easy to persons who could never have solved them, and true inventions sometimes seem obvious to persons who could never have produced them. This doctrine does not contradict that of the last section. It only teaches us that the fact upon which the doctrine of the last section is founded cannot be proved by subsequent opinion, when that opinion is inconsistent with prior attempts and failures.

[1] Bromley Bros. Carpet Co. *v.* Stewart, 51 Fed. Rep. 915, 1892; Haslem *v.* Pittsburgh Plate Glass Co. 71 Off. Gaz. 1770, 1894.

[2] National Co. *v.* Belcher, 68 Fed. Rep. 668, 1895.

[3] Beach *v.* Box-Machine Co. 63 Fed. Rep. 601, 1894.

[4] The Barbed Wire Patent, 143 U. S. 283, 1892; Gandy *v.* Belting Co. 143 U. S. 594, 1892; Krementz *v.* Cottle Co. 148 U. S. 560, 1893; Potts *v.* Creager, 155 U. S. 609, 1895; DuBois *v.* Kirk, 158 U. S. 63. 1895.

In The Loom Co. *v.* Higgins,[1] Justice BRADLEY remarked that: "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." The exception to his rule, which Justice BRADLEY contemplated, doubtless refers to cases, the result wherein was never before attained only because it was never before desired. In the circuit court cases which support the doctrine of this section, the proviso that the thing or process which the patentee was the first to produce, had been previously sought for by others in vain, is never overlooked, but, on the contrary, is always treated as a material element in the proposition.[2]

A qualification of the rule of this section consists in the subordinate point, that where several improvements have mutually contributed to introduce an unused invention into public favor, and where it does not appear that either of those improvements alone would have produced that result; no presumption in favor of either of those improvements being an invention, arises out of the commercial success of the invention thus improved.[3] And another qualification resides in holding that the rule of the section does not

[1] Loom Co. *v.* Higgins, 105 U. S. 591, 1881.

[2] Terry Clock Co. *v* New Haven Clock Co. 4 Bann. & Ard. 121, 1879; Wallace *v.* Noyes, 13 Fed. Rep. 180, 1882; Ward *v.* Plow Co. 14 Fed. Rep. 696, 1883; Davis *v.* Fredericks, 19 Fed. Rep. 99, 1884; Patterson *v.* Duff, 20 Fed. Rep. 641, 1884; Brown Mfg. Co. *v.* Deere, 21 Fed. Rep. 713, 1884; McFarland *v.* Spencer, 23 Fed. Rep. 151, 1885; Celluloid Mfg. Co. *v.* Chrolithion Collar & Cuff Co. 23 Fed. Rep. 397, 1885; Sewing Machine Co. *v* Frame, 24 Fed. Rep. 596, 1884; Asmus *v.* Alden, 27 Fed. Rep. 687, 1886; Adee *v.* Peck, 42 Fed. Rep. 499, 1890; American Cable Ry. Co. *v.* New York, 56 Fed. Rep. 150, 1893; Stohlmann *v.* Parker, 53 Fed. Rep. 925, 1893; Westinghouse *v.* Air-Brake Co. 59 Fed. Rep. 581, 1893; Electric Ry. Co. *v.* Jamaica R. R. Co. 61 Fed. Rep. 670, 1894.

[3] Corbin Lock Co. *v.* Eagle Lock Co. 37 Fed. Rep. 338, 1889.

apply where the prior attempts were unsuccessful because they were stupid, or unskilful.[1]

§ 27. It is not invention to produce an article which differs from some older thing only in excellence of workmanship.

The distinction between this rule, and the rule of Section 25, resides in the fact that mechanical skill is treated as ability to plan improvement; while excellence of workmanship is contemplated as ability to execute improvement already planned, but not well executed by him who planned it. This subject does not require an elaborate explanation; because it is evident that invention does not reside in taking an article so irregular or rough, that it never could have found a sale in the market, and exercising upon that article such superiority of workmanship as to make it commercial.[2]

§ 28. It is not invention to substitute superior for inferior materials, in making one or more or all of the parts of a thing.

In most of the cases which embody this rule, the substitution of materials was both new and useful; and in some of those cases, the increase of utility due to the substitution, was decidedly high. But the courts held the respective improvements to be the result of judgment and skill in the selection and the adaptation of materials, and not the product of the inventive faculties of those who made them.[3]

[1] Butler *v.* Steckel, 137 U. S. 29, 1890; American Feather Duster Co. *v.* Levy, 43 Fed. Rep. 383, 1890; Mahon *v.* McGuire Mfg. Co. 51 Fed. Rep. 684. 1892; Johnson Co. *v.* Steel Co. 67 Fed. Rep. 942, 1895.

[2] Risdon Locomotive Works *v.* Medart, 158 U. S. 81, 1895; Buzzell *v.* Fifield, 7 Fed. Rep. 467, 1881; Hatch *v.* Moffitt, 15 Fed. Rep. 252, 1883; Lee *v.* Upson Hart Co. 42 Fed. Rep. 531, 1890.

[3] Hotchkiss *v.* Greenwood, 11 Howard, 248, 1850; Hicks *v.* Kelsey, 18 Wallace, 670, 1873; Terhune *v.* Phillips, 99 U. S. 593, 1878; Gardner *v.* Herz, 118 U. S. 192, 1885; Brown *v.* District of Columbia, 130 U. S. 87, 1889; Florsheim *v.* Schilling, 137 U. S. 76, 1890; Hoff *v.* Iron Clad Mfg. Co. 139 U. S. 329, 1891; Ryan *v.* Hard, 145 U. S. 245, 1892; *In re* Maynard, 1 McArthur's Patent Cases, 536, 1857; Post *v.* Hardware Co. 26 Fed. Rep. 616, 1886; Forschner *v.* Baumgarten; 26 Fed. Rep. 858, 1886; J. L. Mott Iron Works *v.* Cassidy, 31 Fed. Rep. 47, 1887; National Roofing Co. *v.* Garwood, 35 Fed. Rep. 658, 1888; Kilbourne *v.* Bingham Co. 47 Fed. Rep. 57, 1891; Vulcanized Fiber Co. *v.* Taylor, 49 Fed. Rep. 744, 1891.

There being no invention in substituting superior for inferior materials, there is certainly none in selecting from a number of materials recommended by a prior patentee, that one which is best adapted to the purpose in view ;[1] and none in substituting one well-known form of a particular material, for another well-known form of the same material.[2]

§ 29. Important exceptions have, however, been established to the general rule of the last section. If the substitution involved a new mode of construction, or if it developed new uses and properties of the article made, it may amount to invention.[3] And substitution of materials may constitute invention, where it produces a new mode of operation,[4] or results in a new function,[5] or in the first practical success in the art in which the substitution is made.[6] So also, where the excellence of the material substituted could not be known beforehand, and where practice shows its superiority to consist not only in greater cheapness and greater durability, but also in more efficient action, the substitution of a superior for an inferior material amounts to invention.[7]

§ 30. It is not invention to so enlarge and strengthen a machine that it will operate on larger materials than before.

In Phillips *v.* Page [8] the patent covered the first circular saw-mill which was adapted to sawing logs. Its utility was great, and was unquestioned. Machines like it, except that they were much smaller in every part, had been used before,

[1] Welling *v.* Crane, 14 Fed. Rep. 571, 1882.

[2] Brush Electric Co. *v.* Julien Electric Co. 41 Fed. Rep. 693, 1890; Brush Electric Co. *v.* Accumulator Co. 47 Fed. Rep. 50, 1891.

[3] Smith *v.* Dental Vulcanite Co. 93 U. S. 496, 1876.

[4] Perkins *v.* Lumber Co. 51 Fed. Rep. 291, 1892.

[5] Potts *v.* Creager, 155 U. S. 609, 1895.

[6] Edison Electric Light Co. *v.* U. S. Electric Lighting Co. 52 Fed, Rep. 308, 1892.

[7] Dalton *v.* Nelson, 13 Blatch. 357, 1876; Celluloid Mfg. Co. *v.* American Zylonite Co. 35 Fed. Rep. 301, 1888; Celluloid Mfg. Co. *v.* Crane Chemical Co. 36 Fed. Rep. 110, 1888.

[8] Phillips v. Page, 24 Howard, 164, 1860.

to saw lath and other slender articles out of small blocks of wood. The Supreme Court therefore held that Mr. Page did not invent a circular saw-mill, but merely constructed one, by copying on a larger scale the prior machine for sawing lath.

In the case of the Planing Machine Co. *v.* Keith,[1] the patent covered the Woodbury planing machine, a machine which differed from the older Woodworth planing machine in one respect only. Woodworth used rollers to press the boards against the bed of the machine, whereas Woodbury used pressure bars for that purpose. The Supreme Court held the Woodbury patent to be void because Alfred Anson, of Norwich, Connecticut, had previously invented and constructed a machine for dressing window-sash, which had pressure bars like Woodbury, instead of pressure rollers like Woodworth. This decision was made notwithstanding the fact that the Anson machine was too small and too weak for general planing work upon boards and planks. And this rule has been applied, and is well illustrated, in several other Supreme Court cases.[2]

§ 31. It is not invention to change the degree of a thing, or of one feature of a thing.

In Glue Co. *v.* Upton [3] the patent covered pulverized glue made from flake glue by grinding it in any suitable manner. It had several points of superiority over all former kinds of glue, but the Supreme Court held that, not being a product of invention, the patent covering it was void.

In Guidet *v.* Brooklyn [4] the patent covered paving-stones of a certain shape and with rough sides. Paving-stones of the same shape, but with sides less rough, had been known before. To make the sides of the prior stones rougher was

[1] Planing Machine Co. *v.* Keith, 101 U. S. 490, 1879.

[2] Peters *v.* Active Mfg. Co. 129 U. S. 530, 1889; Morgan Envelope Co. *v.* Albany Paper Co., 152 U. S. 430, 1894.

[3] Glue Co. *v.* Upton, 97 U. S. 6, 1877.

[4] Guidet *v.* Brooklyn, 105 U. S. 552, 1881.

hold by the Supreme Court to be a change in degree only, and therefore not patentable.

In Estey *v.* Burdett,[1] one of the claims of the patent involved, depended upon concentrating certain valve openings into a smaller space than had theretofore been occupied by them. The Supreme Court held that there was no invention in that change.

In Preston *v.* Manard[2] the alleged invention consisted in making the reel of a fountain hose-carriage of larger diameter than were the reels of former hose-carriages, in order to allow the water to pass through the hose when partly wound upon the reel. The Supreme Court held that there resided no invention in that improvement.

In French *v.* Carter,[3] the patent claimed a roof for a vault, which consisted, like an earlier roof, of two gable-stones, and two sloping roof-stones, and one cap-stone; and which differed from the earlier roof in that its roof-stones were narrower, and its cap-stone was wider, than the corresponding stones of the earlier vault. The Supreme Court held that these differences of degree did not constitute invention.

Circuit Court cases which have been decided by skilful judges furnish still other illustrations of the rule of this section.[4]

§ 31*a*. A meritorious exception, to the rule of the last section, is involved in the adjudicated validity of the Edison incandescent light patent.[5] The carbon filament which

[1] Estey *v.* Burdett, 109 U. S. 640, 1884.

[2] Preston *v.* Manard, 116 U. S. 663, 1886.

[3] French *v.* Carter, 137 U. S. 239, 1890.

[4] Stow *v.* City of Chicago, 3 Bann. & Ard. 91, 1877; White *v.* Lee, 14 Fed. Rep. 790, 1882; Woonsocket Rubber Co. *v.* Candee, 23 Fed. Rep. 797, 1885; Smith *v.* Murray, 27 Fed. Rep. 69, 1886; Hurd *v.* Snow, 35 Fed Rep. 423, 1888; Blumenthal *v.* Burrell, 43 Fed. Rep. 669, 1890; Murphy *v.* Trenton Rubber Co. 45 Fed. Rep. 571, 1891; Caverly *v.* Deere, 52 Fed Rep. 763, 1892.

[5] Edison Electric Light Co. *v.* U. S. Electric Lighting Co. 52 Fed. Rep. 300, 1892.

constitutes the only new part of the combination of the second claim of that patent, differs from the earlier carbon burners of Sawyer and Man, only in having a diameter of one-sixty-fourth of an inch or less, whereas the burners of Sawyer and Man had a diameter of one-thirty-second of an inch or more. But that reduction of one-half in diameter increased the resistance of the burner four-fold, and reduced its radiating surface two-fold, and thus increased eight-fold, its ratio of resistance to radiating surface. That eight-fold increase of proportion, enabled the resistance of the conductor of electricity from the generator to the burner, to be increased eight-fold, without any increase of percentage of loss of energy in that conductor, or decrease of percentage of development of heat in the burner; and thus enabled the area of the cross section of that conductor to be reduced eight-fold, and thus to be made with one-eighth of the amount of copper or other metal, which would be required if the reduction of diameter of the burner from one-thirty-second to one-sixty-fourth of an inch had not been made. And that great reduction in the size and cost of conductors, involved also a great difference in the composition of the electric energy employed in the system; that difference consisting in generating the necessary amount of electrical energy with comparatively high electromotive force, and comparatively low current, instead of contrarywise. For this reason, the use of carbon filaments, one-sixty-fourth of an inch in diameter or less, instead of carbon burners one-thirty-second of an inch in diameter or more, not only worked an enormous economy in conductors, but also necessitated a great change in generators, and did both according to a philosophy, which Edison was the first to know, and which is stated in this paragraph in its simplest form and aspect, and which lies at the foundation of the incandescent electric lighting of the world.

§ 32. Aggregation is not invention.

In Hailes *v.* Van Wormer [1] the patents passed upon, cov-

[1] Hailes *v.* Van Wormer, 20 Wallace, 353, 1873.

ered certain self-feeding coal stoves. These stoves were better than any which preceded them, because they contained more good things than were ever before assembled in that kind of heater. All of the things so assembled were old. The superiority of the patented stoves arose from the fact that sundry good features, theretofore scattered through several, were in them gathered into one such article of manufacture. The things so united did not, however, perform any joint function, but each did only what it had formerly done in former stoves. The Supreme Court held the whole to be a mere aggregation of devices, and not to be invention.

The case of Reckendorfer *v.* Faber [1] was based upon patents for a new and useful article, of which many millions of specimens had been made and sold since those patents were granted. That article was a piece of soft rubber united to one end of a lead pencil. The Supreme Court called attention to the fact that there was no joint operation performed by the pencil and the rubber, and therefore held the patents to be void for want of invention.

In Pickering *v.* McCullough [2] Justice MATTHEWS said: "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 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."

The first of these sentences has been thought to imply a severer doctrine than the second, and some of the lower courts have inclined to ascribe to the opinion a milder signification than the first sentence standing alone may appear to warrant.

[1] Reckendorfer *v.* Faber, 92 U. S. 357, 1875.

[2] Pickering *v.* McCullough, 104 U. S. 318, 1881.

The Circuit Court of Appeals for the third circuit has said that: "If, instead of an extract, the whole opinion be read, in connection with the authorities which are cited in it, it may be readily perceived that the substance of the doctrine intended to be affirmed, is that a combination, to be patentable, must produce a new and useful result as the product of the combination, and not a mere aggregate of several results, each the complete result of one of the combined elements." And that: "If it were essential to a valid patent for any combination whatever, that the mode of operation 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."[1]

And Judge BAKER held that no such doctrine was essential to the decision of the case, nor is fairly deducible from the particular language above quoted from Justice MATTHEWS, as that, in a patentable combination, all the constituents must so enter into it that each qualifies the mode of action of every other, and that each element must not merely perform its own part in the combination, but must also in some way be directly and immediately concerned in the performance of their respective parts by every other of the elements; and that: "All that can be claimed to be settled by the case is, that a combination, to be patentable, must produce a single new and useful result, or an old result in a better or cheaper manner, as the product of the combination."[2]

And Judge MCKENNA expressly declined, when strenuously urged by counsel so to do, to recognize as an established rule of law, that in all cases where the action of each of the combined devices remains its own individual action, there is no patentable combination.[3]

[1] National Cash Register Co. *v.* American Cash Register Co. 53 Fed. Rep. 371, 1892.

[2] Heath Cycle Co. *v.* Hay, 67 Fed. Rep. 249, 1895.

[3] Bowers *v.* Von Schmidt, 63 Fed. Rep. 582, 1894.

And while the language above quoted from Pickering *v.* McCullough has been often quoted since it was delivered, there is no case in which the severer doctrine of the first sentence of that language has been applied to defeat any patent or claim which could have endured the milder doctrine of the second of those sentences, or the milder doctrine held in the three last mentioned cases. Indeed, the Supreme Court has shown its preference for the milder view, by substantially quoting the second sentence of Justice MATTHEWS,[1] while omitting the first sentence from all of its later decisions.

The law of this subject is well settled, and the dividing line between combinations and aggregations is well established. Every case must fall on one side or the other of that line, and no case can stand upon it. But the facts in particular cases, which will arise hereafter, will often make it difficult to determine upon which side of the line those cases respectively belong.[2] Such decisions may sometimes be made by direct analysis without extensive comparison; but in other cases reasoning by analogy from precedents must be resorted to, and therefore the precedents which have not already been mentioned are collected by name in a note.[3]

[1] Brinkerhoff *v.* Aloe, 146 U. S. 516, 1892.

[2] Standard Oil Co. *v.* Southern Pacific Railroad Co. 48 Fed. Rep. 110, 1891.

[3] Tack Co. *v.* Mfg. Co. 109 U. S. 120, 1883; Bussey *v.* Mfg. Co. 110 U. S. 145, 1883; Phillips *v.* Detroit, 111 U. S. 607, 1883; Stephenson *v.* Railroad Co. 114 U. S. 158, 1884; Beecher Mfg. Co. *v.* Atwater Mfg. Co. 114 U. S. 523, 1884; Thatcher Heating Co. *v.* Burtis, 121 U. S. 293, 1886; Hendy *v.* Iron Works, 127 U. S. 375, 1887; Royer *v.* Roth, 132 U. S. 201, 1889; Fond Du Lac County *v.* May, 137 U. S. 407, 1890; Union Edge Setter Co. *v.* Keith, 139 U. S. 539, 1891; Adams *v.* Stamping Co. 141 U. S. 539, 1891; Wright *v.* Yuengling, 155 U. S. 53, 1894; Richards *v.* Elevator Co. 158 U. S. 301, 1895; Combined Can Co. *v.* Lloyd, 11 Fed. Rep. 154, 1882; Perry *v.* Foundry Co. 12 Fed. Rep. 149, 436, 1882; Doubleday *v.* Roess, 11 Fed. Rep. 737, 1880; Nicodemus *v.* Frazier, 19 Fed. Rep. 260, 1884; Stutz *v.* Armstrong, 20 Fed. Rep. 843, 1884; Hayes *v.* Bickelhoupt, 21 Fed. Rep. 566, 1884; Mosler Safe & Lock Co. *v.* Mosler, 22 Fed. Rep. 901, 1885; Watson *v.* Railway Co. 23 Fed. Rep. 445, 1885; Peard *v.*

§ 33. The rule of the last section does not state nor imply that all the parts of a patentable combination must act at the same time. The fact on that point is no criterion by means of which to distinguish invention from aggregation. Justice CURTIS, in a Circuit Court case,[1] stated the true doctrine on this subject, and stated it with marked lucidity, saying: "To make a valid claim for a combination, it is not necessary that the several elementary parts of the combination should act simultaneously. If those elementary parts are so arranged that the successive action of each contributes to produce some one practical result, which result, when attained, is the product of the simultaneous or successive action of all the elementary parts, viewed as one entire whole, a valid claim for thus combining those elementary parts may be made." And that view of the law has also been taken in more recent times.[2]

§ 34. It is not invention to duplicate one or more of the parts of a machine, unless that duplication causes a new mode of operation of the duplicate parts.

In Dunbar *v.* Myers[3] the patent was based on a circular-saw mill adapted to sawing lumber into thin sheets to be used for the backs of picture-frames and mirrors. It dif-

Johnson, 23 Fed. Rep. 509, 1885; Ames *v.* Spring Bed Co. 24 Fed. Rep. 785, 1885; Phipps *v.* Yost, 26 Fed. Rep. 448, 1886; Troy Machinery Co. *v.* Bunnell, 27 Fed. Rep. 810, 1886; Duesh *v.* Medlar Co. 30 Fed. Rep. 619, 1887; J. L. Mott Iron Works *v.* Skirm, 30 Fed. Rep. 621, 1887; Schmid *v.* Mfg. Co. 37 Fed. Rep. 347, 1889; Ide *v.* Engine Co. 39 Fed. Rep. 548, 1889; Jones *v.* Clow, 39 Fed. Rep. 785, 1889; Richards *v.* Railroad Co. 40 Fed. Rep. 165, 1889; Steam Gauge and Lantern Co. *v.* Williams, 42 Fed. Rep. 845, 1890; National Bunching Machine Co. *v.* Williams Co. 44 Fed. Rep. 193, 1890; Campbell *v.* Bailey, 45 Fed. Rep. 564, 1891; Brickill *v.* Hartford, 49 Fed. Rep. 372, 1892; Brickill *v.* Baltimore, 50 Fed. Rep. 274, 1892; Appleton Mfg. Co. *v.* Starr Mfg. Co. 51 Fed. Rep. 284, 1892; Boston Lasting Machine Co. *v.* Woodward, 53 Fed. Rep. 481, 1893; Bagley & Sewall Co. *v.* Wood Pulp Co. 58 Fed. Rep. 216, 1893.

[1] Forbush *v.* Cook, 2 Fisher, 669, 1857.

[2] Holmes Alarm Tel. Co. *v.* Domestic Tel. Co. 42 Fed. Rep. 226, 1890; San Francisco Bridge Co. *v.* Keating, 68 Fed. Rep. 353, 1895.

[3] Dunbar *v.* Myers, 94 U. S. 197, 1876.

fered from former machines used for the same purpose, mainly in the fact that it had a plate on each side of the saw for the pupose of expanding the saw kerf and thus keeping the sawed parts away from the sides of the saw, whereas earlier machines had such a plate only on one side of the saw. The two plates of the patented machine differed from each other in diameter and in one or two other respects, but the function performed by each of them was substantially identical with that performed by the other. The Supreme Court therefore held the claim which covered the additional plate to be void for want of invention.

In Slawson *v.* Grand Street R. R. Co.[1] the patented improvement consisted merely in putting an additional pane of glass in the fare-box of a street car, on the side next to the passengers, so that they could see into the box as well as the driver, for whose use one pane of glass was already in the side of the box next to him. The Supreme Court said that the putting in of that additional pane of glass required no more invention than the putting of an additional window in a room opposite one already there.

Millner *v.* Voss[2] was decided by Judge BOND in Virginia. The patent involved, purported to cover an arrangement of furnaces and flues in a tobacco-curing house. It appeared to differ from prior arrangements only in the fact that each of the furnaces had two or more fire-places of different sizes on each side of a chimney, whereas former arrangements had but one. Judge BOND wittily said that, "Where one stove is found to be unequal to the heating of a room, to put another beside it, even though smaller, requires no invention." Mr. Millner's patent was therefore held to be void.

And the rule of this section has been applied in cases not so simple as those above mentioned;[3] and may be applied still more widely hereafter.

[1] Slawson *v.* Grand Street R. R. Co. 107 U. S. 653, 1882.

[2] Millner *v.* Voss, 4 Hughes, 262, 1882.

[3] Electrical Accumulator Co. *v.* Julien Electric Co. 38 Fed. Rep. 138, 1889; Sugar Apparatus Co. *v.* Yaryan Mfg. Co. 43 Fed. Rep. 149, 1890.

The exception which belongs to the general rule of this section, is illustrated by the Parker water-wheel. Before the date of that invention, it was customary to place a single turbine, upon a vertical shaft, in such a way that the pressure of the water was partly exerted endwise of the shaft; and that pressure, in addition to the weight of the shaft, and of the wheel, had to be sustained by the bearing of the shaft. Parker placed two such wheels in a pair, face to face, on the same shaft, and the water entered between them, so that the downward pressure of the water upon one wheel was balanced by the upward pressure of the water upon the other wheel. In this case the duplication of the wheel caused a new mode of operation of the duplicate parts; and the patent was held to be valid.[1]

§ 35. It is not invention to omit one or more of the parts of an existing thing, unless that omission causes a new mode of operation of the parts retained.

Stow *v.* Chicago,[2] decided by Judge BLODGETT, is the case which perhaps most exactly corresponds with this rule. The patent in that case covered a wood pavement like that of Nicholson, except that it omitted the board foundation and also the board strips of that earlier pavement. Judge BLODGETT held that those omissions constituted no invention, saying: "A reconstruction of a machine, so that a less number of parts will perform all the functions of the greater, may be invention of a high order, but the omission of a part, with a corresponding omission of function, so that the retained parts do just what they did before in the combination, cannot be other than a mere matter of judgment, depending upon whether it is desirable to have the machine do all, or less, than it did before." These views were also reiterated and reinforced by the same judge many years after they were stated and applied by him in the leading case.[3]

[1] Parker *v.* Hulme, 1 Fisher, 44, 1849.

[2] Stow *v.* Chicago, 3 Bann & Ard. 92, 1877.

[3] McClain *v.* Ortmayer, 33 Fed. Rep. 287, 1888.

And the Supreme Court, when the latter case reached that tribunal, affirmed Judge BLODGETT'S decision;[1] and has since rendered several decisions to the same effect.[2]

The exception which is stated in the general rule of this section was judicially applied, and is well illustrated, in a case decided by Judge NATHANIEL SHIPMAN, where invention was found to reside in so reorganizing a meat-mincing machine, as to dispense with some of its parts, and as to cause the parts retained to do the work of the original machine.[3] And in a case which involved a process patent, the Supreme Court has decided that invention resided in omitting one of the steps in an old process, where the resulting new process was the result of careful and long-continued experiment, and where its utility was decidedly greater than that of the old process.[4] And Judge GILBERT has held that it is invention to omit, from a prior process, a step which those skilled in its performance considered essential, but which the inventor proved to be useless.[5]

§ 36. It is not invention to improve a known structure by substituting an equivalent for either of its parts.[6]

What is signified in the patent law by the word "equivalent" is explained in detail in the chapter on infringement. The subject is of double importance, because it relates sometimes to the validity and sometimes to the infringement of patents. A. B. may construct and may patent a machine which differs from the prior patented machine of C. D. in one part only. If the courts decide that the new part inserted, is an equivalent to the old part omitted, then the machine of A. B. will be an infringement; and it will

[1] McClain *v.* Ortmayer, 141 U. S. 425, 1891.

[2] Hat Pouncing Machine Co. *v.* Hedden, 148 U. S. 489, 1893; Giles *v.* Heysinger, 150 U. S. 632, 1893; Olin *v.* Timken, 155 U. S. 148, 1894;

[3] Enterprise Mfg. Co. *v.* Sargent, 28 Fed. Rep. 187, 1886.

[4] Lawther *v.* Hamilton, 124 U. S. 1, 1887.

[5] Pacific Contracting Co. *v.* Bingham, 62 Fed. Rep. 283, 1894.

[6] Smith *v.* Nichols, 21 Wallace, 119, 1874: Crouch *v.* Roemer, 103 U. S. 797, 1880; Cochrane *v.* Waterman, 1 McArthur's Patent Cases, 54, 1844; Perry *v.* Foundry Co. 12 Fed Rep. 436, 1882; Celluloid Mfg. Co. *v.* Tower, 26 Fed. Rep. 451, 1885.

not be an invention, unless the new part, not only performs the function of the part for which it was substituted, but also performs another function by another mode of operation.[1] If, on the other hand, the courts hold that the part inserted is not an equivalent of the old part omitted, then the machine of A. B. may be an invention, and it will not be an infringement of *any* claim covering the entire machine of C. D.

§ 37. It is not invention to combine old devices into a new article without producing any new mode of operation.[2]

This rule differs from that of Section 32 in not depending upon absence of joint mode of operation, but only upon antiquity of mode of operation. For this reason, while the invalidity of a patent, under the rule of Section 32, can be shown, where it exists, from the face of the patent; the invalidity of a patent under the rule of this section requires evidence aliunde for its establishment, and depends upon the state of the prior art for its applicability.[3] The meaning and scope of this rule, like all the primary rules of this chapter, require illustration and example for full comprehension; and such examples and illustrations are abundantly supplied by the adjudicated cases.

Stimpson *v.* Woodman[4] involved a patent for a machine for pebbling leather. It gave the leather the pebbled surface by means of a roller, which had the counterpart of that surface engraved or sunk on its periphery. The same kind of roller had previously been used for the same purpose by hand, and the same kind of machine had been used for compressing leather, except that the roller in it was smooth. The Supreme Court held that the change involved in putting the old figured hand roller in the place of the plain roller of the machine, involved no invention, and that the patent was void, if the facts were as stated.

[1] *In re* Hebbard, 1 McArthur's Patent Cases, 550, 1857.

[2] Burt *v.* Evory, 133 U. S. 349, 1890; Florsheim *v.* Schilling, 137 U. S. 77, 1890; Morgan Envelope Co. *v.* Albany Paper Co. 40 Fed. Rep. 582, 1889; Mahon *v.* McGuire Mfg. Co. 51 Fed Rep. 684, 1892.

[3] Brickill *v.* Hartford, 57 Fed. Rep. 217, 1893.

[4] Stimpson *v.* Woodman, 10 Wallace, 117, 1869.

Heald *v.* Rice [1] was based on a patent which covered a certain previously known straw feeding attachment in combination with a certain previously known return-flue boiler, that straw-feeding attachment having been previously combined with a fire-box boiler. The utility of the return-flue boiler in that combination was much greater than that of the fire-box boiler, but the Supreme Court nevertheless held that there was no invention in the union of the former with the straw-feeding attachment.

Hall *v.* Macneale [2] shows the following state of facts. The patentee first made safe doors, the plates of which were held together by cored conical arbors, having screw threads cut on their exterior surfaces, and later he made other safe doors, the plates of which were held together by solid conical arbors which had no such screw threads as the cored conical arbors had, and he afterwards obtained a patent for the combination of the plates of safe doors with solid conical arbors having such screw threads. The Supreme Court, speaking by Justice BLATCHFORD, said that "There was no invention in adding to the solid conical bolt the screw thread of the cored conical bolt."

Many Circuit Court cases also involve the doctrine of this section. In one such case [3] Justice BLATCHFORD held a patent to be void for want of invention, which covered a combination of a whip socket having an annular recess in it, with a flexible elastic ring held in that recess by its own elasticity, and provided on its inner edge with non-contiguous projections, separated so that they could not be pressed into contact with each other by the insertion of the whip handle into the ring. That decision was based on the fact that a prior whip socket having an annular recess, had been combined with a plain rubber ring in that recess, and on the further fact that flexible elastic rings constructed like those of the patent had been combined with a whip socket

[1] Heald *v.* Rice, 104 U. S. 754, 1881.

[2] Hall *v.* Macneale, 107 U. S. 90 1882.

[3] Searls *v.* Merriam, 22 Off. Gaz. 1040, 1882.

which had no annular recess, but which clamped that ring between the upper end of that socket and a cap above it. Judge LOWELL likewise decided three similar cases. In one of them[1] he held it to be no invention to give paper collars the same kind of surface that had theretofore been impressed upon other articles of paper. In another[2] he decided that embossed lines on writing paper being old, and ogee lines on other paper being old, there was no invention in embossing ogee lines on writing paper to serve as guides to the eye of the writer. In a third case[3] he held that soft base-balls having been covered with a double cover, and hard base-balls having been covered with a single cover, there was no invention in covering a hard base-ball with a double cover. And other still later cases illustrate the same doctrine.[4]

But while a new combination with an old mode of operation is not invention, an old combination with a new mode of operation may be an invention. The Supreme Court found that the Henry Adams corn sheller was an invention, and was patentable to him, although his father, Augustus Adams, had previously made corn shellers from which that of Henry differed only in reversing the direction of revolution of one of its parts. That part was the revolving beater, which Augustus Adams made to turn in the direction opposite to the desired motion of the ears of corn, expecting it to knock back any ear that might ride upon another, and

[1] Union Paper Collar Co. *v.* Leland, 1 Bann. & Ard. 491, 1874.

[2] Cone *v.* Morgan Envelope Co. 4 Bann. & Ard. 109, 1879.

[3] Mahn *v.* Harwood, 3 Bann. & Ard. 517, 1878.

[4] Yale Lock Mfg. Co. *v.* National Bank, 17 Fed. Rep. 533, 1883; Kaaps *v.* Hartung, 23 Fed. Rep. 187, 1885; Troy Machinery Co. *v.* Bunnell, 27 Fed. Rep. 810, 1886; Union Edge Setter Co. *v.* Keith, 31 Fed. Rep. 46, 1887; Washburn & Moen Mfg. Co. *v.* Barbed Wire Co. 33 Fed. Rep. 273, 1888; Low *v.* Stove Co. 36 Fed. Rep. 903; 1888; Rodebaugh *v.* Jackson, 37 Fed. Rep. 886, 1889; Royer *v.* Coupe, 38 Fed. Rep. 115, 1889; Royer *v.* Belting Co. 40 Fed. Rep. 160, 1889; Gates Iron Works *v.* Fraser, 42 Fed. Rep. 49, 1890; Abbott Machine Co. *v.* Bonn, 51 Fed. Rep. 223, 1892; Hunt *v.* Garsed, 51 Fed. Rep. 678, 1892; Electric Ry. Co. *v.* Jamaica R. R. Co. 61 Fed. Rep. 655, 1894.

thus tend to prevent choking the shelling devices. This mode of operation was not successful, and Henry Adams reversed the revolution of the beater so that its wings moved in the same direction as that of the ears of corn, and thus drove them forward into the shelling devices. The old combination, with that new mode of operation, was entirely successful, and the patent thereon was therefore held to be valid.[1]

§ 38. It is not invention to use an old thing or process for a new purpose.

In Tucker *v.* Spalding[2] the patent covered a combination of a circular disk with removable saw teeth. There was a prior combination of a circular disk with removable cutters for the purpose of cutting tongues and grooves. The Supreme Court held that if what the latter combination did was in its nature the same as sawing, and if its structure and its action suggested to the mind of the ordinarily skilful mechanic this double use to which it could be adapted without material change, then the combination of the patent was but a double use of the older combination, and was therefore not an invention, and not patentable.

Brown *v.* Piper[3] is a case in which the Supreme Court held that a patent for an apparatus for preserving fish and other articles in a close chamber by means of a freezing mixture having no contact with the atmosphere of the preserving chamber, covered nothing but a double use of the well-known ice-cream freezer.

In Roberts *v.* Ryer[4] the same tribunal decided that to change the form and proportions of the compartments of a refrigerator, so as to utilize the descending instead of the ascending current of endlessly circulating air, was but a double use of that refrigerator.

[1] Keystone Mfg. Co. *v.* Adams, 151 U. S. 142, 1894.

[2] Tucker *v.* Spalding, 13 Wallace, 453, 1871.

[3] Brown *v.* Piper, 91 U. S. 37, 1875.

[4] Roberts *v.* Ryer, 91 U. S. 157, 1875.

Many other cases also embody the rule of this section, and apply it to particular double uses of old inventions.[1]

[1] King v. Gallun, 109 U. S. 99, Fed. Rep. 575, 1880; Gloucester 1883; Pennsylvania Railroad Co. v. Truck Co. 110 U. S. 494, 1883; Blake v. San Francisco, 113 U. S. 679, 1884; Miller v. Force, 116 U. S. 27, 1885; Dreyfus v. Searle, 124 U. S. 63, 1887; Hendy v. Iron Works, 127 U. S. 375, 1887; Crescent Brewing Co. v. Gottfried, 128 U. S. 169, 1888; Peters v. Active Mfg. Co. 129 U. S. 530, 1889; Peters v. Hanson, 129 U. S. 541, 1889; Aron v. Railway Co. 132 U. S. 84, 1889; Marchand v. Emken, 132 U. S. 195, 1889; Howe Machine Co. v. Needle Co. 134 U. S. 397, 1890; St. Germain v. Brunswick, 135 U. S. 230, 1890; Fond Du Lac County v. May, 137 U. S. 406, 1890; Busell Trimmer Co. v. Stevens, 137 U S. 433, 1890; Patent Clothing Co. v. Glover, 141 U. S. 563, 1891; Ansonia Co. v. Electrical Supply Co. 144 U. S. 18, 1892: Smith v. Saddle Co. 148 U. S. 679, 1893; Wollensak v. Sargent, 151 U. S. 227, 1894; Gates Iron Works v. Fraser, 153 U. S. 347, 1894; Bean v. Smallwood, 2 Story, 408, 1843; Meyer v. Pritchard, 1 Bann. & Ard, 261, 1874; Adams v. Loft. 4 Bann. & Ard. 496, 1879; Royer v. Mfg. Co. 20 Fed. Rep. 853, 1884; Howe Machine Co. v. Needle Co. 21 Fed. Rep. 630, 1884; Spill v. Celluloid Mfg. Co. 21 Fed. Rep. 639, 1884; Celluloid Mfg. Co. v. Noyes, 25 Fed. Rep. 319, 1885; Aron v. Manhattan Ry. Co. 26 Fed. Rep. 317, 1886; Marchand v. Emken, 26 Fed. Rep. 629, 1886; Shenfield v. Mfg. Co. 27 Fed. Rep. 808, 1886; Busell Trimmer Co. v. Stevens, 28 Isinglass & Glue Co. v. Le Page, 30 Fed. Rep. 370, 1887; Ansonia Brass & Copper Co. v. Electrical Supply Co. 32 Fed. Rep. 81, 1887; Acme Hay Harvesting Co. v. Martin, 33 Fed. Rep. 249, 1888; Mann's Car Co. v. Monarch Car Co. 34 Fed. Rep. 130, 1888; Babcock & Wilcox Co. v. Pioneer Iron Works, 34 Fed. Rep. 338, 1888; Ansonia Brass & Copper Co. v. Electrical Supply Co. 35 Fed. Rep. 68, 1888; Rubber Harness Trimming Co. v. Rubber Comb Co. 35 Fed. Rep. 498, 1888; Hale & Kilbourn Mfg. Co. v. Hartford Mattress Co. 36 Fed. Rep. 762, 1888; Schmid v. Mfg. Co. 37 Fed. Rep. 345, 1889; Foster v. Crossin, 44 Fed. Rep. 62, 1890, American Road Machine Co. v. Pennock & Shark Co. 45 Fed. Rep. 255, 1890; Watson v. Stevens, 47 Fed. Rep. 117, 1891; Whitcomb v. Coal Co. 47 Fed. Rep. 660, 1891; Zinsser v. Krueger, 48 Fed. Rep. 298, 1891; Cahoone Mfg. Co. v. Harness Co. 45 Fed. Rep. 585, 1891; Buckingham v. Iron Co. 51 Fed. Rep. 236, 1892; Steiner Extinguisher Co. v. Adrian, 52 Fed. Rep. 733, 1892; Steiner Extinguisher Co. v. Adrian, 59 Fed. Rep. 182, 1893; Forgie v. Oil-Well Supply Co. 57 Fed. Rep. 747, 1893; Consolidated Bunging Apparatus Co. v. Brewing Co. 60 Fed. Rep. 93, 1894; Browning v. Telephone Co. 61 Fed. Rep. 845, 1894; Adams Electric Ry. Co. v. Lindell Ry. Co. 63 Fed. Rep. 990, 1894; Schreiber & Sons Co. v. Grim, 65 Fed. Rep. 221, 1895.

On the other hand, if an old device or process be put to a new use, which is not analogous to the old one, and if the adaptation of the subject to the new use requires the exercise of invention, such new use will not be denied the merit of patentability.[1] And where a new use of an old thing consists in combining it with other things in a new organization, invention may be present.[2]

§ 39. The rule of the last section is an easy one to apply to a case to which it is relevant, if the thing or process covered by the patent in that case, is used for the new purpose without being changed either in construction or mode of operation. That is, however, not always the fact; and where it is not the fact, the rule is of but minor practical utility as a guide to a just conclusion. It does not apply to using any new thing for a new purpose, and in order to apply it to anything which differs somewhat from the most similar thing that preceded it, it is necessary first to determine whether that difference constitutes legal novelty: to determine whether the thing covered by the patent is really old. That question must be investigated by the aid of rules other than that of the last section; and when it is determined in the negative, it will follow that the rule of that section does not apply to the case.

§ 40. Want of invention, if it really exists in a particular process or thing, can nearly always be detected by one or another of the foregoing rules. When a case arises to which neither of them applies, and relevant to which the mind remains in uncertainty, that uncertainty may be removed by means of the rule in Smith *v.* The Dental Vulcanite

[1] Ansonia Co. *v.* Electrical Supply Co. 144 U. S. 18. 1892; Lovell Mfg. Co. *v.* Cary, 147 U. S 637, 1893; Potts *v.* Creager, 155 U. S 608, 1895; Cary *v.* Wolff, 24 Fed Rep. 139, 1885; Rapid Service Store Ry. Co. *v.* Taylor, 43 Fed. Rep. 253, 1887; Mack *v.* Optical Mfg. Co. 52 Fed. Rep. 821, 1892; Brown Mfg. Co. *v* Mast 53 Fed. Rep. 585, 1892; Loewer *v.* Ford, 55 Fed. Rep. 62, 1893; New Departure Bell Co. *v.* Bevin Mfg. Co. 64 Fed. Rep. 863, 1894.

[2] Telephone Cases, 126 U. S. 572, 1887.

Co.[1] namely: When the other facts in a 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. But the fact that the device has been forced into extensive sale, by judicious advertising and business energy, does not prove the presence of invention in any case.[2]

§ 41. To change the form of a machine or manufacture is sometimes invention, and sometimes it is not invention. Where a change of form is within the domain of mere construction, it is not invention; but where it involves a change of mode of operation, or of function, or of result, it is invention, unless it is held to be otherwise in pursuance of some rule other than any that relates to form.[3]

§ 41*a*. To change the proportions of a machine or manufacture will seldom, or never amount to invention; but it may be invention to change the proportions of the ingredients of a chemical combination, or other composition of matter. For example, Charles Goodyear invented soft vulcanized rubber, consisting of crude India rubber and sulphur in the proportion of one part of sulphur to five parts

[1] Smith *v.* Dental Vulcanite Co. 93 U. S. 495. 1876; Hollister *v* Benedict Mfg. Co. 113 U S. 72. 1884; Adams *v.* Stamping Co 141 U S. 542. 1891; Magowan *v.* Belting Co. 141 U. S. 343. 1891; Gandy *v.* Belting Co. 143 U S. 594, 1892; Barb Wire Patent, 143 U. S. 284, 1892; Sessions *v.* Romadka, 145 U. S. 44, 1892; Topliff *v.* Topliff, 145, U.S. 164, 1892; Hat Pouncing Machine Co. *v.* Hedden, 148 U. S. 489, 1893; Krementz *v.* Cottle Co. 148 U. S. 560, 1893; Duer *v.* Lock Co. 149 U. S. 223, 1893; Keystone Mfg. Co. *v.* Adams, 151 U. S. 143, 1894; Olin *v.* Timken, 155 U. S. 155, 1894; Potts *v.* Creager, 155 U. S. 609, 1895.

[2] McClain *v.* Ortmayer, 141 U. S. 427, 1891; Fox *v.* Perkins, 52 Fed. Rep. 213, 1892.

[3] Winans *v.* Denmead, 15 Howard, 341, 1853; Davis *v.* Palmer, 2 Brock. 310, 1827; Mabie *v.* Haskell, 2 Cliff, 510, 1865; Aiken *v.* Dolan, 3 Fisher, 204, 1867; United States Bung Mfg. Co. *v.* Independent Bung Co. 31 Fed Rep. 76, 1887; Electrical Accumulator Co. *v.* Julien Electric Co. 38 Fed. Rep. 143, 1889; Parker *v.* Dickinson, 38 Fed. Rep. 413; 1889; Hammond Buckle Co. *v.* Goodyear Rubber Co. 58 Fed Rep. 413, 1893; Goldie *v.* Iron Co. 64 Fed. Rep. 237, 1894.

of rubber, mixed and subjected to a high degree of heat; and afterward Nelson Goodyear invented hard vulcanized rubber, consisting of equal, or comparatively equal, parts of sulphur and crude rubber mixed and subjected to a high degree of heat. In this case, the change in proportion of the two materials resulted in two entirely distinct articles, having entirely distinct modes of operation and functions; and the later article was well held to be an invention.[1]

§ 42. A question of invention is a question of fact and not of law;[2] though it is to be determined by means of the rules of law set forth in this chapter. In applying those rules, patents are not held void for want of invention except where invention is clearly absent.[3]

§ 43. Every inventor or constructor is presumed by the law to have borrowed from another whatever he produces that was actually first invented and used by that other, in the United States;[4] or was previously patented[5] or described in a printed publication[6] in any country, after having been invented by another. It follows that such of the foregoing rules as involve an inquiry into the state of the art to which the thing or process in controversy pertains, may involve an inquiry into the date and the character of inventions which were in fact unknown to the patentee, when he produced that thing or process.

But it is not settled whether such an inquiry into the state of the art, can include any foreign patent, previously issued on the application of the same inventor, on an invention not near enough like the invention covered by his later United States patent, to make it true that that invention

[1] Goodyear *v.* Vulcanite Co. 2 Fisher, 312, 1856.

[2] Poppenhusen *v.* Falke, 5 Blatch. 49, 1862; Shuter *v.* Davis, 16 Fed. Rep. 564, 1883.

[3] Reiter *v.* Jones, 35 Fed. Rep. 421, 1888; Marvin *v.* Gotshall, 36 Fed. Rep. 908, 1888; Hunt Bros. Fruit Packing Co. *v.* Cassidy, 53 Fed. Rep. 260, 1892.

[4] Crompton *v.* Knowles, 7 Fed. Rep. 203, 1881; Williams *v.* Rubber Shoe Co. 54 Fed. Rep, 499, 1893; Allen *v.* Steele, 64 Fed. Rep. 795; 1894.

[5] Duer *v.* Lock Co. 149 U. S. 223, 1893.

[6] French *v.* Carter, 137 U. S. 239, 1890.

was first patented, or caused to be patented, in a foreign country.[1]

§ 44. It was shown in Section 23 that patents are grantable for nothing but inventions. It is also the law that they can be granted only to those who invented the inventions they respectively cover, or to the assignees or legal representatives of those persons. The subjects of assignments and devolutions of inventions and patents are explained in the chapter on title; but this is the proper place in which to treat the subjects of joint invention and sole invention.

§ 45. If A. B. notices the need of a new machine to perform a particular function, and thereupon conceives the plan of such a machine, and proceeds to embody that plan in a successful working structure, and does all this without assistance from any other person; then it is clear that he is a sole inventor of that machine. If, on the other hand, C. D. notices the need of a new machine to perform a particular function, and calls the attention of E. F. to the matter, and a successful invention is, after many conversations between the two, embodied in a working machine constructed by the hands of both, then it may be that C. D. is the sole inventor, or it may be that E. F. is the sole inventor, or it may be that both are joint inventors of the machine they produced. Upon what considerations the fact on this point depends, it is now in order to point out.

§ 46. 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. Equally axiomatic is the proposition that if both participate in the inventing, they are joint inventors, regardless of whether both take part in the constructing. Plainly true as this last doctrine appears to be, there are several circuit court decisions with which it is not perfectly harmonious.

[1] Edison Electric Light Co. *v.* U. S. Electric Lighting Co. 52 Fed. Rep. 304, 1892, Revised Statutes, Section 4887.

Justice NELSON once decided that where A. B. aided C. D. to invent a machine, but did not furnish all the information necessary to complete the invention, and where C. D. thereupon did the required residue of the inventing, and did all of the constructing of the machine, without further help, he was the sole inventor of that machine.[1]

Justice SWAYNE, on the other hand, decided that where A. B. drew a sketch in sand to represent his ideas of a possible improvement of a portable steam engine, and where C. D. from that sketch made working drawings, and from those drawings built a working engine, without further interference or suggestion from A. B., the latter was the sole inventor of the improvement so produced.[2]

Now, if we apply the doctrine of Justice NELSON to the facts passed upon by Justice SWAYNE, we shall probably be driven to the conclusion that C. D., and not A. B., was the sole inventor of that improvement in steam engines, because it is very improbable that any mere sketch in sand furnished C. D. with all the information necessary to complete that invention. There must have been something which, in the language of Justice NELSON, "was left for him to devise and work out by his own skill or ingenuity, in order to complete the arrangement."

In the case before Justice NELSON it was C. D., and in that before Justice SWAYNE it was A. B. who had obtained a sole patent. In each case the defendant insisted that the other man concerned in the production of the invention, and not the patentee, was the sole inventor, and in both cases that contention was evidently unfounded in fact. The patents were *prima facie* evidence of their own validity, and not being attacked at their vulnerable points were necessarily sustained. Had the defendant in either case urged the defence of joint invention as being fatal to a sole patent, then the true question would have been before the court; and the charge to the jury in the first case, or the opinion

[1] Pitts *v.* Hall, 2 Blatch. 229, 1851.

[2] Blandy *v.* Griffith, 3 Fisher, 609, 1869.

of the judge in the other, would have been adapted to that issue. The failure of counsel to take the proper ground of defence in the two cases, deprived the profession and the public of what would doubtless have been very instructive deliverances relevant to the point under present inspection. Taking into account, however, the facts of the two cases and the lack of harmony between the doctrines involved in the two opinions, it is safest to lay them both out of view in the present connection. Both cannot be followed by the federal courts, and it is not probable that either will be. The question has not been squarely presented to such a tribunal, but when it is so presented it will doubtless be decided that where two or more persons exercised their inventive faculties in the mutual production of a new and useful process or thing, those persons are joint inventors thereof, regardless of whether one, or part, or all, or neither of those persons constructed or helped to construct the first specimen of that thing, or performed or helped to perform the first instance of that process.

§ 47. The case of the Agawam Co. *v.* Jordan[1] is not inconsistent with what is advanced at the close of the last section. The defendant in that case did not set up a joint invention by the patentee and another, but set up an alleged sole invention by that other of the thing patented. The most that it could get its witness to testify, however, was that he suggested to the patentee one of the parts of one of the combinations secured by the patent, but that the patentee himself contrived the devices by means of which that part was incorporated into that combination. The patentee did not claim the suggested part as his invention, but only claimed several new combinations of old devices, and among the number a combination of several things, one of which was said to have been suggested by the defendant's witness. In that state of facts it was clear that the latter was neither sole nor joint inventor of anything covered by the patent, and accordingly the Supreme Court so decided.

[1] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

And the case of Forgie *v.* Oil Well Supply Co.[1] is also consistent with the views of the last section. In that case Forgie wanted a machine by means of which to exert great power horizontally, and it occurred to him that a lifting jack might be somehow used for the purpose. With this view he called on Barrett, who was the inventor and manufacturer of a particularly good lifting jack, and presented his case to him. Barrett thereupon caused his lifting jack to be reconstructed on a plan prescribed by himself, and thereafter made a number of the reconstructed tools for Forgie, who sold them to others who, like himself, wanted such a machine. They filled the vacant place by entirely successful operation, and became very popular. Thereupon Forgie applied for and obtained a patent on the reconstructed machine as his own invention; but the Circuit Court of Appeals for the third circuit held the patent to be void, because the machine had been produced by Barrett, and not by Forgie.

§ 48. In order to make an invention of importance, a considerable fund of general knowledge must be possessed by the inventor. Where that fund was acquired before he undertook his invention, it is easy to see that those who imparted it, are not thereby made joint inventors with him. Though not quite so obvious, it is equally certain that if, pending his experiments, an inventor seeks and secures one point of information from a scientist, and another from a machinist, and a third from a book, he is not, on account of having done the first two, any less a sole inventor than he is on account of having done the last.[2]

§ 49. To constitute a man an inventor, it is not necessary for him to have skill enough to embody his invention in a working machine, or in a model, or even in a drawing. If a man furnishes all the ideas needed to produce th invention aimed at, he may avail himself of the mechanical skill of others, to practically embody or represent his contrivance,

[1] Forgie *v.* Oil Well Supply Co. 58 Fed. Rep. 871, 1893.

[2] O'Reilly *v.* Morse, 15 Howard, 62, 1853.

and still be the sole inventor thereof.[1] But it is not invention to conceive a result, and then employ another to produce that result.[2]

§ 50. Under the statute, only he or they who have invented a particular thing can lawfully obtain a patent therefor, except in cases where the applicant is an assignee or legal representative of the true inventor or inventors. It follows that if one of two or more persons obtain a patent for a process or thing which was jointly invented by them all, that patent is not valid.[3] In such a case it is not true that the patentee invented the thing patented. He only helped to invent it. If he could have a valid patent for that thing or process, each of his co-inventors could do likewise, and each of several persons would possess the exclusive right to the same. As to each other, such a state of affairs among patentees would be impossible, and as to the public it would be intolerable.

§ 51. So also if several persons obtain a joint patent for what was invented solely by one of them, that patent is void.[4] And where several independent inventions are claimed by several different claims in a joint patent, and where one of those inventions was made by one of the joint applicants for the patent, without any co-operation of another joint applicant; the claim of the patent, which covers that invention is void.[5] There is no statutory authority to grant a patent or a claim to a non-inventor jointly with an inventor, without an assignment or a death, any more than there is to grant a patent to a non-inventor alone. But very convincing evidence is required to estab-

[1] Sparkman *v.* Higgins, 1 Blatch. 209, 1846; Stearns *v.* Davis, 1 McArthur's Patent Cases, 696, 1859. Smith *v.* Stewart, 55 Fed. Rep. 483, 1893.

[2] Streat *v.* White, 35 Fed. Rep. 426, 1888.

[3] Arnold *v.* Bishop, 1 McArthur's Patent Cases, 36, 1841; H. T. Slemmer's Appeal, 58 Penn. 164, 1864.

[4] Ransom *v.* New York, 1 Fisher, 269, 1856; Hotchkiss *v.* Greenwood, 4 McLean, 461, 1848; Barrett *v.* Hall, 1 Mason, 473, 1818; Royer *v.* Coupe, 29 Fed. Rep. 363, 1886; Stewart *v.* Tenk, 32 Fed. Rep. 665, 1887.

[5] Heulings *v.* Reid, 58 Fed. Rep. 868, 1893.

lish the invalidity of a patent on the ground stated in this section.[1]

[1] Button Fastener Co. *v.* Lucas, 28 Fed. Rep. 871, 1886; Schlicht & Field Co. *v.* Machine Co. 36 Fed. Rep. 595, 1888; Priestly *v.* Montague, 47 Fed. Rep. 651, 1891.

CHAPTER III.

NOVELTY.

52. Novelty necessary to patentability.
53. Novelty defined.
54. Not negatived by knowledge or use in a foreign country.
55. Not negatived by private patent granted in a foreign country.
56. Prior printed publications.
57. Fulness of prior patents and printed publications.
58. Novelty not negatived by any abandoned application.
59. Qualification of the last rule.
60. Successful prior applications.
61. Novelty not negatived by any unpublished drawing, or prior model.
62. Novelty not negatived by anything substantially different.
63. Abandoned experiments.
64. Novelty in cases of designs.
65. Novelty not negatived by anything apparently similar or chemically identical, but practically useless.
66. Novelty not negatived by antiquity of parts.
67. Novelty not negatived by prior accidental and not understood production.
68. Novelty not negatived by anything neither designed, nor apparently adapted, nor actually used for the same purpose as the [invention.
69. Comparative dates.
70. Dates of patented inventions.
71. Novelty is negatived by one instance of prior knowledge and use in this country.
72. Novelty is negatived by prior making without using.
73. Inventor's lack of knowledge of anticipating matter is immaterial.
74. Old thing derived from new source.
75. Questions of novelty are questions of fact.
76 Burden of proof relevant to novelty.

§ 52. THE statutes of the United States have always provided that anything to be patentable must be new. Statements that some things are not patentable because, though new in a commercial sense, they are not new in the eye of the patent law, occur in a few reported cases. In every such instance, however, it would have been more accurate to say that some things are not patentable because, though new things, they are not invented things. Such things lack patentability not because they lack newness, but because

they lack invention. The subject belongs to the domain of invention and not to that of novelty, and it is therefore treated in the second chapter of this book. With this explanation, it is not untrue nor misleading to say that whatever is really new, is new in the eye of the patent law.

§ 53. Many things are new in the eye of the patent statutes, in addition to those things which are really new. The word has therefore a broader signification in those statutes than it has in the dictionaries; but that broader meaning is not capable of a short definition. Novelty is the conventional name of the statutory newness, but that name does not indicate the boundaries of the thing which it denotes. Those boundaries can be delineated only by enumerating and explaining those classes of facts which fall within them, but which fall without the boundaries of actual newness; those classes of facts which negative newness, but which do not negative novelty.

§ 54. Novelty is not negatived by prior knowledge and prior use in a foreign country of the thing patented, provided the patentee, at the time of making his application for a United States patent, believed himself to be the first inventor of the thing covered thereby, and provided that thing had nowhere been patented to another, and nowhere been described in a printed publication.[1]

Knowledge in the mind of a man who lives in this country, that the patented thing was known and used in a foreign country before its invention here, is not such knowledge in this country as will negative the novelty of the patent covering that thing.[2]

§ 55. Novelty is not negatived by any United States patent which was issued after the contested invention was made, though applied for before that event,[3] nor by any prior private patent granted in any foreign country,[4] nor

[1] Revised Statutes, Sections 4887 and 4923.

[2] Doyle *v.* Spalding, 19 Fed. Rep. 746, 1884.

[3] American Roll Paper Co. *v.* Weston, 45 Fed. Rep. 689, 1891.

[4] Brooks *v.* Norcross, 2 Fisher, 661, 1851.

by any public patent granted in England, unless the latter was sealed before the person obtaining the American patent made the invention.[1] In neither of those three cases can it be truly said that the invention was antecedently patented, and therefore such transactions do not come within the statute; but the application in the first case may negative novelty. And also, it is safe to say that novelty would be negatived by a full description in the specification of a prior public patent of the thing covered by an American patent, even though that thing *was* not covered by the claims of the prior patent, and therefore not patented to the prior inventor.[2] This doctrine must result from the fact that whatever is well described in a patent is patented, that is, made patent to the public, whether it is claimed by the patentee or not. Indeed the Supreme Court has decided that novelty is negatived by a prior patent which shows the device in its drawings and describes it in the specification, but does not clearly state its use.[3]

§ 56. A printed publication is anything which is printed, and, without any injunction of secrecy, is distributed to any part of the public in any country; and such a publication may negative novelty.[4] Indeed, it seems reasonable that no actual distribution need occur, but that exposure of printed matter for sale is enough to constitute a printed publication. But the mere existence of a printed thing is not a printed publication.[5] Whether a drawing, either in a patent or printed publication, if unaccompanied by description in words, will negative novelty in a machine or manufacture, is an unsettled question.[6]

[1] Siemens *v.* Sellers; 123 U. S. 283, 1887; Bliss *v.* Merrill, 33 Fed. Rep. 40, 1887; Electrical Accumulator Co. *v.* Julien Electric Co. 38 Fed. Rep. 141, 1889; American Roll-Paper Co. *v.* Weston, 45 Fed. Rep. 691, 1891.

[2] United States Bung Mfg. Co. *v.* Independent Bung Co. 31 Fed. Rep. 79, 1887; Saunders *v.* Allen, 60 Fed. Rep. 613, 1894.

[3] Stow *v.* Chicago, 104 U. S. 547, 1881.

[4] Rosenwasser *v.* Spieth, 129 U. S. 47, 1889.

[5] Britton *v.* White Mfg. Co. 61 Fed. Rep. 95, 1894.

[6] Judson *v.* Cope, 1 Fisher, 619, 1860; Reeves *v.* Bridge Co. 5 Fisher, 456, 1872.

Its answer depends upon the meaning of the word "described" in the statute. If that meaning is confined to the last definition of Webster, then only description in words can negative novelty; but if it covers also the first definition of Webster, then representation by lines, as in a drawing, must have that effect. Inasmuch as drawings can generally give information which is as clear as that which words alone can give, relevant to the construction and character of a machine or manufacture, there seems to be no meritorious reason for their not having the same effect on the novelty of subsequent patents. No injustice can result from such a rule, because in order to have any effect on such novelty, drawings as well as words must be able to endure the test stated in the next section. And it is undoubtedly true, that lack of description in words does not avert negation of novelty in a design, where that design is shown in the drawing of a prior patent or printed publication.[1]

§ 57. Novelty is not negatived by any prior patent or printed publication, unless the information contained therein, is full enough and precise enough to enable any person skilled in the art to which it relates, to perform the process or make the thing covered by the patent sought to be anticipated.[2] But a difference, which consists of a mere omission of something which a skilful mechanic would supply, is not fatal to anticipation.[3] The phrase "skilful mechanic," as used in this connection, does not include mechanics who are skilful only in methods of servile imitation. It refers only to mechanics who know how to vary form without varying substance, and who, in constructing a machine from a printed description, or from Patent Office drawings, could readily and would freely alter proportions

[1] Britton *v.* White Mfg. Co. 61 Fed. Rep. 96, 1894.

[2] Seymour *v.* Osborne, 11 Wallace, 516, 1870; Cawood Patent, 94 U. S. 704, 1876; Downton *v.* Milling Co. 108 U. S. 466, 1882; Eames *v.* Andrews, 122, U. S. 66, 1886; Roberts *v.* Dickey, 4 Fisher, 532, 1871; Cahill *v.* Brown, 3 Bann. & Ard. 580, 1878; Hammerschlag *v.* Scamoni, 7 Fed. Rep. 584, 1881.

[3] Chase *v.* Fillebrown, 58 Fed. Rep. 378, 1893.

and change details in order to adapt the contrivance to a particular use, or in order to secure greater merit of workmanship for the thing constructed.

And where the claim is for an article of manufacture, it may be anticipated by a prior patent or printed publication, which describes the article, without describing any process of making it, provided a knowledge of the article would teach a skilful mechanic some process of making it.[1]

§ 58. Novelty is not negatived by any prior abandoned application for a patent.[2] Abandoned applications for patents are not by the statutes made bars to patents to later applicants. They furnish no evidence that any specimen of the things they describe was ever made or used anywhere. Being only pen and ink representations of what may have existed only as mental conceptions of the men who put them upon paper, they do not prove that the things which they depict were ever known in any country. Nor can they be classed among printed publications, for they are usually in writing, and are not published otherwise than by being placed on file in the Patent Office. Any person may procure a certified copy of an abandoned application,[3] and publish it, but such a publication will operate as of its own date, and not as of the date of the application.

§ 59. When there is evidence that he who made and abandoned an application for a patent, made also some effort to carry his invention into practical use, then that application is admissible in evidence to aid the court to determine the date and the nature of the invention which was sought to be embodied in a working form. If, however, upon the whole of the evidence, it appears that what the inventor did, outside of his abandoned application, did not amount to enough to negative the novelty of a subsequent

[1] In re Schaeffer, 66 Off. Gaz. 514, 1893.

[2] Corn-planter Patent, 23 Wallace, 211, 1874; N. W. Extinguisher Co. *v.* Phila. Extinguisher Co. 1 Bann. & Ard. 177, 1874; Lyman Ventilating & Refrigerator Co. *v.* Lalor, 1 Bann. &. Ard. 403, 1874.

[3] United States *v.* Hall, 7 Mackey 14, 1888.

patent to a later inventor, then that abandoned application becomes immaterial to that issue.[1]

§ 60. Novelty is not negatived by any successful apppli-tion for a patent, nor by any documents pertaining thereto, other than the letters patent issued in pursuance thereof.[3] When such an application, or such a document, is offered to prove the existence of something which is not shown by the letters patent themselves, the justice and propriety of this rule is apparent at a glance. The rule necessarily follows from the same considerations as those which reject an abandoned application, when an abandoned application is offered to negative novelty. But where a successful application is offered only to prove the date of the invention claimed in the resulting patent, an exception to the rule has been established.[2]

§ 61. Novelty is not negatived by any prior unpublished drawings, no matter how completely they may exhibit the patented invention,[4] nor by any prior model, no matter how fully it may coincide with the thing covered by the patent.[5] The reason of this rule is not stated with fullness in either of the cases which support it, but that reason is deducible from the statute and from the nature of drawings and of models. The statute provides, relevant to the newness of patentable machines and manufactures and improvements thereof, that they shall not have been previously known or used by others in this country.[6] Now, it is clear that to use

[1] Corn-planter Patent, 23 Wallace, 211, 1874.

[2] Howes *v.* McNeal, 5 Bann. & Ard. 77, 1880.

[3] Westinghouse *v.* Gas Co. 43 Fed. Rep. 588, 1890; Barnes Co. *v.* Walworth Co. 51 Fed. Rep. 88, 1892; 60 Fed. Rep. 606, 1894.

[4] Ellithorp *v.* Robertson, 4 Blatch. 309, 1859; Draper *v.* Potomska Mills, 3 Bann. & Ard. 214, 1878; Detroit Lubricator Mfg. Co. *v.* Renchard, 9 Fed. Rep. 293, 1881; Odell *v.* Stout, 22 Fed. Rep. 159, 1884; Pennsylvania Diamond Drill Co. *v.* Simpson, 29 Fed. Rep 291, 1886.

[5] Cahoon *v.* Ring, 1 Cliff, 593, 1861; Stainthorp *v.* Humiston, 4 Fisher, 107, 1864; Johnson *v.* McCullough, 4 Fisher, 170, 1870; Stillwell & Bierce Mfg. Co. *v.* The Cincinnati Gas Light & Coke Co. 1 Bann. & Ard. 610, 1875; Bowers *v.* Von Schmidt, 63 Fed. Rep. 577, 1894.

[6] Revised Statutes, Section 4886.

a model or a drawing is not to use the machine or manufacture which it represents; and it is equally obvious that to know a drawing or a model is not the same thing as knowing the article which that drawing or model more or less imperfectly pictures to the eye. It follows that neither of those things can negative the newness required by the statute. Nor is the statutory provision on this point lacking in good reasons to support it. Private drawings may be mislaid or hidden, so as to preclude all probability of the public ever deriving any benefit therefrom; and even if they are seen by several or by many, they are apt to be understood by few or by none. Models also are liable to be secluded from view and to suffer change, and thus to fail of propagation. Moreover, if a patent could be defeated by producing a model or a drawing to correspond therewith, and by testifying that it was made at some sufficiently remote point of time in the past, a strong temptation would be offered to perjury. Several considerations of public policy and of private right combine, therefore, to justify the rule of this section.

§ 62. Novelty is not negatived by anything not substantially identical with the subject of the patent, even though the function of the prior thing was identical with that of the patented article. This rule necessarily follows from the doctrine that a valid patent may be granted for a new means of producing an old result.[1] And substantial identity is also consistent with substantial difference, for novelty is negatived by a prior process or mechanism which included the subject of the patent, and also some other process or device. But if a patented thing possesses distinct and apparently important characteristics not possessed by any alleged anticipation, the defense for want of novelty will fail. But a thing which will not defeat a patent for want of novelty may defeat it for want of invention.[2] It will do so wherever the observed difference corresponds in character with either

[1] O'Reilly *v.* Morse, 15 Howard, 62, 1853.

[2] Untermeyer *v.* Freund, 58 Fed. Rep. 209, 1893.

of those differences between a patented thing and the prior art, which in the second chapter of this book were shown to be insufficient to constitute invention.

§ 63. The rule of the last section will probably govern every case which justly comes within the doctrine that novelty is not negatived by any unsuccessful abandoned experiment. That rule is far more reliable than that doctrine, because the latter is subject to such qualifications and explanations that its practical utility in deciding cases is but small. A thing may have been abandoned and still negative the novelty of a thing independently invented long after that abandonment.[1] Such will be the result if the earlier thing was identical with the later, and was used long enough to show that it would work.[2]

If a given experimental device was unsuccessful in the hands of its contriver, that fact must have been due either to one or more faults of principle, or to one or more faults of construction, or to one or more faults of each of these kinds. If partly or wholly due to any fault of principle, that very fact shows that the unsuccessful device was substantially different from subsequent successful patented things. For that reason alone it would have failed to negative the novelty of those things, even if it had not been unsuccessful. If, on the other hand, a prior device was unsuccessful merely because its construction was weak, it is far from certain that it will not be held to negative the novelty of subsequent devices identical with it in plan, mode of operation, and function.[3]

The truth, therefore, appears to be that an unsuccessful abandonded experiment may possibly negative the novelty

[1] Waterman *v.* Thomson, 2 Fisher, 463, 1863; Shoup *v* Henrici, 2 Bann. & Ard. 249, 1876; N. W. Extinguisher Co. *v.* Phila. Extinguisher Co. 1 Bann. & Ard. 177, 1874; McNish, *v.* Everson, 5 Bann. & Ard. 484, 1880.

[2] Gayler *v.* Wilder, 10 Howard, 477, 1850; Sayles *v.* Railway Co. 4 Fisher, 588, 1871; Stephenson *v.* Railroad Co. 14 Fed. Rep. 459, 1881; Electrical Accumulator Co. *v.* Julien Electric Co. 38 Fed. Rep. 131, 1889; American Roll Paper Co *v.* Weston, 51 Fed. Rep. 240, 1892.

[3] Pickering *v.* McCullough, 104 U. S. 319, 1881.

of a later invention, and that where it fails to have that effect, it would have failed, even if it had been neither unsuccessful nor abandoned. Novelty is to be ascribed to new things, regardless of whether old and different things were successful or unsuccessful, abandoned or not abandoned. Novelty is to be denied to old things, regardless of the accidents which caused earlier specimens of the same things to fail to operate, or caused their use to be discontinued.

§ 64. The question of the novelty of a design, is to be determined by the comparative appearance of that design and of prior designs, in the eyes of average observers, and not by their comparative appearance in the eyes of experts making an analytical inspection.[1] Nor is the novelty of any design negatived by the fact that all of its features can be collected out of scattered prior designs.[2]

§ 65. Novelty is not negatived by anything fundamentally incapable of the function of the thing covered by the patent, even though the character of the prior thing was chemically identical with the patented thing, or mechanically similar thereto.

In Morey *v.* Lockwood[3] the prior Mau syringe was relied upon to negative the novelty of the syringe of Dr. Davidson and his brother. The latter is the now well-known soft rubber bulb apparatus. The former was exactly like it, except that the central part was a soft rubber cylinder with metallic heads, instead of a soft rubber bulb. The mode of operation of the two syringes was identical. The Mau apparatus proved to be of no practical value, simply because the metallic heads of the cylinder strongly counteracted the

[1] Perry *v.* Starrett, 3 Bann. & Ard. 489, 1878; Foster *v.* Crossin, 23 Fed. Rep. 402, 1885; Kraus *v.* Fitzpatrick, 34 Fed. Rep. 39, 1888; Redway *v.* Ohio Stove Co. 38 Fed. Rep. 583, 1889; Paine *v.* Snowden, 46 Fed. Rep. 189, 1891; Anderson *v.* Saint, 46 Fed. Rep. 763, 1891.

[2] Simpson *v.* Davis, 12 Fed. Rep. 144, 1882; Stearns *v.* Beard, 46 Fed. Rep. 193, 1891; New York Belting Co. *v.* New Jersey Car Spring Co. 48 Fed. Rep. 557, 1891.

[3] Morey *v.* Lockwood, 8 Wallace, 230, 1868.

user's efforts to compress its rubber walls. Feeble persons could not use it, and those who had enough muscular power did not care to perform the needed labor. Practically, therefore, the Mau syringe proved to be of no value, and very few were ever sold. For those reasons the Supreme Court held that it did not negative the novelty of the Davidson patent.

The Wood Finishing Co. *v.* Hooper[1] is a case the patent involved in which, covered the employment of finely powdered flint, quartz, or feldspar, mixed with oil or other fluent substance, for the purpose of filling the pores of the surface of wood. A prior patent had been granted for the employment of silicious marl or infusorial earth for the same purpose. It was shown that all five of these substances consisted mainly of silica or the oxide of silicon, but that the first three differed from the last two in being non-absorbent instead of porous, and in consisting of angular instead of rounded particles. These two differences made the first three substances very valuable for wood-filling, whereas the others were not valuable for that purpose. Judge NATHANIEL SHIPMAN, therefore, decided that the prior patent did not negative the novelty of the later one.

§ 66. Novelty is not negatived by the fact that every part of the patented thing is old.[2] This rule necessarily follows from the doctrine which allows patents for new combinations of old devices. In such cases the whole is different from the sum of all its parts, precisely as this printed page is different from what it would be, if the same words were arranged in alphabetical order, or were printed promiscuously upon the paper. If, however, a new assemblage of old things amounts only to aggregation and not to combina-

[1] Bridgeport Wood Finishing Co. *v.* Hooper, 5 Fed. Rep. 63, 1880.

[2] Bates *v.* Coe, 98 U. S. 48, 1878; Imhaeuser *v.* Buerk, 101 U. S. 660, 1879; Parks *v.* Booth, 102 U. S. 104, 1880; Cantrell *v.* Wallick, 117 U. S. 694, 1885; Johnson *v.* Railroad Co. 33 Fed. Rep. 501, 1888; Consolidated Roller Mill Co. *v.* Coombs, 39 Fed. Rep. 32, 1889.

tion,[1] or if it results in no new mode of operation,[2] the patent which covers it will be void for want of invention, though not void for want of novelty.

§ 67. Novelty is not negatived by any prior accidental production of the same thing, unaccompanied by knowledge on the part of the producer sufficient to enable him to repeat that production.[3] The reason of this rule arises out of that point of patent law policy, which rewards persons for teaching the public how to perform processes and construct things which nobody else in the United States knew how to perform or to construct, and relevant to which no adequate information could be found in any public patent or printed publication anywhere in the world. But novelty is negatived by proof of prior use, where that use was understood in point of method, though not correctly understood in point of result.[4]

§ 68. Novelty is not negatived by anything which was neither designed, nor apparently adapted, nor actually used, to perform the function of the thing covered by the patent, though it might have been made to perform that function by means not substantially different from that of the patented invention;[5] but this rule cannot govern any case which lacks either of the circumstances upon which it is founded,

[1] Adams *v.* Stamping Co. 141 U. S. 542, 1891; Campbell *v.* Bailey, 45 Fed. Rep. 565, 1891.

[2] Burt *v.* Evory, 133 U. S. 349, 1890; Florsheim *v.* Schilling, 137 U. S. 77, 1890.

[3] Tilghman *v.* Proctor. 102 U. S. 711, 1880; Ransom *v.* New York, 1 Fisher. 256, 1856; Pelton *v.* Waters, 1 Bann. & Ard. 309, 1874; Andrews *v.* Carman, 2 Banh. & Ard. 277, 1876; Pittsburgh Reduction Co. *v.* Cowles Electric Co 55 Fed. Rep. 307, 1893; Chase *v.* Fillebrown, 58 Fed. Rep. 377, 1893.

[4] Dorlon *v* Guie, 25 Fed. Rep. 816, 1885; Schultz Belting Co. *v.* Belting Co. 40 Fed. Rep. 156, 1889.

[5] Topliff *v.* Topliff, 145 U. S. 161, 1892; Heaton-Peninsular Button-Fastener Co. *v.* Elliott Button-Fastener Co. 58 Fed. Rep. 222, 1892; Westinghouse *v.* Brake Co. 59 Fed. Rep. 590, 1893; Beach *v.* Box Machine Co. 63 Fed. Rep. 601, 1894; Campbell Printing Press Co. *v.* Marden, 64 Fed. Rep. 784, 1894; New Departure Bell Co. *v.* Mfg. Co. 64 Fed. Rep. 803, 1894; Knickerbocker Co. *v.* Rogers, 61 Fed. Rep. 297, 1894; Clinton Wire Cloth Co. *v.* Wire Cloth Co. 65 Fed. Rep. 427, 1894.

for negation of novelty is not averted by the mere fact that the inventor of the prior device did not design it to perform the function of the patented device,[1] nor by the mere fact that its ability to perform that function is not apparent to every beholder, nor by the mere fact that it was never actually used for that purpose, nor by any two of these facts combined.

§ 69. Novelty is not negatived by anything which was invented, patented, or described in a printed publication prior to the granting of the patent sought to be anticipated, or even prior to the application therefor, unless the anticipating event occurred prior to the date of the invention secured by that patent.[2]

One apparent exception to this rule has been stated in one leading case by the Supreme Court,[3] and indorsed in another good precedent by Judge McKINNON.[4] In those instances it was said that where two patents for the same invention are granted to the same inventor, the last, and not the first, is void, even where the last was first applied for. The exception is, however, only apparent, because the patent last applied for is as much entitled to date from the making of the invention as the other. The date of invention assignable to the two patents being exactly the same, the first patent will negative the novelty of the last, regardless of which was first applied for. The saying of the Supreme Court in this matter is not inconsistent with the rule that, in the absence of other evidence of the dates of invention, the first application must be taken to represent the first invention,[5] because the fact of an identical inventor is evidence in such cases that the date of invention was iden-

[1] Leonard *v.* Lovell, 29 Fed. Rep. 315, 1886.

[2] Cochrane *v.* Deener, 94 U. S. 791, 1876; Elizabeth *v.* Pavement Co. 97 U. S. 130, 1877; Clark Thread Co. *v.* Willimantic Linen Co. 140 U. S. 486, 1891; Pacific Cable Ry. Co. *v.* Butte City Ry. Co. 58 Fed. Rep. 422, 1893.

[3] Suffolk Co. *v.* Hayden, 3 Wallace, 315, 1865.

[4] McMillin *v.* Rees, 5 Bann. & Ard. 269, 1880.

[5] Pope Mfg. Co. *v* Gormully Mfg. Co. 144 U. S. 244, 1892; Pennington *v.* King, 7 Fed. Rep. 402 1881.

tical. No man can make one invention at two different times.

And the saying in Suffolk Co. *v.* Hayden has no applicability to a case where an inventor takes out a patent which describes and claims what was described but not claimed in a prior patent of his, because in such a case the prior patent is not for the same invention as the last.[1]

Where several patents are granted to one inventor on different inventions in the same art, the dates of their applications, instead of the dates of the patents themselves, in the absence of evidence of the dates of the making of the respective inventions, determine the relative rank of those patents in the art to which they belong.[2]

§ 70. In order to apply the rule of the last section, it is necessary to fix the date of the invention covered by the patent sought to be anticipated. In cases where the invention may be exhibited in a drawing or in a model, it will date from the completion of such a model or such a drawing as is sufficiently plain to enable those skilled in the art to understand the invention;[3] and patented inventions always date at least as early as the dates of the execution of the original applications therefor, provided the original applications exhibit the inventions with the above-mentioned extent of sufficiency.[4] In cases where a patented invention was explained in words, without the aid of any model or any drawing, it will date from the completion of such a written description as would teach others how to

[1] Suffolk Co. *v.* Hayden, 3 Wall. 315, 1865; Singer *v.* Braunsdorf, 7 Blatch. 521, 1870; Wheeler *v.* McCormick, 11 Blatch. 234, 1873; Graham *v.* McCormick, 5 Bann. & Ard. 244, 1880; McMillan *v.* Rees, 5 Bann. & Ard. 269, 1880; Graham *v.* Mfg. Co. 11 Fed. Rep. 138, 1880.

[2] Barbed Wire Patent, 143 U. S. 281, 1892.

[3] Loom Co. *v.* Higgins, 105 U. S. 594, 1881; Deering *v* Harvester Works, 155 U. S. 298, 1894; Heath *v.* Hildreth, 1 McArthur's Patent Cases, 24, 1841; Perry *v.* Cornell, 1 McArthur's Patent Cases, 78, 1847; Farley *v.* Steam Gauge Co. 1 McArthur's Patent Cases, 621, 1859; Hubel *v.* Dick, 28 Fed. Rep. 139, 1886.

[4] Kearney *v.* Railroad Co. 32 Fed. Rep. 322, 1887; National Machine Co. *v.* Brown, 36 Fed. Rep. 321, 1888.

make and use the invention described. In cases where the inventor makes a specimen of the thing invented before he makes any model, or drawing, or written description to represent that thing, the invention will date from the completion of that specimen. Perfection is not necessary to such a specimen in order to entitle it to such an effect. Substantial completeness is enough.[1]

No invention ought to date from any day wherein it had no existence or representation outside of the mind of the inventor, no matter how clear or how complete his mental conception of its character and mode of operation may have been. Mental conceptions are not useful inventions until they are so embodied that the world could use them after the death of the persons who conceived them.[2] To allow inventions to take date from mental conceptions, would strongly tempt inventors to commit perjury in order to appear to anticipate real anticipations of their patents.

Whether an oral description given by the inventor to another, of a subsequently patented invention, can give that invention a date earlier than that to which it would otherwise be entitled, depends upon the nature of the invention and the capacity of the hearer to understand it and remember it. Where an invention is abstruse or is complicated, and where it is not certain that the hearer understood it and has remembered it well enough to communicate it to the world in case of the inventor's death, the invention ought not to date from such a description.[3] But where it is shown that the person to whom such an oral description was given, understood it completely, and has remembered it accurately, a patented invention may date back to that

[1] National Cash Register Co. *v.* Store Service Co 60 Fed. Rep. 603, 1894; Coffee *v.* Guerrant, 68 Off. Gaz. 279, 1894.

[2] Clark Thread Co. *v.* Willimantic Linen Co. 140 U. S. 489, 1891.

[3] Stephens *v.* Salisbury, 1 McArthur's Patent Cases 385, 1855.

oral description.[1] The reason for allowing a patented invention to date back to an oral or a written description, or to a drawing or a model, as the case may be, while an unpatented invention, which is set up to negative the novelty of a patented invention, is not allowed to date back to either of those things, resides in the fact that those things are incipient in their nature, and in the principle that an invention which is ultimately developed and given to the world in a patent, ought equitably to date from such an incipiency, while the rights of a patentee ought not to be impaired by a similar incipiency which was never developed into a patent.[2]

§ 71. Novelty is negatived by prior knowledge and use in this country, by even a single person, of the thing patented.[3] This rule applies even to cases where that knowledge and use were purposely kept secret;[4] and it applies no matter how limited that use may have been.[5]

In Gayler *v.* Wilder [6] the Supreme Court announced an exception to this rule, but in a later case it intimated a denial, or at least a doubt, of the validity of that exception.[7] According to the opinion of a majority of the court in the first case, a single instance of prior knowledge and use will not negative novelty, if that use had ceased when the patent was granted, and that knowledge was forgotten until called to mind by the reinvention. Justices McLEAN and DANIEL dissented from that conclusion; and Judge PUTNAM, who is

[1] Philadelphia & Trenton R. R. *v.* Stimpson, 14 Peters, 448, 1840; Stephens *v.* Salisbury, 1 McArthur's Patent Cases, 385, 1855; Hill *v.* Dunklee, 1 McArthur's Patent Cases, 483, 1857; Davidson *v.* Lewis, 1 McArthur's Patent Cases, 599, 1858; McCormick Machine Co. *v.* Harvester Works, 42 Fed. Rep. 153, 1890; Merrow *v.* Shoemaker, 59 Fed. Rep. 122, 1893.

[2] Bowers. *v.* Von Schmidt, 63 Fed. Rep. 577, 1894.

[3] Coffin *v.* Ogden, 18 Wallace, 120, 1873; Brush *v.* Condit, 132 U S. 39, 1889.

[4] Reed *v.* Cutter, 1 Story, 598, 1841.

[5] Bedford *v.* Hunt, 1 Mason, 301. 1817; Rich *v.* Lippincott, 2 Fisher, 2, 1858.

[6] Gayler *v.* Wilder, 10 Howard, 477, 1850.

[7] Coffin *v.* Ogden, 18 Wallace, 125. 1873.

the only judge treating of the point in recent times, finally felt unable to lay down any general rule on the subject.[1] For these reasons, it is apparent that the question whether a United States patent can be invalidated by proof that its subject is identical with some lost art, or forgotten thing, which was formerly known in the United States, is yet an unsettled question.

§ 72. Novelty is also negatived by evidence that even one specimen of the thing patented was made in this country prior to its invention by the patentee, even though it was not used prior to that time.[2] This rule results from the statute which provides that things, in order to be patentable, must not have been known or used by others in this country.[3] If the prior article produced or proved, appears on inspection to have been identical with the patented thing, and if it is proved to have been made in this country before the date of the patented invention, it follows that it was known here prior to that time, and the novelty of the patent is necessarily negatived. If, however, the identity of the patented and the prior article can be known only by actual use, and if the prior article never was actually used till after the date of the patented invention, then its prior making will not negative novelty.[4] In that case though its existence was known prior to the invention of the patented thing, it was not known to be what the patented thing afterward was. Knowledge in order to negative novelty must include knowledge of the character, as well as knowledge of the existence, of the prior thing.

§ 73. Negation of novelty is not averted by the fact that the inventor had no knowledge of the anticipating matter

[1] Converse *v.* Matthews, 58 Fed. Rep. 249, 1893; Dalby *v.* Lynes, 64, Fed. Rep. 379, 1894.

[2] Corn-planter Patent, 23 Wallace, 220, 1874; Parker *v.* Ferguson, 1 Blatch. 408, 1849; Pitts *v.* Wemple, 2 Fisher, 15, 1855; Stitt *v.* Railroad Co. 22 Fed. Rep. 650, 1884.

[3] Revised Statutes, Section 4886.

[4] Sayles *v.* Railway Co. 4 Fisher, 588, 1871; Stitt *v.* Railroad Co. 22 Fed. Rep. 650, 1884.

when he made the invention covered by the patent.[1] The patent laws do not reward people for producing things which, though new to them, are old to others in this country.

§ 74. Nor is negation of novelty averted by the fact that the anticipating substance was made by a different process, or derived from a different source from that which produced the patented substance, for it does not make an old thing new to derive it from a new and unexpected quarter[2] or to make it by a new and improved method.[3]

§ 75. Questions of novelty are questions of fact.[4] This point is very obvious, except in cases where the prior thing is a patent or printed publication. In those cases it may be supposed that questions of novelty are questions of law arising on the construction of documents. The point has, however, been settled by the Supreme Court, in a case involving the consideration of a prior patent, and bearing with equal logical force upon a prior printed publication.[5] In that case it was held that the question whether the novelty of a patent is negatived by a prior patent, depends not upon the construction of the latter, but depends rather upon the outward embodiment of the terms contained in the latter document; and that such outward embodiment is to be properly sought, like the explanation of latent ambiguities arising from the description of external things, by evidence *in pais*. The court accordingly indorsed the proposition that such questions belong to the province of evidence, and not to that of construction; and said that even where no testimony is required to explain the terms of art or the description contained in the respective documents, the question is still to be treated as a question of fact.

[1] Derby *v.* Thomson, 146 U. S. 481, 1892; Many *v.* Sizer, 1 Fisher, 19, 1849.

[2] Cochrane *v.* Badische Anilin & Soda Fabrik, 111 U. S. 311, 1883; Badische Anilin & Soda Fabrik *v.* Cummins, 4 Bann. & Ard. 490, 1879.

[3] Cottle *v.* Krementz, 31 Fed. Rep. 42, 1887.

[4] Battin *v.* Taggert, 17 Howard, 74, 1854; Turrill *v.* Railroad Co. 1 Wallace, 491, 1863.

[5] Bischoff *v.* Withered, 9 Wallace, 812, 1869.

§ 76. The burden of proof of a want of novelty rests upon him who avers it, and every reasonable doubt should be resolved against him.[1] Novelty can only be negatived by proof which puts the fact beyond a reasonable doubt.[2] But such proof can be made with less evidence, where anticipation is probable, than where it is less to be expected.[3] And testimony of want of novelty is not overthrown, by innocent errors on collateral points;[4] or even by impeaching a principal witness, if his testimony is shown to be true by other evidence, which his bad character could not vitiate.[5] The unsupported oral testimony of one witness is not strong enough to negative the novelty of a patent beyond a reasonable doubt;[6] and the oral testimony of many witnesses, if unsupported by any evidence consisting of documents or things, must be very reasonable and very strong, in order to

[1] Coffin *v.* Ogden, 18 Wallace, 120, 1873; Cantrell *v.* Wallick, 117 U. S. 696, 1885; Parham *v.* Machine Co. 4 Fisher, 482, 1871; Webster Loom Co. *v.* Higgins, 4 Bann. & Ard. 88, 1879; Shirley *v.* Sanderson, 8 Fed. Rep. 908, 1881; Green *v.* French, 11 Fed. Rep. 591, 1882; Duffy *v.* Reynolds, 24 Fed. Rep. 858, 1885; Dreyfus *v.* Schneider, 25 Fed. Rep. 481, 1885; Osborne *v.* Glazier. 31 Fed. Rep. 404, 1887; Smith *v.* Davis, 34 Fed. Rep. 785, 1888; Howard *v.* Plow Works, 35 Fed. Rep. 745, 1888; Pacific Cable Ry. Co. *v.* Butte City Ry. Co. 55 Fed. Rep. 764, 1893.

[2] Barbed Wire Patent, 143 U. S. 284, 1892; Wood *v.* Mill Co. 4 Fisher, 560, 1871; Hawes *v.* Antisdel, 2 Bann. & Ard. 10, 1875; Bignall *v.* Harvey, 5 Bann. & Ard. 636, 1880; Worswick Mfg. Co. *v.* Buffalo, 20 Fed. Rep. 126, 1884; Thayer *v.* Hart, 20 Fed. Rep. 694, 1884; Everest *v.* Oil Co. 20 Fed. Rep. 849, 1884; American Bell Telephone Co. *v.* People's Telephone Co. 22 Fed. Rep. 313, 1884; McDonald *v.* Whitney, 24 Fed. Rep. 600, 1885; Jennings *v.* Kibbe. 24 Fed. Rep. 698, 1885; Wetherell *v.* Keith, 27 Fed. Rep. 364, 1886; Hobbie *v.* Smith, 27 Fed. Rep. 659, 1886; Cohansey Mfg. Co. *v.* Wharton, 28 Fed. Rep. 191, 1886; American Bell Telephone Co. *v.* Globe Telephone Co. 31 Fed. Rep. 733, 1887; Hunt Bros. Packing Co. *v.* Cassidy, 53 Fed. Rep. 260, 1893.

[3] Lee *v.* Upson & Hart Co. 43 Fed. Rep. 670, 1890; Rochester Coach Lace Co. *v.* Schaefer, 46 Fed. Rep. 190, 1891.

[4] Simmonds *v.* Morrison, 44 Fed. Rep. 762, 1891.

[5] Olin *v.* Timken, 155 U. S. 152, 1894; Timken *v.* Olin, 37 Fed. Rep. 207, 1888.

[6] Bowman *v.* DeGraw, 60 Fed. Rep. 911, 1894.

negative novelty;[1] and patents are seldom overthrown on the mere recollection of witnesses.[2] This rule of reasonable doubt applies where the question of novelty depends upon the identity of the patented thing or process with the alleged anticipation; as well as where that question depends upon the existence or the priority of the latter.[3]

Where an anticipating fact prior to the date of a patent is proved beyond reasonable doubt, the burden is shifted to the plaintiff to prove, by convincing preponderance of evidence, that his invention was made still earlier than that fact occurred; and if the plaintiff does not introduce enough evidence to strongly outweigh whatever evidence is introduced to the contrary, the patent must be held to be void for want of novelty.[4]

[1] Barbed Wire Patent, 143 U. S. 284, 1892; Deering *v.* Harvester Works, 155 U. S. 300, 1894; American Roll Paper Co. *v.* Weston, 59 Fed. Rep. 150, 1893; Knickerbocker Co. *v.* Rogers, 61 Fed. Rep. 297, 1894; Pratt *v.* Sencenbaugh, 64 Fed. Rep. 781, 1893; Campbell Printing Press Co. *v.* Marden, 64 Fed. Rep. 785, 1894; Wickes *v.* Lockwood, 65 Fed. Rep. 611, 1895; Singer Mfg Co. *v.* Schenck, 68 Fed. Rep. 194, 1895.

[2] Carter *v.* Wollschlaeger, 53 Fed. Rep. 575, 1892.

[3] Pittsburgh Reduction Co. *v.* Aluminum Co. 55 Fed. Rep. 308, 1892.

[4] Clark Thread Co. *v.* Willimantic Linen Co. 140 U. S. 492, 1891; Caverly *v.* Deere, 52 Fed. Rep. 760, 1892; Curtis *v.* Atlanta Street Railway Co. 56 Fed. Rep. 600, 1892; Simmons *v.* Standard Oil Co. 62 Fed Rep. 930, 1894; Ecaubert *v.* Appleton. 67 Fed. Rep. 925, 1895.

CHAPTER IV.

UTILITY.

77. Utility necessary to patentability.
78. Utility is negatived by lack of function.
79. Perfection not necessary to utility.
80. Beauty has utility.
81. Utility is negatived where function is evil.
82. Functions which sometimes work evil, and sometimes work good.
83. Functions thought by some to be good, and by others to be bad.
84. Good functions in wrong places.
85. Doubts relevant to utility to be solved against infringers.

§ 77. THE useful arts are those that Congress is authorized by the Constitution to promote, and accordingly the statute includes utility among the qualities which a process or a thing must have in order to be patentable.[1] To possess utility, a thing or a process must be capable of producing a result, and that result must be a good result. Both these elements inhere in the meaning of the word; and they are so distinct as to require separate explanation.

§ 78. Utility is absent from all processes and devices which cannot be used to perform their specified functions, and patents for such subjects are therefore void.[2] This rule applies even to cases in which, by simply adding new elements to useless contrivances, highly useful inventions are produced.

In Burrall *v.* Jewett,[3] the patent covered the cylinder of a threshing-machine, having rows of teeth inserted in its convex surface and revolving within a barrel which had no teeth. The contrivance was confessedly useless. After the

[1] Revised Statutes, Section 4886.

[2] Coupe *v.* Royer, 155 U. S. 574, 1895; Bliss *v.* Brooklyn, 10 Blatch. 522, 1873; Rowe *v.* Blanchard, 18 Wisconsin, 465, 1864.

[3] Burrall *v.* Jewett. 2 Paige, 143, 1830.

patent for it was granted, the patentee, or some other person, by simply inserting rows of tooth in the concave surface of the barrel, produced the successful threshing-machine, which has everywhere succeeded the ancient flail. The law applicable to these facts was stated by Chancellor WALWORTH in the following terms: "The patent is void if the machine will not answer the purpose for which it was intended, without some addition, adjustment, or alteration, which the mechanic who is to construct it must introduce of his own invention, and which had not been invented or discovered by the patentee at the time his patent was issued."

In Bliss *v.* Brooklyn the patent covered a certain hose-coupling. The contrivance was worthless, because it proved on trial to be inoperative. The subsequent addition of a lug to one of its parts, transferred the coupling into a useful invention. Judge BENEDICT nevertheless held the patent to be invalid for want of utility.

§ 79. If, however, a device performs a good function, though but imperfectly, the utility of that device is not negatived by the fact that it is susceptible of improvement, which will make it operate much better,[1] nor by the fact that some prior invention performed the same function quite as well,[2] or even performed it with superior excellence.[3] Nor is utility negatived by later inventions which are so much superior to the patented process or thing, that they entirely superseded the use of the latter.[4] Indeed, patents are never held to be void for want of utility, merely because the things covered by them perform their functions but poorly.[5] In such cases no harm results to the public

[1] Wheeler *v.* Reaper Co. 10 Blatch. 189, 1872; Mergenthaler Co. *v.* Press Pub. Co. 57 Fed. Rep. 505, 1893.

[2] Seymour *v.* Osborne, 11 Wallace, 516, 1870; Shaw *v.* Lead Co. 11 Fed. Rep. 715, 1882.

[3] Bell *v.* Daniels, 1 Fisher, 375, 1858.

[4] Railway Co. *v.* Sayles, 97 U. S. 559, 1878; Poppenhusen *v.* Comb Co. 2 Fisher, 72, 1858; McComb *v.* Ernest, 1 Woods, 203, 1871.

[5] Vance *v.* Campbell, 1 Fisher, 485, 1859; Conover *v.* Roach, 4 Fisher, 16, 1857.

from the exclusive right, because few will use the invention, and because those who do use it without permission, will seldom or never be obliged to pay for that use, anything beyond the small benefit they may really have realized therefrom.[1]

§ 80 Utility is not negatived by the fact that the manufacture covered by the patent has no function except to decorate the object to which it is designed to be attached.[2] In such case utility resides in beauty. Whatever is beautiful is useful, because beauty gives pleasure, and pleasure is a kind of happiness, and happiness is the ultimate object of the use of all things.

§ 81. Utility is negatived if the function performed by an invention is injurious to the morals, the health, or the good order of society.[3] An invention to improve the art of forgery, or one to facilitate the spread of a contagious disease, or one to render air or water intoxicating, would of course be unpatentable for want of utility. The more completely such an invention could perform its function, the more objectionable it would be in this respect. But utility is not negatived by the fact that the article covered by a patent is an imitation of a natural substance.[4]

§ 82. An important question relevant to utility in this aspect, may hereafter arise and call for judicial decision. It is perhaps true, for example, that the invention of Colt's revolver was injurious to the morals, and injurious to the health, and injurious to the good order of society. That instrument of death may have been injurious to morals, in tending to tempt and to promote the gratification of private revenge. It may have been injurious to health, in that it is very liable to accidental discharge, and to thereby cause wounds, and even homicide. It may also have been

[1] Gibbs *v.* Hoefner, 19 Fed. Rep. 324, 1884.

[2] Magic Ruffle Co. *v.* Douglas, 2 Fisher, 330, 1863.

[3] Bedford *v.* Hunt, 1 Mason, 301, 1817; National Device Co. *v.* Lloyd, 40 Fed. Rep. 89, 1889.

[4] *In re* Corbin and Martlett, 1 McArthur's Patent Cases, 521, 1857.

injurious to good order, especially in the newer parts of the country, because it facilitates and increases private warfare among frontiersmen. On the other hand, the revolver, by furnishing a ready means of self-defense, may sometimes have promoted morals and health and good order. By what test, therefore, is utility to be determined in such cases? Is it to be done by balancing the good functions with the evil functions? Or is everything useful within the meaning of the law, if it is used to accomplish a good result, though in fact it is oftener used to accomplish a bad one? Or is utility negatived by the mere fact that the thing in question is sometimes injurious to morals, or to health, or to good order? The third hypothesis cannot stand, because if it could, it would be fatal to patents for steam-engines, dynamos, electric railroads, and indeed many of the noblest inventions of the nineteenth century. The first hypothesis cannot stand, because if it could it would make the validity of the patents to depend on a question of fact, to which it would often be impossible to give a reliable answer. The second hypothesis is the only one which is consistent with the reason of the case, and with the practical construction which the courts have given to the statutory requirement of utility.

§ 83. Another question relevant to utilty of function will sooner or later demand the attention of counsel and of courts. A particular invention may invariably perform one specific function, which function is deemed good in some quarters, and in other quarters is thought to be bad. The function performed by a newly invented smoking-pipe, if it increased the prevalence of smoking, would be thought by many persons to be only evil, and that continually: would be deemed by many moralists to be injurious to the morals, and by many physicians to be injurious to the health of society. James I. would doubtless have refused a patent for such an invention, unless by granting one he could have diminished its use. On the other hand, there are many persons who would regard such an invention as truly useful. Federal judges would be found among both parties,

and an entire difference of personal opinion on the point might perhaps exist among the justices of the Supreme Court themselves. Personal opinion cannot, therefore, control the decision of such a question, for if it could there would be no stability to the jurisprudence of the subject. Nor ought former custom to be the criterion, for if it were, each age would be hampered by a prior and lower civilization. Science may hereafter demonstrate the uniform hurtfulness of smoking, and when it does, the courts can hardly adjudge it to be useful on the ground that millions of men formerly smoked. It seems, therefore, that in such cases of divided personal opinion relevant to the utility of a particular result, the only criterion of decision is the average public sentiment of the time when the question arises.[1] Accordingly, the courts at present uphold patents which relate to tobacco, and will probably always sustain the utility of inventions which perform functions that average public sentiment is willing to have performed.

§ 84. Utility is negatived by the fact that the patented process or thing is injurious to the thing to which it is applicable,[2] and also by the fact that the function performed by the patented part of a machine, though good in itself, is injurious to the utility of the machine as a whole.[3] The first of these points is well illustrated by the first case cited in this section: a case based on a patent for a process of treating leather to an application of fat liquor. The second point is equally well illustrated by the second case: a case based on a patent for a locomotive spark arrester. To arrest sparks is in itself a good thing to do, but where it must be done in such a way as to stop or seriously retard the locomotive, it is not desirable to attempt it. Therefore a device which would arrest sparks, but only at the expense of retarding the locomotive from the smoke-pipe of which they issued, was rightly held to be wanting in utility.

[1] Pope Mfg. Co. *v.* Gormully, 144 U. S. 233, 1892.

[2] Klein *v.* Russell, 19 Wallace, 433, 1873.

[3] Wilton *v.* Railroad Co. 1 Brightley's Federal Digest, 618, 1849.

§ 85 A patent is *prima facie* evidence of utility,[1] and doubts relevant to the question should be resolved against infringers,[2] because it is improbable that men will render themselves liable to actions for infringement, unless infringement is useful.[3]

[1] Vance *v.* Campbell, 1 Fisher, 488, 1859.

[2] Western Electric Co. *v.* LaRue, 139 U. S. 608, 1891; Whitney *v.* Mowry, 4 Fisher, 215, 1870.

[3] Lehnbeuter *v.* Holthaus, 105 U. S. 94, 1881; Gandy *v.* Belting Co. 143 U. S. 595, 1892; La Rue *v.* Electric Co. 81 Fed. Rep. 82, 1897.

CHAPTER V.

ABANDONMENT.

86. The several sorts of abandonment.
87. Abandonment of inventions.
88. Actual abandonment of inventions.
89. Actual abandonment by express declaration.
90. Actual abandonment by formal disclaimer.
91. Actual abandonment resulting from laches before application.
92. Actual abandonment resulting from laches after application and before issue of letters patent.
93. Constructive abandonment before application.
94. "Public use," defined and delineated.
95. Experimental use.
96. "On sale," delineated and defined.
97. Sale of inchoate right to a patent.
98. Degree of identity necessarily involved between the thing constructively abandoned and the thing patented.
99. Making, works no constructive abandonment.
100. Public knowledge, works no constructive abandonment.
101. Public use or sale in a foreign country.
103. Constructive abandonment after application, and before issue of letters patent.
104. Rules of constructive abandonment are inflexible.
105. Surrender of letters patent.
106. Abandonment of invention after letters patent, unknown to the law.
107. Acquiescence in unlicensed use of patented invention.
108. Questions of abandonment are questions of fact.

§ 86. An inventor may abandon an unsuccessful endeavor to make an invention; or having made an invention, he may abandon it to the public; or having made an invention and having applied for a patent thereon, he may abandon that application without abandoning that invention. Transactions of the first sort are commonly called unsuccessful abandoned experiments. They confer no rights upon those who make them, and they affect no rights

of any other person.[1] Transactions of the third sort are treated in the chapter on applications; the sixth chapter of this book. Transactions of the second sort require treatment in respect that they are inventions; and also require separate treatment in respect that they are abandoned. Treatment of the first sort takes no account of the fact of abandonment, because abandoned inventions have the same effect on the rights of subsequent inventors that they would have if they had not been abandoned.[2] That subject, therefore, does not belong to this chapter. It is treated in the chapters on invention and letters patent, where the state of the art is a very important factor in the discussion; and also in the chapter on novelty, where anticipation is the point of inquiry. Treatment of the second sort indicated above is the special function and scope of this chapter. Abandoned inventions are here considered with regard to the effect abandonment of them has upon the rights of their inventors, and with regard to the rules by means of which abandonment is to be affirmed or denied in particular cases.

§ 87. Abandonment of an invention may be actual, or it may be constructive. It is actual when it is the result of intention. It is constructive when it is the result of some statute which operates regardless of the intention of the inventor. The two sorts require and will receive separate treatment in this chapter, but there are some points of fact and of law which apply equally to both. Either kind may occur before any application for a patent is made, or may occur after such an application, and before any letters patent are issued.[3] So also, either actual or constructive abandonment of an invention, is fatal to the validity of any patent that may afterward be granted therefor. The inchoate right to a patent when once abandoned can never be

[1] Deering *v.* Harvester Works, 155 U. S. 302, 1894; American Bell Telephone Co. *v.* Cushman Telephone Co. 35 Fed. Rep. 734, 1888; Brush Electric Co. *v.* Ft. Wayne Electric Co. 44 Fed. Rep. 284, 1890; Ecaubert *v.* Appleton, 67 Fed. Rep. 922, 1895.

[2] Olds *v.* Brown, 41 Fed. Rep. 703, 1890.

[3] Rifle & Cartridge Co. *v.* Arms Co. 118 U. S. 24, 1885.

resumed; for where gifts are once made to the public, they become absolute and irrevocable.[1]

§ 88. Actual abandonment of an invention occurs whenever there is an entire relinquishment of all expectation of securing a patent therefor, and an accompanying formation of an expectation that the invention will always be free to the public.[2] Such a relinquishment may be shown by direct, or by circumstantial evidence. It may be proved by things said or things done by the inventor, or it may be proved by his omission or delay to do what the law requires to be done in order to secure letters patent.

§ 89. An inventor abandons his invention to the public when he makes an express declaration to that effect.[3] Justice CURTIS charged the jury, in Kendall *v.* Winsor, that abandonment might be shown by declarations or conduct, and the Supreme Court held that Justice CURTIS's instruction was in strict conformity with the true principle. The Supreme Court also said in that case: "It is the unquestionable right of every inventor, to confer gratuitously the benefits of his ingenuity upon the public, and this he may do by express declaration."

§ 90. So also an inventor will be held to abandon a particular invention, when he formally disclaims it in an application for a patent for some other invention;[4] and where he cancels from an application, a claim for that invention, and substitutes no other claim for the same invention, before his patent is issued;[5] and also when he formally disclaims a particular invention, or claim in a separate paper filed for that purpose. The Supreme Court decided in 1854,

[1] Pennock *v.* Dialogue, 2 Peters, 1, 1829; Kendall *v.* Winsor, 21 Howard, 328, 1858; Consolidated Fruit Jar Co. *v.* Wright, 94 U. S. 96, 1876; Planing Machine Co. *v.* Keith, 101 U. S 484, 1879; Consolidated Fruit Jar Co. *v.* Stamping Co. 27 Fed. Rep. 377, 1886.

[2] Babcock *v.* Degner, 1 McArthur's Patent Cases, 616, 1859.

[3] Kendall *v.* Winsor, 21 Howard, 328, 1858; Rifle & Cartridge Co. *v.* Arms Co. 118 U. S. 24, 1885.

[4] Leggett *v.* Avery, 101 U. S. 259, 1879.

[5] Yale Lock Co. *v.* Berkshire Bank, 135 U. S. 403, 1890; Pittsburgh Reduction Co *v.* Cowles Electric Co. 55 Fed Rep. 320, 1893.

that no abandonment results from the mere fact that the inventor described the invention in an application for a patent, without either claiming or disclaiming the same.[1] When the cited case was tried in the court below, the judge charged the jury "That a description, by the applicant for a patent, of a machine, or a part of a machine, in his specification, unaccompanied by a notice that he has rights in it as an inventor, or that he desires to secure title to it as a patentee, is a dedication of it to the public." But when the case reached the Supreme Court, that instruction was decided to be erroneous, and a new trial was therefore awarded. The paramount precedent thus established has been followed by the Supreme Court, in a recent case, by holding that a particular combination, which was described in an original patent, but neither claimed nor disclaimed therein, was lawfully claimed in a reissue of that patent.[2] This holding constituted a decision that no abandonment results from the mere fact that the inventor described the invention in an application for a patent, without either claiming or disclaiming the same; for the Supreme Court has always held that an abandonment of a right to a patent on a particular invention, whenever it occurs, is absolute and irrevocable.[3]

§ 91. Abandonment is also proved by evidence that the inventor is chargeable with laches, relevant to applying for a patent.[4] Long delay constitutes laches, unless there was some reason which rendered that delay consistent with an expectation to finally secure a patent. Extreme poverty of the inventor is such a reason;[5] but poverty which was not

[1] Battin *v.* Taggert, 17 Howard, 83, 1854.

[2] Topliff *v.* Topliff, 145 U. S. 165, 1892.

[3] Pennock *v.* Dialogue, 2 Peters, 1, 1829; Kendall *v.* Winsor, 21 Howard, 328, 1858; Consolidated Fruit Jar Co. *v.* Wright, 94 U. S. 96, 1876; Planing Machine Co. *v.* Keith, 101 U. S. 484, 1879.

[4] Consolidated Fruit Jar Co. *v.* Wright, 94 U. S. 96, 1876; Craver *v.* Weyhrich, 31 Fed. Rep. 607, 1887; Wright *v.* Postel, 44 Fed. Rep. 352, 1890.

[5] Smith *v.* Dental Vulcanite Co. 93 U. S. 491, 1876; Celluloid Mfg. Co. *v.* Crofut, 24 Fed. Rep. 796, 1885.

sufficient to prevent the inventor from securing patents on other inventions,[1] or from spending money for an education,[2] is not such a reason. The fact that during all, or during much of the delay the inventor was within the rebellious Southern Confederacy, and therefore unable to apply for a United States patent, has also been repeatedly held to be such a reason.[3] Mental disorder which was great enough to generally incapacitate the inventor for business during the time of the delay, is also such a fact as will negative laches,[4] and physical disorder ought under the same circumstances to have the same effect.

Neither can laches be predicated of any delay which was caused by the experiments of the inventor in making or perfecting his invention,[5] nor of any delay caused by absorbing misfortune,[6] nor upon any neglect of which his patent solicitor was guilty.[7] Nor does delay constitute laches when it was caused by the fact that the invention could only be used in connection with one covered by another patent, and by the fact that the inventor failed to make any arrangement with the owner of that patent for the joint use of the two inventions.[8] If under such circumstances the inventor waits till the older patent expires before securing his patent, his delay is amply accounted for by his desire to enjoy for the full statutory term of a patent the practically exclusive right to his invention. To predicate abandonment of delay suffered for such a purpose would be logically impossible.

§ 92. Abandonment is also established by evidence that an inventor is chargeable with laches relevant to prosecut-

[1] Rifle & Cartridge Co. *v.* Arms Co. 118 U. S. 24, 1885; Wickersham *v.* Singer, 1 McArthur's Patent Cases, 689, 1859.

[2] Craver *v.* Weyhrich, 31 Fed. Rep. 607, 1887.

[3] Johnsen *v.* Fassman, 1 Woods, 14', 1871; Knox *v.* Loweree, 1 Bann. & Ard. 589, 1874.

[4] Ballard *v.* Pittsburg, 12 Fed. Rep. 784, 1882.

[5] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

[6] Beedle *v.* Bennett, 122 U. S. 76, 1886.

[7] Birdsall *v.* McDonald, 1 Bann. & Ard. 165, 1874; Howes *v.* McNeal, 3 Bann. & Ard. 376, 1878.

[8] Webster *v.* New Brunswick Carpet Co. 1 Bann. & Ard. 84, 1874.

ing or renewing his application after it has been rejected or withdrawn.[1] For example, where an application for a patent is rejected when it ought to be allowed, and where the inventor long acquiesces in that erroneous rejection, supposing it to be right, he cannot on receiving better information renew his application or file another, and thereupon secure a valid patent.[2] In such a case the desire of the inventor to secure a patent may never have left him, but there was doubtless a complete, though perhaps reluctant, relinquishment of all expectation of so doing. An abandonment of an invention is not less real because it was unnecessary. But Congress by a special act may waive an abandonment and authorize a patent to issue for the abandoned invention.[3] And laches cannot be predicated of any delay which was incurred by an applicant as the result of slowness of procedure in his case in the Patent Office, whether that slowness was due to neglect[4] or to routine.[5]

§ 93. Constructive abandonment of inventions prior to applications for letters patent is the offspring of certain statutes, the earliest of which was the Patent Act of 1836.[6] Sections 6 and 7 of that act authorized the Commissioner of Patents to grant a patent only where the alleged invention had not been in public use or on sale with the applicant's consent or allowance prior to the application. Section 15 provided that in suits for infringement, judgment should be rendered for the defendant if he should have pleaded and proved that the thing patented had been in public use or on sale with the consent or allowance of the patentee before his application for a patent. Section 7 of

[1] Planing Machine Co. *v.* Keith, 101 U. S. 484, 1879; Rifle & Cartridge Co. *v.* Arms Co. 118 U. S. 22, 1885.

[2] Marsh *v.* Commissioner, 3 Bissell, 321, 1872; Consolidated Fruit Jar Co. *v.* Stamping Co. 27 Fed. Rep. 377, 1886.

[3] Graham *v.* Johnston, 21 Fed. Rep. 42, 1884.

[4] Sayles *v.* Railroad Co. 2 Fisher, 523, 1865.

[5] American Bell Telephone Co. *v.* United States, 68 Fed. Rep. 542, 1895.

[6] 5 Statutes at Large, Ch. 357, p. 117.

the Patent Act of 1839[1] provided that no patent should be held to be invalid by reason of purchase, sale, or use of the thing covered thereby prior to the application for a patent, except on proof of abandonment of such invention to the public, or on proof that such purchase, sale, or use had been for more than two years prior to such application for a patent. This provision of the Act of 1839 was in one respect restrictive of the enactments just cited from the statute of 1836, and in one respect it enlarged their operation. Its effect was to amend those enactments in the same way that it would have done if it had inserted the words "for more than two years" in the proper place in their phraseology, and had also cancelled the qualification which related to consent and allowance.[2] This phrase "for more than two years" means earlier than two years,[3] so that the law which the two statutes established on the subject is expressed in the following sentence. A patent is void if the invention covered thereby was in public use or on sale earlier than two years before the application for that patent. And that continued to be the law of the United States on the subject under the Consolidated Patent Act of July 8, 1870,[4] and also under the Revised Statutes.[5] The two years contemplated by this law are ascertained by measuring backward from the date of the filing of the application in the Patent Office;[6] but where a second or renewed application is filed to take the place of another which described and claimed the same invention, and which was withdrawn or relinquished with intent to file the second application, the two years are ascertained by measuring backward from the date of the filing of the first application.[7]

[1] 5 Statutes at Large, Ch. 80, p. 354.

[2] Andrews *v.* Hovey, 123 U. S. 267, 1887; 124 U. S. 694, 1887.

[3] Consolidated Fruit Jar Co. *v.* Wright, 94 U. S. 94, 1876.

[4] 16 Statutes at Large, Ch. 230, p. 198.

[5] Revised Statutes, Section 4886; Anderson *v.* Eiler, 46 Fed. Rep. 778, 1891; *In re* Drawbaugh, 67 Off. Gaz. 929, 1894.

[6] Campbell *v.* New York, 35 Fed. Rep. 504, 1888.

[7] International Crown Co. *v.* Richmond, 30 Fed. Rep. 778, 1887.

§ 94. What is "public use," within the meaning of the statute? This question has now received light from a sufficient number of decisions, affirming or negativing the fact of public use in particular cases, to make it possible to deduce a moderately precise answer from judicial authorities.

If the inventor allows his invention to be used by other persons generally, either with or without compensation, then it will be in public use within the meaning of the statute.[1] And the use is public which follows a transfer of the thing used from its inventor to the user, without reserving any control over it, and without expecting to make any change in it, or without any restriction.[2]

If the inventor uses his invention for profit, and not by way of experiment, that is a public use,[3] unless actual use resulting in profit is necessary to show the inventor how to perfect his invention, and unless he does perfect it in accordance with the teachings of such use;[4] but experimental use becomes public use when it extends further, either in time, or in number of instances, than is reasonably required to test the invention.[5] Nor will the fact that the inventor is but an employee in the place where he uses his invention, or the fact that the profit goes primarily to his employer, oust the operation of this rule.[6]

To constitute public use, it is not necessary that more than one specimen of the thing invented should have been publicly used,[7] nor that more than one person should have known of that use.[8] Nor is it necessary to public use that the article used could have been seen by the public eye, if

[1] Elizabeth *v.* Pavement Co. 97 U. S 135, 1877.

[2] Root *v.* Third Avenue Railroad Co. 146 U. S. 221, 1892; Delemater *v.* Heath, 58 Fed. Rep. 416, 1893.

[3] Elizabeth *v.* Pavement Co. 97 U. S. 137, 1877.

[4] Sprague *v.* Mfg. Co. 12 Fed. Rep. 724, 1882.

[5] International Tooth Crown Co. *v.* Gaylord, 140 U. S. 63, 1891.

[6] Worley *v.* Tobacco Co. 104 U. S. 340, 1881.

[7] Consolidated Fruit Jar Co. *v.* Wright, 94 U. S 94, 1876; Jones *v.* Barker. 11 Fed. Rep. 597, 1882.

[8] Egbert *v.* Lippmann, 104 U. S. 336, 1881.

the ordinary use of such articles is veiled from view.[1]

§ 95. Experimental use is never public use within the meaning of the statute, if it is conducted in good faith for the purpose of testing the qualities of the invention, and for no other purpose not naturally incidental to that.[2] In such a case it is immaterial whether the experimental use disclosed a necessity for improvement, or disclosed no such necessity; and is also immaterial whether the use was conducted with secrecy or not. It may indeed have been had in the open air, and have continued every day for several years, and have been known to hundreds of persons, and have incidentally inured to the profit of the user and of the public, and still not be a public use, within the meaning of the statute, if the nature of the invention was such that only long-continued out-door use could show whether the invention possessed utility, or show in what respects, if any, it required to be improved.[3] The liberal ideas which underlie the decision just cited will doubtless be applied to every variety of invention, as occasion serves, and will be found elastic enough to cover every meritorious case. Indeed, Judge LOWELL went still further in the direction of liberally allowing scope to experimental use, and decided that such use is not public use within the meaning of the law, where, in order to test its comparative as well as its absolute utility, and in order to convince others of its merits, an inventor allows them to use his invention after he has himself become satisfied that it is useful.[4] But where the main object of the use was profit, and improvement was only an incidental aim, the use is not experimental in the eye of the law;[5] and proof of the experimental character of any use

[1] Egbert *v.* Lippmann, 104 U. S. 333, 1881; International Tooth Crown Co. *v.* Gaylord, 140 U. S. 55, 1891.

[2] Beedle *v.* Bennett, 122 U. S. 77, 1886; Harmon *v.* Struthers, 43 Fed. Rep. 448, 1890; Pacific Cable Railroad Co. *v.* Butte City Ry. Co. 55 Fed. Rep. 765, 1893; Harmon *v.* Struthers, 57 Fed. Rep. 641, 1893.

[3] Elizabeth *v.* Pavement Co. 97, U. S. 134, 1877.

[4] Sinclair *v.* Backus, 5 Bann. & Ard. 81, 1880.

[5] Smith & Griggs Mfg. Co. *v.* Sprague, 123 U. S. 256, 1887.

which occurred earlier than two years before the application for a patent, must be full, unequivocal, and convincing, or it cannot prevail to save that patent from invalidity.[1]

Public use by a stranger, without the knowledge of the inventor, more than two years before the inventor applies for a patent, generally has the same operation of constructive abandonment, that public use by the inventor himself would have ;[2] but Judge WHEELER decided, that where the inventor continued his experiments legitimately, until less than two years before he applied for his patent, that patent will not be defeated by the fact that another person constructed, and still another used, his invention, without his knowledge, more than two years before the application for the patent was made.[3]

§ 96. What is being "on sale," within the meaning of the statute? The answer to this question also, can now be accurately delineated in nearly or quite all of its boundaries.

A single instance of sale of one specimen of the thing invented is enough to constitute putting the invention on sale,[4] and it is immaterial if the purchase price is not paid more than two years before the application.[5] Indeed a device will be on sale within the meaning of the law, if it is offered for sale, whether any specimen of it is actually sold or not.[6] If, however, the nature of the invention is such that the inventor is obliged to put it into the hands of others for crucial experiment, he may sell specimens to those others for that purpose, and such a sale will not be obnoxious to the law now under consideration.[7] But if the invention could have been tested by the inventor on his own premises, as well as by any one there or elsewhere, then either an

[1] Smith & Griggs Mfg. Co. *v.* Sprague, 123 U. S. 254, 1887.

[2] Andrews *v.* Hovey, 123 U. S. 267, 1887; 124 U. S. 694, 1887.

[3] Campbell *v.* New York, 47 Fed. Rep. 515, 1891.

[4] Consolidated Fruit Jar Co. *v.* Wright, 94 U. S. 94, 1876.

[5] Anderson *v* Monroe, 55 Fed. Rep. 405, 1893.

[6] Plimpton *v.* Winslow, 14 Fed. Rep. 921, 1883.

[7] Graham *v* McCormick, 5 Bann. & Ard. 244, 1880; Graham *v.* Mfg. Co. 11 Fed. Rep. 142, 1880.

absolute or a conditional sale of a specimen of the thing invented, will be putting the invention on sale, unless there is unequivocal evidence that the sale was made for the purpose of experimental use.[1] And a sale for the purpose of testing the commercial merits of an invention, will constitute being "on sale;"[2] but where a specimen of an invention is built or made to order, it is not "on sale" till it is completed, delivered, and accepted.[3]

§ 97. An assignment of the inchoate right to an invention, is not such a sale as will be obnoxious to the statute now under explanation.[4] So far from furnishing evidence of abandonment, the sale of the inchoate right to a patent indicates an expectation that such a patent will be obtained, and that right be thus translated into a legal title.

§ 98. Precise identity between the thing covered by the patent, and the thing which the inventor allowed to be in public use or on sale more than two years before he applied for that patent, is not necessary to constitute constructive abandonment of the invention covered by the latter. It is enough if the two devices are substantially the same,[5] or if the advance from one to the other did not amount to invention;[6] but it is not enough that the two devices perform the same function and are somewhat similar in construction and in mode of operation.[7]

§ 99. No constructive abandonment results from any mere making of a specimen of an invented thing more than two years before the application for a patent.[8] But where an invention consists in a process of making a thing, the making of a specimen of that thing, by that process, is a

[1] Henry *v.* Soapstone Co. 5 Bann. & Ard. 108, 1880; DeLamater *v.* Deeley, 53 Fed. Rep. 380, 1892.

[2] Smith & Davis Mfg. Co. *v.* Mellon, 58 Fed. Rep. 707, 1893.

[3] Campbell *v.* New York, 36 Fed. Rep. 261, 1888.

[4] Elm City Co. *v.* Wooster, 6 Fisher, 452, 1873.

[5] Hall *v.* Macneal, 107 U. S. 90, 1882; Theberath *v.* Trimming Co. 15 Fed. Rep. 251, 1883.

[6] International Tooth Crown Co. *v.* Gaylord, 140 U. S. 62, 1891.

[7] Draper *v.* Wattles, 3 Bann. & Ard. 618, 1878.

[8] Comstock *v.* Sandusky Seat Co. 3 Bann. & Ard. 188, 1878; Campbell *v.* New York, 36 Fed. Rep. 261, 1888.

use of that process, and is therefore subject to the rules which govern using, and not to that which applies to making only.

§ 100. Public knowledge of an invention, acquired with the consent of the inventor, prior to his application for a patent, was formerly fatal to the validity of any patent granted for that invention. The Patent Act of 1793[1] provided that to be patentable, a thing must not have been known before the making of an application for a patent thereon. The Supreme Court construed that enactment to mean only that the invention must not have been known to the public with the consent of the inventor.[2] The Patent Act of 1836 repealed all prior statutes on the subject of patents, and did not provide that any unfavorable effect on an inventor's right should result from public knowledge of his invention, acquired at any time after its production by him.[3] Nor has any later statute made any such provision. Since 1836 there has, therefore, been no reason for an inventor to keep his invention secret, unless he proposed to rely upon secrecy, and not upon a patent, for his profits, or unless he feared that some other person, obtaining knowledge of the invention, would falsely claim it as his own.

§ 101. A public use or a sale of a specimen of a newly invented thing, occurring in any foreign country after its invention by an applicant for an American patent, but more than two years before his application is made, will not have the same effect upon such a patent, that it would have had if that public use or that sale had occurred in the United States. The language of section 4886 of the Revised Statutes, contains no restriction as to the country wherein the public use or the sale of a newly invented thing, more than two years prior to an application for a patent thereon, must occur, in order to constitute constructive abandonment of that invention; and it was held by one Circuit Court, that no

[1] 1 Statutes at Large, Ch. 11, Section 1, p. 318.

[2] Pennock *v.* Dialogue, 2 Peters, 18, 1829.

[3] Elizabeth *v.* Pavement Co. 97 U. S. 136, 1877.

such restriction exists.[1] But the Supreme Court reversed that decision, and decided that sections 4886, 4887, 4920 and 4923 of the Revised Statutes, taken together, show that the right of an inventor, to obtain a United States patent, is not lost by reason of the fact that his invention was in public use or on sale, in some foreign country, more than two years before his application for a United States patent thereon.[2]

§ 103. Constructive abandonment of an invention, after an application for a patent thereon, necessarily results from constructive abandonment of that application, in certain classes of cases which are explained in the chapter on applications.[3] In still another class of cases, constructive abandonment of an invention, after an application for a patent thereon, necessarily results from a particular kind of constructive abandonment of that application, unless a new application is filed within a certain time after such abandonment. That class of cases is the following. Where an applicant omits to pay the final fee within six months from the time at which his application was allowed, and notice thereof sent to him or to his agent, and where he also omits to make any new application for a patent on the same invention within two years after such an allowance, he loses all right to obtain a patent for that invention.[4]

§ 104. The statutory law relevant to constructive abandonment, resulting from a public use or from a sale of a newly invented thing, more than two years before an application for a patent, is a law which operates inflexibly upon all cases coming within it. Its effect cannot be obviated by any evidence showing reasons for the delay, however ample and meritorious those reasons may be.[5] The rule of this section doubtless applies also to the constructive abandonment explained in the last.

[1] Gandy *v.* Belting Co. 28 Fed. Rep. 570, 1886.

[2] Gandy *v.* Belting Co. 143 U. S. 592, 1892.

[3] Section 147 of this book.

[4] Revised Statutes. Section 4897.

[5] Sisson *v.* Gilbert, 9 Blatch, 189, 1871.

§ 105. Surrender of an invention may be effected after the grant of letters patent therefor, by means of a formal surrender of those letters patent. A proceeding of the kind was mentioned by the Supreme Court as being confessedly proper as early as 1832,[1] and an actual surrender of the sort was tacitly approved by that tribunal about twenty years later.[2]

§ 106. No abandonment of an invention after the issue of letters patent thereon has ever been judicially decided to exist in the United States. The Patent Act of 1832[3] provided that a certain class of aliens might obtain United States patents who had theretofore been excluded from that privilege; but it coupled with that provision an enactment that every patent granted by virtue of that Act should cease and determine in case of failure on the part of the patentee to introduce the invention into public use in the United States within one year from the issuing of the patent, or in case of a discontinuance of such public use for any period of six months, or in case of failure on the part of the patentee to become a citizen of the United States. In providing such a rule of constructive abandonment for a certain class of aliens, Congress showed that it did not overlook the subject of non-user of patented inventions; and in omitting to provide any such rule for citizens of the United States, Congress showed that it did not intend constructive abandonment to result from non-user in their cases. Even as to aliens, the policy of the law upon the point was soon changed. The Act of 1836 repealed all former patent statutes, and did not re-enact the provision just cited from the Act of 1832, nor put any corresponding restrictions upon any class of patentees. Nor has any later statute contained any provision of the kind. The fair inference from this course of legislation seems to be that Congress does not intend any patent right to be lost on any ground of non-user of that right. Even before Congress had thus indicated

[1] Grant *v.* Raymond, 6 Peters, 240, 1832.

[2] Battin *v.* Taggert, 17 Howard, 74, 1854.

[3] 4 Statutes at Large, Ch. 203, p. 577.

its intention on the subject, Justice WASHINGTON instructed a jury that no disuser of an invention, after it is patented, can amount to an abandonment so as to deprive the patentee or his assignees of their exclusive right to it for the term of the patent.[1] So, also, the Supreme Court has held that no presumption arises against a patent from any use of the invention by the public after the patent is granted.[2] Since no abandonment of an invention, after it is patented, can arise out of any existing statute, nor be based on any non-user by the patentee, or on any user by the public, we seem shut up to the conclusion that no such abandonment is known to our laws.

§ 107. Acquiescence by a patentee in unlicensed use of his invention during the life of the patent, has sometimes been said or been intimated by courts to amount to an abandonment of the patent and of the invention. Four cases containing such statements or suggestions are to be found in the reports. In two of them the judges made their observations on the subject, in spite of their decisions that no such question was involved in the pleadings. In the other two cases the views of the judges were inserted in charges to juries, but inasmuch as the juries found for the respective plaintiffs, it seems that there were no facts in the cases which called for such statements in the charges. The opinions of the four judges on the point seem, therefore, to be no more weighty than the reasons which support them. But no reasons applicable to the subject of abandonment of a patent are contained in either of the cases, though one of them contains statements of reasons adapted to support the doctrine of estoppel. Nor do the four cases agree among themselves relevant to the character or to the quantity of acquiescence needed to support an hypothesis of abandonment of a patent. In Wyeth *v.* Stone[3] Justice STORY intimated that such acquiescence must be without objection,

[1] Gray *v.* James, 1 Peters C. C. 403, 1817.

[2] Shaw *v.* Cooper, 7 Peters, 320, 1833.

[3] Wyeth *v.* Stone, 1 Story, 282, 1840.

and must continue for a series of years. In Ransom *v.* New York[1] Judge HALL placed no such limitation as the last of these upon the doctrine, and if he hinted at the first of them he hinted but vaguely. In Bell *v.* Daniels[2] Judge LEAVITT said that it would require a strong case to prove abandonment of a patent actually granted. In Williams *v.* Railroad Co.[3] Judge WALLACE said: "Neither does mere delay or acquiescence establish an abandonment or dedication of the patent. There must be an acquiescence in the appropriation of the right of such a character as reasonably to induce the belief that the owner intended to relinquish it to the public use." The opinions cited in this section, so far as they disagree with the statutes and decisions cited in the last, do not agree in that disagreement, and they seem insufficient to outweigh, or even to modify, the doctrine set forth in that section.

§ 108. Questions relevant to actual or to constructive abandonment of inventions are questions of fact;[4] and every reasonable doubt relevant to any such question should be solved in favor of the patent, for the law does not favor forfeiture.[5]

[1] Ransom *v.* New York, 1 Fisher, 273, 1856.

[2] Bell *v.* Daniels, 1 Bond, 219, 1858

[3] Williams *v.* Boston & Albany Railroad Co. 4 Bann. & Ard. 441, 1879.

[4] Battin *v* Taggert, 17 Howard, 84, 1854; Kendall *v.* Winsor, 21 Howard, 330, 1858.

[5] Pitts *v.* Hall, 2 Blatch. 238, 1851; McCormick *v.* Seymour, 2 Blatch. 256, 1851; Birdsall *v.* McDonald, 1 Bann. & Ard. 165, 1874; Comstock *v.* Sandusky Seat Co. 3 Bann. & Ard. 188, 1878; Anderson *v.* Eiler, 46 Fed Rep. 779, 1891.

CHAPTER VI.

APPLICATIONS.

109. Constituents of applications for patents.
110. The petition.
111. Constituents of specifications.
112. The preamble.
113. The general statement of the invention.
114. The description of the drawings.
115. The detailed description of the invention.
116. The claim or claims.
117. Claims in machine patents.
117*a*. Methods of specifying parts in claims.
118. Claims in patents for manufactures.
119. Claims in patents for compositions of matters.
120. Claims in process patents.
120*a*. Claims in design patents.
121. The signatures.
122. The form of the oath.
123. The constituents of the oath.
124. Affirmations.
125. The Patent Office fees.
126. Drawings.
127. Models.
128. Specimens of compositions of matter.
129. Dates of applications.
130. The examination by the Patent Office.
131. Notification of rejection.
132. Appeals.
133. Appeals to the Court of Appeals of the District of Columbia.
134. Bills in equity to compel the Commissioner to grant patents.
135. Amendment of applications.
136. The foundation of the right of amendment.
137. When an applicant may amend.
138. How an applicant may amend.
139. When an applicant must amend.
140. Interferences.
141. Number of interferences.
142. Decision on interference is not conclusive.
143. Caveats
144. Appeals from decrees on bills in equity.
145. Abandonment of applications
146. Constructive abandonment of applications.
147. Constructive abandonment of application working constructive abandonment of invention.
148. Effect of Commissioner's decision on questions relevant to applications.

§ 109. AN application for a patent consists of the following transactions: The deposit in the Patent Office of a written petition to the Commissioner of Patents; the like

deposit of a written specification of the invention; the making of an oath; the payment of the Patent Office fee; and in some cases the deposit of a drawing; and in some cases the deposit of a model; and in some other cases the deposit of specimens.[1] Applications and proceedings on applications are primarily governed by the provisions of the Revised Statutes. Where those provisions do not cover a particular point, that point is governed by the rules of the Patent Office.[2] Every such rule, unless it is inconsistent with law, is as authoritative as the Revised Statutes themselves.[3]

§ 110. The petition is a communication, signed by the applicant and addressed to the Commissioner of Patents, stating the name and residence of the petitioner, and requesting the grant of a patent for the invention therein designated by name and by a reference to the specification for a full disclosure thereof.[4] The petition must be the petition of the inventor, and not of an assignee of the inventor, though it may properly request that the patent, when granted, shall be granted to an assignee.[5] If, however, the inventor becomes insane or dies before executing a petition, the petition may be made and signed by his guardian in case of his insanity,[6] or by his executor or administrator in case of his death.[7]

§ 111. The specification properly consists of seven parts. 1. The preamble, giving the name and residence of the applicant, the title of the invention, and the name of any foreign country from which he or his assigns may have received a foreign patent for the same invention, and other particulars connected therewith. 2. A general statement of

[1] Revised Statutes, Sections 4888, 4889, 4890, 4891, 4892, 4893; Rules of Practice of the United States Patent Office, revised April 1, 1892, Rule 30.

[2] Revised Statutes, Section 483.

[3] United States *v.* Commissioner of Patents, 22 Off. Gaz. 1365, 1882.

[4] Patent Office Rule 33.

[5] Revised Statutes, Section 4895; Patent Act of March 3, 1837, Section 6.

[6] Whitcomb *v.* Spring Valley Coal Co. 47 Fed. Rep. 658, 1891.

[7] Revised Statutes, Section 4896; Patent Act of April 17, 1800, Sec. 2.

the nature and object of the invention. 3. A brief description of the drawings, if drawings are made, showing what each view represents. 4. A detailed description of the invention, explaining fully its construction and mode of operation, if it is a thing, or the manner of performing it, if it is a process. 5. The claim or claims. 6. The signature of the inventor. 7. The signatures of two witnesses.[1]

§ 112. The preamble states the name and residence of the inventor and the title of the invention, in order to connect the specification with the petition; and it states the particulars of foreign patents previously granted for the same invention, in order to inform the Commissioner whether he is to grant a patent for seventeen years, or whether, in pursuance of Section 4887 of the Revised Statutes, he is to so limit the patent that it will purport to expire at the same time with some foreign patent for the same invention. There is no statute which makes it the duty of the applicant to furnish the Commissioner with information on that subject. If he omits to do so, and if the Commissioner ascertains the facts elsewhere, and limits the term of the patent accordingly, then every purpose is answered that would have been answered if the applicant had stated the facts in his application. The rules of the Patent Office, however, do require the applicant to mention such a foreign patent, if any exists,[2] and in the absence of such mention the Commissioner, if he grants a patent, grants it for the term of seventeen years. If subsequent litigation discloses the prior granting of a foreign patent for a term sooner ending, it will be impossible for the United States patent to continue in force for the full term expressed on its face, but it will be given the same duration that it ought to have purported to have.[3]

§ 113. The general statement of the nature and object of the invention is a convenient mode of introducing the detailed description. Every such statement should be free

[1] Patent Office Rule 39.
[2] Patent Office Rule 39.
[3] Telephone Cases, 126 U. S. 572, 1888.

from any particularity or limitation which is not necessary to distinguish the invention or inventions covered by the claim or claims from all earlier inventions; for where a general statement contains such a particularity or limitation there is always danger that it will be imported, by implication, into one or more of the claims, and there operate to reduce the area covered by the patent to territory more narrow than the state of the prior art required.

§ 114. The description of the drawings is a convenience in aid of their understanding, but if that description is omitted, and all reference to the drawings is excluded from the specification, no statutory requirement is necessarily departed from.[1] In such a case, however, the specification would perhaps be impossible to be understood, and therefore be obnoxious to the rules stated in the next section.

§.115. The detailed description must be full enough, and clear enough, and concise enough, and exact enough, to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make and use the invention, if it is a machine or a manufacture, or to compound the invention, if it is a composition of matter, or to perform the invention, if it is a process.[2] If the description falls below this standard, the patent, if granted, will be void.[3] But this standard may be reached, in the case of a design, by a reference to the drawing or photograph[4] annexed to the specification. In the statute by which this standard is established, the phrase "any persons skilled in the art or science" includes persons of ordinary and fair information and skill in the relevant art or science; and that phrase is not confined to the most eminent scientists, or to the most competent experts, in that science or art.[5]

The statute also says that in case of a machine, the applicant shall explain the principle thereof, and the best mode in

[1] Emerson *v.* Hogg, 2 Blatch, 9 1845.

[2] Revised Statutes, Section 4888.

[3] O'Reilly *v.* Morse, 15 Howard, 62, 1853.

[4] Dobson *v.* Dornan, 118 U. S. 14, 1885; Anderson *v.* Saint, 46 Fed. Rep, 760, 1891.

[5] Tannage Patent Co. *v.* Zahn, 66 Fed. Rep. 989, 1895.

which he has contemplated applying that principle, so as to distinguish it from other inventions.[1] These provisions must be read in the light of their avowed object. That object is identification. The first provision cannot mean that the inventor must infallibly explain the law of nature which makes his machine work; for if it means that, neither Morse nor Bell complied with it when describing the telegraph or the telephone, and, indeed, neither Morse nor Bell nor any man could have done so. The second provision cannot mean that every inventor must infallibly judge which of several forms of his machine will eventually be found to work best, for if it means that, it requires what is often impossible: requires the inventor to foresee the ultimate effects of new and comparatively untried causes. The first provision means that the essential distinctive characteristic of the machine shall be explained; and the second provision means that the inventor shall state the mode which he contemplates to be the best.[2] Inasmuch as the validity of a patent depends on the sufficiency of the description, the subject of this section is treated with more detail in the chapter on letters patent, the seventh of this book. Enough has been outlined in this connection, to show what kinds of statements those decriptions need to contain.

§ 116. The claim or claims constitute a necessary part of every specification. The statutory requirement in this regard is, that the applicant "shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention."[3] The practice of the Patent Office has always been to require the claim or claims to be made in that part of the specification which immediately precedes the signatures It is a practice of many solicitors of patents to write claims in vague phraseology, with an idea that vagueness is elasticity, and that elasticity is excellence. Such a practice is neither honest

[1] Revised Statutes, Section 4888.

[2] Carver *v.* Mfg. Co. 2 Story, 432, 1843; Page *v.* Ferry, 1 Fisher, 309, 1857.

[3] Revised Statutes, Section 4888.

nor expedient. It is not honest, because it is often intended, and always adapted to deceive the public, and to lead individuals into unintended infringement. It is not expedient, because dishonesty is bad policy in matters of patents, as in all other human affairs, and because vagueness of claims may make a patent void which would otherwise be valid. It is the practice of many other solicitors of patents to write claims in loose phraseology, because they do not know how to write precise sentences. By multiplying words they hope to hit the mark, on the same principle that the user of a shotgun hopes to hit a solitary bird. But the principles which apply to shotguns do not apply to rhetoric. The true rhetorician uses a rifle, not a blunderbus. With him every word hits its target, because it is adapted to do so, and because he knows how to aim it.

Writing a claim for a patent may require as many points of information and powers of mind, as can ever be required for any prose writing of similar length. More than half the chapters of this book contain such points of information, but neither this nor any other law book, can embody all that the penner of such a claim requires to know. A few leading points may, however, be conveniently stated in this place.

§ 117. In a case where the description sets forth an entire machine, the applicant may lawfully make a claim coextensive with the description, if the machine as a whole possesses novelty. But such a claim ought seldom to be the only one in a patent; because, for reasons stated in the chapter on infringement, it can, in most cases, be readily evaded. The proper practice is to fix upon the new parts, or new combinations, which the described machine contains, and to make a separate claim for each of those parts, and for each of those combinations.[1] Indeed the applicant may, if he will, apply for and receive a separate patent for each of those parts and combinations.[2]

[1] Gill *v.* Wells, 22 Wallace, 24, 1874; Adams *v.* Jones, 1 Fisher, 530, 1859.

[2] Corn-Planter Patent, 23 Wallace, 224, 1874.

But one patent or claim having been granted to an inventor, upon a particular part or combination, as performing particular functions; no valid claim or patent can be afterward granted to him, on the same part or combination, as performing a part only of the functions called for by the claim of the first patent.[1] And it is advisable to take out all patents, on the same day, on different combinations of parts, some of which are in each of the different combinations. To secure a particular part of a machine, a claim must specify that part; and to secure a particular combination of some of the parts of a machine, a claim must specify all of those parts, and the description must explain their joint mode of operation, and must state their joint function.[2]

And a part or a combination may be claimed separately, though it cannot do useful work separately from the residue of the machine or apparatus of which it constitutes a part.[3] Otherwise an infringer might take the most important part of an invention, and by changing the method of adapting it to its environment, might avoid any charge of infringement. The invention of a needle with an eye near the point, is the basis of all sewing machines; but the methods of operating such a needle are many, and if its inventor 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.[4]

§ 117*a*. A part of a machine when claimed alone, may be specified by the use of its name in the claim, where no other part of the machine has a similar name; but where the use of a name alone, is not sufficiently specific to show what part of the machine is referred to, that object can be accomplished by mentioning, in the claim, the reference letter or

[1] Miller *v.* Eagle Co. 151 U. S. 199, 1894.

[2] Parks *v.* Booth, 102 U. S. 102, 1880; Forbush *v.* Cook, 2 Fisher, 669, 1857.

[3] Hancock Inspirator Co. *v.* Jenks, 21 Fed. Rep. 915, 1884; Rapid Service Store Ry. Co. *v.* Taylor, 43 Fed. Rep. 251, 1887; Roberts *v.* Nail Co. 53 Fed. Rep. 920, 1892; Holloway *v.* Dow, 54 Fed. Rep. 516, 1893.

[4] Deering *v.* Winona Harvester Works, 155 U. S. 302, 1894.

numeral, which is used to indicate that part in the description and in the drawings. Such a use of a reference letter or numeral does not necessarily confine the claim to a part having all the characteristics of the part which, in the drawings, is indicated by that letter or numeral;[1] because a claim which expressly covers a particular device, impliedly covers any equivalent of that device; and other devices will be held to be equivalent or not equivalent, by means of certain tests, which are explained in the chapter on infringement, and which are quite foreign to the question whether a particular device is designated in a claim by a reference letter or numeral, or by a name alone, or in some other way.

It is true that where the particular characteristics of the parts of the combination shown in the drawings of a patent, are all that differentiate it from the prior art; and where those parts are specified in an amended claim by reference letters or numerals, in pursuance of a rejection by the Patent Office of a prior claim which was broad enough to cover the prior art; the amended claim is limited to a combination of parts having those particular characteristics; for if not so restricted, the effect would be to make the claim coextensive with what the Patent Office rejected.[2] But the same thing is true, in an otherwise similar case, where the parts of the combination are specified, in an amended claim, by names alone, or in any other way. The breadth or the narrowness of a claim as the case may be, does not depend upon any artificial rule of interpretation;[3] and to narrow a broad invention by reference letters or numerals alone, would be to frame and enforce such a rule.

Where some of the parts of a combination, operate therein to give motion to other parts, which do the final work of the combination, it is proper to specify the former

[1] Campbell Printing Press Co. *v.* Marden, 64 Fed. Rep. 785, 1894.

[2] Knapp *v.* Morss, 150 U. S. 228, 1893; Lehigh Valley Railroad Co. *v.* Kearney, 158 U. S. 469, 1895.

[3] Topliff *v.* Topliff, 145 U. S. 171, 1892.

by the use of such terms as 'means," "mechanism," or "devices" for giving that motion.[1] But such general language will not include all means, mechanism, or devices which can perform that function, but only those which are shown in the patent, and their equivalents.[2] And in this case also, the question whether other means, mechanism, or devices are equivalents of those shown in the patent, will be determined by the established rules on that subject, rather than by any apparent looseness or elasticity of the language used in the claims to designate the parts involved in the inquiry.

§ 118. In cases where the description sets forth a manufacture, there ought to be a separate claim for each of its patentable features, or at least for the article without any dispensable feature; for if there is but one claim, and if all those features are covered by it, then those persons who manage to dispense with even the least of them, incur no liability by making, using, or selling articles which possess all the others.[3]

§ 119 In cases where the description relates to a composition of matter, the claim should cover that composition in its entirety, and should, either expressly, or by reference to the description, specify the respective proportions which the different ingredients bear to each other.[4] But where some of the described ingredients may be dispensed with, the applicant, if he states that fact in the description, may have a separate claim for a composition of matter composed only of the residue, or he may have a single claim covering the indispensable ingredients, whether with or without the others.[5]

[1] Brush Electric Co. *v.* Ft. Wayne Electric Light Co. 40 Fed Rep. 833, 1889; Brush Electric Co. *v.* Western Electric Co. 43 Fed. Rep. 537, 1890; Brush Electric Co. *v.* Electric Imp. Co. 52 Fed. Rep. 975, 1892.

[2] Dudley E. Jones Co. *v.* Munger Mfg. Co. 49 Fed. Rep. 64, 1891; Williams *v.* Steam Gauge & Lantern Co. 47 Fed. Rep. 323, 1891.

[3] Prouty *v.* Ruggles, 16 Peters, 336, 1842.

[4] Tyler *v.* Boston, 7 Wallace, 327, 1868.

[5] Rubber Co. *v.* Goodyear, 9 Wallace, 788, 1869.

§ 120. In cases where the description relates to a process, the claim should cover all the necessary occurrences in that process, and cover no more. If it covers less it will be void for want of utility; and if it covers more, it can be evaded by persons who omit any one which is unnecesary, when using the others.

§ 120*a*. In cases where the description and its accompanying drawing or photograph represent a design, the claim may identify its subject by a reference to that drawing or photograph.[1] And a design patent may contain a claim for the entire design, with other claims for such of the parts of the design as are independently patentable.[2] But several unconnected ornaments cannot lawfully be aggregated and claimed together in one claim.[3]

§ 121. The signatures of the applicant and of the witnesses must embody the full names of those persons, and must be legibly written.[4] The grammatical construction of the statutory provisions, relevant to signatures, seems to indicate that the document signed by the applicant, and not the signature of that applicant, is the thing which is to be attested by the two witnesses. In cases where language of similar character has been used in statutes which prescribe the mode of attesting wills, it has been decided to be immaterial, whether the witnesses sign before or sign after the execution of the document;[5] but where such statutes have provided for attesting the signatures rather than the will, it is the law that the document is void if the witnesses sign before the testator.[6] It is the practice of the Patent Office to regard the attestation as being attestation of the signatures, and, accordingly, to require two witnesses for each signature, in cases of joint applications for joint

[1] Dobson *v.* Dornan, 118 U. S. 14, 1885.

[2] Dobson *v.* Hartford Carpet Co. 114 U. S. 446, 1885; Britton *v.* White Manufacturing Co. 61 Fed. Rep. 95, 1894.

[3] Dukes *v.* Bauerle, 41 Fed, Rep. 781, 1890.

[4] Patent Office Rule 40.

[5] O'Brien *v.* Gallagher, 25 Conn. 229, 1856.

[6] Wharton on Evidence, Section 888.

inventions. The same two witnesses may indeed attest all the signatures ; but where one witness attested the signature of one joint inventor, and another witness attested the signature of the other, of two joint inventors, the Patent Office has held the attestation to be insufficient.

§ 122. The oath is not required by the statute to be in writing, nor to be recorded. It may be taken anywhere in the United States, before any person authorized by law to administer oaths at that place ; or, when the applicant resides in a foreign country, it may be taken before any minister, chargé d'affairs, consul, or commercial agent, holding commission under the government of the United States, or before *any* notary public of the foreign country in which the applicant may be.[1]

Recital in the letters patent, that the required oath was made by the applicant, is, in the absence of fraud, conclusive evidence of that fact.[2] The presence, in the files of the Patent Office, of a paper purporting to be the oath in a given case, but void for lack of a jurat, or for some other fault, is a harmless circumstance.[3] In such a case the law presumes that the oath recited in the letters patent was made orally, or was embodied in some other paper. It is presumed that the Commissioner will never issue a patent till he is satisfied that the applicant has somehow made oath to the facts to which the statute requires him to swear. When the Commissioner is so satisfied, and recites the fact in the letters patent, all inquiry on the subject is foreclosed, except in cases of actual fraud. Rule 47 of the Patent Office provides, however, that the oath or affirmation is to be attested in all cases by the proper official seal of the officer before whom it is taken. That implies that the Commissioner requires the oath to be put into writing. If, however, he were to waive that require-

[1] Revised Statutes, Section 4892.

[2] Seymour *v.* Osborne, 11 Wallace, 516, 1870.

[3] Crompton *v.* Belknap Mills, 3 Fisher, 536, 1869: DeFlorez *v.* Raynolds, 14 Blatch 506, 1878; Hoe *v.* Kahler, 12 Fed. Rep. 111, 1882; Hancock Inspirator Co. *v.* Jenks, 21 Fed. Rep 914 1884.

ment in a given case, and were to content himself with an oral oath, and were to recite in the patent that the required oath was made, the law would still have been complied with.

§ 123. The statute requires an applicant to make oath that he does verily believe himself to be the first inventor of the invention for which he solicits a patent, and to state of what country he is a citizen.[1] The Patent Office rules require that this last mentioned statement shall also be made in the oath, and that the applicant shall also state in the oath, where he resides, and whether the invention has been patented to himself, or to any other with his consent or knowledge, in any country, and if it has, that the applicant shall name, under oath, such foreign country or countries, and shall likewise set forth the number and date of every such patent granted therein, and that, according to his knowledge and belief, the same has not been in public use in the United States for more than two years prior to the application in this country.[2]

The statute of 1836, which was in force till the approval of the act of 1870, required the applicant to make oath or affirmation of what country he was a citizen,[3] whereas the Act of 1870, and the Revised Statutes, require only his statement on that subject. The old law governs all applications made before July 8th, 1870; and under it Justice GRIER decided that where an applicant mentioned a wrong country in his oath, that error rendered his patent void, even though it arose from an erroneous opinion relevant to what constituted citizenship of the United States.[4] But under the Statute of 1870, re-enacted in the Revised Statutes, such an error does not invalidate a patent.[5]

When an application for a patent is made by an executor or administrator of a deceased inventor, the statute directs the oath to be so varied in form that it can be made by

[1] Revised Statutes, Section 4892.

[2] Patent Office Rules 46 and 39.

[3] 5 Statutes at Large, Ch. 357, Section 6, p. 119.

[4] Child *v.* Adams, 1 Fisher, 193, 1854.

[5] Tonduer *v.* Chambers, 37 Fed. Rep. 337, 1889.

him.[1] Whether, in such a case, it is necessary for the applicant to swear that he believes that the deceased believed himself to be the first inventor, or whether it is necessary for the applicant to swear that he believes that the deceased was in fact the first inventor of the invention, is an unsettled question. If the first is the true view, then an executor may obtain, without perjury, a patent for an invention which he may know to have been previously used in the United States. If the second is the true view, then an executor may be unable to obtain, without perjury, a patent for an invention never before known or used in this country, and not previously patented or described in any printed publication, in this or in any foreign country, and not known or believed by its inventor, to have been previously known or used anywhere in the world. In the first of these contingencies, a wrong may result to the public, and in the last, a wrong may result to the beneficiaries of the deceased.

§ 124. An affirmation in judicial form may always be substituted for any oath required by any United Stated statute.[2] Nor is this rule confined, as it is in the statutes of some of the States, to cases where the affiant informs the magistrate that he has scruples of conscience against taking an oath.

§ 125. The Patent Office fee, due with the application for a patent for a process, machine, manufacture, or composition of matter, is fifteen dollars, and a final fee of twenty dollars is payable after such a patent has been allowed and before it is issued. The fees for patents for designs, vary with the length of the terms of the patents applied for. For such a patent for three years and six months, the fee is ten dollars: for such a patent for seven years, the fee is fifteen dollars: for such a patent for fourteen years, the fee is thirty dollars.[3] Fees for design patents are required to be paid in advance.[4] The final fee, above mentioned, must be paid within six months after the patent is allowed, and notice thereof is sent to the applicant or his agent; and if

[1] Revised Statutes, Section 4896.
[2] Revised Statutes, Section 1.
[3] Revised Statutes, Section 4934.
[4] Patent Office Rule 217.

that fee is not paid within that time, the statute provides that the patent shall be withheld.[1] The Commissioner of Patents has no jurisdiction to do what the statute forbids. Therefore if he were to issue a patent on an application, the final fee for which was not paid till more than six months after the patent was allowed, he would be acting without authority, and the patent would, for that reason, be void. At common law, a month is a lunar, not a calendar month.[2] Many of the States have reversed this definition by statute, and though Congress has never done so, the Supreme Court of the United States has reached that good result by judicial interpretation; and the word "month" wherever it occurs in the patent laws, must now be taken to mean a calendar and not a lunar month.[3]

§ 126. Drawings are required by the statute to be furnished by applicants for patents, in all cases wherein the invention admits of representation by drawings.[4] The statutory requirement relevant to the character of such drawings, is merely that they shall be signed by the applicant or by his attorney in fact, and shall be attested by two witnesses. The Patent Office rules require, in addition, that drawings must show every feature of the invention covered by the claims; and when the invention consists of an improvement on an old machine, must exhibit, in one or more views, the invention itself, disconnected from the old structure, and also, in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.[5] Those rules also describe numerous other characteristics for drawings.[6] They are all necessary to the systematic and proper conduct of the business of the office, and must be carefully followed in order to secure favorable action from the Commissioner.

To be as useful as possible, all drawings for letters patent ought to show the true positions and proportions of the

[1] Revised Statutes, Section 4885.
[2] Blackstone, Book 2, Ch. 9.
[3] Guaranty Trust Co. *v.* Railroad Co. 139 U. S. 145, 1891.
[4] Revised Statutes, Section 4889.
[5] Patent Office Rule 50.
[6] Patent Office Rule 51.

parts of the inventions which they purport to delineate; but it is not necessary that they be accurate enough to be used as working drawings, from which to construct specimens of those inventions.[1]

Drawings in applications filed prior to July 8, 1870, and after July 4, 1836, were required to have "written references."[2] The object of such references was to connect the various parts of the drawings with the corresponding parts of the specification; but it was a sufficient compliance with that statute, where those references were made on the drawings, though not made in the specifications.[3] The present statute says nothing about any references, or other means of connecting drawings with specifications; but the Patent Office rules require that they shall be connected by figures adjacent to the different views, and by letters or figures adjacent to the different parts of the drawings, and by incorporating those figures and letters in the descriptive part of the specification.[4]

§ 127. A model of the invention is required by the statute to be furnished by the applicant, in all cases wherein the invention admits of representation by model, provided the Commissioner requires a model.[5] This proviso was not in the statute of 1836, but it was inserted in that of 1870, in order to enable the Commissioner to dispense with models, in all cases where their utility is inferior in value to their cost, and to the room they would occupy in the Patent Office. Under the operation of the proviso, models are at present called for by the Commissioner in very few of the cases which admit of representation thereby.

§ 128. Specimens of compositions of matter, and of the ingredients thereof, are required by the statute to be furnished by applicants for patents for such compositions of matter, in all cases where the Commissioner calls for such

[1] American Hide and Leather Splitting Machine Co. *v.* Machine Co. 4 Fisher. 284, 1870; Royer *v.* Coupe, 29 Fed. Rep. 369, 1886.

[2] 5 Statutes at Large, Ch. 357, Section 6, p. 119.

[3] Emerson *v.* Hogg, 2 Blatch. 1, 1845.

[4] Patent Office Rules 38 and 51.

[5] Revised Statutes, Section 4891.

specimens.[1] He always does call for at least a specimen of the composition, put up in proper form to be preserved, unless that composition is in its nature perishable.[2]

§ 129. An application for a patent dates from its filing in the Patent Office, and not from the day of its execution by the applicant, nor from the day of the deposit of a model in the Patent Office, nor from the day of the deposit of anything there less than the full application;[3] but where an application is divided by filing a new one for part of its subject, the new one will date from the date of the old one.[4] In the absence of other evidence, the date of the application for a particular patent, is taken to be identical with the date of the letters patent itself.[5] Letters patent, and printed certified Patent Office copies of letters patent, not old enough to have expired, always have upon them, in the space under the title, a memorandum that the application therefor was filed on a particular specified day. But no such memorandum is evidence of the fact it recites. It is not evidence at common law, nor in pursuance of any statute. That section of the Revised Statutes[6] which gives evidential character to certain certified copies, does not include any such memorandum, because it is no part of the letters patent upon which it is placed, and because it is not a copy of any record, book, paper, or drawing belonging to the Patent Office. It is an indication of what some such record, book, or paper appears to show, but it is not evidence of its own accuracy, nor is it covered by the certificate attached to the document upon which it is placed.

§ 130. Those transactions which constitute an original application for a patent, have thus far constituted the subjects explained in this chapter. While such an application is pending in the Patent Office; the Commissioner of Patents

[1] Revised Statutes. Section 4890.

[2] Patent Office Rule 62.

[3] Draper *v.* Wattles, 3 Bann. & Ard. 618, 1878; Henry *v.* Francestown Soap-stone Stove Co. 5 Bann. & Ard. 108, 1880; Campbell *v.* New York, 35 Fed. Rep. 504, 1888.

[4] Smith & Griggs Mfg. Co. *v.* Sprague, 123 U. S. 250, 1887.

[5] Worley *v.* Tobacco Co. 104 U. S. 342, 1881.

[6] Revised Statutes, Section 892.

has no authority to furnish a copy of any paper which belongs to it, to any one, except the applicant, or his attorney or agent. And no Patent Office official has any authority to give to any person any information about any pending application; except so far as the rules of the Patent Office authorize the giving of certain limited information specified therein, to those who make or who represent an interfering application.[1]

When an application is made by any person, it becomes the duty of the Commissioner to cause an examination thereof, and of the invention covered thereby. If upon such examination, it appears that the applicant is justly entitled to a patent under the law, it is the duty of the Commissioner to issue one to him for that invention.[2] The statute does not prescribe that the Commissioner shall cause this examination to be made by any particular subordinate, and he may overrule the decision of any subordinate to whom he may have committed the matter.[3]

The examination may extend not only to the novelty of the invention covered by the application, but also to any other question of fact, upon which the validity of the patent, if granted, may be expected to depend. If the investigation of any such question necessitates the taking of testimony by the Commissioner, he cannot take that testimony in the form of ex-parte affidavits, but must take it in the form of depositions, made upon notice to the applicant to appear and cross-examine the deponents.[4]

§ 131. Whenever, after an examination, any application for a patent is rejected, it is the duty of the Commissioner to notify the applicant thereof, giving him the reasons for such rejection, together with such information and references, as may be useful in judging of the propriety of prosecuting the application, or of altering the specification;

[1] United States *v.* The Commissioner of Patents, 54 Off. Gaz. 267, 1890.

[2] Revised Statutes, Sections 4893, 4886.

[3] Hull *v.* Commissioner of Patents, 7 Off. Gaz. 559, 1875; 8 Off. Gaz. 46, 1875.

[4] Alteneck's Appeal, 23 Off. Gaz. 269, 1882.

and if, after receiving such a notice, the applicant persists in his request for a patent, with or without altering his specification, it thereupon becomes the duty of the Commissioner to cause a re-examination of the case.[1]

§ 132. If, without amending his specification, the applicant persists in his request for a patent, and if the application is again rejected by the primary examiner, to whom the Commissioner referred the case, then the applicant may appeal to the board of examiners-in-chief;[2] and if unsuccessful there, he may appeal to the Commissioner.[3] Such an appeal may be heard by the Commissioner, or by the Assistant Commissioner. If heard by the latter, no appeal lies to the former, and no decision of either can be reopened or set aside by any successor, except for fraud, clerical error apparent on the face of the record, or newly discovered evidence, presented under circumstances which would justify a new trial in an action at law.[4] If the Commissioner or Assistant Commissioner refuses to grant him a patent, the applicant may appeal to the Court of Appeals of the District of Columbia,[5] but not to the Secretary of the Interior;[6] and if the Commissioner refuses to allow that appeal, he may be compelled to do so, by a writ of mandamus, granted by the latter tribunal, upon the petition of the applicant.[7] No appeal lies to that court from a rejection of an amendment; but only from rejections of specifications as originally filed, or as amended by leave of the Patent Office.[8]

And all appeals must be heard on the case as submitted to the primary examiner.[9] No appeal, therefore, should be

[1] Revised Statutes, Section 4903; Patent Office Rule 65.

[2] Revised Statutes, Section 4909.

[3] Revised Statutes, Section 4910.

[4] *In re* Hoeveler & McTighe, 21 D. C. R. 107, 1892.

[5] 27 Statutes at Large, Ch. 74, Section 9, p. 436; Revised Statutes, Section 4911; Revised Statutes relating to the District of Columbia, Section 780.

[6] Butterworth *v.* Hoe, 112 U. S. 50, 1884.

[7] Commissioner of Patents *v.* Whiteley, 4 Wallace, 533, 1866.

[8] *In re* Chinnock, 21 D. C. R. 594, 1893.

[9] Hammond's Appeal, 2 Off. Gaz. 57, 1872.

taken until the application is in such a condition that the patent will issue, if the decision of the primary examiner is reversed.[1] If that decision is reversed by the board of examiners-in-chief, the primary examiner can require no amendment,[2] but must pass the case for issue. If the board affirms the decision of the primary examiner, the Commissioner will not reverse the board on any question of fact, unless its decision was clearly against the weight of evidence.[3] If the Commissioner affirms the decision of the board, because the patent ought not, in his judgment to issue, he need assign but one reason for that opinion. The applicant cannot demand of him that he pass upon any other question.[4] And the Commissioner may at any time before the issue of a patent, reverse his own or any other favorable Patent Office action thereon,[5] except that of a predecessor of himself, or of a predecessor of the Assistant Commissioner,[6] and may thereupon reject the application.

And any party aggrieved by a decision of the Commissioner of Patents, in any interference case, may appeal therefrom to the Court of Appeals of the District of Columbia.[7] But such an appeal is confined to the final decision of the Commissioner, on the question of priority only.[8] And that decision cannot award costs to the successful party.[9]

§ 133. Where an appeal is taken to the Court of Appeals of the District of Columbia, the applicant is required to give notice thereof to the Commissioner, and to file in the Patent Office, within such time as the Commissioner shall appoint, his reasons for the appeal, specifically set forth in writing.[10]

[1] Mewes' Appeal, 2 Off. Gaz. 617, 1872.

[2] Brunner's Appeal, 1 Off. Gaz. 303, 1872.

[3] Hazelip *v.* Richardson, 10 Off. Gaz. 747, 1876.

[4] Commissioner of Patents *v.* Whiteley, 4 Wallace, 532, 1866.

[5] United States *v.* Butterworth, 3 Mackey, 233, 1884.

[6] *In re* Hoeveler & McTighe, 21 D. C. R. 107, 1892.

[7] 27 Statutes at Large, Ch. 74, Section 9, p. 436.

[8] Westinghouse *v.* Duncan, 66 Off. Gaz. 1010, 1894; Hisey *v.* Peters, 71 Off. Gaz. 893, 1895.

[9] Wells *v.* Reynolds, 69 Off. Gaz. 1507, 1894.

[10] Revised Statutes. Section 4912.

The court before hearing the appeal, gives notice to the Commissioner of the time and place thereof, and the Commissioner is required, thereupon, to give like notice to all persons who appear to be interested in the case. The applicant is required to lay before the court, at the hearing, certified copies of all the papers in the case, and the Commissioner is required to furnish the court with a full written statement of the grounds of his decision; 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.[1]

None of the papers which go from the applicant, or from the Commissioner, to the court on an appeal, are kept secret in the court;[2] though the papers of which they are copies, and all the other papers in the case, are kept concealed from the public in the Patent Office, until the case is finally disposed of there, after the court has rendered its decision.

The court hears the case in a summary way, on the evidence produced before the Commissioner, and confines its revision of the Commissioner's decision, to the points set forth in the applicant's reasons of appeal. Having decided the questions involved, the court gives the Commissioner a certificate of its proceedings and decisions, which, being entered of record in the Patent Office, governs the further proceedings in the case. No such decision, however, precludes any person from contesting the validity of any patent issued in pursuance thereof, in any court wherein that validity may be called in question.[3] And no such decision, if adverse to the applicant, deprives the Commissioner of jurisdiction to grant a patent for the same invention, on a later and proper application of the same inventor.[4]

§ 134. Whenever a patent is refused by the Commissioner of Patents, or by the Court of Appeals of the District of

[1] Revised Statutes, Section 4913.

[2] *In re* Drawbaugh, 66 Off. Gaz. 1451, 1894.

[3] Revised Statutes, Section 4914; Fry *v.* Quinlan, 13 Blatch. 205, 1875.

[4] United States *v.* Colgate, 32 Fed. Rep. 624, 1884.

Columbia, on appeal from the Commissioner, the applicant may file a bill in equity in any United States Court having or acquiring jurisdiction of the parties.[1] The only way in which any United States Circuit Court can acquire jurisdiction of the Commissioner, is by his voluntary appearance therein and submission thereto,[2] but the Supreme Court of the District of Columbia has jurisdiction over him, for the purposes of this law, by virtue of his official residence in Washington, in that District.[3] The complainant in such a bill may be the inventor-applicant, or, in case of an assignment of the invention, he may be the assignee, because the latter is considered to be an applicant within the meaning of the law on this subject.[4] If there is no opposing party, a copy of the bill is required to be served on the Commissioner; but the Secretary of the Interior is not a proper party to such a bill.[5] And the Commissioner is not a proper party,[6] where there is a party whose interests are those which are adverse to the interests of the complainant;[7] and in that case the bill may be filed in the Circuit Court of the United States for the judicial district or division wherein that party is an inhabitant; or in the Supreme Court of the District of Columbia, if that party is an inhabitant of that District.[8]

Where either class of these conditions are fulfilled, the court has jurisdiction to adjudge that the applicant is entitled to receive a patent for his invention, as specified in his final claims, or any part thereof, as the facts in the case may appear to be, but not as specified in any claim which the applicant relinquished in the Patent Office, or in any new claim which he never presented there.[9] And such an

[1] Revised Statutes, Section 4915 and Section 629, ¶ 9.

[2] Illingworth *v.* Atha, 42 Fed. Rep. 144, 1890.

[3] Butterworth *v.* Hill, 114 U. S. 129, 1885.

[4] Gay *v.* Cornell, 1 Blatch. 508, 1849.

[5] Kirk *v.* Commissioner of Patents, 37 Off. Gaz. 451, 1886.

[6] Mergenthaler Co. *v.* Seymour, 66 Off. Gaz. 1311, 1894.

[7] Graham *v.* Teter, 25 Fed. Rep. 555, 1885.

[8] 24 Statutes at Large, Ch. 373, p. 552.

[9] Durham *v.* Seymour, 71 Off. Gaz. 601, 1895.

adjudication, if made, authorizes the Commissioner to issue such a patent, on the applicant's filing in the Patent Office a copy of the adjudication, and otherwise complying with the requirements of the law ;[1] and it then becomes the duty of the Commissioner to issue the patent.[2] But no court has any jurisdiction to restrain the Commissioner from issuing a patent to the defendant, in any such case as those treated in this section.[3]

In order to decide the issues of such a bill in equity as is treated in this section, the court where the bill is pending will take testimony, and any other admissible evidence, according to the course of courts of equity; and will also consider whatever was before the Patent Office in the proceedings which resulted in the refusal to grant a patent; and, if the case has been before the Court of Appeals of the District of Columbia, will also consider the proceedings which took place in that tribunal.[4] The burden is on the complainant to prove the truth of his bill, by evidence that is clear and conclusive.[5] The litigation explained in this section is therefore original, and not appellate litigation. But it may not be resorted to as a concurrent remedy with an appeal to the Court of Appeals of the District of Columbia in any case where such an appeal lies; because, where that remedy exists, it must be exhausted before the ultimate redress of a bill in equity can be invoked.[6]

Where the Commissioner withholds a patent by virtue of his general supervisory authority, the remedy now under consideration is the only one to which the applicant can resort, for no appeal lies to the Court of Appeals of the District of Columbia, nor can any writ of mandamus be

[1] Revised Statutes, Section 4915.

[2] Butterworth *v.* Hoe, 112 U. S. 62, 1884; Vermont Farm Machine Co. *v.* Marble, 20 Fed. Rep. 118, 1884.

[3] Whipple v. Miner, 15 Fed. Rep. 117, 1883; Illingworth *v.* Atha. 42 Fed. Rep. 141, 1890.

[4] Butterworth *v.* Hoe, 112 U. S. 61, 1884; Gandy *v.* Marble, 122 U. S. 439, 1886.

[5] Durham *v.* Seymour, 71 Off. Gaz. 604, 1895.

[6] Kirk *v.* Commissioner of Patents, 37 Off. Gaz. 451, 1886.

granted by that tribunal, to compel the Commissioner to issue a patent in such a case.[1]

Where a patent is refused because of an adverse decision of an interference, and where an applicant files a bill in equity to procure a patent, on the ground that the decision of the question of priority in the interference was wrong; the court will dismiss the bill if it finds the alleged invention to have been not patentable to either of the parties in the interference, regardless of any question of priority between those parties.[2]

The remedy delineated in this section must be invoked within two years after the last official action on the application; unless the complainant satisfies the court in which it is invoked, that the longer delay was unavoidable.[3]

§ 135. The right to amend applications for patents is one of great value and frequent exercise, but it has never been expressly established by any statute. No statute prior to that of 1836 even mentioned the subject, and that statute only provided that whenever it appeared to the Commissioner, that one or more of the claims of an application were inadmissible for want of novelty, or that the description was defective and insufficient, he should notify the applicant thereof, and should furnish him with such information as might be useful in judging of the propriety of altering his specification, so as to exclude that part of the subject-matter found not to be new.[4] No change relevant to this point was made in the statute till 1870, when, in the place of the foregoing provision, it was enacted that whenever any claim was rejected, for any reason whatever, the Commissioner should notify the applicant thereof, and should furnish him with such information as might be useful in judging of the propriety of altering his specification.[5] The

[1] Hull *v.* Commissioner of Patents, 7 Off. Gaz. 559, 1875; 8 Off. Gaz. 46, 1875.

[2] Hill *v.* Wooster, 132 U. S. 693, 1890.

[3] Gandy *v.* Marble, 122 U. S. 439, 1886.

[4] 5 Statutes at Large, Ch. 357, Section 7, p. 120.

[5] 16 Statutes at Large, Ch. 230, Section, 41, p. 204.

present statute on the subject is substantially identical with that of 1870.[1]

There is no apparent material difference, at this point, between any of the three statutes, unless the provision in that of 1836, relevant to the nature of the amendment contemplated by that section, constitutes a limitation not found in either of the others. The two later statutes provide that the Commissioner shall furnish the applicant with such information as may be useful in judging of the propriety of altering his specification. The earlier statute adds to that provision the words: "to embrace only that part of the invention or discovery which is new." All three of the statutes recognize the right of an applicant to alter his specification, after rejection of any claim therein. They differ from each other only in regard to the kind of information which they require the Commissioner to furnish the applicant, to guide him in the exercise of that right. Neither of them furnishes the foundation of that right, nor limits that right to cases where the application has been rejected. They all provide a proceeding for such cases, but neither of them negatives the existence of such a right in other cases.

§ 136. The real foundation of the right to amend applications for patents, is found in Section 4888 of the Revised Statutes, a section substantially identical with Section 26 of the Patent Act of 1870, and with the second sentence of Section 6 of the Patent Act of 1836, and with the middle part of Section 3 of the Patent Act of 1793. Ever since 1793, one or another of these four enactments has been in force, and has provided, in substance, that before any inventor shall receive a patent for his invention, he shall file in the Patent Office a full, clear, and exact written description of that invention. Ever since 1836, one or another of the three statutes first mentioned has been in force, and has additionally provided that before any inventor shall receive a patent, he shall particularly point out and claim the part or combination which he claims as his

[1] Revised Statutes, Section 4903.

invention. Now when a statute enacts that a thing shall be done before a particular event can occur, it implies that it can be done prior to such an event. An inventor may therefore do those things before he receives a patent. If he fails in his first attempt to furnish a proper and adequate description, or to furnish proper and adequate claims, he may try again, and, if necessary, still again and again. If he finally succeeds in both, the Commissioner acquires jurisdiction to grant him a patent, provided all the other requirements of the law are also complied with. The statute does not attend to the details of this matter. It only provides that at some time before a patent is issued, a proper description and a proper claim shall be filed in the Patent Office. To what extent these things must be done at first, and to what extent and under what circumstances they may be done by way of amendment of the original papers, are questions which are to be determined in the light of the decisions of the courts, made under general judicial authority; and of the rules of the Patent Office, made under Section 483 of the Revised Statutes. To ascertain, therefore, what may and what may not be done by way of amendments of applications, the true recourse is to those decisions and those rules.

§ 137. The applicant may amend before or after the first rejection, and he may amend as often as the examiner presents any new references or reasons for rejection; but after such action on all the claims as entitles the applicant to an appeal to the board of examiners-in-chief, no amendment is allowed, unless the applicant convinces the examiner or the Commissioner, that there was a sufficient excuse for the delay in presenting it.[1] Amendments not affecting the merits may be made after the patent is allowed, and even after the final fee is paid, provided those amendments are approved first by the examiner, and then by the Commissioner.[2]

[1] Patent Office Rule 68.

[2] Patent Office Rule 78.

§ 138. It was formerly held, that whenever an inventor files an application for a patent, he was regarded as applying for such a patent as would cover every patentable thing represented in the specification, drawing or model of that application.[1] If, therefore, his claims as first submitted to the Commissioner did not cover every such thing, he was allowed to amend them to whatever extent was necessary to make them do so, or he was allowed to add other claims to accomplish that purpose. But the law of the subject has more lately been laid down on stricter lines, though those lines have not yet been accurately delineated, in all their parts, in the decisions.

The general rule is that no amended or new claim can be allowed, unless it is for the "same invention" as the original application.[2] It has been decided that this quoted phrase is not confined in its meaning to whatever invention was actually claimed by the inventor in his original application, and that claims may be broadened, while applications are pending.[3] And it has also been decided, that a drawing may be amended in the light of the specification, even to the extent of inserting in it, the distinguishing characteristic of the invention, when that was accidentally omitted from the original drawing.[4] But it has not been decided whether "the same invention" refers to whatever invention was described, indicated, or shown in the applicant's original specification, drawing, or model; or refers to whatever invention was described or indicated in the original specification or drawing; or refers to whatever invention was described in the original specification; or refers to whatever invention was described in the original specification, and appeared therein to have been intended to be secured by

[1] Singer *v.* Braunsdorf, 7 Blatch. 532, 1870.

[2] Railway Co. *v.* Sayles, 97 U. S. 554, 1878; Eagleton Mfg. Co. *v.* West Mfg. Co. 111 U. S. 490, 1884; Beach *v.* Box Machine Co. 63 Fed. Rep. 604, 1894; Michigan Central R. R. Co. *v.* Car-Heating Co. 67 Fed. Rep. 126, 1895.

[3] Rocker Spring Co. *v.* Thomas, 68 Fed Rep. 200, 1895.

[4] Consolidated Brake Shoe Co. *v.* Detroit S. & S. Co. 59 Fed. Rep. 903, 1894.

the original application. The latter signification of the phrase, is that which the same phrase has been finally decided to bear in the law of reissues.[1] But there are reasons why a more liberal meaning should be ascribed to it in the law of amendments of applications; and it is therefore probable that the courts will finally establish one or another of the more liberal significations, as being the true meaning of the phrase in the latter law.

An amendment which does not add or broaden any claim, may be made by the attorney of the applicant, even after the death of the latter;[2] but in case the applicant seeks, by amendment, to introduce any claim not substantially embraced in the statement of invention or any claim originally presented, he is required to file a supplemental oath that the subject of the proposed amendment, was part of his invention, and was invented before he filed his original application.[3]

§ 139. An applicant must amend his specification, whenever such amendment is required to correct inaccuracy or unnecessary prolixity therein, or to secure correspondence between the claim and the other parts of the specification.[4] So also, unless the original drawings and model conform to certain standards of artistic and mechanical excellence set forth in the rules, the applicant must furnish amended drawings and an amended model which do conform to those requirements.[5]

§ 140. An interference is a proceeding carried on in the Patent Office, for the purpose of determining the question of priority between two or more parties, each of which is seeking a patent for the same invention; or between two or more parties, at least one of which is seeking a patent for an invention already covered by a patent which has not yet expired.[6] The proceedings in interferences are governed by

[1] Section 233 of this book.

[2] De La Vergne Machine Co. *v.* Featherstone, 147 U. S. 229, 1893.

[3] Patent Office Rule 48.

[4] Patent Office Rule 71.

[5] Patent Office Rules 49 to 59.

[6] Revised Statutes, Section 4904; Patent Office Rule 93; United States *v.* Commissioner of Patents, 7 Off. Gaz. 603, 1875; Hisey *v.* Peters, 71 Off. Gaz. 893, 1895.

an elaborate code of Patent Office rules, which are as binding as the law itself,[1] and to which the practitioner, in such cases, will necessarily resort for detailed information.[2] It is unnecessary to explain those rules in this text-book, but it is expedient to set down in this connection the relevant rules of law, which rest directly upon the statutes and decisions for their sanction.

§ 141. There is no limit to the number of interferences to which an application may be subjected; and if a patent is issued without going through every such proceeding, previously ordered by the Commissioner, that patent will be void.[3] The ordinary rules of evidence which are applied in United States courts are used in interference cases.[4] This includes the rules which relate to dispensing with evidence of facts of public notoriety.[5] The doctrines of estoppel also apply in these contests, in the same manner in which they apply in other litigious proceedings.[6]

But a witness who is not a party to the interference, is protected, by a statute, from being compelled to disclose any secret invention made or owned by himself;[7] but that statute does not allow a party to an interference to refuse to answer any question relevant to the invention in interference.[8]

In deciding an interference, priority is awarded to the party who first conceived the invention, provided he used due diligence in reducing it to practice, or in applying for a patent thereon; but if laches intervened between his conception on the one hand, and his reduction to practice, or his application for a patent, on the other hand; then priority is awarded to the party who first reduced the

[1] Arnold *v.* Bishop, 1 McArthur's Patent Cases, 31, 1841; United States *v.* Marble, 2 Mackey, 12 1882.

[2] Patent Office Rules 93 to 132, and 146 and 147.

[3] Potter *v.* Dixon, 2 Fisher, 381, 1863.

[4] Berry *v.* Stockwell, 9 Off. Gaz. 404, 1876.

[5] Anson *v.* Woodbury, 12 Off. Gaz. 1, 1877.

[6] Berry *v.* Stockwell, 9 Off. Gaz. 404, 1876.

[7] Revised Statutes, Section 4908.

[8] Dorman *v.* Keefer, 49 Fed. Rep. 462, 1892.

invention to practice, or applied for a patent, as the case may be.[1]

§ 142. No decision of the Commissioner, in any interference case, is pleadable as *res judicata* in any action in any court;[2] but such a decision will be followed by the courts, unless it is shown to be wrong, by evidence which puts the point beyond a reasonable doubt.[3] Where such a decision is made between two or more applications, a patent is granted to the inventor decided to be first, and no patent is granted to either of the others. If it is made between an application and a patent, and is made in favor of the application, the Commissioner will grant a patent thereon, but he cannot recall the patent already issued. In such a case, the rival inventors may litigate their interference controversy anew, on the equity side of any United States Circuit Court which has or can acquire jurisdiction of the parties.[4] That kind of litigation constitutes the subject of the chapter on interfering patents; the thirteenth chapter of this book. Or the question of priority between the two inventors may be litigated afresh in any infringement suit, brought by one of them against the other. If, in such a case as that under present consideration, it had happened that the successful applicant had filed his application before the interfering patent was granted, that patent would not have been granted at all, unless the Patent Office decision on the interference had been reversed by some higher authority. In that event, the successful applicant would not have been liable to any interference suit, nor any infringement suit, brought against him by his rival; for his rival would, in that event have no patent upon which to base a suit of either of those kinds.

[1] Reed *v.* Cutter, 1 Story, 598, 1841; McCormick Mach. Co. *v.* Minneapolis Harvester Works, 42 Fed. Rep. 154, 1890; Burr *v.* Ford, 70 Off. Gaz. 275, 1894.

[2] Union Paper Bag Machine Co. *v.* Crane, 1 Bann & Ard. 494, 1874; Gloucester Isinglass Co. *v.* Brooks, 19 Fed. Rep. 427, 1884; Hubel *v.* Tucker, 24 Fed. Rep. 701, 1885; Kirk *v.* DuBois, 33 Fed. Rep. 252, 1887.

[3] Morgan *v.* Daniells, 153 U. S. 123, 1894; Hisey *v.* Peters, 71 Off. Gaz. 894, 1895.

[4] Revised Statutes, Section 4918.

For this reason, as well as for others, every inventor who desires to secure a patent for an invention, should make his application therefor soon after making that invention. If, however, that invention requires time in reaching maturity, the inventor may prevent the issuing of any interfering patent in the meantime, by filing a caveat in the Patent Office.

§ 143. A caveat is a document in which an inventor states the function, and the distinguishing characteristics, of the invention to which it refers, and prays protection for his right thereto, until he shall have matured that invention. A caveat remains in force only one year; and while it is in force, its only statutory function is to prevent the issuing of any patent to another, for the same invention, until after the caveator has notice of the interfering application, and has thus had an opportunity to file an application himself, and so delay the issuing of a patent to his competitor until an interference proceeding in the Patent Office shall have decided the question of priority.[1] If an invention is fully described in a caveat, then that caveat will constitute evidence showing that invention to have been made at least as early as the caveat was filed. This, however, is an incidental and not a statutory function of such a document, and it cannot be performed by any caveat which is not complete enough in its description to enable a skilful mechanic, without inventing anything himself, to construct a specimen of the invention to which the caveat refers. But even where a caveat does not reach that standard, it constitutes evidence that the invention had reached the stage of development shown in the caveat, at the time the caveat was executed.[2]

Omission to file a caveat does not impair the ultimate rights of an inventor;[3] and omission to consider a caveat does not invalidate a patent granted to another in pursuance of the oversight.[4]

[1] Revised Statutes, Section 4902; Bell *v.* Daniels, 1 Fisher, 372, 1858.

[2] Jones *v.* Wetherell, 1 McArthur's Patent Cases, 413, 1855.

[3] Heath *v.* Hildreth, 1 McArthur's Patent Cases, 25, 1841.

[4] Cochrane *v.* Waterman, 1 McArthur's Patent Cases, 59, 1844.

But whether an immature invention is provisionally protected by a caveat or not, it should not be made the subject of an application for a patent until it reaches maturity; for it has happened in the past, and may otherwise happen hereafter, that a patent granted on an application, based on an immature invention, is not strong enough or broad enough to give any valuable exclusive right, while being significant enough to weaken or to narrow the operation of any subsequent patent granted to the same inventor, on a mature invention, in the same department of the useful arts.

§ 144. No appeal lies from any decision of the Court of Appeals of the District of Columbia, on an appeal to that tribunal from the Commissioner of Patents. But an appeal does lie from any decision of any United States Circuit Court, or of the Supreme Court of the District of Columbia, on any bill in equity which may be filed to compel the issuance of a patent, after an unsuccessful appeal to the Court of Appeals of the District of Columbia, from the rejection of an application by the Commissioner of Patents. Where such a bill is filed and adjudicated in some Circuit Court of the United States, an appeal lies from its decision to the Circuit Court of Appeals of the circuit to which that Circuit Court belongs.[1] And where such a bill is filed and adjudicated in the Supreme Court of the District of Columbia, an appeal lies to the Court of Appeals of the District of Columbia.[2] And where a decree of the latter tribunal, in disposing of such an appeal, involves the validity of any patent, as it may in the case of an interference between a patent and an application, an appeal apparently lies from that tribunal, to the Supreme Court of the United States.[3]

§ 145. An application for a patent may be abandoned. That abandonment may be actual, or it may be constructive. The facts which constitute an actual abandonment of an application, may also constitute an actual abandonment of

[1] 26 Statutes at Large, Ch. 517, Sec. 6, p. 828.

[2] 27 Statutes at Large, Ch. 74, Sec. 7, p. 435.

[3] 27 Statutes at Large, Ch. 74, Sec. 8, p. 436.

the invention covered thereby; and a constructive abandonment of an application, may or may not work a constructive abandonment of the invention.

Actual abandonment of an application does not always follow from the fact that the applicant withdrew it from the Patent Office. If, when withdrawing it, he intended to file a new application for the same invention, and accordingly does so, the two are held to constitute one continuous application within the meaning of the law.[1] This doctrine applies, even if the new application is not filed till long after the old one was withdrawn, provided there was no laches chargeable to the applicant on account of the delay.[2]

Nor does actual abandonment of an application necessarily follow from the fact that it was rejected by the Patent Office, and then allowed to lie dormant by the applicant. If, in such a case, the applicant always expected to secure a patent, either on the original application or on another, and if, without laches, he made and prosecuted another application for the same invention, and secured a patent thereon; the two applications are considered, in the eye of the law, to be one.[3]

Laches, if it intervenes, between a withdrawn or rejected application and a new application covering the same invention, will, however, be fatal to any claim of continuity.[4] It will constitute evidence that the first application was actually abandoned, and equally good evidence of the actual abandonment of the invention itself.[5]

§ 146. Constructive abandonment of an application occurs whenever two years intervene between the filing of the

[1] Godfrey *v.* Eames, 1 Wallace, 317, 1863; International Crown Co. *v.* Richmond, 30 Fed. Rep. 779, 1886; Dederick *v.* Fox, 56 Fed. Rep. 715, 1892.

[2] Howes *v.* McNeal, 3 Bann. & Ard. 376, 1878.

[3] Smith *v.* Dental Vulcanite Co. 93 U. S. 500, 1876; Blandy *v.* Griffith, 3 Fisher, 617, 1869; Graham *v.* McCormick, 5 Bann. & Ard. 244, 1880; Ligowski Clay Pigeon Co. *v.* Clay Bird Co. 34 Fed. Rep. 334, 1887.

[4] Bevin *v.* Bell Co. 9 Blatch. 61, 1871; Weston *v.* White, 13 Blatch. 452, 1876.

[5] Planing Machine Co. *v.* Keith, 101 U. S. 484, 1879.

application and its being made complete enough to entitle it to examination, according to the rules of the Patent Office; and such an abandonment also occurs if the applicant allows two years to pass without regularly prosecuting his application, after any particular action is taken thereon by the Patent Office, and notified to him; provided, in either case, the Commissioner of Patents is not convinced that the delay was unavoidable.[1] If he is so convinced he may condone the delay by granting a patent; and if he grants a patent, his decision on the point is conclusive.[2]

All applications, also, which were rejected or withdrawn prior to July 8, 1870, and not revived within six months after that day, were thereby constructively abandoned.[3] The statutory provision just cited, did not operate to renew any right to any abandoned invention.[4] Nor did it fix any time after which any invention should be held to be abandoned, for it provided no result from six months' delay, except that the application should be held to have been abandoned.

So, also, constructive abandonment of his application occurs when an applicant fails to pay the final fee within six months from the time at which a patent is allowed, and notice of such allowance is sent to him or to his agent.[5]

Where a patent is issued, notwithstanding a prior constructive abandonment of the application therefor; the question will arise whether the patent can be invalidated on that ground in an infringement suit, or only in a bill in equity to repeal the patent. In the only case in which the question has arisen, the Circuit Court decided that the defence could not be made in an infringement suit;[6] but on an appeal of the

[1] Revised Statutes, Section 4894; Kirk *v.* Commissioner of Patents, 37 Off. Gaz. 451, 1885.

[2] M'Millin *v.* Barclay, 5 Fisher, 199, 1871.

[3] 16 Statutes at Large, Ch. 230, Section 35, p. 202.

[4] Planing Machine Co. *v.* Keith, 101 U. S. 483, 1879.

[5] Revised Statutes, Section 4885.

[6] Lamprey Protector Co. *v.* Economy Heater Co, 62 Fed. Rep. 592, 1894.

case, the Circuit Court of Appeals for the first circuit, expressly passed over the point without deciding it.[1]

§ 147. Constructive abandonment of an application will work constructive abandonment of the invention covered thereby, where the abandonment of the application arose from either of the causes stated in the first paragraph of the last preceding section, if no new application is filed soon enough to independently avoid the statute relevant to public use or sale more than two years before application for a patent.[2] The same thing is true, for the same reason, where the abandonment of the application arose from the cause stated in the second paragraph of the last preceding section. But the same reason does not exist relevant to the cause of constructive abandonment stated in the third paragraph of that section. If, therefore, an applicant fails to pay the final fee within six months after an allowance of a patent to him, and if he files a new application for a patent, on the same invention, within two years after that allowance, but more than two years after that invention was first in public use or on sale, the question arises whether the constructive abandonment of the first application will prevent the two applications from being regarded as one, on the principles stated in the second and third paragraphs of Section 145 in this chapter. No answer to that question is found in any adjudicated case; and as the point is unlikely to arise, and as its solution involves much argument, no answer is attempted in this book.

But in every case where a new application is made within two years after the invention was first in public use or on sale, a patent, if granted on that new application, will not be unfavorably affected by the fact that a former application was made, and was constructively abandoned.

[1] Economy Heater Co. *v.* Lamprey Protector Co. 65 Fed. Rep. 1000, 1895.

[2] Lindsay *v.* Stein, 10 Fed. Rep. 913, 1882; Western Electric Co. *v.* Sperry Electric Co. 58 Fed. Rep. 191, 1893.

§ 148. Patents are authorized by law, only on compliance with the statutory prerequisites to their issue. The Commissioner has therefore no jurisdiction to grant any patent, except where all those prerequisites have been substantially performed. If he inadvertently grants a patent in any other case, he exceeds his jurisdiction, and it is therefore open to every person who is sued as an infringer of that patent, to successfully defend against such an action, by pleading and proving the particular fault or omission with which the applicant was chargeable.[1] In all cases, however, where the application was complete enough to give the Commissioner jurisdiction, the patents will be unaffected by evidence that the Commissioner was improvident or injudicious in the exercise of his discretionary powers over these applications. If, for example, he omits to require that specimens of the ingredients shall be furnished, with a particular application for a patent for a composition of matter, it is not open to any infringer to show that the public interest would have been better subserved had such a requirement been made.[2] The same rule also governs the same point in cases where the Commissioner omits to require a model.[3] But it is probably open to any defendant to defeat a recovery for infringement, by pleading and proving that no drawing of the invention was filed in the Patent Office, and that the nature of the case admitted of drawings. This must be the law, unless the Commissioner is the sole and final judge of this last point of fact; and it is not probable that Congress intended to make him so, for no such intention is expressed in the statute,[4] and no such intention is consistent with public policy.

[1] Grant *v.* Raymond, 6 Peters, 218, 1832; Parks *v.* Booth, 102 U. S. 101, 1880; Ransom *v.* New York, 1 Fisher, 257, 1856.

[2] Tarr *v.* Folsom, 1 Bann. & Ard. 24, 1874.

[3] Revised Statutes, Section 4891.

[4] Revised Statutes, Section 4889.

CHAPTER VII.

LETTERS PATENT.

140. No exclusive right to inventions at common law.
150. Constitutional exclusive right to inventions in the United States.
151. Patent sare property.
152. Dignity of property in patents.
153. Patents are not odious monopolies.
154. Patent rights are absolute, not qualified.
155. Patent rights are beyond State interference.
156. Patent rights are not subject to common law executions, but may be subjected to creditors' bills in equity.
157. Patent rights are as exclusive of the government, as they are of any citizen.
158. Patents do not cover specimens purchased of the inventor, or made with his knowledge and consent, before application therefor.
159. The foregoing rule has no application to patents for processes.
160. Territorial scope of United States patents.
161. Operation of United States patents on the decks of ships.
162. Duration of patents.
163. Duration of United States patents for inventions first patented in a foreign country, according to the statute of 1870.
164. Duration of United States patents for inventions first patented in a foreign country, according to the statute of 1839.
165. Duration of United States patents for inventions first patented in a foreign country, according to the statute of 1861.
170. Beginning of the terms of United States patents.
171. To whom letters patent are granted by the government.
172. Letters patent as documents.
173. The specification.
174. The description.
175. The description.
176. The claim or claims.
177. The claim or claims.
178. Particularity in descriptions and claims, are conditions precedent to validity.
179. Questions of sufficiency of particularity of descriptions and claims, are questions of fact, and not of law.
180. Plurality of inventions in a single letters patent.
180a. Plurality of letters patent for different parts or combinations in a machine or apparatus.
181. Construction of letters patent.
182. Claims to be construed in the light of descriptions.
182a. Construction of claims which employ reference letters or numerals.
183. Construction of functional claims.

184. Claims construed in the light of the state of the art.
185. Proper liberality of construction.
186. Proper strictness of construction.
187. Construction in the light of contemporaneous understanding of the inventor.
187*a*. Patent Office limitations.
188. Construction in the light of contemporaneous statutes.
189. Questions of construction are questions of law, and not of fact.
190. Letters patent presumed to be for same invention as the application therefor.
191. Letters patent are constructive notice of their contents to every person.

§ 149. No inventor has any special right to his invention at common law.[1] This is not a virtue in that law. It is an imperfection; an omission. That omission is due to the fact that the common law came into being in the middle ages, and in England. New and useful inventions were seldom produced in those ages, and most of those which were produced, were produced in Italy or on the continent of Europe. There was little or no occasion or opportunity in England, for the creation or recognition of any exclusive, or otherwise paramount, customary right in inventions. Even in those countries where new and useful things were more frequently invented, their inventors were oftener persecuted as heretics than rewarded as benefactors. Despotic kings were wont, in many countries, to confer monopolies upon their favorites, regardless of any meritorious right to the things monopolized; and it sometimes happened, in England and elsewhere, that, in pursuance of this practice, a monopoly of an invention was granted to its true inventor. Such a grant, however, was always a matter of kingly grace, and never a matter of legal right. In the reign of James the First, the English parliament limited this exercise of royal prerogative to cases of inventions, and thus laid the foundation of the patent laws of England. The limiting statute did not purport to confer upon inventors, any inchoate right which they might

[1] Brown *v.* Duchesne, 19 Howard, 195, 1856; Dable Grain Shovel Co. *v.* Flint, 137 U. S. 41, 1890.

perfect and make absolute by proceeding in any manner pointed out by law. It recognized the power of the king to secure to any inventor, an exclusive right to his invention, if his royal pleasure prompted him so to do. But the exercise of that power was so infrequent for more than a century, that Blackstone, in his Commentaries on the Laws of England, devoted but one sentence to the branch pertaining to patents for inventions.

§ 150. In the United States of America, the superior right of an inventor to his invention has a far better foundation than could be furnished by the prerogative of any king. That foundation is the consent of the people of the United States: a consent primarily expressed in the Federal Constitution, and elaborately defined in the federal statutes. The Constitution was established as the supreme law of the United States, on the twenty-first day of June, 1788. It conferred power upon Congress to promote the progress of the useful arts, by securing, for limited times, to inventors, the exclusive right to their respective inventions.[1] In exercise of that power, Congress, on the tenth day of April, 1790, enacted the first federal statute on the subject; and provided therein that the exclusive right in contemplation, should be secured to the respective inventors, by means of a written grant from the United States, to be named letters patent.[2] It is the office of this chapter to explain the nature, the extent, and the duration of the right secured by such a document; to outline the general form and necessary characteristics of such a document itself; and to set forth the rules by which such documents are properly construed.

§ 151. Patents are property;[3] and the owner of a patent is both legally and equitably entitled to the same protection

[1] Article 1, Section 8.

[2] 1 Statutes at Large, Ch. 7, p. 109.

[3] Brown *v.* Duchesne, 19 Howard, 195, 1856; Seymour *v.* Osborne, 11 Wallace, 533, 1870; Consolidated Fruit Jar Co. *v.* Wright, 94 U. S. 96, 1876; Cammeyer *v.* Newton, 94 U. S. 226, 1876; James *v.* Campbell, 104 U. S. 357, 1881; Marsh *v.* Nichols, 128 U. S. 612, 1888.

for that property, that the owner of any other species of property may enjoy,[1] and he cannot be constitutionally deprived of that property without due process of law.[2] Due process of law includes the constitutional judgments and decrees of courts; but it does not include any act of Congress, or of any other legislature.[3] Patent rights, once vested, are therefore incapable of being divested by act of Congress.[4] Nor can Congress do indirectly, that which it is forbidden to do with directness. It cannot destroy nor seriously impair the value of a patent right, under the guise of altering or repealing the existing remedies applicable to its enforcement, any more than it can so treat any other kind of property.[5]

§ 152. The right of property which an inventor has in his invention, is excelled, in point of dignity, by no other property right whatever. It is equalled, in point of dignity, only by the rights which authors have in their copyrighted books. The inventor is not the pampered favorite or beneficiary of the government, or of the nation. The benefits which he confers, are greater than those which he receives. He does not cringe at the feet of power, nor secure from authority an unbought privilege. He walks everywhere erect, and scatters abroad the knowledge which he created. He confers upon mankind a new means of lessening toil, or of increasing comfort; and what he gives cannot be destroyed by use, nor lost by misfortune. It is henceforth an indestructible heritage of posterity. On the other hand, he receives from the government, nothing which cost the government or the people a dollar or a sacrifice. He receives nothing but a contract, which provides that for a limited time he may exclusively enjoy his own. Compared with

[1] Thomson *v.* Citizens National Bank, 53 Fed. Rep. 252, 1892.

[2] Fifth Amendment to the Constitution.

[3] Barron *v.* Baltimore, 7 Peters, 247, 1833; Kent's Commentaries, Lecture 24, p. 13; Taylor *v.* Porter, 4 Hill (N. Y.), 147, 1843.

[4] McClurg *v.* Kingsland, 1 Howard, 202, 1843.

[5] Green *v.* Biddle, 8 Wheaton, 75, 1823; Bronson *v.* Kinzie, 1 Howard, 317, 1843.

those who acquire property by devise or inheritance; compared with those who acquire property by gift or marriage; compared with those who acquire property by profits on sales, or by interest on money; the man who acquires property in inventions, by creating things unknown before, occupies a position of superior dignity. Even the man who creates value by manual labor, though he rises in dignity *above the heir, the donee, the merchant, and the* money-lender, falls in dignity below the author and the inventor. The inventor of the reaper is entitled to greater honor than his father who used the grain cradle; and the inventor of the grain cradle is entitled to greater honor than his ancestors, who, for a hundred generations, had used the sickle. Side by side stand the inventor and the author. Their labor is the most dignified and the most honorable of all labor; and the resulting property is most perfectly theirs.

Sir Francis Bacon gave the weight of his opinion, to views somewhat similar to the foregoing. The following is a translation of one of his Latin paragraphs.

"The introduction of great inventions appears one of the most distinguished of human actions, and the ancients so considered it; for they assigned divine honors to the authors of inventions, but only heroic honors to those who displayed civil merit; such as the founders of cities and empires, legislators, the deliverers of their country from lasting misfortunes, the quellers of tyrants and the like. And if any one rightly compare them, he will find the judgment of antiquity to be correct; for the benefits derived from inventions may extend to mankind in general, but civil benefits to particular lands alone; the latter, moreover, last but for a time, the former forever. Civil reformation seldom is carried on without violence and confusion, while inventions are a blessing and a benefit without injuring or afflicting any."[1]

[1] Novum Organum, Book 1, Section CXXIX.

§ 153. "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 inventors of new and useful improvements, for the purpose of securing to them, 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." Such is the accepted doctrine as formulated by Justice CLIFFORD when speaking for the Supreme Court.[1] The same ideas were more concisely expressed in an earlier case by Justice DANIEL.[2] Speaking of the inventor's exclusive right, he said: "This was at once the equivalent given by the public for benefits bestowed by the genius and meditations and skill of individuals, and the incentive to further efforts for the same important objects." Writing an opinion of the Supreme Court, and referring to the doctrine of patents, Justice MILLER said: "It is no longer a scarcely recognized principle, struggling for a foothold, but it is an organized system, with well-settled rules, supporting itself at once by its utility, and by the wealth which it creates and commands."[3] These opinions of the Supreme Court agree, therefore, in holding, with all fair and thoughtful men, that patent rights are not hurtful monopolies, but are rights of property at once dignified, honorable, and strong.

§ 154. A patent right is an absolute, and not a qualified, right. During the term of his patent, a patentee may, if he pleases, decline to allow any other person to make, use, or

[1] Seymour *v.* Osborne, 11 Wallace, 533, 1870.

[2] Kendall *v.* Winsor, 21 Howard, 322, 1858.

[3] Merrill *v.* Yeomans, 94 U. S. 573, 1876.

sell the invention which it covers, and at the same time may refrain from making, using and selling his invention himself.[1] From July 1832, until July 1870, there was an exception to this rule. Under the statute of 1790, aliens, as well as citizens, might receive United States patents;[2] but the statute of 1793 confined that privilege to citizens of the United States.[3] The statute of 1800 extended the right to aliens who had resided two years within the United States, and provided that patent rights should be obtained, used, and enjoyed by such persons, in as full and ample a manner, and under the same conditions, limitations, and restrictions, as in the case of citizens.[4] That continued to be the state of the law on the point till July 13, 1832; when Congress provided that still another class of aliens might have patents; namely, aliens who were residents of the United States, and had declared their intention, according to law, to become citizens thereof. It was, however, expressly provided, that any patent, granted to an alien of this class, should determine and become absolutely void, without resort to any legal process to annul or cancel the same, in case of failure on the part of the patentee, for the space of one year from the issuing thereof, to introduce into public use in the United States the invention covered by the patent; or in case such public use be discontinued for any period of six months; or in case of failure of the patentee to become a citizen of the United States as soon as the law allowed.[5] Four years later, however, this statute was repealed by that of 1836. The latter statute extended

[1] Pitts *v.* Wemple, 1 Bissell, 93, 1855; American Bell Telephone Co. *v.* Service Co. 45 Off. Gaz. 1193, 1888; Consolidated Roller Mill Co. *v.* Coombs, 39 Fed. Rep. 805, 1889; Campbell Printing Press Co. *v.* Manhattan Ry. Co. 49 Fed. Rep. 935, 1892; Edison Electric Light Co. *v.* Sawyer-Man Electric Co. 53 Fed. Rep. 598, 1892; Edison Electric Light Co. *v.* Mt. Morris Electric Light Co. 57 Fed. Rep. 644, 1893; Masseth *v.* Reiber, 59 Fed. Rep. 614, 1894.

[2] 1 Statutes at Large, Ch. 7, Section 1, p. 109.

[3] 1 Statutes at Large, Ch. 11, Section, 1, p. 318.

[4] 2 Statutes at Large, Ch. 25, Sec. 1, p. 37.

[5] 4 Statutes at Large, Ch. 203, Section 1, p. 577.

the right to obtain United States patents to all inventors; but it provided that an effectual defence to an action for infringement might be based on the fact that the patentee, if an alien at the time the patent was granted, had failed and neglected, for the space of eighteen months from the date of the patent, to put and continue on sale to the public, on reasonable terms, the invention for which the patent issued.[1] But no such qualification of any patent right is contained in the consolidated Patent Act of 1870,[2] nor in the Revised Statutes;[3] so that the rule stated at the head of this section applies to all existing patents.

§ 155. No State has any power to make a law interfering with the sale of any patent right,[4] but every State has power to regulate the making, the selling and the using of the things covered by any patent to the same extent that it lawfully regulates the making, selling, and using of similar unpatented things. Things covered by patents are as much subject to the law of common carriers,[5] the revenue laws,[6] and other public laws[7] of a State or municipality, as any other things. A patent for a dynamite powder, or for a deadly poison, or for an explosive oil, does not oust nor affect the power of local authorities to prescribe the place and manner of the manufacture, storage and sale of those dangerous substances. Nor does a patent on a sewing-machine exempt the patentee from any State tax on the machines he may make, use or sell within the boundaries of that State. The reason why a State may regulate the sale of a patented thing, and may not regulate the sale of the patent covering that thing, is explainable as follows. A patentee has two kinds of rights in his invention. He has a right to make, use, and sell specimens of the invented thing; and he has a right to

[1] 5 Statutes at Large, Ch. 357, Sections 6 and 15, pp. 119 and 123.

[2] 16 Statutes at Large, Ch. 230, Section 61, p. 208.

[3] Revised Statutes, Section 4920.

[4] *Ex parte* Robinson, 2 Bissell 313, 1870; Castle *v.* Hutchinson, 25 Fed. Rep. 394, 1885.

[5] Delaware Telephone Co. *v.* Delaware, 50. Fed. Rep. 677, 1892.

[6] Weber *v.* Virginia, 103 U. S. 347, 1880.

[7] Patterson *v.* Kentucky, 97 U. S. 505, 1878.

prevent all other persons from doing either of those acts. The first of these rights is wholly independent of the patent laws; while the second exists by virtue of those laws alone.[1] A patentee therefore holds the first of these rights subject to the police powers, and the taxing powers, of the State; while the second being the creature of the laws of Congress, is wholly beyond State control or interference.[2]

§ 156. Patent rights, being, as they are, intangible property, cannot be seized and sold under the authority of any writ of *fieri facias*, or other common-law execution.[3] They may, however, be reached by a creditor's bill in equity, and thus be applied to the payment of the debts of the owners; the same as trust property, choses in action, or stock of a debtor in a corporation, may be reached and applied. A court of equity may, in pursuance of its powers in such cases, decree that the debtor patentee pay the judgment upon which the bill is based, or, in default thereof, that his patent right be sold under the direction of the court, and an assignment thereof be executed by him, and, in default of his executing such an assignment, that some suitable person be appointed trustee to execute the same in his place,[4] or that the master in chancery of the court, shall perform that function.[5]

§ 157. Patent rights are exclusive, not only of citizens and residents of the United States, but also of the government itself, and of its agents. The government has no more right than any private citizen; to make, use, or sell a patented invention, without the license of the patentee.[6] When

[1] Bloomer *v.* McQuewan, 14 Howard, 539, 1852; *In re* Brosnahan, 18 Fed. Rep. 62, 1883; United States *v.* Bell Telephone Co. 29 Fed. Rep. 43, 1886.

[2] May *v.* County of Buchanan, 29 Fed. Rep. 473, 1886.

[3] Stephens *v.* Cady, 14 Howard, 528, 1852; Stevens *v.* Gladding, 17 Howard, 447, 1854.

[4] Ager *v.* Murray, 105 U. S. 126, 1881.

[5] Wilson *v.* Fire Alarm Co. 52 Off. Gaz. 901, 1890.

[6] United States *v.* Burns, 12 Wallace, 252, 1870; Cammeyer *v.* Newton, 94 U. S. 234, 1876; Solomons *v.* United States, 137 U. S. 346, 1890.

the government grants letters patent for an invention, it confers upon the patentee an exclusive property therein, which cannot be appropriated or used by the government itself, without just compensation, any more than land which has been patented to a private purchaser can, without compensation, be appropriated or used by the government.[1]

§ 158. No patent right covers any use or sale of any specimen of the patented thing which was purchased of the inventor, or made by another with his knowledge and consent, before his application for a patent therefor.[2] Where another than the inventor, surreptitiously obtains knowledge of an invention, and, without the consent of the inventor, makes a specimen of the invented thing before any patent thereon is applied for, that specimen is covered by a patent for that invention, as truly and as fully as it would be if it had been made by an infringer after the date of that patent. Such a case is clearly outside of the rule just stated, and of the statute upon which that rule is based. Indeed Justice STORY,[3] and afterward the full Supreme Court,[4] held such a case to be outside the corresponding provision of the Patent Act of 1839,[5] though that provision did not literally exclude such a case.

Where another than the first inventor, re-invents and constructs a specimen of an invention, before any patent is applied for thereon, and does so without any knowledge of the inventor, or of his doings, and without the knowledge or consent of the inventor himself, he cannot invoke the rule stated at the beginning of this section; because knowledge and consent of the inventor is an express element in the statute which supports that rule. If, however, such a re-invention and such a construction occurred before July 8,

[1] James *v.* Campbell, 104 U. S. 356, 1881; United States *v.* Palmer, 128 U. S. 271, 1888.

[2] Revised Statutes, Section 4899; Wade *v.* Metcalf, 129 U. S. 202, 1889; Dable Grain Shovel Co. *v.* Flint, 137 U. S. 41, 1890.

[3] Pierson *v.* Screw Co. 3 Story. 402, 1844.

[4] Kendall *v.* Winsor, 21 Howard, 326, 1858.

[5] 5 Statutes at Large, Ch. 88, Section 7, p. 354.

1870, the thing so constructed is outside of any patent afterward applied for, because the Patent Act of 1839 can be invoked in its behalf, and because the corresponding provision of that act was not limited to cases where the inventor had knowledge and gave consent. Where such a re-invention and construction occurred after July 8, 1870, it is probable that the specific thing, so constructed, is taken out of the operation of a patent afterward applied for, by the direct action of the fifth amendment to the Constitution of the United States. That amendment provides that no person shall be deprived of property without due process of law. Things independently re-invented and innocently made, before the first inventor applied for a patent thereon, are the lawful property of him who thus made them. To deprive him of the right to use and to sell those things, would be to lessen or to destroy their value, and thus to deprive him of property rights. If such an act is ever done at the suit of the first inventor, after he gets his patent, it will be done by virtue of that patent. Now, a patent is the creature of a statute. No statute is "due process of law,"[1] and no patent can be "due process of law" unless a creature can be greater than its creator: unless a statute can authorize a contract to accomplish, upon the rights of third parties, a result which the statute itself is forbidden to accomplish. If this reasoning and this conclusion, are correct, it will not follow therefrom, that such a re-inventor may construct any specimen of the invention after the first inventor has obtained a patent thereon. To deprive a re-inventor of such a privilege, is not to deprive him of property, for no re-inventor has any property right in an invention which he was the second in the United States to make, any more than he would have if he had learned of that invention from a newspaper or from a book.

§ 159. The rule stated at the head of the last section does not apply to any process patent. The provision of 1870,[2]

[1] Barron *v.* Baltimore, 7 Peters, 247, 1833: Taylor *v.* Porter, 4 Hill (N. Y.) 147, 1843.

[2] 16 Statutes at Large, Ch. 230, Section 37, p. 203.

and Section 4899 of the Revised Statutes, treat only of machines or other patentable articles, and confer exemption from the operation of patents upon nothing but specific things. Now, a process is neither an article nor a thing. It is a series of acts. It is therefore outside the language of the law on this subject. It is also outside the reason of that law. That reason is as follows. Where another than the first inventor of a particular tangible thing, buys from the inventor a specimen of that thing, or makes such a specimen with his consent, or re-invents and makes such a specimen independently of the first inventor, that specimen ought to be exempt from any patent afterward applied for by the first inventor; because, if it is not so exempt, it will become worthless in the hands of one who honestly expended of his substance to procure it, and who procured it without violating any patent or any law. Processes are not subjects of these considerations. A process cannot be purchased. The right to practice a patented process can indeed be purchased; but the right to practice an unpatented process, while it remains unpatented, cannot be the subject of a sale, because that right belongs to every one without any purchase. So also, if an inventor of a process consents that another person may practice that process, before the inventor applies for a patent, that fact furnishes no reason why that person should be allowed to practice that process, against the will of that inventor, after the date of his patent. To deprive such a person of such a privilege, is not to deprive him of the use of a thing. It is only to deprive him of the privilege of repeating a series of acts. These considerations apply also to cases where a re-inventor produces and practices a process, after its production by the first inventor, and before any application is made for a patent thereon, and without any knowledge of the first inventor or his doings. Such a re-inventor has no more natural right to practice that process, after a patent is granted to the first inventor, than any other person has. He has no such right growing out of the fact 'that he was a re-inventor, because the patent laws do not reward

re-inventors, and because patents to first inventors are exclusive of re-inventors, as well as of other persons. He has no such right growing out of rights of property, because to deprive him of the privilege of repeating the process is not to deprive him of the use of any tangible property, and because he has no tangible property in the process itself.

The language of the Patent Act of 1839 [1] was, however different from that of the Act of 1870, and of the Revised Statutes, on the point treated in this section. The earlier Act contained a considerable clause which is not in either of the others, and which induced the Supreme Court to decide that the earlier statute applied to patents for processes, as well as to patents for things.[2] The reasoning of Justice BALDWIN, in the case, was never convincing to the present textwriter. It was spoken of by Justice STORY as "certainly general;" [3] and Judge WHEELER has well said that "It is not probable that McClurg *v.* Kingsland would be followed beyond cases of its class, upon the same statute."[4] As far as McClurg *v.* Kingsland construed the Act of 1839, and applied that Act to the very case then at bar, it is entitled to loyal respect and obedience, even from those who cannot follow its reasoning. But McClurg *v.* Kingsland is no guide to the meaning of the present statute on the subject, because that statute is substantially different from the one construed in that case, and because the reasoning of that case has no convincing force when applied to the language of the now existing statute.

§ 160. Every United States patent is in general co-extensive, in point of the territory it covers, with the territory covered by the jurisdiction of the United States.[5] Every such patent, therefore, covers the use of the patented thing in or under the tide-waters of the United States; and that,

[1] 5 Statutes at Large, Ch. 88, Section 7, p. 354.

[2] McClurg *v.* Kingsland, 1 Howard, 202, 1843.

[3] Pierson *v.* Screw Co. 3 Story, 408, 1844.

[4] Brickill *v.* New York, 5 Bann. & Ard 547, 1880.

[5] Revised Statutes, Section 4884.

too, even in cases where the government has granted, to others than the patentee, the exclusive right to do, at a particular place, the particular thing which the patented invention is adapted to accomplish.[1] In the case just cited the complainant had a patent on a certain submarine telegraph cable; and the defendant had a grant from Congress, giving it the sole right, for fourteen years, to lay, construct, land, maintain, and operate telegraphic cables in and over the waters, reefs, islands, shores, and lands over which the United States have jurisdiction, from the shores of Florida to the Island of Cuba. Under these circumstances, Justice BLATCHFORD decided that the defendant acquired, by its grant, no right to use the patented cables of the complainant; and he intimated that the complainant acquired by its patent, no right to use his cables between Florida and Cuba. His honor supported this intimation by saying that no patent confers upon its owner any right to make or use his invention in the house of another; and he supported his decision by saying that the fact just mentioned does not confer upon another than the patentee any right to make or use the invention of the latter in the house of the former.

§ 161. No United States patent right extends to the mere use of the patented invention on any foreign ship while temporarily in a harbor of the United States for the purposes of commerce; though such a right would be infringed by making or selling the patented article on board any foreign vessel while in either of our ports.[2] United States patent rights extend to the decks of United States ships, even when those ships are on the high seas, as fully as they extend to the solid earth of the United States.[3]

§ 162. The regular duration of a United States patent for a process, machine, manufacture, or composition of matter, was fourteen years under the statutes prior to that of 1861; but it was enacted, in Section 16 of the Patent Act of March

[1] Colgate *v.* Ocean Telegraph Co. 17 Blatch. 310, 1879.

[2] Brown *v.* Duchesne, 19 Howard, 196, 1856.

[3] Gardner *v.* Howe, 2 Cliff. 464, 1865.

2 of that year, that all patents thereafter granted should remain in force for seventeen years from the date of issue.[1] Section 22 of the consolidated Patent Act of 1870 provided that every patent should grant to the patentee, his heirs or assigns, for the term of seventeen years, the exclusive right to make, use, and vend the invention covered thereby.[2] Section 4884 of the Revised Statutes makes the same provision as that made on this point by the Act of 1870. The phrase "every patent" is not to be understood in its literal signification. It means every patent, the duration of which is not otherwise prescribed by statute. In the latter category, design patents fall. Such patents are grantable for fourteen years, or for seven years, or for three years and six months, as the applicant may in his application elect.[3] In the same category, also, fall patents for inventions for which their owners previously obtained one or more foreign patents. United States patents of this class cannot be granted for more than seventeen years, and they generally have to be limited to some shorter length of time.

§ 163. "Every patent granted for an invention which has previously been 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."[4] Such is the present statute on this subject, and the corresponding provision of the Patent Act of 1870 was substantially the same.[5]

These enactments apply only to cases wherein the foreign patent was taken out by the United States patentee, or at least with his knowledge and consent. No foreign patent obtained by another, without that knowledge and that consent, after the inventor made his invention, and before

[1] 12 Statutes at Large, Ch. 88, Section 16, p. 249.

[2] 16 Statutes at Large, Ch. 230, Section 22, p. 201.

[3] Revised Statutes, Section 4931.

[4] Revised Statutes, Section 4887.

[5] 16 Statutes at Large, Ch. 230, Section 25, p. 201.

the United States patent was granted, can operate to limit the duration of the latter.[1]

Those enactments apply to a case where a foreign patent was granted before the granting of the corresponding United States patent, even if the foreign patent was made a secret one at the request of the applicant therefor;[2] but they do not apply to a case where a foreign patent was dated before the granting of the corresponding United States patent, but not sealed nor published till afterward;[3] though they do apply to a case where the United States patent was granted after the foreign patent was sealed, upon an application filed before that event.[4]

Whether these enactments apply where the invention claimed in the United States patent was not claimed but only described in the prior foreign patent, was a question which was once decided in the affirmative,[5] and once in the negative,[6] but is now settled in the affirmative.[7]

In a case to which these enactments apply, the United States patent will not expire with the first term of the foreign patent, if the foreign patent is extended before the expiration of its first term, in pursuance of a statute which was in force when the United States patent was applied for and when it was issued, and which conferred an absolute right to such an extension, and if the extension or extensions of the foreign patent cover a continuous space of

[1] Kendrick *v.* Emmons, 2 Bann. & Ard. 210, 1875.

[2] Gramme Electrical Co. *v.* Electric Co. 17 Fed. Rep. 838, 1883.

[3] Gold & Stock Telegraph Co. *v.* Telegram Co. 23 Fed. Rep. 340. 1885; Emmerson *v.* Lippert, 31 Fed. Rep. 911, 1887; Seibert Oil Co. *v.* Powell Co. 35 Fed. Rep. 591, 1888; Holmes Alarm Tel. Co. *v.* Telephone Co. 42 Fed. Rep. 228, 1890; American Bell Telephone Co. *v.* Cushman, 57 Fed. Rep. 843, 1893, Edison Electric Light Co. *v.* Waring Electric Co. 59 Fed. Rep. 364, 1894.

[4] Bate Refrigerating Co. *v.* Sulzberger, 157 U. S. 1, 1895; Bate Refrigerating Co. *v.* Gillett, 13 Fed. Rep. 553, 1882; Gramme Electrical Co. *v.* Electric Co. 17 Fed. Rep. 838, 1883; Edison Electric Light Co. *v.* United States Electric Lighting Co. 35 Fed. Rep. 135, 1888.

[5] Commercial Mfg. Co. *v.* Canning Co. 27 Fed. Rep. 87, 1886.

[6] Holmes Protective Co. *v.* Alarm Co. 22 Fed Rep. 341, 1884.

[7] Commercial Mfg. Co *v.* Fairbank Co. 135 U. S. 194, 1890.

time.[1] And it has been decided in several Circuit Courts, that the United States patent will not expire with the first term of the foreign patent, if the foreign patent might have been extended before the expiration of its first term, in pursuance of a statute which was in force when the United States patent was applied for and when it was issued, and which conferred an absolute right to such an extension, whether the foreign patent was actually extended or not.[2] But it has also been decided on the Circuit, that where the patentee has no absolute right to an extension of the first term of his foreign patent, no such extension has any effect upon the duration of his United States patent.[3]

The termination of a foreign patent, prior to its appointed end, because of an omission of the patentee to do what the foreign laws require in order to keep it in force, has no effect upon the duration of a corresponding United States patent.[4] Nor will any such effect result from the expiration of a prior foreign patent, on account of the expiration of a patent of another foreign country on the same invention.[5] But where the corresponding foreign patent terminated before the United States patent for the same invention was issued, the latter is void *ab initio*;[6] though a repeal *ab initio* of a foreign patent which would otherwise limit the duration of a corresponding United States patent, restores the latter to its full term of seventeen years.[7]

It is not necessary, to the validity of a United States patent granted for an invention which has previously been patented in a foreign country, that it shall be so limited on its face, as to appear to expire at the same time with the

[1] Bate Refrigerating Co. *v.* Hammond, 129 U. S. 151, 1889.

[2] Consolidated Roller Mill Co. *v.* Walker, 43 Fed. Rep. 581, 1890; Pohl *v.* Heyman, 58 Fed. Rep. 568, 1893.

[3] Henry *v.* Tool Co. 3 Bann. & Ard. 501, 1878.

[4] Pohl *v.* Anchor Brewing Co. 134 U. S. 381, 1890; Holmes Protective Co. *v.* Alarm Co. 21 Fed. Rep. 458, 1884; Paillard *v.* Bruno, 29 Fed. Rep. 864, 1886.

[5] Edison Electric Light Co. *v.* Perkins Electric Lamp Co. 42 Fed. Rep. 327, 1890.

[6] Huber *v.* Nelson Mfg. Co. 148 U. S. 275, 1893.

[7] Bate Refrigerating Co. *v.* Gillett, 20 Fed. Rep. 192, 1884.

foreign patent which limits its life.[1] The statute is satisfied when the courts decline to enforce it after the expiration of that foreign patent, whether or not it appears on its face to be so limited.[2]

And the duration of a patent should never be limited because of the expiration of a foreign patent, if there is any doubt about the invention covered by the two patents, being substantially the same.[3] But differences of description do not necessarily involve substantial differences of invention;[4] and the true test of identity consists in ascertaining and deciding whether the practice of what is described in the foreign patent, would constitute an infringement of the United States patent.[5]

The law set forth in this section applies to no patent which was originally granted prior to July 8, 1870; and applies to no reissue of any patent which was originally granted before that date, even though the reissue itself was granted after that date.[6] The duration of such patents, where they were granted for inventions which had previously been granted in some foreign country, was governed by certain earlier statutes which it is now in order to explain.

§ 164. Section 8 of the Patent Act of 1836 provided that nothing therein contained should be construed to deprive any original and true inventor of the right to a patent for his invention, by reason of his having previously taken out letters patent therefor in a foreign country, and the same having been published, at any time within six months next

[1] Telephone Cases, 126 U. S. 572, 1888; Bate Refrigerating Co. *v.* Hammond, 129 U. S. 151, 1889.

[2] New American File Co. *v.* Nicholson File Co. 8 Fed. Rep. 816, 1881; Canan *v.* Mfg. Co. 23 Fed. Rep. 185, 1885.

[3] Brush Electric Co. *v.* Julien Electric Co. 41 Fed. Rep. 696, 1890; Brush Electric Co. *v.* Accumulator Co. 47 Fed. Rep. 52, 1891.

[4] Commercial Mfg. Co. *v.* Fairbank Co. 135 U. S. 192, 1890.

[5] Commercial Mfg. Co. *v.* Fairbank Co. 135 U. S. 194, 1890; Accumulator Co. *v.* Julien Electric Co. 57 Fed. Rep. 609, 1893.

[6] Badische Anilin and Soda Fabrik *v.* Hamilton Mfg. Co. 3 Bann. & Ard. 235, 1878.

preceding the filing of his specification and drawings.[1] Section 6 of the Patent Act of 1839 provided that no person should be debarred from receiving a patent for any invention, as provided in the Act of 1836, by reason of the same having been patented in a foreign country more than six months prior to his application, provided, among other things, that every such patent should be limited to the term of fourteen years from the date or publication of such foreign letters patent.[2] The effect of these enactments was to allow an inventor to take out a patent in the United States, for an invention which he had previously patented in a foreign country, no matter how long previously that foreign patent was granted;[3] but the duration of the United States patent was limited to the term of fourteen years from the date or publication of the foreign patent, unless the United States patent was applied for within six months after the foreign patent was taken out, and within six months after the foreign patent was published. This law applied only to cases where the foreign patent was published,[4] or, if it was a British patent, was sealed,[5] before the United States patent was applied for. It did not therefore, affect any United States patent for an invention which was patented in a foreign country while the application for the United States patent was pending in the Patent Office. It was not necessary under the law stated in this section, any more than it is necessary under the law stated in the last, that a patent should be limited on its face, so as to appear to expire when it really ceased to be in force. Whether so limited or not, the courts would limit it to its legal life, when called upon to enforce it after the end of that life; but its validity for the term of fourteen years from the date of the foreign patent, was unaffected by the

[1] 5 Statutes at Large, Ch. 357, Section 8, p. 121.

[2] 5 Statutes at Large, Ch. 88, Section 6, p. 354.

[3] De Florez *v.* Raynolds, 17 Blatch. 444, 1880.

[4] French *v.* Rogers, 1 Fisher, 136. 1851.

[5] Gold & Stock Telegraph Co. *v.* Telegram Co. 23 Fed. Rep. 343. 1885.

fact that on its face the United States patent purported to run for fourteen years from its own date.[1]

§ 165. Section 16 of the Patent Act of March 2, 1861, provided that all patents thereafter granted should remain in force for the term of seventeen years from the date of issue; and the Supreme Court has decided that this enactment modified the statute of 1839 precisely as it would have done had it expressly substituted the word "seventeen" for the word "fourteen" in the earlier statute; thus making it read: "every such patent shall be limited to the term of seventeen years from the date or publication of such foreign letters patent."[2] The law which was established on the subject by the Patent Act of 1836, as modified by the Patent Act of 1839, was still further modified to that extent by the Patent Act of March 2, 1861; and as thus modified it is the law which governs the point, in respect of patents granted between the latter date and July 8, 1870.

§ 170. The terms of all United States patents begin at their respective dates.[3] Those dates are selected by the Commissioner of Patents, but they cannot be later than six months after the time at which the respective applications are allowed;[4] and cannot be earlier than the time of such allowance: that is to say, patents cannot now be antedated.[5]

Section 8 of the Patent Act of 1836 provided that whenever the applicant should request it, the patent should take date from the time of the filing of the specification and drawings, not however exceeding six months prior to the actual issuing of the patent.[6] This continued to be the law for nearly a quarter of a century, and patents so antedated conferred rights of action upon the patentees, for infringe-

[1] O'Reilly *v.* Morse, 15 Howard, 62. 1853.

[2] Siemens' Adm'r *v.* Sellers, 123 U. S. 276, 1887.

[3] Rein *v.* Clayton, 37 Fed. Rep. 355, 1889.

[4] Revised Statutes, Section 4885.

[5] De Florez *v.* Raynolds, 17 Blatch. 444, 1880.

[6] 5 Statutes at Large, Ch. 357, Section 8, p. 121.

ments occurring after their respective dates, and before the respective days of their actual issue.[1] Section 16 of the Patent Act of March 2, 1861, provided a change in this law: provided that thereafter the terms of patents should begin with the dates of their respective issue, and such has ever since been the law on the subject.[2] In actual practice, patents are now dated and issued on the third or the fourth Tuesday after the applicant pays the final Patent Office fee. And all the patents which are issued in one day are contemporaneous, regardless of the order of the numbers which they respectively receive.[3]

§ 171. The grantee of the government in cases of letters patent for inventions may be the inventor himself;[4] or his assignee;[5] or an assignee of an assignee;[6] or an assignee who has assigned the invention;[7] or a guardian of an insane inventor;[8] or if an inventor dies before any patent is granted for his invention, the right to obtain the patent devolves 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 invention, then in trust for his devisees.[9] In this last case the patent may be granted to the executor by his proper personal name, without any declaration that he takes in his representative capacity;[10] and the same thing is equally true in cases where the patent is granted to an administrator.

[1] Burdett *v.* Estey, 3 Fed. Rep. 566, 1880.

[2] 12 Statutes at Large, Ch. 88, Section 16, p. 249.

[3] Electrical Accumulator Co. *v.* Brush Electric Co. 52 Fed. Rep. 137, 1892.

[4] Revised Statutes, Section 4886.

[5] Revised Statutes, Section 4895.

[6] Selden *v.* Gas Burner Co. 19 Blatch. 544, 1881.

[7] Consolidated Electric Light Co. *v.* Edison Electric Light Co. 25 Fed. Rep. 719, 1885; Consolidated Electric Light Co. *v.* McKeesport Light Co. 34 Fed. Rep. 335, 1888.

[8] Whitcomb *v.* Coal Co. 47 Fed. Rep. 658, 1891.

[9] Revised Statutes, Section 4896.

[10] Stimpson *v.* Rogers, 4 Blatch. 336, 1859; Northwestern Fire Extinguisher Co. *v.* Philadelphia Extinguisher Co. 1 Bann. & Ard. 177, 1874.

Where an inventor applies for a patent to be issued to himself, and then dies before any patent is granted; the patent may be granted in his name as patentee, and will be valid notwithstanding his prior death; and the title thereto will vest in his executor or administrator, if there is any, whoever he may be; and if there is no executor or administrator, the title will ultimately vest in the heirs or legatees of the inventor, whoever they may be.[1]

Where an inventor assigns his invention before making an application for a patent, and then makes such an application, coupled with a request that the patent be granted to the assignee, and accompanied with an entry of the assignment on the records of the Patent Office, and then dies before any patent is granted; there appears to be no reason why the patent should not be granted to the assignee, though the statute literally provides that in all cases where the inventor dies before the patent is granted, the right to the patent devolves on his executor or administrator in trust for his heirs or devisees.[2] But this statute must receive a reasonable construction, and it is not reasonable to hold that the death of an inventor, who has sold and assigned his inchoate right to a patent, should operate to divest his assignee of that right, and devolve it upon another person, in trust for still another party. Nor is there any propriety, in such a case, in granting the patent to the executor or administrator, on the theory that he will take as trustee for the assignee. The assignee requires no trustee, for his incohate title, is a legal, and not a merely equitable one;[3] and the executor or administrator, if he takes at all, must take as trustee for the heirs or devisees of the inventor.

Where an inventor assigns his invention and dies before making any application for a patent, a difficulty arises for which the statute affords no clear solution. In such a case,

[1] De La Vergne Machine Co. *v.* Featherstone, 147 U. S. 211, 1893.

[2] Revised Statutes, Section 4896.

[3] Hendrie *v.* Sayles, 98 U. S. 549, 1878.

it is provided that the application must be made and sworn to by the executor or administrator, for an assignee cannot apply for a patent except on the oath of the inventor himself.[1] It is also provided, that where an executor or administrator applies for a patent, he must take that patent, if granted, in trust for the heirs or devisees of the inventor.[2] Now under these circumstances, the law must do one of three things. It must ignore this last provision, and hold that the executor or administrator takes in trust for the assignee; or it must impose a trust upon a trust, by holding that the executor or administrator takes in trust for the heirs or devisees, and they take in trust for the assignee; or it must deprive the assignee of his right altogether. The first alternative flies in the face of the statute, and the third flies in the face of justice. The second is consistent with conscience, and can probably be adopted and enforced by courts of equity.

§ 172. Letters patent are documents consisting of the grant and the specification; and where drawings form a part of the application, they also form a part of the letters patent. The grant is a paper, issued in the name of the United States, under the seal of the Patent Office, and signed by the Secretary of the Interior, or under his direction by one of the Assistant Secretaries of the Interior,[3] and countersigned by the Commissioner of Patents. It contains a short title of the invention, and purports to grant to the patentee, his heirs or assigns, for the term of seventeen years, the exclusive right to make, use, and vend the invention, throughout the United States and the territories thereof; and it refers to the specification, for the particulars of the invention covered by the grant,[4] and each of the three rights granted by letters patent is a separate substantive right.[5]

[1] Revised Statutes, Sections 4895, 4896.

[2] Revised Statutes, Section 4896.

[3] 25 Statutes at Large, Ch. 15, p. 40.

[4] Revised Statutes, Sections 4883, 4884.

[5] Adams *v.* Burke, 17 Wall. 453, 1873; Tuttle *v.* Matthews, 28 Fed. Rep. 98, 1886.

Letters patent are valid where the grant is signed by an Acting Secretary of the Interior, or countersigned by an Acting Commissioner of Patents; and letters patent, so signed, are admissible in evidence without any pleading or proof of the title of such officers to their respective offices. Courts take judicial notice of the persons who preside over the departments or bureaus of the government, whether permanently or temporarily; and the production of their commissions is not necessary to support their official acts.[1] But if letters patent are issued without any signature of the Secretary of the Interior, or of an Acting or Assistant Secretary of the Interior, the omission is fatal to the validity of those letters patent; and the same effect would result from an omission of the counter-signature of the Commissioner of Patents, unless an Acting Commissioner of Patents should countersign in his stead.[2] Such an error may, however, be corrected by affixing the omitted signature; but such a correction will affect only the future, and not the past, portion of the term of the patent.[3] A misnomer of the patentee, in a grant, does not invalidate the patent, if he can be identified by means of any description which the letters patent may contain.[4] If the letters patent contains no means for correcting the misnomer, it may be corrected by the proper officers of the government, whenever those officers become convinced of the mistake.[5]

But regularly executed letters patent cannot be altered in character by the Commissioner of Patents, except after a surrender, and by means of a reissue, and any such alteration otherwise made, is void for want of jurisdiction in the Commissioner to make it.[6] But where an alteration has

[1] York and Maryland Line Railroad Co. *v.* Winans, 17 Howard, 30, 1854.

[2] Marsh *v.* Nichols, 128 U. S 605, 1888.

[3] Marsh *v.* Nichols, 128 U. S. 605, 1888.

[4] Northwestern Fire Extinguisher Co. *v.* Philadelphia Extinguisher Co. 1 Bann. & Ard. 177, 1874.

[5] Bell *v.* Hearne, 19 Howard, 262, 1856.

[6] Edison Electric Light Co. *v.* U. S. Electric Lighting Co. 52 Fed. Rep. 312, 1892.

been actually made by the Commissioner of Patents, at the request of the patentee, and where some party has relied upon the validity of that alteration, to the extent of embarking in business because of it, the patentee may be estopped from denying that validity, as against that particular party.[1]

§ 173. The word "specification," whenever it is used in the statute without the word "claim," covers both the claim and the description; and whenever it is used with the word claim, it covers the description only.[2] The first is its more general meaning, and to avoid confusion it is never used in any other sense in this book. The proper characteristics of specifications are herein explained by explaining the proper characteristics of descriptions and claims, which are the component parts of specifications.

§ 174. The description of the invention, which forms a part of every specification, is required to set forth that invention, and the manner and process of making 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 and use the same; and in case of a machine, the description is required to explain the principle thereof, and the mode of applying that principle which the inventor believes to be the best.[3] The phrase "any person skilled in the art or science" is not confined to the most eminent scientists, nor the most able experts in that science or art; but it also indicates persons whose skill may stop short of the highest excellence.[4]

It is not necessary that the description should be intelligible to every intelligent man, nor to every skilful mechanic. If it can be understood by those who possess full knowledge of the prior inventions in the same department of art or science, it is full, clear, concise, and exact enough to

[1] Edison Electric Light Co. *v.* Buckeye Electric Co. 59 Fed. Rep. 699, 1894.

[2] Wilson *v.* Coon, 18 Blatch. 532, 1880,

[3] Revised Statutes, Section 4888.

[4] Tannage Patent Co. *v.* Zahn, 66 Fed. Rep. 989, 1895.

comply with the statute.[1] In explaining this point of law, Justice BRADLEY, in the first cited decision, used a particularly felicitous illustration. His Honor said: "When an astronomer reports that a comet is to be seen with the telescope, in the constellation of Auriga, in so many degrees of declination, and so many hours and minutes of right ascension, it is all Greek to the unskilled in science; but other astronomers will instantly direct their telescopes to the very point in the heavens where the stranger has made his entrance into our system. They understand the language of their brother scientist. If a mechanical engineer invents an improvement on any of the appendages of a steam-engine, such as the valve-gear, the condenser, the steam-chest, the walking-beam, the parallel motion, or what not, he is not obliged, in order to make himself understood, to describe the engine, nor the particular appendage to which the improvement refers, nor its mode of connection with the principal machine. These are already familiar to others skilled in that kind of machinery. He may begin at the point where his invention begins, and describe what he has made that is new, and what it replaces of the old."

These observations are particularly applicable to descriptions of machinery; but they also suggest the true principles on which to judge of the sufficiency of descriptions of processes, manufactures, and compositions of matter.[2] Relevant to this last class of subjects of patents, it has been held that descriptions should state the component parts thereof, and the proportions in which they are to be mixed or combined, and should do this with clearness and precision, and should not leave the public to ascertain any such fact by experiment.[3] But where proportions must vary with circumstances, a description of an invention is

[1] Loom Co. *v.* Higgins, 105 U. S. 580, 1881; Celluloid Mfg. Co. *v.* Russell, 37 Fed. Rep. 679, 1889; Lalance & Grosjean Mfg. Co. *v.* Haberman Mfg. Co. 55 Fed. Rep. 296, 1893.

[2] Seabury *v.* Am Ende, 152 U. S. 567, 1894.

[3] Wood *v.* Underhill, 5 Howard, 1, 1847; Tyler *v.* Boston, 7 Wallace, 327, 1868.

sufficient, if it states the proportions proper under ordinary circumstances, and points out the direction in which they must be varied when circumstances are changed.[1] And in the case of an article of manufacture, where proportion is important to operativeness, the proper proportions may be indicated in any way that is substantially correct, and need not be stated mathematically.[2]

§ 175. An inventor need not explain in his description, or know in point of fact, what laws of nature those are which cause his invention to work;[3] nor is a patent void on the ground that the principle of the invention is not fully understood; or if understood by any one, not understood alike by all.[4] Neither is any description insufficient in the eye of the law, on account of any mere errors it may be found to contain, where those errors would at once be detected and their remedies be known, by any person skilled in the art, when making specimens of the invention set forth, or when practicing that invention, if that invention is a process;[5] nor where such errors consist in mistaken statements of immaterial facts;[6] nor where such errors relate to the degree of efficiency of the invention.[7] Nor need a description state every use to which the described and claimed invention is applicable, in order to cover every such use.[8] Neither is it necessary in a description in a patent for a process to set forth all the modes in which that process may be performed, nor all the kinds of apparatus which may be used in performing it, in order to cover that process with the patent. It is enough to describe one particular mode and one particular apparatus

[1] Consolidated Valve Co. *v.* Valve Co. 113 U. S. 177, 1884.

[2] Edison Electric Light Co. *v.* U. S. Electric Lighting Co. 52 Fed. Rep. 309, 1892.

[3] Saint Louis Stamping Co. *v.* Quinby, 4 Bann. & Ard. 195, 1879; Haffcke *v.* Clark, 46 Fed. Rep. 770, 1891; Dixon-Woods Co. *v.* Pfeifer, 55 Fed Rep. 395, 1893.

[4] Knickerbocker Co. *v.* Rogers, 61 Fed. Rep. 297, 1894.

[5] Singer *v.* Walmsley, 1 Fisher, 559, 1860; Kendrick *v.* Emmons, 2 Bann. & Ard. 210, 1875.

[6] Maryland Hominy Co. *v.* Dorr, 46 Fed. Rep. 776, 1891.

[7] Michaels *v.* Roessler, 34 Fed. Rep. 325, 1888.

[8] Pike *v.* Potter, 3 Fisher, 55, 1859.

by means of which the process may be performed with at least some beneficial result.[1] Nor is a description fatally defective merely because it omits to mention something which contributes only to the degree of benefit, provided the invention will work beneficially without it.[2] But the omission of anything absolutely material to the utility of the invention described, is a fatal defect in a description,[3] unless that omission would naturally be supplied by any person skilled in the art when making the invention, if it be a thing, or when using it, if it be a process. Accordingly, it has been held that where one element of a new combination covered by a patent must have a certain form in order to operate in that combination, and where another form of that element is known to persons skilled in the art; a description is insufficient which merely states that such old element is a part of the combination, without saying or showing which of its known forms is applicable to the case.[4] On the other hand, no excess of description is injurious to the validity of a patent, unless the redundant matter was introduced with fraudulent intention.[5]

§ 176. The claim or claims of a specification are necessarily inserted in order to conform to the statutory requirement that the patentee shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention.[6] A distinct and formal claim is necessary to ascertain the scope of a patented invention,[7] and a patent grants no exclusive right, except to what is thus distinctly claimed.[8]

A claim covers and secures a process, a machine, a manufacture, or a composition of matter, and never the function

[1] Tilghman *v.* Proctor, 102 U. S. Ard. 505, 1880.

[2] Sewall *v.* Jones, 91 U. S. 185, 1875.

[3] Carr *v.* Rice, 1 Fisher, 204, 1856.

[4] Schneider *v.* Thill, 5 Bann. & 728, 1880; Pittsburgh Reduction Co. *v.* Cowles Co. 55 Fed. Rep. 316, 1893; Rapid Service Store Co. *v.* Taylor, 43 Fed. Rep. 251, 1890.

[5] Sewall *v.* Jones, 91 U. S. 186, 1875.

[6] Revised Statutes, Section 4888.

[7] Grant *v.* Walter, 148 U. S. 554, 1893.

[8] Ashton Valve Co. *v.* Muffler Co. 8 U. S. App. 226, 1893.

or result of either.[1] A claim may cover the entire process, machine, manufacture, or composition of matter, which is set forth in the description, or it may cover such parts, or such sub-processes, or such combinations as are new and useful inventions; and the specification may contain a claim for the whole, and other claims for separate parts, and still other claims for separate sub-processes or combinations.[2] And the subject of a claim needs not to be operative alone,[3] for utility is justly ascribed to things which have their use in co-operating with other things to perform a useful work. But in order to be sustained, each claim must be able to withstand the tests of invention, of novelty, and of utility, which are stated in the second, third, and fourth chapters of this book, respectively.

All claims are required to be specific, so that the public may know what they are prohibited from doing during the existence of the patent, and what they are to have at the end of the term, as a consideration for the grant.[4] The necessary degree of particularity in claims may be reached in various modes. Where the invention is an entire machine, the claim is sufficient if it is clearly co-extensive with the machine; and where the invention is a part of a machine or manufacture, that part must be clearly indicated in the claim which covers it.[5] Claims for combinations of a plurality of the described devices, but less than all of them, should use the word "combination," and should state the devices of which it is composed.[6] But though this degree

[1] Corning *v.* Burden, 15 Howard, 252, 1853; O'Reilly *v.* Morse, 15 Howard, 62, 1853; Carver *v.* Hyde, 16 Peters, 513, 1842; Le Roy *v.* Tatham, 14 Howard, 156, 1852.

[2] Railroad Co. *v.* Dubois, 12 Wallace, 47, 1870; National Machine Co. *v.* Thom, 25 Fed. Rep. 500, 1885.

[3] Deering *v.* Winona Harvester Works, 155 U. S. 302, 1894; Hancock Inspirator Co. *v.* Jenks, 21 Fed. Rep. 915, 1884; Rapid Service Store Co. *v.* Taylor, 43 Fed. Rep. 251, 1890; Roberts *v.* Nail Co. 53 Fed. Rep. 920, 1892; Holloway *v.* Dow, 54 Fed. Rep. 516, 1893.

[4] Brooks *v.* Fiske, 15 Howard, 212, 1853; Buffington's Iron Bldg. Co. *v.* Eustis, 65 Fed. Rep. 807, 1895.

[5] Seymour *v.* Osborne, 11 Wallace, 516, 1870.

[6] Brown Mfg. Co. *v.* Bradley Mfg. Co. 51 Fed. Rep. 226, 1892.

of obvious certainty is highly desirable in a combination claim, it is not absolutely necessary to the validity of such an one; for a claim may declare that it covers so much of the described mechanism as effects a particular specified result, without specifying those parts themselves. In such a case it is a question of fact to be determined in court, if necessary, which parts those are which effect that result and are therefore covered by the claim.[1] So, also, two or more claims in substance may sometimes be combined in one claim in form.[2] This may be accomplished in different ways, and among others by inserting in the claim the words "with or without" before the name or other designation of one or more of the enumerated parts of the process, machine, combination, manufacture, or composition of matter covered by that claim.[3] The claim of the Charles Goodyear rubber patent had this characteristic. It was a claim for vulcanized India rubber, whether with or without other ingredients, chemically altered by the application of heat, substantially as described.[4] But a process and its product, though they may be secured by separate claims in one patent, cannot be covered by one claim.[5]

§ 177. Letters patent may be valid as to one or more claims while being invalid as to one or more other claims in the same specification.[6] And where a patent contains two claims which are alike, except that the narrower one of them calls for an unpatentable addition to what is called for by the other, the narrower claim is void.[7] But two claims which may appear to be alike will, if practicable, be construed to differ rather than agree, because there is a

[1] Silsby *v.* Foote, 14 Howard, 218, 1852; Fay *v.* Cordesman, 109 U. S. 420, 1883; Hoe *v.* Knap, 27 Fed. Rep. 208 1886.

[2] Telephone Cases, 126 U. S. 537, 1888.

[3] Tuck *v.* Bramhill, 6 Blatch. 95, 1868.

[4] Rubber Co. *v.* Goodyear, 9 Wallace, 795, 1869.

[5] Durand *v.* Schulze, 61 Fed. Rep. 820, 1894.

[6] Russell *v.* Place, 94 U. S. 606, 1876.

[7] Featherstone *v.* Cycle Co. 53 Fed. Rep. 116, 1892.

presumption that no applicant will do so useless and inexpedient an act as to repeat a claim.[1]

Letters patent which contain a needless multiplication of nebulous claims, calculated to mislead the public, are void for that reason, if for no other.[2] This word "calculated" is the word used by the justice who announced the opinion of the Supreme Court upon the point. It is itself somewhat nebulous, for it is questionable whether it means apt, or means intended. Judge W. D. SHIPMAN was quite explicit when deciding a similar question. He held that a patent is not void merely because it contains a plurality of claims, each of which covers the same thing, and covers nothing else, where there is no evidence that the double claim was made with intention to mislead.[3] And Judge MCKENNA has lately followed that example.[4] In the light of these decisions the word "calculated" in the Supreme Court decision is seen to signify intended, and the Supreme Court decision is therefore to be read with that explanation.

If all the claims of a particular patent are void, either for want of particularity or for want of invention, novelty, or utility, or for any other reason or reasons, that patent is also void, even though one or more valid claims might have been made and allowed on the basis of the descriptive part of the specification.[5]

§ 178. The statutory requirements relevant to particularity in the descriptions and claims of letters patent, are conditions precedent to the authority of the Commissioner of Patents to issue such documents;[6] and if such a document is issued, the descriptions or claims in which do not conform to these requirements, then that document is void.[7]

[1] Campbell Printing Press Co. *v.* Marden, 64 Fed. Rep. 784, 1894; National Cash Register Co. *v.* American Cash Register Co. 53 Fed. Rep. 370, 1892.

[2] Carlton *v.* Bokee, 17 Wallace, 463, 1873.

[3] Tompkins *v.* Gage, 5 Blatch. 270, 1861.

[4] Bowers *v.* Von Schmidt, 63 Fed. Rep. 581, 1894.

[5] Wisner *v.* Grant, 5 Bann. & Ard. 215, 1880.

[6] Seymour *v.* Osborne, 11 Wallace, 516, 1870.

[7] O'Reilly *v.* Morse, 15 Howard, 62, 1853; Ames *v.* Howard, 1 Sumner, 482, 1833.

But where the inventions, which are covered by part of the claims of a patent, are sufficiently described, those claims may be valid, though other claims in the same patent are void for want of sufficient description.[1] Such invalidity does not depend on the intention of the inventor, but is a legal inference from his failure to give to his description and claims the statutory particularity.[2] It is a question of jurisdiction in the Commissioner of Patents; not a question of fraudulent intent in the delinquent patentee. The Commissioner is authorized to issue letters patent only on adequate specifications. If he issues them on inadequate specifications, their invalidity cannot be removed by showing that the inadequacy arose from ignorance and not from fraud. This point of law is not shaken by the fact that Section 4920 of the Revised Statutes, in providing for special defences to patent suits, under the general issue in pleading, provides that among such defences the defendant may prove "that for the purpose of deceiving the public, the description filed by the patentee in the Patent Office was made to contain less than the whole truth relative to the invention or discovery, or more than is necessary to produce the desired effect." There are several grounds for this opinion of the text writer. First: An omission to state the whole truth relative to an invention is not necessarily the same thing as an insufficient description of that invention. A specification might have one or more of several faults belonging to the first category, and be free from objection on the latter score. One of these would be an omission to state some double use of which the invention is capable. Such an omission, if made in ignorance of that double use, ought not to invalidate the patent, but if made with a fraudulent intention to keep that double use forever secret, it ought to have that effect. The defence in Section 4920 is aimed at such cases, and not at cases of insufficiency of specification. Second: The defences provided for in

[1] Bene *v.* Jeantet, 129 U. S. 683, 1888.

[2] Grant *v.* Raymond, 6 Peters, 218, 1832.

Section 4920 are not all the defences that may be interposed in infringement cases. They are merely the defences that may be interposed under the general issue. The defence of insufficient specification, as well as any other legal defence, may be interposed by a special plea.[1]

§ 179. It is a question of fact for a jury in an action at law, or for a chancellor in an action in equity, to determine whether the specification, including the claim, of a patent conforms to the statutory requirements relevant to particularity.[2] That question is, in both tribunals, a question of evidence, and not a question of construction.[3]

§ 180. Two or more inventions, if they relate to the same subject, or are in their nature and operation connected together, may be covered by a corresponding number of claims in a single letters patent.[4] Thus two or more separate inventions, which may be used as parts of a particular machine, may be separately claimed in a single letters patent, and two or more processes which may be successively used to produce a particular product, may likewise be secured; but two or more products, even in the same department of manufactures, cannot be patented together. So also apparatus claims and process claims may sometimes be joined, and a process claim and a product claim may sometimes be assembled; but a machine claim and a product claim cannot both be made in a single patent.

On the other hand, separate letters patent may be granted for different parts of the same machine.[5] In such cases it is proper to describe the whole machine in each of the specifications, and to picture the whole machine in each set of drawings, thus causing the separate letters patent to

[1] Reckendorfer *v.* Faber, 92 U. S. 347, 1875.

[2] Battin *v.* Taggert, 17 Howard, 74, 1854.

[3] Fisk, Clark & Flagg *v.* Hollander, MacArthur & Mackey, 355, 1883.

[4] Hogg *v.* Emerson, 6 Howard, 483, 1848; Dobson *v.* Carpet Co. 114 U. S. 446, 1884; McComb *v.* Brodie, 1 Woods, 153, 1871; Stevens *v.* Pritchard, 2 Bann. & Ard. 390, 1876.

[5] Graham *v.* McCormick, 11 Fed. Rep. 859, 1880; Graham *v.* Mfg. Co. 11 Fed. Rep. 138, 1880.

differ from each other only in their claims.[1] A plurality of patents cannot, however, be granted for different uses of the same invention.[2] Indeed, all the uses of an invention are covered and secured by a single letters patent for that invention.[3]

§ 180*a*. Only one valid original patent can be granted to an inventor on one invention; and if a plurality of such patents are thus granted, all except the first are void.[4] Where a plurality of similar or approximating original patents have been granted to an inventor, the question of the identity or the non-identity of the inventions may therefore arise; and when such a question arises, it must be determined by the application of the relevant rule of law. The rule for ascertaining whether a reissue patent is for "the same invention" within the meaning of the reissue statute, is not applicable to determining the question of identity between two original patents; because a reissue patent is held to be for "the same invention," within that meaning, where that invention was described in the original patent, and appears therein to have been intended to be secured thereby, whether it was thus secured or not;[5] and because a man does not have two original patents for the same invention, unless each of those patents purports to secure to him a monopoly of that invention. And no monopoly of any invention is secured to any patentee, by any patent, otherwise than by

[1] M'Millin *v.* Rees, 5 Bann. & Ard. 269, 1880.

[2] McComb *v.* Brodie, 1 Woods, 153, 1871.

[3] Roberts *v.* Ryer, 91 U. S. 157, 1875; Western Electric Co. *v.* La Rue, 139 U. S. 606, 1891; Potts *v.* Creager, 155 U. S. 606, 1893; Ligowski Clay Pigeon Co. *v.* Clay Bird Co. 34 Fed. Rep. 331, 1888; Thompson *v.* Gildersleeve, 34 Fed. Rep. 45, 1888; Stegner *v.* Blake, 36 Fed. Rep. 183, 1888; Thompson *v.* Donnell Mfg. Co. 40 Fed. Rep. 383, 1889; Steiner Extinguisher Co. *v.* Adrian, 52 Fed. Rep. 733, 1892; New Departure Bell Co. *v.* Mfg. Co. 64 Fed. Rep. 862, 1894; Wright & Colton Wire-Cloth Co. *v.* Wire-Cloth Co. 67 Fed. Rep. 792, 1895.

[4] Suffolk Co. *v.* Hayden, 3 Wall, 315, 1865; Miller *v.* Eagle Co. 151 U. S. 197, 1894.

[5] Parker & Whipple Co. *v.* Yale Clock Co. 123 U. S. 99, 1887; Freeman *v.* Asmus, 145 U. S. 240, 1892; Corbin Lock Co. *v.* Eagle Lock Co. 150 U. S. 42, 1893.

a claim in that patent, which is co-extensive with that invention.[1] Therefore the rule for ascertaining the identity or the non-identity of the invention or inventions of a plurality of resembling original patents granted to one inventor, is the same as the rule for ascertaining the identity or non-identity of the invention or inventions of a plurality of resembling original patents granted to a plurality of inventors. And that rule consists in comparing the claims of the patents in question, and finding identity or non-identity of invention, according as those claims are found to be co-extensive or not co-extensive.[2]

Claims are co-extensive which specify the same combination, of the same number, of the same parts, with the same features; though the functions which are mentioned in the claims are not co-extensive.[3] That was held to be the character of the respective claims of two patents to the same inventor, in the case of Miller *v.* Eagle Co; and therefore the second of those patents was held to have been granted for the same invention as the first, and to be void. But two claims are not co-extensive, which specify different combinations of parts of a process, machine, or manufacture, even where some of those parts are in each of the combinations;[4] because the claim which specifies fewest of those parts, may be infringed by what will not infringe any claim

[1] M'Millin *v.* Rees, 5 Bann. & Ard. 269, 1880; Delaware Coal & Ice Co. *v.* Packard, 5 Bann. & Ard. 296, 1880; Blades *v.* Rand, 27 Fed. Rep. 97, 1886; Roemer *v.* Peddie, 27 Fed. Rep. 702, 1886; Allison *v.* Brooklyn Bridge, 29 Fed. Rep. 517, 1886; McBride *v.* Plow Co. 44 Fed. Rep. 77. 1890; Maddock *v.* Coxon, 45 Fed. Rep. 579, 1891.

[2] Gold & Silver Ore Co. *v.* Disintegrating Ore Co. 6 Blatch. 311, 1869; Morris *v.* Kempshall Mfg. Co. 20 Fed. Rep. 121, 1884; Pentlarge *v.* New York Bushing Co. 20 Fed. Rep. 314, 1884; Nathan Mfg. Co. *v.* Craig, 49 Fed. Rep. 370, 1892; Dederick *v.* Fox, 56 Fed. Rep. 718, 1893; Stonementz Mach. Co. *v.* Brown Mach. Co. 57 Fed. Rep. 605, 1893.

[3] Miller *v.* Eagle Co. 151 U. S. 189, 1894; Fassett *v.* Ewart Mfg. Co. 58 Fed. Rep. 366; and 62 Fed. Rep. 407, 1894.

[4] Suffolk Co. *v.* Hayden, 3 Wall. 315, 1865; Wheeler *v.* McCormick, 11 Blatch. 334, 1873; Graham *v.* McCormick, 5 Bann. & Ard. 244, 1880; Graham *v.* Crawford Mfg. Co. 11 Fed. Rep, 138, 1880.

specifying more of those parts.[1] That was held to be the character of the respective claims of two patents to the same inventor, in the case of Suffolk Co. *v.* Hayden; and therefore the second of those patents was held to have been granted for another invention than the first, and to be valid. And two claims are not co-extensive, where one of them specifies all the features of any or all of the parts of its subject, while the other omits one of those features;[2] because the latter may be infringed by processes or mechanisms which lack that feature, while the former cannot.[3]

Where a plurality of approximating original patents have been granted to an inventor; and where the question of identity of subject has been decided in the negative, or must evidently be so decided; the question may arise whether the ascertained difference between the two subjects is a patentable difference.[4] In investigating that question, the patent which was applied for last, even if granted first, will be treated as the junior patent; since the dates of the applications, and not the dates of the patents, control in determining the legal effect to be given to two patents issued at different dates, to the same inventor, and the order in which they are to be considered.[5]

§ 181. To construe letters patent, is to determine precisely what inventions they cover and secure. Nothing described in letters patent, is secured thereby, unless it is

[1] Vance *v.* Campbell, 1 Black, 430, 1861; Eames *v.* Godfrey, 1 Wall. 78. 1863; Case *v.* Brown, 2 Wall. 320, 1864; Dunbar *v.* Meyers, 94 U. S. 187, 1876; Fuller *v.* Yentzer, 94 U. S. 297, 1876; Fay *v.* Cordesman, 109 U. S. 420, 1883; Rowell *v.* Lindsay, 113 U. S. 102, 1884; Sargent *v.* Lock Co. 114 U. S. 86, 1884; Shepard *v.* Carrigan, 116 U. S. 597, 1885; Yale Lock Co. *v.* Sargent. 117 U. S. 378, 1885; Derby *v.* Thompson, 146, U. S. 482, 1892; Weatherhead *v.* Coupe, 147 U. S. 335, 1893; Dobson *v.* Cubley, 149 U. S. 120, 1893.

[2] Thompson-Houston Co. *v.* Elmira Ry. Co. 69 Fed. Rep. ——, 1895.

[3] Prouty *v.* Ruggles, 16 Peters, 341, 1842; Sharp *v.* Relssner, 119 U. S. 636, 1886; McClain *v.* Ortmayer, 141 U. S. 425, 1891; Wright *v.* Yuengling, 155 U. S. 52, 1894; Black Diamond Coal Co. *v.* Excelsior Co. 156 U. S. 617, 1895.

[4] Reynolds *v.* Standard Paint Co. 68 Fed. Rep. 487, 1895; Russell *v.* Kern, 72 Off. Gaz. 590, 1895.

[5] Barbed Wire Patent, 143 U. S. 281, 1892.

covered by a claim.[1] And a claim which is clearly narrower than the invention which it was designed to cover, cannot be broadened by construction to correspond with that invention.[2] The construction of letters patent depends therefore upon the construction of their respective claims;[3] and the established rules by means of which claims are properly construed may constitute the next subject of discussion.

§ 182. The phrase "substantially as described," or its equivalent, when such a phrase occurs in a claim, throws the investigator back to the description for means of construction;[4] and that phrase is always implied in claims wherein it is not expressed.[5] The words "substantially as specified" mean substantially as specified in regard to the particular matter which is the subject of the claim;[6] and the same rule applies with the same force to the words "substantially as described." But neither of those phrases will import into a claim any unessential feature of the subject thereof;[7] nor even a detail, which was said to be best

[1] M'Millin *v.* Rees, 5 Bann. & Ard. 269, 1880; Delaware Coal & Ice Co. *v.* Packard, 5 Bann. & Ard. 296, 1880; Blades *v.* Rand, 27 Fed. Rep. 97, 1886; Roemer *v.* Peddie, 27 Fed. Rep. 702, 1886; Allison *v.* Brooklyn Bridge, 29 Fed. Rep 517, 1886; McBride *v.* Plow Co. 44 Fed. Rep. 77, 1890; Maddock *v.* Coxon, 45 Fed. Rep. 579, 1891.

[2] Smith *v.* Macbeth, 67 Fed. Rep. 140, 1895; New Home Sewing Machine Co. *v.* Singer Mfg. Co. 68 Fed. Rep. 226, 1895.

[3] Maddock *v.* Coxon, 45 Fed. Rep. 579, 1891.

[4] Seymour *v.* Osborne, 11 Wallace, 516, 1870; Corn-Planter Patent, 23 Wallace, 181, 1874; Telephone Cases, 126 U. S. 537, 1887; Consolidated Roller Mill Co. *v.* Walker, 138 U. S. 133, 1891.

[5] Matthews *v.* Schoneberger, 4 Fed. Rep. 635, 1880; Westinghouse *v.* Air Brake Co. 2 Bann. & Ard. 57, 1875; Olds *v.* Brown, 41 Fed. Rep. 704, 1890; Foos Mfg. Co. *v.* Thresher Co. 44 Fed. Rep. 599, 1891; Bundy Mfg. Co. *v.* Columbian Co. 59 Fed. Rep. 294, 1894.

[6] Lake Shore R. R. Co. *v.* Car Brake Shoe Co. 110 U. S. 235, 1883, Page Fence Co. *v.* Land, 49 Fed. Rep. 943, 1891; Edison Electric Light Co. *v.* U. S. Electric Lighting Co. 52 Fed. Rep. 309, 1892; McKay & Copeland Lasting Machine Co. *v.* Claflin, 58 Fed. Rep. 354, 1893; Reece Button-Hole Mach. Co. *v.* Globe Mach. Co. 61 Fed. Rep. 961, 1894.

[7] Campbell Printing Press Co. *v.* Marden, 64 Fed. Rep. 786, 1894; Temple Pump Co. *v.* Mfg. Co. 30 Fed. Rep. 442, 1887; Edison Electric Light Co. *v.* U. S. Electric Lighting Co. 52 Fed. Rep. 309, 1892; Pacific Cable Ry. Co. *v.* Butte City Ry. Co. 55 Fed. Rep. 763, 1893.

in the specification, but was afterwards found to be useless.[1] The implication of such a phrase, where it is not expressed, follows from the rule that while descriptions are considered in this connection only for the purpose of construing claims,[2] a claim should always be construed in the light of the description;[3] and the certainty of that implication indicates the propriety of omitting, for the sake of brevity, all such phrases from claims. An uncommon word in a claim is to be construed in the light of the description, rather than in the light of the dictionary;[4] because the patentee presumably knew the description, and may not have known the dictionary; and because the reader of a patent may reasonably be expected to consult the description, before he consults the dictionary, when engaged in trying to learn the meaning of one of its claims.

The phrase "for the purpose set forth" is never implied in a claim, because an inventor is entitled to the exclusive use of his invention for all purposes, whether he sets them all forth in his specification or not.[5] And such a phrase ought never to be expressed in a claim, because it cannot impart validity to a claim otherwise void,[6] and because it may enable persons to avoid infringement, who would otherwise infringe.[7]

The drawings attached to letters patent may be referred to for explanation of anything which the description leaves obscure,[8] but not to supply a total omission of description.[9]

[1] American Dunlop Tire Co. *v.* Erie Rubber Co. 66 Fed. Rep. 558, 1895.

[2] Pitts *v.* Wemple, 1 Bissell, 87, 1855.

[3] Smith *v.* Dental Vulcanite Co. 93 U. S. 493, 1876; Howe Machine Co. *v.* National Needle Co. 134 U. S. 395, 1890; Pacific Cable Railway Co. *v.* Butte City Ry. Co. 58 Fed. Rep. 423, 1893.

[4] Standard Paint Co. *v.* Bird, 65 Fed. Rep. 510, 1894.

[5] Roberts *v.* Ryer, 91 U. S. 157, 1875.

[6] Crescent Brewing Co. *v.* Gottfried, 127 U. S. 168, 1888.

[7] Keystone Bridge Co. *v.* Iron Co. 95 U. S. 278, 1877.

[8] Hogg *v.* Emerson, 11 Howard, 587, 1850.

[9] Gunn *v.* Savage, 30 Fed. Rep. 369, 1887; Wilkln *v.* Covel, 46 Fed. Rep. 926, 1891.

And neither drawings nor descriptions can enlarge claims,[1] unless it be where a claim is limited on its face to the use of the invention in a particular environment, and where the description shows that it was intended to be claimed in other environments also.[2] Claims may be narrowed by limitations in the description,[3] and also by importation by construction of described elements which are necessary to invention or novelty as well as operativeness;[4] but not by inference from the description, where the state of the prior art does not require such an implied limitation.[5]

182*a*. Reference letters or numerals, when used in a claim to indicate, or help indicate, a part or combination covered thereby, do not limit that claim to the specific mechanism shown in the patent; unless the claim must be thus limited by the prior state of the art.[6] But where the novelty of a part or combination, shown in the drawings of a patent, resides entirely in all its particular characteristics, and where that part or combination is specified in a claim by reference letters or numerals, that claim is limited to a part or combination having those particular characteristics; for if not thus restricted, the claim would be void for want of novelty.[7] But the same rule applies, in an otherwise similar case, for the same reason, where the part or combination, covered by a claim, is indicated therein in some other way than by reference letters or numerals. A rule which would give, to a reference letter or numeral in a claim, a more narrowing effect than is called for by the prior state of the art, would

[1] Railroad Co. *v.* Mellon, 104 U. S. 112, 1881; White *v.* Dunbar, 119 U. S. 51, 1886; Howe Machine Co. *v.* National Needle Co. 134 U. S. 394, 1890; McClain *v.* Ortmayer, 141 U. S. 419, 1891.

[2] LaRue *v.* Electric Co. 28 Fed. Rep. 85, 1886; LaRue *v.* Electric Co. 31 Fed. Rep. 83, 1887.

[3] Sargent *v.* Lock Co. 114 U. S. 86, 1884; Crawford *v.* Heysinger, 123 U. S. 606, 1887; McClain *v.* Ortmayer, 141 U. S. 419, 1891.

[4] Hartshorn *v.* Barrel Co. 119 U. S. 679, 1886; Consolidated Roller Mill Co. *v.* Walker, 138 U. S. 132, 1891.

[5] Campbell Printing Press Co. *v.* Marden, 64 Fed. Rep. 785, 1894.

[6] Campbell Printing Press Co. *v.* Marden, 64 Fed. Rep. 785, 1894.

[7] Knapp *v.* Morss, 150 U. S. 228, 1893; Lehigh Valley Railroad Co. *v.* Kearney, 158 U. S. 469, 1895.

be an artificial rule of interpretation; but the object of the patent law is to secure to inventors what they have invented, and that object is not to be defeated by the application of any such rule.[1]

§ 183. Claims which are functional in form; that is to say, claims which literally purport to cover a result rather than a process or a thing, are properly construed to cover only the process of the thing which produces that result, for otherwise such claims would be void.[2] And a claim which literally purports to cover a process performed by machinery, is properly construed to cover the machinery itself, and not any process performed thereby.[3]

§ 184. The state of the art, to which an invention belongs, at the time that invention was made, must be considered in construing any claim for that invention,[4] although the art may have been advanced to that stage, by a prior invention of the same inventor.[5] The leading cases on this subject are McCormick *v.* Talcott,[6] and Railway Co. *v.* Sayles,[7] and Morley Machine Co. *v.* Lancaster.[8]

The doctrine of the first of these cases is as follows. The original inventor of a machine, will have a right to treat as infringers all who make machines operating on the same

[1] Topliff *v.* Topliff, 145 U. S. 171, 1892.

[2] Fuller *v.* Yentzer, 94 U. S. 288, 1876; Parham *v.* Buttonhole Co. 4 Fisher, 468, 1871; Hitchcock *v* Tremaine, 4 Fisher, 508, 1871; Coes *v.* Collins Co. 9 Fed. Rep. 905, 1882; Henderson *v.* Stove Co. 2 Bann. & Ard. 608, 1877; Palmer *v.* Gatling Gun Co. 8 Fed. Rep. 513, 1881. Columbus Watch Co. *v.* Robbins, 64 Fed. Rep. 395, 1894.

[3] Smith & Egge Mfg. Co. *v.* Bridgeport Chain Co. 46 Fed. Rep. 395, 1891.

[4] Carlton *v.* Bokee, 17 Wallace, 463, 1873; Washing-Machine Co. *v.* Tool Co. 20 Wallace, 342, 1873; Florsheim *v.* Schilling, 137 U. S. 71, 1890; The Roller Mill Patent, 156 U. S. 269, 1895; Dederick *v.* Seigmund, 51 Fed. Rep. 235, 1892; Brush Electric Co. *v.* Electric Imp. Co. 52 Fed. Rep. 972. 1892; Boston Lasting Mach. Co. *v.* Woodward, 53 Fed. Rep. 481, 1893; Stirrat *v.* Excelsior Mfg. Co. 61 Fed. Rep. 981, 1894.

[5] Celluloid Mfg. Co. *v.* Cellonite Mfg. Co. 42 Fed. Rep. 906, 1890.

[6] McCormick *v.* Talcott, 20 Howard, 402, 1857.

[7] Railway Co. *v.* Sayles, 97 U. S. 554, 1878.

[8] Morley Machine Co. *v.* Lancaster, 129 U. S. 273, 1889.

principle, and performing the same functions, by analogous means, or equivalent combinations; even though the infringing machine be an improvement on the original, and patentable as such. 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 any other improvement which is not a mere colorable invasion of the first.

The doctrine of the Sayles case is as follows. If one inventor, in a particular art, precedes all the rest, and strikes out something which underlies all that they produce, he subjects them to tribute. But if the advance toward the thing desired is gradual, so that no one can claim the complete whole, then each inventor is entitled to the specific form of device which he produced, 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.

The doctrine of the Morley case is as follows: Where an invention is primary, any subsequent improvement which employs substantially the same means, to accomplish the same result, is within the scope of a proper patent on the primary invention, although the subsequent contrivance may contain valuable improvements; but secondary patents must be more narrowly construed than primary patents.

The meaning of these three cases seems to be that every inventor is entitled to claim whatever he was the first to invent. If A. B. is the first to invent mechanism to perform a particular work, and if his mechanism is substantially incorporated into subsequent machines which do that work, then A. B. is entitled to such a construction of his patent as will be infringed by those later machines; but if C. D. is a mere improver on A. B.'s machine, C. D. is not entitled to such a construction of his patent, as will cover the machines of still later inventors, who have improved on A. B.'s

machine in a substantially different manner. It follows from those doctrines that C. D.'s patent must be construed in the light of A. B.'s machine, and indeed of every other similar and older structure; which is the same thing as saying that every patent must be construed in the light of the state of the art, at the time the invention it covers was produced.

§ 185. "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."[1] "Patents for inventions 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 to destroy the right of the inventor."[2] "While it is undoubtedly true that a patentee may so restrict his claim as to cover less than what he invented, or may limit it to one particular form of a machine, excluding all other forms, though they also embody his invention, yet such an interpretation should not be put upon his claim if it can fairly be construed otherwise."[3] "In a case of doubt, where the claim is fairly susceptible of two constructions, that one will be adopted, which will preserve to the patentee his actual invention."[4] "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 a too strict and technical adherence to the letter of the statute, or by the application of artificial rules of interpretation."[5]

[1] Rubber Co. *v* Goodyear, 9 Wallace, 788, 1869.

[2] Turrill *v*. Railroad Co. 1 Wallace, 491, 1863.

[3] Winans *v*. Denmead, 15 Howard, 330, 1853.

[4] McClain *v*. Ortmayer, 141 U. S. 425, 1891.

[5] Topliff *v*. Topliff, 145 U. S. 171, 1892.

Those are the declarations of the Supreme Court relevant to the proper liberality to be observed in construing patents. That liberality as often shows itself in a narrow construction as in a broad one; for narrow construction may be as necessary to establish the validity of a patent, as a broad construction is to lay the foundation for proof of its infringement. Therefore when it becomes necessary to construe a claim narrowly, in order that its novelty may not be negatived by the prior art, or its validity otherwise overthrown, courts will give such a narrow construction, if they can do so consistently with the language of the claim and of the description.[1] On the other hand, a claim will not be narrowed by importing into it, by construction, any dispensable element, in order to enable an infringer to escape the consequences of his infringement.[2]

§ 186. "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."[3] "As patents are procured *ex parte*, the public is not bound by them, but the patentees are. And the latter cannot show that their invention is broader than the terms of their claim; or, if broader, they must be held to have surrendered the surplus to the public."[4] "If the language of the specification and claim shows clearly what the patentee desired to secure as a monopoly, nothing can be held

[1] Klein *v.* Russell, 19 Wallace, 433, 1873; Jones *v.* Barker, 11 Fed. Rep. 600, 1882; Stevenson *v.* Macowan, 31 Fed. Rep. 826, 1887; Consolidated Roller Mill Co. *v.* Coombs, 39 Fed. Rep. 30, 1889; Steam Gauge and Lantern Co. *v.* Williams, 50 Fed. Rep. 931, 1892.

[2] Lamson Cash Reg. Co. *v.* Keplinger, 45 Fed. Rep. 249, 1890.

[3] Burns *v.* Myer, 100 U. S. 672, 1879.

[4] Keystone Bridge Co. *v.* Iron Co. 95 U. S. 278, 1887.

to be an infringement, which does not fall within the terms which the patentee has himself chosen to express his intention."[1]

These are the declarations of the Supreme Court relevant to the proper strictness to be observed in construing patents; and they apply to primary patents as much as to secondary patents.[2] Therefore, when a claim clearly covers a combination of certain elements, it cannot, by construction, be so altered as to cover more elements, so as not to be invalid,[3] or to cover fewer elements, and thus be rendered more likely to be infringed,[4] or to cover other elements in place of some that may be omitted, but which are not equivalents therefor.[5] So also, a claim for a process, substantially as described, cannot be construed to cover an incidental process set forth in the description, but merely recommended there, instead of being required or being stated to be essential to the principal process of the patent.[6]

§ 187. Letters patent may be construed in the light of the contemporaneous intention of the inventor and of the Patent Office; and to this end recourse may be had to the files of the application papers to see what changes were made in the description and claims while the application was pending in the Patent Office.[7] And where such a change was a broadening one, it cannot be construed away in order to

[1] McClain *v.* Ortmayer, 141 U. S. 425, 1891.

[2] Groth *v.* Postal Supply Co. 61 Fed. Rep. 287, 1894.

[3] Howe Machine Co. *v.* National Needle Co. 134 U. S. 394, 1890; Morgan Envelope Co. *v.* Albany Paper Co. 152 U. S. 429, 1894; Stiles *v.* Rice, 29 Fed. Rep. 445, 1887; Wollensak *v.* Sargent, 41 Fed. Rep. 55, 1890; Westinghouse *v.* Edison Electric Light Co. 63 Fed. Rep. 592, 1894.

[4] Shepard *v.* Carrigan, 116 U. S. 597, 1885; Sutter *v.* Robinson, 119 U. S. 541, 1886; McClain *v.* Ortmayer. 141 U. S. 425, 1891.

[5] Sackett *v* Smith, 42 Fed. Rep. 852, 1890.

[6] Sewell *v.* Jones, 91 U. S. 185, 1875; Hollilday *v.* Pickhardt, 29 Fed. Rep. 858, 1887.

[7] Crawford *v.* Heisinger, 123 U. S. 602, 1887; Trader *v.* Messmore, 1 Bann. & Ard. 639, 1875; Bate Refrigerating Co. *v.* Eastman, 24 Fed. Rep. 649, 1885; Williams *v.* Rubber Shoe Co. 49 Fed. Rep. 251, 1892.

ascribe validity to the patent.[1] But no subsequent application by the same inventor for another patent is admissible in this behalf;[2] except where the patent contains a disclaimer of matter said therein to be claimed in another patent or application of the same inventor, in which case that other patent or application is admissible to aid in ascertaining the scope of the disclaimer.[3]

§ 187*a*. Where an applicant, on the rejection of his application, inserted in consequence of that rejection, limitations and restrictions into his specification, 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 if such limitations and restrictions were not contained in it.[4] And where an applicant materially modified a claim, in obedience to a requirement of the Patent Office, it will not be construed as it would have been if it had not been modified.[5] Neither can a patentee who cancelled a claim in his application, after it was rejected by the Patent Office for want of invention or for want of novelty, afterwards successfully contend that some other claim of his patent shall be construed to be co-extensive with the one rejected.[6] Nor can a disclaimer, which was inserted by an applicant in his application in pursuance of a requirement of the Patent Office, be eliminated from his patent by construction.[7] And where an applicant cancelled a portion of his application, in pursuance of a decision in the Patent Office that it could not be covered by one application with the other portions

[1] Morgan Envelope Co. *v.* Albany Paper Co. 152 U. S. 429, 1894; Johnson *v.* Olsen, 61 Fed. Rep. 833, 1894.

[2] Edison Electric Light Co. *v.* U. S. Electric Lighting Co. 47 Fed. Rep. 462, 1891.

[3] National Typographic Co. *v.* New York Typograph Co. 46 Fed. Rep. 115, 1891.

[4] Roemer *v.* Peddie, 132 U. S. 317, 1889.

[5] Phœnix Caster Co. *v.* Spiegel, 133 U. S. 368, 1890; Williams *v.* Rubber Shoe Co. 49 Fed. Rep. 251, 1892.

[6] Royer *v.* Coupe, 146 U. S. 532, 1892; Corbin Cabinet Lock Co. *v.* Eagle Lock Co. 150 U. S. 40, 1893; Douglas *v.* Abraham, 50 Fed. Rep. 422, 1892; J. L. Mott Iron Works *v.* Standard Mfg. Co. 53 Fed. Rep. 821, 1893.

[7] Stahl *v.* Williams, 52 Fed. Rep. 651, 1892.

thereof, a patent granted upon the application thus reduced, cannot be construed to be co-extensive with what it would have been but for such cancellation.[1] And these rules apply even where the action of the Patent Office was erroneous, or that of the applicant unnecessary.[2]

But merely incidental amendments, which are not made in pursuance of any references or real reasons given by the Patent Office, but are made in deference to Patent Office preferences for particular phraseology, will not be construed to limit claims so as to make them narrower than the inventions they were designed to cover.[3] And no amendment made to meet an objection of the Patent Office will be construed to disclaim the patentee's actual invention, if that construction can be avoided without doing violence to the obvious meaning of the language.[4]

§ 188. The laws which were in force when any particular patent was granted, are the laws according to which it must be construed;[5] and a special statute relevant to any particular patent is ingrafted on the general patent statutes, and must be construed harmoniously with them.[6]

§ 189. Questions of construction are questions of law for the judge, not questions of fact for the jury.[7] As it cannot be expected, however, that judges will always possess the requisite knowledge of the meaning of the terms of art or science used in letters patent, it often becomes necessary that they should avail themselves of the light furnished by experts relevant to the significance of such words and phrases.[8] The judges are not, however, obliged to blindly follow such testimony. They may disregard it if it appears

[1] Macbeth *v.* Gillinder, 54 Fed. Rep. 170, 1889.

[2] Lapham Dodge Co. *v.* Severin, 40 Fed. Rep. 763, 1889; Shaw Stocking Co. *v.* Pearson, 48 Fed. Rep. 236, 1891.

[3] Rhodes *v.* Lincoln Press Drill Co. 64 Fed. Rep. 220, 1894.

[4] Westinghouse *v.* Brake Co. 66 Fed. Rep. 1006, 1895.

[5] McClurg *v.* Kingsland, 1 Howard, 202, 1843.

[6] Evans *v.* Eaton, 3 Wheaton, 454, 1818; Bloomer *v.* McQuewan, 14 Howard, 539, 1852.

[7] Winans *v.* Denmead, 15 Howard, 330, 1853; Coupe *v.* Royer, 155 U. S. 565, 1894.

[8] Loom Co. *v.* Higgins, 105 U. S. 580, 1881.

to them to be unreasonable.[1] While the testimony of experts relevant to the meaning of particular words or phrases in letters patent is to this extent admissible, such testimony is wholly inadmissible relevant to the construction of the letters patent as a whole.[2]

§ 190. In the absence of contrary evidence, the invention covered by a particular letters patent is presumed to be identical with that covered by the application on which those letters patent were granted.[3]

§ 191. All persons are bound to take notice of the contents of all letters patent of the United States, because those letters patent are matters of public record.[4]

[1] Winans *v.* Railroad Co. 21 Howard, 88, 1858.

[2] Corning *v.* Burden, 15 Howard, 252, 1853.

[3] Loom Co. *v.* Higgins, 105 U. S. 580, 1881.

[4] Boyden *v.* Burke, 14 Howard, 575, 1852.

CHAPTER VIII.

DISCLAIMERS.

192. Statutory authorization of disclaimers.
193. Statutory prescriptions, relevant to disclaimers.
194. Errors which justify disclaimers.
195. Mistakes of fact, relevant to novelty.
196. Mistakes of law, relevant to invention.
197. Claims void for want of utility.
198. Combination claims.
199. Compound claims.
200. Immaterial claims.
201. Reissue claims.
202. Fraudulent or deceptive intention
203. Effect of unreasonable delay to file a disclaimer.
204. Beginning of unreasonable delay to file a disclaimer.
205. Costs, where a necessary disclaimer has not been filed.
206. Extent of disclaimant's interest.
207. Construction of letters patent after a disclaimer.
208. Disclaimers filed pending litigation.
209. Disclaimers demanded by judicial decisions.

§ 192. THE statutory provisions relevant to disclaimers originated in 1837, and have never been substantially changed. Sections 7 and 9 of the Patent Act of that year,[1] embodied those provisions; and those sections continued in force till July 8, 1870, when they were substantially re-enacted as Sections 54 and 60 of the Consolidated Patent Act of that date.[2] In 1874, the latter sections were, in their turn, re-enacted, without any material change, as Sections 4917 and 4922 of the Revised Statutes. It would have been better statute writing, if those two sections had always been blended together into one clear and comprehensive paragraph. Referring to the same subject, and standing, as they always have, in the same statute, they must undoubtedly

[1] 5 Statutes at Large, Ch. 45, Sections 7 and 9, p. 193.

[2] 16 Statutes at Large, Ch. 230, Sections 54 and 60, p. 206; Taylor *v.* Archer, 8 Blatch. 318, 1871.

be construed together;[1] and the law they embody, must be set forth, by extracting from both sections, all the material meaning of both, and by incorporating that meaning, together with the case law of the subject, into one systematic explanation. Let that therefore be the present attempt.

§ 193. Whenever through inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, a patentee has, in his specification, claimed materially more than that of which he was the first inventor, his patent shall be valid for whatever is justly his own; and every such patentee, his executors, administrators, or 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 such part, if it is a material and substantial part of the thing patented, and is definitely distinguishable from the parts claimed without right. 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 was entered in the Patent Office, before the commencement of the suit. But no patentee shall be entitled to maintain any such suit, if he has unreasonably neglected or delayed to enter a disclaimer. And any such patentee, his heirs or assigns, whether of the whole or of any sectional interest therein, may, on payment of the fee required by law, make disclaimer of such parts of the subject-matter of the patent, as he shall not choose to longer claim, 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 shall thereafter be considered a part of the original specification, to the extent of the interest possessed by the disclaimant 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

[1] Hailes *v.* Stove Co. 123 U. S. 588, 1887; Sessions *v.* Romadka, 145 U. S. 41, 1892.

relate to the question of unreasonable neglect or delay in filing it.[1]

§ 194. The primary fact which brings the law stated in the last section into play, is the claiming by a patentee of materially more in his patent than he was entitled to claim.[2] Such errors may spring from inadvertence. That is to say, they may spring from failure, on the part of the writer of the claims, to exercise proper care in penning them. So also, they may arise from accident: from chances against which even diligent care cannot always guard. But mistake is the most common source of such errors; and such errors may arise from mistake of fact or from mistake of law.[3]

§ 195. Mistakes of fact, relative to how much of a described process, machine or manufacture was first invented by its patentee, frequently follow from lack of full information touching what was previously invented by others in the same department of the useful arts. Litigation may alone disclose the fact that the patentee's claims are too numerous or too broad to be consistent with novelty. Whenever this occurs, it is clear that the patentee ought no longer to appear to hold an exclusive right to anything which he was not the first to invent. To this end, the statute provides that he must disclaim that part, within a reasonable time, or, in default thereof, must suffer the statutory consequences. On the other hand it is equally clear, that if the patentee is willing to eliminate from his claims, everything which later information shows had been invented before him, he ought to be allowed to retain his exclusive right to the residue. To this end, the statute provides, that if within a reasonable time, he disclaims what was another's, he shall be enabled to enforce his patent as far as it covers what was his own invention. But a disclaimer cannot confine

[1] Revised Statutes, Sections 4917 and 4922 blended together.

[2] Hailes *v.* Stove Co. 123 U. S. 588, 1887; Brush Electric Co. *v.* Ft. Wayne Electric Light Co. 40 Fed. Rep. 835, 1889.

[3] Electrical Accumulator Co. *v.* Julien Electric Co. 38 Fed. Rep. 134, 1889.

a claim to ground which does not appear in the patent to constitute an invention; even where that ground is narrower than that which was originally claimed in the patent.

§ 196. A mistake of law, which consists in claiming something not patentable, may also be remedied by disclaimer.[1] The law which requires and permits a patentee to disclaim, is not penal but remedial. It is intended for the protection of the patentee, as well as for the protection of the public. The evil to be remedied is the same, where a patentee has claimed more than he ought, whether that result sprang from the fact that another invented it before him, or sprang from the fact that what he produced was not an invention at all. For this reason, the Supreme Court held that the eighth claim of Morse might be disclaimed, after having been held void for want of patentability, with the same effect as though it had been held void for want of novelty. The same reason would also permit a patentee to disclaim any claim which is void for want of invention. Indeed the statute expressly applies to such a case, for no man can be the first inventor of anything which is not an invention. He may be its first discoverer, if it is a law of nature, or its first constructor, if it is a product of mere mechanical skill, but its first inventor he cannot be. And a mistake of law, which consisted in unlawfully claiming, in one patent, several independent inventions, may be remedied by disclaiming enough claims to give to the patent the necessary unity.[2]

§ 197. There appears to be no warrant in the statute, for disclaiming any claim which is void for want of utility, and for no other cause. An inventor of a new thing may generally ascertain its character in point of utility before applying for a patent. If he can do so, he ought to do so, and thus shield the public from a waste of time involved in examining and judging useless contrivances. Where a patent has but one claim, and where the matter covered by

[1] O'Reilly *v.* Morse, 15 Howard, 120, 1853.

[2] Sessions *v.* Romadka, 145 U. S. 40, 1892.

that claim is useless, no disclaimer could make that patent valid. Where a part only of the claims of a patent are void for want of utility, and for no other cause, the void claims are not injurious to the valid ones, and therefore no disclaimer is needed in any such case. Where a claim purports to cover a thing constructed in either of several ways, and where that thing is useless if constructed in one of those ways, and useful if constructed in another, the claim cannot be limited to the useful construction, by means of any disclaimer; for it is not the office of a disclaimer to reform or to alter the description or claim of an invention.[1] Its function is to eliminate from letters patent all claims for inventions which were not new with the patentee, and all claims for things which were not inventions with him.[2] And no disclaimer is necessary where some, but not all, of the claims of a patent are void, by reason of constructive abandonment, resulting from public use or sale of the subjects of those particular claims, more than two years prior to the application for the patent.[3]

Where two patents are applied for on the same day, and are granted on the same day, to the same inventor, for the the same invention; the owner of them has the lawful power to choose which one of those patents he will retain, but he must somehow relinquish the other.[4] He cannot rid himself of his superfluous patent, in such a case, by means of a disclaimer under the disclaimer statutes; but he can undoubtedly do so by means of a surrender of his superfluous patent uncoupled with any application for a reissue thereof.

§ 198. The right to file disclaimers is expressly limited to cases where the actual invention of the patentee is a material and substantial part of the thing patented.[5] Parts of

[1] Hailes *v.* Stove Co. 123 U. S. 587, 1887; White *v.* Mfg. Co. 24 Off. Gaz. 205, 1883.

[2] Cartridge Co. *v.* Cartridge Co. 112 U. S. 642, 1884.

[3] Whitney *v.* B. & A. R. Co. 50 Fed. Rep. 72, 1892.

[4] Electrical Accumulator Co. *v.* Brush Electric Co. 52 Fed. Rep. 138, 1892.

[5] Revised Statutes, Sections 4917 and 4922.

combinations do not come within this category, for a combination is an entirety; and if one of the elements is given up, the thing claimed disappears. The disclaimer provisions cannot be made to modify and thereby save combination claims, for unless the combination is maintained, the whole of the invention fails.[1]

§ 199. The statutes also provide, that in order to save a patent by a disclaimer, the part retained must be definitely distinguishable from the part eliminated. It does not follow, however, that each claim of a patent must be wholly disclaimed or wholly retained. On the contrary, there are cases where two or more inventions are covered by one claim; and in such cases, a disclaimer may be made to expunge one of those inventions from that claim, without disturbing the others.[2]

In the first of the cases just cited, the claim was: "The forming of packing for pistons or stuffing boxes of steam engines, and for like purposes, out of saturated canvas, so cut that the thread or warp shall run in a diagonal direction from the line or centre of the roll of packing, and rolled into form, either in connection with the india-rubber core, or other elastic material, or without, as herein set forth." Litigation showed that such a thing, without a core, was old, and the patentee therefore entered a disclaimer to that part of the claim which covered the packing without the core. Justice BLATCHFORD held that disclaimer to be proper, and to be effectual.

In the second case cited, the claim was "The use and application of glue, or glue composition, in the tubing, substantially as described, for the purpose of making the flexible tubing gas tight, whether of cloth or rubber or other gum." During the pendency of the suit, and after considerable testimony had been taken, a disclaimer was entered to

[1] Vance *v.* Campbell, 1 Black, 429, 1861.

[2] Tuck *v.* Bramhill, 6 Blatch. 95, 1868; Taylor *v.* Archer, 8 Blatch. 318, 1871; Electrical Accumulator Co. *v.* Julien Electric Co. 38 Fed. Rep. 134, 1389.

that part of the claim of the patent which claimed as an improvement in flexible tubing for illuminating gas, the use and application of glue; thereby limiting the claim to the use and application of glue composition in the tubing, substantially as described. This disclaimer was also upheld by the same distinguished chancellor who upheld the disclaimer in the other case.

§ 200. There is one difference between the two disclaimer sections, of the Revised Statutes, which it is now requisite to mention. Section 4917 contemplates disclaimers as being proper whenever a patentee has claimed more than that of which he was the first inventor; while Section 4922 attends only to cases wherein the excess is a material or substantial part of the thing patented. This qualification should be inserted in the two sections, as construed together, because Section 4922 is the only one that prescribes any evil result from a failure to disclaim. Neither section visits any infliction on the patentee, for omitting to disclaim anything which is an immaterial part of the thing patented. If, therefore, a patentee omits to disclaim such a part when he discovers it to have been known before his invention thereof, or learns that it is not an invention at all, he thereby loses no right, and incurs no inconvenience.[1] To file a disclaimer, in such a case, is an act which is at once harmless and unnecessary.

§ 201. Reissue patents, as well as original patents, are entitled to the benefits of the law relevant to disclaimers; and that too, even where the matter disclaimed was not claimed in the original, but only in a reissue granted upon its surrender.[2] But no claim which was in an original patent, and is absent from a reissue thereof, can be reclaimed by a disclaimer of the changes made by the

[1] Hall *v.* Wiles, 2 Blatch. 199, 1851; Peek *v.* Frame, 5 Fisher, 212, 1871.

[2] O'Reilly *v.* Morse, 15 Howard, 62, 1853; Gage *v.* Herring, 107 U. S. 646, 1882; Yale Lock Co. *v.* Sargent, 117 U. S. 553, 1886; Schillinger *v.* Gunther, 17 Blatch. 69 1879; Tyler *v.* Galloway, 12 Fed. Rep. 567, 1882.

reissue.[1] Where an original patent was surrendered, and then reissued in several divisions; that is to say, where several reissue patents were granted for separate inventions described in an original patent, a suit based upon one of those divisions will be unaffected by the fact that a claim in another division, is invalid for want of novelty, or for want of invention. The statute relevant to disclaimers has no application to such cases.[2]

§ 202. Fraudulent or deceptive intention, if it existed on the part of a patentee, when claiming materially more than that of which he was the first inventor, or when claiming that which was not patentable, will rightly prevent him from receiving any benefit from a disclaimer. The statutory provision is in harmony with the principles of equity: a system which always declines to extract persons from trouble which arose from their own moral turpitude.

§ 203. The statement in Section 4917, that under the circumstances therein mentioned, a patentee's patent shall be valid as to all that part of the invention which is truly and justly his own, is to be construed in connection with the provision in Section 4922, that the patentee shall not be entitled to recover in any suit, if he unreasonably neglects or delays to enter a disclaimer. When so construed, the two sections enact that where a patentee claims materially more than that which he was the first to invent, his patent is void, unless he has preserved the right to disclaim the surplus, and that he may fail to preserve that right, by unreasonable neglect or delay to enter a disclaimer in the Patent Office.

§ 204. Neglect or delay to file a necessary disclaimer, begins when knowledge is brought home to the patentee, that the inventor upon whose account the patent was granted, was not the first inventor of a particular thing claimed in the patent, and material to the subject of the patent as a whole.[3] If, however, there is reasonable ground for difference

[1] McMurray *v.* Mallory, 111 U. S. 109, 1883.

[2] Elastic Fabrics Co. *v.* Smith, 100 U. S. 111, 1879.

[3] O'Reilly *v.* Morse, 15 Howard, 121, 1853; Singer *v.* Walmsley, 1 Fisher, 558, 1860; Parker *v.* Stiles, 5 McLean, 44, 1849.

of opinion relevant to the question whether the prior patent, or the prior process, or the prior thing, so brought home to the knowledge of the patentee, really negatives the novelty of anything claimed by him; then unreasonable delay to file a disclaimer will not begin until that question is finally settled by the courts.[1] Even a still further very short delay is not fatal to the right to disclaim;[2] and if the patent has expired when the occasion for a disclaimer is established, no disclaimer can be filed or is necessary.[3] The question whether the delay to enter a disclaimer, in a particular case, was or was not unreasonable, is a mixed question of law and fact, to be decided by the jury in accordance with proper instructions from the court.[4] In the case of Seymour *v.* McCormick,[5] the Supreme Court, when speaking of the question of the necessity for a disclaimer in that case, and of the question of unreasonable delay in entering one, said: "Under the circumstances, the question is one of law." The peculiar collocation of the paragraph, has caused some courts,[6] to suppose that the question thus characterized, was the question of delay; but really it must have been the question of necessity. The latter depended wholly upon the construction of the patent, and was therefore a question of law. Whether or not a particular instance of delay was unreasonable, must largely depend upon the circumstances which surrounded the person chargeable therewith. What those circumstances were is a question of fact. Whether they constituted an excuse for the delay is a question of law. Whether or not a particular instance

[1] Seymour *v.* McCormick, 19 Howard, 106, 1856; Potter *v.* Whitney, 1 Lowell, 87, 1866; Hill *v.* Biddle, 27 Fed. Rep. 561, 1886.

[2] Kittle *v.* Hall, 30 Fed. Rep. 39, 1887.

[3] Yale Lock Co. *v.* Sargent, 117 U. S. 553, 1885.

[4] Brooks *v.* Jenkins, 3 McLean, 449, 1844; Washburn *v.* Gould, 3 Story, 122, 1844; Burden *v.* Corning, 2 Fisher, 477, 1864; Office Specialty Co. *v.* Globe Co. 65 Fed. Rep. 605, 1895.

[5] Seymour *v.* McCormick, 19 Howard, 106, 1856.

[6] Singer *v.* Walmsley, 1 Fisher, 558, 1860; Parker *v.* Stiles, 5 McLean, 44, 1849.

of delay to enter a necessary disclaimer was unreasonable, is therefore a mixed question of law and of fact.

§ 205. No costs can be recovered in any infringement suit, the final decision of which shows a necessity for a disclaimer, unless such a disclaimer was entered in the Patent Office before the commencement of the suit.[1] This rule applies even to cases where the delay to enter the disclaimer was not unreasonable.[2] But a verdict on all the claims of a patent entitles the plaintiff to costs, even if, after that verdict, he files a disclaimer to one or more of the claims of that patent.[3]

Judge LOWELL remarked that where a plaintiff sues on a part of the claims of his patent only, the defendant will not be permitted to raise any issue relevant to the validity of any other claim, with intent to show a necessity for a disclaimer, and thus to escape costs.[4] His Honor based this opinion on the fact that more expense might be incurred in litigating such a collateral issue, than would be justified by the amount of the costs depending upon its decision. But general rules of law can hardly be based on considerations of what is expedient in a part only of the cases to which those rules purport to apply. It may happen that the costs involved in a particular litigation are large, while the expense involved in proving a necessity for a disclaimer of some one claim of the patent is small. The difference between the two sums may sometimes be measured by thousands of dollars. A judgment or a decree may be largely lessened, and justly lessened, if a defendant is permitted to prove a necessity for a disclaimer of a claim not sued upon. In view of these considerations, it is possible that the law will finally be settled otherwise than as Judge LOWELL's remark would seem to forecast.

[1] Revised Statutes, Section 4922; Reed *v.* Cutter, 1 Story, 591, 1841; Burdett *v.* Estey, 5 Bann. & Ard. 309, 1880; Proctor *v.* Brill, 16 Fed. Rep. 791, 1883.

[2] O'Reilly *v.* Morse, 15 Howard, 121, 1853; Yale Lock Co. *v.* Sargent, 117 U. S. 553, 1885.

[3] Peek *v.* Frame, 5 Fisher, 212, 1871.

[4] American Bell Telephone Co. *v.* Spencer, 8 Fed. Rep. 512, 1881.

§ 206. Disclaimers are required to state the extent of the interest which is held by the disclaimant in the patent involved.[1] If, however, the disclaimant is the original patentee, and the disclaimer states that fact, and is silent respecting any transfer of any part of it, the fair implication is that he still owns the whole, and that implication is a sufficient statement of the interest of the patentee.[2] So also, if an executor or administrator, in whose name a patent has been extended, states in his disclaimer that he is the patentee, and refers to the patent as showing his interest, that is a sufficient statement of his interest in the patent.[3] But if only one of several joint owners or owners in common of a patent should file a disclaimer, no other owner could avail himself of its benefits, nor could it affect a suit brought by all the owners jointly.[4]

§ 207. The construction of a patent after a disclaimer has been properly entered, must be the same that it would have been if the matter so disclaimed had never been claimed.[5] No disclaimer, in order to be effectual, needs to eliminate anything from the description; though no harm will follow from such elimination, if it is confined to matter which is disclaimed, and which is not needed to show the nature of the invention which, after disclaimer, the patent continues to cover.[6]

§ 208. Disclaimers may be filed pending a suit on the patent,[7] but in that event the plaintiff, even if he prevails in the suit, can recover no costs.[8] The filing of a disclaimer at that stage of affairs does not affect the pending action, except so far as it may bear upon the question whether or

[1] Revised Statutes, Section 4917.

[2] Silsby *v.* Foote, 14 Howard, 221, 1852.

[3] Brooks *v.* Jenkins, 3 McLean, 432, 1844.

[4] Wyeth *v.* Stone, 1 Story, 294, 1840.

[5] Dunbar *v.* Myers, 94 U. S. 187, 1876; Schwarzwalder *v.* Filter Co. 66 Fed. Rep. 157, 1895.

[6] Schillinger *v.* Gunther, 17 Blatch. 69, 1879.

[7] Filley *v.* Stove Co. 30 Fed. Rep. 434, 1887.

[8] Smith *v.* Nichols, 21 Wallace, 117, 1874.

not there was unreasonable delay before filing it.[1] That question is an open one until decided on its merits, regardless of whether the disclaimer was filed before or after the bringing of the suit.[2] The sooner a necessary disclaimer is filed, the less danger exists that the preceding delay will be held unreasonable. For that reason, and for that reason alone, it is sometimes wiser to file a disclaimer pending a suit than to wait till the case is heard, or still longer, till it is decided.

§ 209. An important question arises when a Circuit Court, before any disclaimer has been filed, decides that a part of the claims of the patent in suit are valid, and have been infringed by the defendant, while another part are void for want of novelty, or for want of invention, and ought therefore to be disclaimed. Ought the chancellor in such a case to enter a decree for an injunction and an account on the valid claims, and allow the complainant to disclaim the others or not, as he deems most prudent? Or ought the chancellor to refuse both the injunction and the account till the complainant shall have filed a disclaimer? Or ought the chancellor to grant an injunction whether the complainant disclaims or not, while refusing an account till after he shall have done so? Or ought the chancellor, in case the complainant declines to disclaim, to refuse an injunction, and grant a decree for an account? The second of these courses has been the practice followed by Justice BLATCHFORD;[3] and by Judge WALLACE;[4] Judge SHIPMAN[5] and Judge WHEELER,[6] and also by Justice MATTHEWS and

[1] Revised Statutes, Section 4917; Sessions *v.* Romadka, 145 U. S. 41, 1892; Tuck *v.* Bramhill, 6 Blatch. 95, 1868.

[2] Reed *v.* Cutter, 1 Story, 590, 1841.

[3] Myers *v.* Frame, 8 Blatch. 446, 1871; Burdett *v.* Estey, 15 Blatch. 349, 1878; Christman *v.* Rumsey, 17 Blatch. 148, 1879.

[4] Brainard *v.* Cramme, 12 Fed. Rep. 621, 1882; Union Paper Bag Mach. Co. *v.* Waterbury, 39 Fed. Rep. 392, 1889; Steam Gauge & Lantern Co. *v.* Kennedy, 41 Fed. Rep. 39, 1889; Smead *v.* School District, 44 Fed. Rep. 617, 1890.

[5] Tyler *v.* Galloway, 12 Fed. Rep. 567, 1882.

[6] Matthews *v.* Spangenberg, 14 Fed Rep. 350, 1882; Hake *v.* Brown, 37 Fed. Rep. 783, 1889.

Judge SAGE.[1] But Judge COXE said, in 1891,[2] that this practice had always seemed to him to be an arbitrary one; and in 1893 he spoke of it as "the arbitrary and, to my mind, unjust rule which obtains in this circuit."[3] And in speaking of the case in which Judge COXE used the language just quoted, Judge DALLAS said in 1894, "That decree, however, was in fact entered without disclaimer being made, and doubtless for the reason that the learned judge had observed, after his opinion had been delivered, that, while the statute deprives the plaintiff of costs, in such cases, it does not authorize the requirement of the disclaimer of unfounded claims, as a condition of granting relief upon those which are supported."[4] The third course was that adopted by Judge CADWALLADER.[5] The point has never been decided by the Supreme Court; though the action of that tribunal, in O'Reilly *v.* Morse,[6] appears to favor the first of the four suggested views. The subject is interesting, and when the law relevant thereto is finally settled, a number of considerations will require to be weighed.

The second view of the law operates to deny an appeal from the Circuit Court upon the question of the necessity for a disclaimer. If the patentee submits to the condition imposed by the chancellor, and if, in order to secure an injunction and an account on his confessedly valid claims, he disclaims the others, and if the Supreme Court, on an appeal by the defendant, holds that no disclaimer was necessary in the case, it will be impossible to rectify the error, for there is no way to recall a disclaimer.

The third view is open to the same objections as the second, but in a diminished degree; a degree diminished, in any particular case, in the same proportion that the value of an injunction, bears to the value of an injunction

[1] Odell *v.* Stout, 22 Fed Rep. 169, 1884.

[2] Brush Electric Co. *v.* Accumulator Co. 47 Fed. Rep. 56, 1891.

[3] Ballard *v.* McCluskey, 58 Fed. Rep. 884, 1893.

[4] Williames *v.* McNeely, 64 Fed. Rep. 768, 1894.

[5] Aiken *v.* Dolan, 3 Fisher, 207, 1867.

[6] O'Reilly *v.* Morse, 15 Howard, 121, 1853.

and an account. It is also open to the objection of inconsistency, for there is probably no reason for refusing an account, which does not apply with equal force to an injunction.

The fourth view seems still less reasonable than the third, because an account is incidental to an injunction, and if no injunction is granted, the power to enter a decree for an account is sometimes wanting.

The first view would probably be found to be more consistent with convenience and with justice than either of the others. Whenever a Circuit Court decides, that while some of the claims of a patent are valid and have been infringed, others are void and should be disclaimed; that decision is right or it is wrong. If it is wrong, the patentee ought to have an opportunity to get it corrected by an appellate court. On the other hand, if that decision is right, it will be either obviously right or questionably right. If it is obviously right, and if the patentee insists on taking a decree without filing a disclaimer, he will do so at his peril; for the appellate court will probably hold, on the defendant's appeal, that the omission to disclaim was unreasonable, and the whole patent therefore void. If the decision is questionably right; that is to say, if there is room for difference of intelligent opinion upon the point, then the patentee ought not to be forced to disclaim till the appellate court shall have decided that question against him. No ultimate injustice would result to either litigant, were the first of the four courses, adopted by the Circuit Courts; whereas the adoption of either of the others, involves a denial of the right of appeal; a right provided by the statute in all cases touching patents.[1]

[1] Revised Statutes, Section 699.

CHAPTER IX.

REISSUES.

210. Beginning of the history of reissues.
211. First statute providing for reissues, 1832.
212. Reissues under the Patent Act of 1836.
213. Amendments made in the reissue law by the Patent Act of 1837.
214. Reissues under the Patent Act of 1870.
215. Reissues under the Revised Statutes.
216. Subjects of reissues.
216*a*. Narrowed reissues.
217. The words "specification," "defective," and "insufficient" defined.
218. Faults which justify reissues.
218*a*. Reissues correcting patents without changing their scopes.
219. Broadened reissues.
220. Inadvertence, accident, and mistake.
221. Question of the conclusiveness of the Commissioner's decision relevant to existence of reissuable faults, and relevant to the existence of inadvertence, accident, or mistake.
226. The doctrine of the case of Miller *v.* Brass Co.
227. The length of the delay contemplated by the doctrine of Miller *v.* Brass Co.
220. The statute relevant to two years' prior use or sale has no application to reissues as such.
230. Surrender of patent.
231. Effect of surrender with, and also without, reissue.
232. Reissues of reissued patents and of extended patents, but not of expired patents, are proper.
233. Same invention.
239. "Where there is neither model nor drawing."
240. New matter.
242. Reissues must be for same invention as prior reissues, and also for same invention as originals.
243. Legal presumption of sameness of invention.
244. Omission, as it affects sameness of invention.
245. Reissues for sub-combinations.
246. Reissues for single devices.
247. Reissues as affected by substitution of equivalents.
248. Reissues entitled to a liberal construction.
249. Reissued patents may be valid as to some claims while void as to others.

250. Executors, administrators, and assigns may procure reissues.
251. One of several executors may procure a reissue.
252. Rights of assignees in reissues.
253. The rights of grantees in reissues.
254. The legal effect of reissued patents.

§ 210. In 1821 James Grant, of Providence, Rhode Island, received letters patent of the United States for an improved mode of manufacturing hat bodies. In 1825 he presented a petition to Henry Clay, Secretary of State, stating that the specification of his patent was defective, and praying that his patent might be cancelled, and a new and correct one granted, embracing the same improvements, so far as they were set forth in certain new specifications drawings and explanations which accompanied the petition. Though there was, at that time, no statute which authorized any such proceeding; yet, on the advice of William Wirt, the Attorney General, and in the name of John Quincy Adams, the President of the United States, Mr. Clay cancelled the letters patent of Mr. Grant, and thereupon issued to him new letters patent, for the same invention, and for the residue of the term covered by the original document. Annexed to the new letters, and forming part thereof, were the new specifications, drawings and explanations, which had accompanied Mr. Grant's petition.

In the case of Grant *v.* Raymond[1] the validity of this proceeding was called in question in the Supreme Court; and was argued in the negative by Daniel Webster. The Supreme Court sustained the validity of the reissued patent, on the general spirit and object of the patent law; not on its letter. In delivering the opinion Chief Justice MARSHALL said: "If the mistake should be committed in the Department of State, no one would say that it ought not to be corrected. All would admit that a new patent, correcting the error, and which would secure to the patentee the benefits which the law intended to secure, ought to be issued. And yet the act does not in terms authorize a new

[1] Grant *v.* Raymond, 6 Peters, 243, 1832.

patent, even in that case. Its emanation is not founded on the words of the law, but it is indispensably necessary to the faithful execution of the solemn promise made by the United States. Why should not the same step be taken for the same purpose, if the mistake has innocently been committed by the inventor himself?" And his Honor further said: "If, by an innocent mistake, the instrument introduced to secure his privilege fails in its object, the public ought not to avail itself of this mistake, and to appropriate the discovery without paying the stipulated consideration. The attempt would be disreputable in an individual, and a Court of Equity might interpose to restrain him."

In pursuance of the doctrines of the first four sentences quoted above from Chief Justice MARSHALL, the Commissioner may cancel a patent and issue a corrected one in its stead, where the first one was caused, by an inadvertent error in the Patent Office, to grant less to the inventor than he had applied for and was entitled to receive, and where the inventor refuses to accept the patent thus limited.[1]

§ 211. In accordance with the spirit of the decision in Grant *v.* Raymond, and within a few months after that decision was made, Congress enacted a statute to regulate the granting of reissued letters patent.[2] That statute provided, in effect, that whenever any patent should be invalid or inoperative, because the inventor, by inadvertence, accident or mistake, and without any fraudulent or deceptive intention, failed to conform his specification to the then existing statutory requirements; it should be lawful for the Secretary of State, upon the surrender to him of such patent, and the delivery to him of a sufficient statutory specification, to cause a new patent to be granted to the same inventor, for the same invention, and for the residue of the term of the original patent. That statute also provided that the right to receive a reissue, should extend to executors, administrators or assigns; and that the reissue patent

[1] Railway Register Mfg. Co. *v.* Railroad Co. 23 Fed. Rep. 593, 1885.

[2] 4 Statutes at Large, Ch. 162. Section 3, p. 559.

should be liable to the same defences as the original; and that no public use of the invention, after the grant of the original patent, should prejudice the right of the patentee to recover for infringement of the reissue patent, committed after the grant thereof.

§ 212. The Patent Act of 1836[1] repealed all prior statutes relevant to patents, and provided a more elaborate system in place of the repealed laws. Section 13 of that Act referred to reissues, and provided, in effect, that whenever any patent should be inoperative or invalid because the inventor had, by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, made his description or specification defective or insufficient, or had claimed in his specification more than he had a right to claim as new; it should be lawful for the Commissioner of Patents, upon the surrender to him of such patent, to cause a new patent to be issued to the same inventor, for the same invention, in accordance with the inventor's corrected description and specification, and for the residue of the term of the original patent. This statute also provided that the right to receive a reissue should extend to executors, administrators and assigns, and that the reissued patent, together with the corrected description and specification, should have the same effect in law, on the trial of all actions thereafter commenced for causes subsequently accruing, as though the same had been originally filed in such corrected form before the issuing of the original patent.

§ 213. The Patent Act of 1837[2] made some additions to the statute of 1836, relevant to reissues. Section 5 recognized a right in a patentee to demand and receive several reissued patents for distinct parts of the subject-matter of his surrendered patent. And Section 8 provided, that whenever a patent should be returned for reissue, the claims thereof should be subject to revision and restriction, in the same manner as were original applications for pat-

[1] 5 Statutes at Large, Ch. 357, p. 117.

[2] 5 Statutes at Large, Ch. 45, p. 191.

ents; and that the Commissioner should not grant any reissue, until the applicant should have entered a disclaimer, or altered his claim, in accordance with the decision of the Commissioner; and that the applicant, if dissatisfied with such decision, should have the same remedy by way of appeal, that the law provided in cases of original applications.

§ 214. The Patent Act of 1870[1] substantially re-enacted the law of reissues as it had been embodied, for more than thirty years, in the statutes of 1836 and 1837; but re-enacted that law with a few modifications and additions. Where the old law used the phrase "defective or insufficient description or specification," the new law used the words "defective or insufficient specification." Where the old statute made it lawful for the Commissioner to reissue a patent, the new statute made it obligatory upon him to do so. Where the old law recognized a right in a patentee to demand and receive several reissue patents in the place of one surrendered patent, the new law provided that the Commissioner might, in his discretion, cause several such patents to be issued upon the demand of the applicant. The provision of the old statute, that the applicant, if dissatisfied with the decision of the Commissioner, should have the same remedy and be entitled to the same privileges and proceedings, as were provided by law in the case of original applications for patents, was omitted in the new statute; but its effect was retained, by expressly mentioning reissues in those sections of the new statute, which provided for that remedy, and for those privileges and proceedings.[2] Section 33 of the new statute provided further, that where a patent was to be reissued to an assignee of the inventor, the application should be made, and the specification be sworn to, by the inventor, if he be living. The Patent Act of March 3, 1871[3] prescribed, that the provision of Section 33, just mentioned should not be construed to apply to any patent, is-

[1] 16 Statutes at Large, Ch. 230, p. 198.

[2] 16 Statutes at Large, Ch. 230, Sections 46 to 52, p. 204.

[3] 16 Statutes at Large, Ch. 132, p. 588.

sued and assigned before July 8, 1870: the date of the approval of the Act of which that section formed a part. Another new provision of the Statute of 1870, was as follows: "No new matter shall be introduced into the specification, nor in case of a machine patent shall the model or drawings be amended, except by each other; but where 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."[1]

§ 215. Section 4916 of the Revised Statutes is substantially a copy of Section 53 of the Statute of 1870. Section 4895 of the Revised Statutes, re-enacted the provision above cited from Section 33 of the Act of 1870, coupled with the statutory construction of that provision, which was contained in the Patent Act of 1871, and which was above explained. Sections 46 to 52 of the Act of 1870, were re-enacted as Sections 4909 to 4915 of the Revised Statutes. Thus the law of reissues underwent no change when the Revised Statutes were approved. The reissue provisions which were embodied in the Act of 1870, are still the statutes which govern the subject.

The meritorious ground for reissues, as stated by the Supreme Court in Grant *v.* Raymond, has now been set forth; and the subsequently enacted and gradually developed statutory law on the subject has been explained. To explore the great mass of relevant adjudicated cases, and to extract from those cases the detailed doctrines of the law of reissues, is the engaging work upon which it is now in order to enter.

§ 216. To be the lawful subject of a reissue, a patent must be invalid, or it must be at least inoperative.[2] All patents that are invalid, are also inoperative. If the two words had,

[1] 16 Statutes at Large, Ch. 132, Section 53, p. 206.

[2] Act of 1832, Section 3; Act of 1836, Section 13; Act of 1870, Section 53; Revised Statutes, Section 4916.

in the statutes, been always connected with the word "and," there would be ground for an argument that they were used synonymously. In fact, however, they have always been connected with the word "or," thus indicating that they were not intended to signify the same thing. What they do respectively mean is to be ascertained by considering other provisions of the statute; namely, those provisions which indicate the causes from which either invalidity or inoperativeness must have sprung, in order to make patents reissuable. To have that effect, either of those faults must have resulted from a defective or insufficient specification, or from the patentee claiming more than he had a right to claim as new. This last cause of fault was first mentioned in the statute of 1836. In the following year Congress provided that patents should no longer be held to be invalid on that ground, provided proper disclaimers were reasonably entered.[1] Ever since 1837, therefore, faults in patents, arising from patentees claiming more than they had a right to claim, have generally been curable by disclaimers.

§ 216*a*. But in some cases, the matter in a patent which the patentee had no right to claim as new, is so blended with the other matter in the patent, that it cannot be simply cut away by a disclaimer, and can best be removed by rewriting part or all of the specification. In such cases the remedy by reissue is undoubtedly lawful, and can probably be invoked regardless of any supposed intervening rights of others, for others can hardly have a right to object to a patentee reducing the area of his patented claims. But the remedy by disclaimer in such cases cannot be invoked after an unreasonable delay to invoke it; and it is probable that the remedy by reissue in such cases is subject to a similar limitation; but such delay will not be held to begin till the patentee is informed of the facts which make a narrower claim necessary.[2] The remedy by disclaimer, where it can

[1] 5 Statutes at Large, Ch. 45, Sections 7 and 9, p. 193.

[2] Matthews *v.* Flower, 25 Fed. Rep. 834, 1885; Electrical Accumulator Co. *v.* New York & Harlem R. R. Co. 50 Fed. Rep. 82, 1892.

be applied, is better than the other, because the remedy by reissue involves the loss of the rights of action under the patent for infringements committed before the reissue is granted.

§ 217. The meaning of the word "specification" is that of the words "description and claim" when it is used, in the statutes, separately from both those words.[1] In the reissue section of the statute of 1836, the word "description" was used in connection with the word "specification," and thus limited the meaning of the latter to the signification of the word "claim."[2] On the other hand, in the fourth sentence of Section 4916 of the Revised Statutes the word "specification" is used in immediate connection with the word "claim," and is therefore limited, in that place, to the meaning of the word "description."

The word "defective" and the word "insufficient" are not synonymous in this statute, as at first thought they may appear to be. The former word means "bad," and the latter means "lacking." A description may be complete, while it is obscure in some of its parts. In such a case, it is defective. On the other hand, it may be perfectly clear, as far as it goes, while omitting all reference to some parts of the thing described. In such a case it is insufficient. So also, a claim may mistily cover the whole invention described, but being liable to be misunderstood, it is defective. On the other hand, it may be entirely clear, while it is narrower than the invention, and therefore insufficient to cover and secure the latter.

§ 218. From the foregoing it follows, that ever since 1836 those patents have been reissuable which were invalid or inoperative by reason of defective or insufficient descriptions or claims; provided their faults arose from inadvertence, accident or mistake, and without any fraudulent or deceptive intention. This proviso is equally imperative in

[1] Wilson *v.* Coon, 18 Blatch. 535, 1880.

[2] Wilson *v.* Coon, 18 Blatch. 536, 1880.

all cases.[1] Assuming it to be satisfied in all, and passing the provisions relevant to reissues when the patentee has claimed too much, it appears that the remaining faults which make patents reissuable are four in number. 1. Invalidity arising from defective description. 2. Invalidity arising from insufficient description. 3. Invalidity arising from defective claims. 4. Inoperativeness arising from insufficient claims.

§ 218*a*. Invalidity arising from defective description, or from insufficient description, or from defective claims, where that invalidity arose by inadvertence, accident or mistake, and without any fraudulent or deceptive intention, may undoubtedly be remedied by a reissue, where the reissue does not add nor broaden any claim. No reissue of this class has ever been held to be void, as a reissue, in any adjudicated case. Such reissues are indeed particularly consistent with the policy of the patent law, because they improve the information of an invention, which the public can derive from a patent, and thus increase the benefit which the public will enjoy on account of the patent after it shall have expired. There appears to be no reason why the remedy of reissue may not be invoked, in a case of this class, at any time during the life of a patent, and no reason why any other than the patentee can have any intervening right accrue after the date of the original, and before the date of the reissue, which can render the reissue invalid.[2]

§ 219. Claims are the only operative parts of specifications. If an inventor has produced two or more inventions so allied that they may properly be secured to him in one letters patent, and if he fully describes all of those inventions in the descriptive part of his specification, but covers only one of them by his claims, then his patent is operative as to one of those inventions, and inoperative as to the others. Inoperativeness of that kind is sufficient to lay the

[1] Coon *v.* Wilson, 113 U. S. 277, 1884; Parker & Whipple Co. *v.* Yale Clock Co. 123 U. S. 103, 1887.

[2] Sewing Machine Co. *v.* Frame, 24 Fed. Rep. 596, 1884.

foundation of a right to a reissue.[1] And where an inventor claims his invention only in combination with something else, his patent is inoperative as to that invention alone.[2] Reissues granted in these classes of cases are called broadened reissues. Though the statute does not, under that name, authorize reissues of that kind, they are authorized by the general terms of the law;[3] and have been upheld by the Supreme Court in many cases;[4] and have been expressly approved by that tribunal.[5]

§ 220. Inadvertence, accident or mistake, must have been the source of the fault in letters patent, in order to make them reissuable.[6] Such inadvertence or accident may have been suffered, or such mistake may have been committed, by the patentee or by the Commissioner of Patents.[7] The statute is satisfied on this point, where the patent was inoperative by reason of insufficient claims, if those claims were made too few or too narrow because the patentee was mistaken about the state of the art,[8] or because the patentee or his solicitor, when concerting the claims, inadvertently failed to make them as extensive as the invention.[9] So also, the statute is satisfied, where the patent was inoperative by reason of insufficient claims, if those claims were made too narrow because the Commissioner, on account of an erroneous opinion entertained by him, refused to allow them to be made as broad as they ought to have been,[10] or

[1] Thompson *v.* Wooster, 114 U. S. 115, 1884; Anilin *v.* Higgin, 15 Blatch. 291, 1878; Wilson *v.* Coon, 18 Blatch. 535, 1880; Giant Powder Co. *v.* Nitro Powder Co. 19 Fed. Rep. 510, 1884.

[2] Jenkins *v.* Stetson, 32 Fed. Rep. 400, 1887.

[3] Miller *v.* Brass Co. 104 U. S. 354, 1881.

[4] Battin *v.* Taggert, 17 Howard, 74, 1854; Morey *v.* Lockwood, 8 Wallace, 230, 1868; Rubber Co. *v.* Goodyear, 9 Wallace, 788, 1869; Corn-Planter Patent, 23 Wallace 217, 1874; Marsh *v*, Seymour, 97 U. S. 356, 1877.

[5] Topliff *v.* Topliff, 145 U. S. 170, 1892.

[6] Revised Statutes, Section 4916.

[7] Grant *v.* Raymond, 6 Peters, 218, 1832.

[8] National Spring Co. *v.* Mfg. Co. 12 Blatch. 89, 1874.

[9] Miller *v.* Brass Co. 104 U. S. 352, 1881.

[10] Morey *v.* Lockwood, 8 Wallace, 230, 1868.

because of an erroneous decision made by him in an interference proceeding.[1] But the statute is not satisfied where the applicant or his attorney cancels a rejected claim and afterward seeks to reclaim it by a reissue;[2] even where the rejected claim was cancelled from a prior application of the same inventor, and not from the particular application for the original of the reissue.[3] Nor is the statute satisfied in any case where the new claims of the reissue were intentionally omitted from the original patent.[4]

§ 221. The Supreme Court has recognized the fact that patents have been reissued by the Commissioner of Patents in some cases where there was no statutory ground therefor; that is to say, in some cases where the patents surrendered were neither invalid nor inoperative; or if invalid or inoperative, were not so by reason of a defective or insufficient specification; or if invalid or inoperative by reason of a defective or insufficient specification, were not so because of inadvertence, accident, or mistake. It is, however, still an unsettled question, whether the decision of the Commissioner, that the existence of the statutory ground for a reissue exists when he grants a reissue, is conclusive; or is a subject of review and possible reversal in a suit for infringement of a reissue. This question arose in the great case of O'Reilly *v.* Morse,[5] where the defendant contended that Morse's reissue patent was void, because his surrendered patent was neither inoperative nor invalid. The Supreme Court decided that the reissue patent was not void, but the court did not explain whether it agreed in opinion with the Commissioner touching the invalidity or inoperativeness of the surrendered patent, or found itself without power to review his decision on that point. It was a misfortune that the court did not decide the question of the power of courts in

[1] American Shoe-tip Co. *v.* Protector Co. 2 Bann. & Ard. 551, 1877.

[2] Union Paper Bag Mach. Co. *v.* Waterbury, 39 Fed. Rep. 392, 1889.

[3] Yale Lock Co. *v.* Berkshire Bank, 135 U. S. 379, 1890.

[4] Dobson *v.* Lees, 137 U. S. 265, 1890.

[5] O'Reilly *v.* Morse, 15 How. 62, 1853.

such cases; for such a decision would have established the law upon the subject, from and after about the middle of the nineteenth century, and would have obviated the numerous controversies which have ranged through the courts upon the point since that time, and the numerous contradictory and inharmonious *obiter dicta* which the Supreme Court and many of the Circuit Courts have since promulgated about the matter, without plainly and authoritatively deciding the question.

In former editions of this book, the then existing deliverances of the courts upon this subject, were marshaled and explained on the sides of the question which they respectively support; because in the years of those editions, the question was one of much practical importance. But the decision of the Supreme Court in Miller *v.* Brass Co., which was made early in 1882, on another part of the law of reissues, operated so strongly to discourage patentees from surrendering their original patents and applying for reissues thereof, that only fifteen hundred reissues have been granted during the thirteen years and a half which have passed since then; though nearly three hundred thousand original patents have been issued during that time. And the comparatively few reissues which have not now expired, were granted with more circumspection than was formerly exercised in the Patent Office, in such cases; so that the question whether the courts have any authority to review the decision of the Commissioner of Patents, that some statutory ground exists therefor, when he grants a reissue, is a question of much diminished import. If any lawyers have occasion to argue, or any judges have occasion to decide that question hereafter, they can consult the principal cases which support the negative,[1] and the

[1] Philadelphia and Trenton Railroad Co. *v.* Stimpson, 14 Peters, 448, 1840; Stimpson *v.* Railroad Co. 4 Howard, 404, 1846; Seymour *v.* Osborne, 11 Wallace, 516, 1870; Collar Co. *v.* Van Dusen, 23 Wallace, 558, 1874; Ball *v.* Langles, 102 U. S. 129, 1880; Topliff *v.* Topliff, 145 U.S. 171, 1892; Smith *v.* Merriam, 6 Fed. Rep. 713, 1881; Selden *v.* Gas Burner Co. 9 Fed. Rep 390, 1881; Peoria Target Co. *v.* Cleveland Target Co. 58 Fed. Rep. 239, 1893; Beach *v.* American Box Machine Co. 63 Fed. Rep. 603, 1894.

principal cases which support the affirmative of the issue.[1]

§ 226. Miller *v.* Brass Co.,[2] is a celebrated case, which introduced a new doctrine into the patent laws of the United States. That doctrine is precisely this. The right to obtain a broadened reissue, is lost by a lapse of some time, after the date of the original, and before the application for that reissue. If that doctrine has any prototype in any prior deliverance of any United States judge, that prototype must be found in a charge which Chief Justice TANEY delivered to a jury somewhat early in his judicial career.[3] In that case, the third paragraph of his Honor's instruction was as follows: "The plaintiff, at the time of his application for the patent of 1834, had a right to surrender the patent of 1829, and take out a corrected one, if the said patent was invalid, either by reason of the defective description of the improvement, or by reason of his having claimed as new, more than he was entitled to; provided, the error had arisen from inadvertence or mistake, and the plaintiff proceeded to correct it within a reasonable time after it was discovered." The last proviso of this instruction, differs from the doctrine of Miller *v.* Brass Co., in that the latter makes the fatal lapse of time to begin at the date of the original patent, whereas the former makes it begin when the fault of the original patent is discovered. This difference is a substantial one; because reissuable faults in

[1] Burr *v.* Duryee, 1 Wallace, 571, 1863; Rubber Co. *v.* Goodyear, 9 Wallace, 795, 1869; James *v.* Campbell, 104 U. S. 371, 1881; Mahn v. Harwood, 112 U. S. 359, 1884; Coon *v.* Wilson, 113 U. S. 277, 1884; Yale Lock Co. *v.* Berkshire Bank, 135 U. S. 378, 1890; Dobson *v.* Lees, 137 U. S. 265, 1890; Electric Gas Co. *v.* Boston Electric Co. 139 U. S. 502, 1891; Huber *v.* Nelson Mfg. Co. 148 U. S. 290, 1893; Olin *v.* Timken, 155 U. S. 148, 1894; Eby *v.* King, 158 U. S. 371, 1895; Whitely *v.* Swayne, 4 Fisher, 123, 1865; Wicks *v.* Stevens, 2 Bann. & Ard. 318, 1876; Odell *v.* Stout, 22 Fed. Rep. 161, 1885, Peoria Target Co. *v.* Cleveland Target Co. 47 Fed. Rep. 737, 1891; Featherstone *v.* Cycle Co. 57 Fed. Rep. 635, 1893.

[2] Miller *v.* Brass Co. 104 U. S. 350, 1881.

[3] Knight *v.* Railroad Co., Taney's Circuit Court Decisions, 107, 1840.

letters patent are often, and perhaps generally, of such a character that they can be detected only by persons learned in the patent law; and because a patentee may honestly keep his patent by him for years, without subjecting it to professional scrutiny. The doctrine of Miller *v.* Brass Co. must therefore find its foundation and genesis elsewhere than in the opinion of Chief Justice TANEY; and elsewhere than in any United States decision made and reported before that doctrine was promulgated in that case in January, 1882.

But that doctrine has been emphatically reaffirmed by the Supreme Court in the use of the following language. "We deem it proper to say, once for all, that the views announced in Miller *v.* Brass Co., on the subject of reissuing patents for the purpose of extending and enlarging the claim, were deliberately expressed and are still adhered to."[1]

The Supreme Court has also decided and announced that the rule in Miller *v.* Brass Co. is not qualified by any question relevant to the presence or absence of intervening rights of other inventors, accruing between the date of the original patent, and the date of the application for a reissue thereof;[2] and that Court has also held that the operation of the rule is not ousted by the fact that the invention sought to be covered by a broadened reissue, had, during the preceding life of the original patent, been apparently, though erroneously, secured to the same patentee, in another patent.[3]

§ 227. The length to which delay must be drawn out, in order to lose the right to apply for a broadened reissue, cannot be fixed and laid down for all cases. Where the specification is complicated, and the claim is ambiguous or involved, the patentee may be entitled to greater indulgence than he would be if the case were simpler or clearer; and the courts will always exercise a proper liberality on this point in favor of patentees.[4] In Miller *v.* Brass Co. itself,

[1] Mahn *v.* Harwood, 112 U. S. 358, 1884.

[2] White *v.* Dunbar, 119 U. S. 52, 1886.

[3] Hartshorn *v.* Barrel Co. 119 U. S. 674, 1886.

[4] Mahn *v.* Harwood, 112 U. S. 361, 1884.

the delay continued for fifteen years. In three later Supreme Court cases, the delay was for fifteen, fourteen and thirteen years, respectively.[1] In still later Supreme Court cases much shorter delays have been held to be fatal to broadened reissues;[2] and indeed, in one simple case where adverse rights had intervened, a delay of ninety-seven days was decided to have a fatal effect on such a reissue.[3] The general rule is that a delay for two years or more invalidates a broadened reissue, unless that delay is accounted for and excused by special circumstances.[4] What special circumstances will have that effect, cannot now be stated, because none such have yet been found by the Supreme Court to have that operation, and because one case in which a Circuit Court sustained so late a broadened reissue,[5] on account of such circumstances, was disapproved in the Supreme Court.[6] In a later case a delay of nearly three years was excused; because the inventor was in poor health, and at times mentally deranged, and once wholly insane, during the delay.[7] But the reception of erroneous advice from a solicitor of patents, not to apply for a particular reissue, is no excuse for waiting a long time, and then doing so.[8] A delay of less than two years is enough to defeat a broadened reissue in a plain case, even in the absence of intervening rights;[9] and in such a case, six months is probably as long a delay as can be excused.[10]

[1] *Johnson v.* Railroad Co. 105 U. S. 539, 1881; Mathews *v.* Machine Co. 105 U. S. 54, 1881; Bantz *v.* Frantz, 105 U. S. 160, 1881.

[2] Leggett *v.* Standard Oil Co. 149 U. S. 292, 1893; Dunham *v.* Dennison Mfg. Co. 154 U. S. 110, 1894.

[3] Coon *v.* Wilson, 113 U. S. 277, 1884.

[4] Wollensak *v.* Reiher, 115 U. S. 101. 1884; Hoskin *v* Fisher, 125 U. S. 222. 1887; Topliff *v.* Topliff, 145 U. S. 171, 1892.

[5] Hartshorn *v.* Roller Co. 18 Fed. Rep. 92, 1883.

[6] Hartshorn *v.* Barrel Co. 119 U. S. 674, 1886.

[7] Whitcomb *v.* Coal Co. 47 Fed. Rep. 658, 1891.

[8] Wollensak *v.* Sargent, 151 U. S. 227, 1894.

[9] Farmer's Mfg. Co. *v.* Corn-Planter Co. 128 U. S. 506, 1888; New *v.* Warren, 22 Off. Gaz. 588, 1882; Haines *v.* Peck, 26 Fed. Rep. 625, 1884; Union Paper Bag Machine Co. *v.* Waterbury, 39 Fed. Rep. 391, 1891.

[10] McArthur *v.* Supply Co. 19 Fed. Rep. 263, 1884.

§ 229. The statutory provision which makes a patent void, if the invention it covers was in public use or on sale more than two years before that patent was applied for, is a matter which does not apply to reissue patents, and the applications therefor.[1] The reissue application is considered as appended to the original application,[2] and the two years cease to run with the filing of the latter.

§ 230. A surrender of a patent, when made with an application for a reissue, need not be made in writing; and therefore the statement in a reissue that it is a reissue of a surrendered former reissue, is not negatived by the production of a document purporting to be a surrender of the original patent, and apparently intended to have been a surrender of the former reissue.[3] The presumption that the proper patent was surrendered, by parol if not otherwise, is not negatived by proof of an ineffectual attempt to surrender it in writing.

§ 231. Patents surrendered prior to July 8, 1870, were thereby cancelled in law, whether a reissue was granted thereon or not.[4] Patents surrendered since July 8, 1870, were also cancelled thereby if reissues were granted thereon, but not otherwise.[5] But a surrendered patent cannot be enforced while the application for a reissue is pending.[6] No damages or profits can ordinarily be recovered, for any infringement of a surrendered patent committed prior to its cancellation, by means of any judgment or decree entered after that time; but money recovered or voluntarily paid, on account of such infringement, prior to such cancellation, cannot be recovered back.[7] Nor will any such cancellation

[1] Shaw *v.* Lead Co. 11 Fed. Rep. 714, 1882.

[2] Grant *v.* Raymond, 6 Peters, 218, 1832.

[3] Dental Vulcanite Co. *v.* Wetherbee, 2 Cliff, 563, 1866.

[4] Moffitt *v.* Garr, 1 Black. 273, 1861; Peck *v.* Collins, 103 U. S. 664, 1880.

[5] 16 Statutes at Large, Ch. 132, Section 53, p. 206; Revised Statutes, Section 4916.

[6] Burrell *v.* Hackley, 35 Fed. Rep. 833, 1888.

[7] Moffitt *v.* Garr, 1 Black. 273, 1861; Eby *v.* King, 158 U. S. 373, 1895.

have any effect upon any unpaid judgment or decree which was entered before that cancellation took effect. The right of the patentee, in such a case, rests upon his judgment or decree, and not on his patent.[1]

The only exception yet established, to what the last paragraph states is the ordinary rule relevant to profits and damages which accrued from the infringement of a surrendered patent before its cancellation, was established in a case where the defendant infringer was himself the patentee, and where the plaintiffs were his equitable grantees, as to that part of the territory of the United States, included within the boundaries of Connecticut and New York. In that case, the patentee infringed his grantees' rights, and afterward surrendered and reissued the patents involved. The Supreme Court decided that the defendant held his patents, all the time in trust for the plaintiffs, to the extent of their territory; and that he must therefore account to them for the profits which he had made from the use of the trust property, within that territory, regardless of the fact that he had surrendered and reissued those patents, after making a part of those profits.[2]

§ 232. A reissue patent may be surrendered and again reissued, under the same circumstances as those which make an original patent reissuable,[3] and the last reissue may be identical with the original patent.[4] So also, a patent might be reissued during its extended term, as well as during its first term, when, as formerly, extensions of patents were provided for by law.[5] But patents reissued during their respective extended terms will be more likely

[1] Mevs *v.* Conover, 125 U. S. 144, 1876.

[2] Littlefield *v.* Perry, 21 Wallace, 205, 1874.

[3] French *v.* Rogers, 1 Fisher, 136, 1851; Selden *v.* Gas Burner Co. 9 Rep. Fed. 390, 1881.

[4] Giant Powder Co. *v.* Nitro Powder Co. 19 Fed. Rep. 510, 1884. Celluloid Mfg. Co. *v.* Zylonite Co. 27 Fed. Rep. 291, 1886; Sawyer Spindle Co. *v.* Eureka Spindle Co. 33 Fed. Rep. 836, 1888.

[5] Wilson *v.* Rousseau, 4 Howard, 646, 1846; Gibson *v.* Harris, 1 Blatch. 167, 1846.

to suffer from the doctrine of Miller *v.* Brass Co.[1] than those reissued during their first terms, because of the generally longer lapse of time after the dates of the originals. No reissue can be granted of a patent after its final expiration; even where that expiration resulted from the fact that the same invention had been patented in a foreign country before it was patented in the United States; and from the fact that the foreign patent has expired, though the United States patent sought to be reissued, does not appear, on its face, to have done so.[2]

§ 233. Only "the same invention" can be covered by a reissued patent.[3] This quoted phrase occurs, in this relation, in all the relevant statutory provisions, now or heretofore in force in the United States. But neither of those statutes obviously indicate whether the phrase refers to whatever invention was made by the patentee, and actually described in his original application; or refers to whatever invention was substantially suggested, indicated or described in the patentee's original letters patent, drawing or model; or refers to whatever invention was described or indicated in the original letters patent or drawing of the patentee; or refers to whatever invention was described by him in his original letters patent; or refers to whatever invention was described in the original letters patent, and appears therein to have been intended to be secured thereby; or refers to whatever invention was actually claimed by the inventor in his original patent. During many years, debate ranged in the courts around these various constructions; and large masses of *obiter dicta* and many actual adjudications can be collected out of the books, in favor of each of them. But the Supreme Court put a period to the controversy in the case of the Parker & Whipple Co. *v.* the Yale Clock Co. decided in 1887.[4] That decision adopted the

[1] Miller *v.* Brass Co. 104 U. S. 350, 1881.

[2] C. W. Siemens' Appeal, 11 Off. Gaz. 1107, 1877.

[3] Patent Act of 1832, Section 3; Patent Act of 1836, Section 13; Patent Act of 1870, Section 53; Revised Statutes, Section 4916.

[4] Parker & Whipple Co. *v.* Yale Clock Co. 123 U. S. 99, 1887.

fifth of the above stated constructions, and thus established the meaning of the phrase "the same invention" to be whatever invention was described in the original letters patent, and appears therein to have been intended to be secured thereby. This rule has already been repeatedly reaffirmed and reapplied by the Supreme Court,[1] and is now as well established as its companion rule in Miller *v.* Brass Co. Therefore no reissue claim can stand any longer upon a model alone, nor even alone upon a drawing of an original patent;[2] and indeed neither models, drawings nor descriptions, nor all of them together, can support a reissue claim, except where the description in the original letters patent shows that the invention covered by that claim was intended to be secured in the original.[3]

§ 239. The last clause of Section 4916, of the Revised Statutes provides, that "where 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." The meaning of that clause is not perfectly known; but it is known not to enlarge the power of the Commissioner, in reference to the invention for which a reissue may be granted.[4]

§ 240. The provision, first enacted in 1870,[5] that "no new matter shall be introduced into the specification" is merely another way of saying that a reissued patent shall be for the same invention as the original.[6] That provision, therefore, neither enlarged nor restricted the reissuability of

[1] Hoskins *v.* Fisher, 125 U. S. 223, 1887; Flower *v.* Detroit, 127 U. S. 571, 1887; Pattee Plow Co. *v.* Kingman & Co. 129 U. S. 294, 1889; Freeman *v.* Asmus, 145 U. S. 240, 1895; Corbin Cabinet Lock Co. *v.* Eagle Lock Co. 150 U. S. 42, 1893.

[2] Halles *v.* Stove Co. 133 U. S. 587, 1887.

[3] Carpenter Machine Co. *v.* Searle, 52 Fed. Rep. 814, 1892.

[4] Powder Co. *v* Powder Works, 98 U. S. 128, 1878.

[5] 16 Statutes at Large, Ch. 230, Section 53, p. 206.

[6] Powder Co. *v.* Powder Works, 98 U. S. 138, 1878.

letters patent; and, accordingly, it is not new matter, within its meaning, to state a new use of the invention shown in the original;[1] nor to explain, in a reissue, the operation of a device which in the original was only described;[2] nor to vary the description of anything described in the original.[3]

§ 242. Reissued patents, which were granted on the surrender of former reissues, must be able to endure comparison, on the point of identity of invention, not only with the original letters patent, but also with the surrendered reissues, which preceded them.[4]

§ 243. There is a legal presumption that the necessary identity of invention exists in all reissued patents; and that presumption controls the point, unless the contrary is shown to be true.[5] That can be done only by introducing the original letters patent in evidence.[6]

§ 244. To omit from a reissue, anything which the original specification stated to be essential to the invention, is fatal to identity of invention.[7] Indeed, it has been held in one case that the omission of one bolt from a reissue patent for a reaper and mower, was enough to negative identity with the original, because, with the bolt, the machine was a reaper only, and not a mower.[8] A process is not the same invention as a machine which may perform that process;[9] and a process consisting of one stage is not the same as a process consisting of that stage and one or more others.[10] Where, however, an original patent described and claimed

[1] Broadnax *v.* Transit Co. 5 Bann. & Ard. 611, 1880.

[2] Putnam *v.* Yerrington, 2 Bann. & Ard. 243, 1876; Potter *v.* Stewart, 18 Blatch. 561, 1881.

[3] O'Reilly *v.* Morse, 15 Howard, 62, 1853.

[4] Knight *v.* Railroad Co., Taney's Circuit Court Decisions, 106, 1840.

[5] O'Reilly *v.* Morse, 15 Howard, 62, 1853; Klein *v.* Russell, 19 Wallace, 433, 1873.

[6] Seymour *v.* Osborne, 11 Wallace, 516, 1870.

[7] Gill *v.* Wells, 22 Wallace, 1, 1874; Russell *v.* Dodge, 93 U. S. 460, 1876; Atwood *v.* Portland Co. 10 Fed. Rep. 286, 1880.

[8] Kirby *v.* Mfg. Co. 10 Blatch. 307, 1872.

[9] Eachus *v.* Broomall, 115 U. S. 436, 1885.

[10] Wood-Paper Patent, 23 Wallace, 599, 1874.

several different inventions, one or more of those inventions may be omitted from the claims of a reissue of that patent.[1] It is necessary to the requisite identity of invention, that the reissue should claim no invention not described and intended to be claimed in the original; but it is not necessary to that identity, that the original should describe or claim no invention not described or claimed in the reissue.

§ 245. A sub-combination may be claimed in a reissue, if it *was shown in the original as performing the same function*; even though it was claimed in the original only as a part of a larger combination.[2] But a sub-combination cannot be legally claimed in a reissue, if it is there shown to perform a substantially different function from any which it could perform in its original environment.[3] In the former case the invention, consisting of the sub-combination, existed in the original specification. In the latter case, the sub-combination may have existed in the original, but it did not compose, in that place the same invention which it constitutes in the reissue.

§ 246. *A single device may also* be made the subject of a separate claim in a reissue, though in the original it was claimed only in combination with other devices; provided that device was a new and useful invention of the patentee, and might have been separately claimed by him in the original patent, and appears therein to have been intended to be secured thereby.[4]

[1] Rubber Co. *v.* Goodyear, 9 Wallace, 788, 1869.

[2] Battin *v.* Taggert, 17 Howard, 74, 1854; Corn-Planter Patent, 23 Wallace, 181, 1874; Jordan *v.* Dobson, 4 Fisher 232, 1870; Pearl *v.* Ocean Mills, 2 Bann. & Ard. 469 1877; Herring *v.* Nelson, 3 Bann. & Ard. 55, 1877; Kerosene Lamp Heater Co. *v.* Littell, 3 Bann. & Ard. 312, 1878; Turrell *v.* Spaeth, 3 Bann. & Ard. 461, 1878; Odell *v.* Stout, 22 Fed. Rep. 163, 1884; Jenkins *v.* Stetson, 32 Fed. Rep. 398, 1887.

[3] Gill *v.* Wells, 22 Wallace, 24, 1874; Johnson *v.* Railroad Co. 105 U. S. 539, 1881.

[4] Parker & Whipple Co. *v.* Yale Clock Co. 123 U. S. 87, 1887; Gallahue *v.* Butterfield, 10 Blatch. 237, 1872.

§ 247. Whether a patentee, in effecting a reissue, may describe an equivalent of one of the elements of the originally patented combination, and may claim the combination broadly enough to cover that equivalent, is a question which depends upon the effect, in particular cases, of the application of the rule in Miller *v.* Brass Co. Where such a reissue is applied for promptly after the granting of the original patent, it may be sustained;[1] but the right to obtain such a reissue, is lost by long lapse of time after the date of the original, and before the application for that reissue.[2]

§ 248. Reissue patents are not to be held void for want of identity with the originals, where a liberal construction of the two documents can avert that result.[3] Courts are accordingly inclined, where claims apparently illegal are inserted in reissue patents, to modify those claims by construction, in order to make them conform to propriety.[4] This inclination is not, however, to be relied upon, in a case where a patent was surrendered and reissued solely to broaden its claim, and where the broadened claim is void for want of novelty, as well as for want of identity with the original invention.[5]

§ 249. Where some, but not all, of the claims of a reissue patent are void because they are obnoxious to the doctrine of Miller *v.* Brass Co., or because they are not for the same invention as the original; that fact does not vitiate the other claims of that patent. The reissue will, in either of those cases, have whatever validity it would have had if it had not contained the invalid claims, provided there is no unreasonable delay to file a proper disclaimer of them.[6]

[1] McArthur *v.* Supply Co. 19 Fed. Rep. 263, 1884.

[2] White *v.* Dunbar, 119 U. S. 51, 1886.

[3] Milligan & Higgins Glue Co. *v.* Upton, 1 Bann. & Ard. 505, 1874.

[4] Mfg. Co. *v.* Ladd, 102 U. S. 412, 1880; Brainard *v.* Cramme, 12 Fed. Rep. 624, 1882.

[5] Wisner *v.* Grant, 7 Fed. Rep. 922, 1880.

[6] Gage *v.* Herring, 107 U. S. 640, 1882; Gould *v.* Spicer, 15 Fed. Rep. 344, 1882; Cote *v.* Moffit, 15 Fed. Rep. 345, 1882; Schillinger *v.* Brewing Co. 24 Off. Gaz. 495, 1883; National Pump Cylinder Co. *v.* Gunnison, 17 Fed. Rep. 812, 1883; Havemeyer *v.* Randall, 21 Fed. Rep. 405, 1884; International Terra Cotta Co. *v.* Maurer, 44 Fed. Rep. 622, 1890.

§ 250. Executors, administrators or assigns have the same right to surrender and reissue a patent, that the patentee himself has ;[1] except that in the case of assigns of patents which were assigned by the patentee after July 8, 1870, the application must be made, and the new specification be signed, by the inventor himself if living,[2] and sane.[3] The exemption from this law, of all patents granted and assigned before July 8, 1870, is not to be found in the Patent Act of that date. It was first enacted March 3, 1871 ;[4] but it expressly applied, by retroactive operation, to all reissues of the kind, that were granted between July 8, 1870, and March 3, 1871. Of course, it applies by prospective operation, to all reissues of the kind granted since the latter date. In cases where the patent was granted and assigned by the patentee, before July 8, 1870, the inventor needed to take no part in the application for a reissue, even though the applicant received his assignment from an intermediate owner after that day.[5] It however always was, and still is, proper for the patentee to make the application for a reissue, instead of his assignee doing so ; provided it be done with the knowledge and consent of the latter, or provided the latter ratifies the application, after it is made.[6] The title to the reissued patent will, in such a case, vest at once in the assignee, by operation of the assignment of the original patent, and without the execution of any new document.[7]

§ 251. Where several executors are appointed in a will, but only one of them receives letters testamentary, a patent of the testator may be lawfully reissued to that executor, and the legal title to the reissued patent will thereupon

[1] Revised Statutes, Section 4916.
[2] Revised Statutes, Section 4895.
[3] Whitcomb *v.* Coal Co. 47 Fed. Rep, 659, 1891.
[4] 16 Statutes at Large, Ch. 132, p. 583.
[5] Selden *v.* Gas Burner Co. 9 Fed. Rep. 390, 1881.
[6] Dental Vulcanite Co. *v.* Wetherbee, 2 Cliff. 563, 1866; Wing *v.* Warren, 5 Fisher, 548, 1872.
[7] Woodworth *v.* Hall, 1 Woodbury & Minot, 248, 389, 1846; McBurney *v.* Goodyear, 11 Cushing (Mass.) 569, 1853.

vest exclusively in him.[1] A grant of a reissue to a person as administrator, is conclusive evidence in an infringement suit that the person was in fact administrator;[2] and the same rule doubtless applies as well to executors. A reissue to a person in trust for the heirs at law of the patentee, will confer the legal title to the reissue upon that person, and the equitable title upon the persons beneficially interested, whoever they may be.[3]

§ 252. An assignee of a patent is a person to whom the entire legal interest, or an undivided part of the entire legal interest, in a patent has been duly assigned by an instrument in writing. A grantee differs from an assignee in that the rights conveyed to him are confined to a part or to parts of the territory of the United States. A licensee is one who receives either an exclusive or a concurrent right to make or to use or to sell the thing covered by the patent.[4] A reissue may be granted to an assignee of the executor or administrator of the patentee;[5] or to an assignee of an assignee;[6] or indeed to an assignee of any degree, however far removed from the original patentee by mesne assignments;[7] and if the reissued patent recites those assignments, it becomes at least *prima facie* evidence thereof, in an infringement suit.[8] If a patent is owned jointly by two or more patentees, or by two or more assignees, or by one or more patentees and one or more assignees, all the owners must join in a reissue, or must ratify it, or it will be void; but neither grantees nor licensees are required to do either.[9]

[1] Rubber Co. *v.* Goodyear, 9 Wallace, 788. 1869.

[2] Woodworth *v.* Hall, 1 Woodbury & Minot, 248, 389. 1846; Goodyear *v.* Hullihen, 3 Fisher, 251, 1867.

[3] Woodworth *v.* Stone, 3 Story, 752, 1845; Northwestern Fire Extinguisher Co. *v.* Philadelphia Fire Extinguisher Co. 1 Bann. & Ard. 177, 1874.

[4] Sections 274, 287, and 296 of this book.

[5] Carew *v.* Fabric Co. 1 Holmes, 45, 1871.

[6] Swift *v.* Whisen, 2 Bond, 115, 1867.

[7] Selden *v.* Gas Burner Co. 9 Fed. Rep. 390, 1881.

[8] Middletown Tool Co. *v.* Judd, 3 Fisher, 141, 1868; Hoffheins *v.* Brandt, 3 Fisher, 218, 1867.

[9] Potter *v.* Holland, 4 Blatch 206, 1858; Forbes *v.* Stove Co 2 Cliff. 379, 1864; Meyer *v.* Bailey, 2 Bann & Ard. 73, 1875.

The right of a patentee or assignee to receive a reissue is not affected by his having made grants, or issued licenses under his patent;[1] but where a patentee grants away his rights in a part of the territory of the United States, and afterward conveys the residue to another vendee, it is doubtful whether that vendee is entitled to apply for a reissue.[2]

§ 253. Grantees may continue to hold their rights under an original patent after it is surrendered and reissued by the patentee or assignee; or they may take corresponding rights under the reissued patent. They have their choice between the two.[3] It follows from this rule, that in theory at least, a given invention may be the subject of letters patent in one part of the United States, at the same time that it is free to the public in other parts of the country. If this were a practical result, it would be highly unjust, because it would operate to prohibit given manufactures in one State, while in another State the same pursuits would be free to all. In fact however, patentees or assignees seldom surrender any claims which it is worth while for any interested person to retain; and, on the other hand, grantees are generally ready to ratify and adopt broadened reissues. It may hereafter happen, that in order to retain his rights of action for accrued damages or profits, or in order to avoid the risk of exchanging a valid original patent for a reissue patent of uncertain validity, now and then a grantee will elect to continue to hold under the original, while the patentee holds under a reissue patent. If such cases become numerous and important, they will probably lead to a change in the statute. The remedy would be to enact that in such cases all the assignees and grantees shall join in the surrender.

§ 254. The legal effect of a valid reissue patent has always been the same under the different statutes which have from

[1] Smith *v.* Mercer, 3 Penn. L. J. Reports, 529, 1846.

[2] Commissioner of Patents *v.* Whiteley, 4 Wallace, 522, 1866.

[3] Washburn *v.* Gould, 3 Story, 122, 1844; Woodworth *v.* Stone, 3 Story. 749, 1856; Potter *v.* Holland, 4 Blatch, 206, 1858.

time to time been in force. The phraseology of the Act of 1832 in this respect was as follows: "Such new patent, so granted, shall, in all respects, be liable to the same matters of objection and defence as any original patent. But no public use or privilege of the invention so patented, derived from or after the grant of the original patent, either under any special license of the inventor, or without the consent of the patentee that there shall be a free public use thereof, shall, in any manner, prejudice his right of recovery for any use or violation of his invention after the grant of such new patent as aforesaid."[1] The language of the Act of 1836 on this point was as follows: "The patent, so reissued, together with the corrected description and specification, shall have the same effect and operation in law, on the trial of all actions hereafter commenced for causes subsequently accruing, as though the same had been originally filed in such corrected form."[2] The provision of the Revised Statutes upon the same subject is as follows: "Every patent so re-issued, together with the corrected specification, 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."[3]

It follows from these provisions, that a reissued patent cannot be affected, in point of novelty, by anything done after the date of the original application. Novelty still dates from the original invention.[4] Nor will any invention produced after that time be taken into account as showing the state of the art, and therefore as being relevant to the question of construction of a reissued patent.[5] On the other hand, when reissued patents are introduced in evidence to negative the novelty or limit the scope of other

[1] 4 Statutes at Large, Ch. 162, Section 3, p. 559.

[2] 5 Statutes at Large, Ch. 357, Section 13, p. 122.

[3] Revised Statutes Section 4916.

[4] Grant *v.* Raymond, 6 Peters, 218, 1832.

[5] Carroll *v.* Morse, 9 Off. Gaz. 453, 1876.

patents, they operate as of their own dates, and not as of the dates of the originals.[1]

It follows also from the foregoing statutory provisions that persons who use or sell, after the date of a reissued patent, specimens of the thing covered by it, are liable as infringers; even though those persons made or bought, or used those specimens before that date, and when, on account of the omission to cover them by the original patent, they had a legal right to appropriate the invention.[2]

[1] United States Stamping Co. *v.* King, 17 Blatch. 64, 1879.

[2] Stimpson *v.* Railroad Co. 4 Howard, 380, 1846; Agawam Co. *v.* Jordan, 7 Wallace, 609, 1868; Carr *v.* Rice, 1 Fisher, 211, 1856; Bliss *v.* Brooklyn, 8 Blatch. 534, 1871.

CHAPTER X.

EXTENSIONS.

255. Constitutional foundation of extensions.
256. Congressional extensions.
257. Mode of Congressional extension.
258. Effect of Congressional extensions.
259. Patent Office extensions.
260. Statutory foundation of Patent Office extensions.
261. Who might apply for Patent Office extensions.
262. Points of time whereon Patent Office extensions were grantable.
263. Patent Office extension might be granted to an inventor-patentee, even if he had parted with all interest in the first term of his patent.
264. Patent Office extensions grantable only where inventors would possess, or at least participate in, the benefit thereof.
265. Patent Office extension, how effectuated.
266. Force of the Commissioner's decision in extension cases.
267. Facts which justify extensions.
268. Proceedings preliminary to extensions.
269. Remedy for fraud in procuring or in granting extensions.
270. "The benefit of the extension of a patent shall extend to the assignees and grantees of the right to use the thing patented, to the extent of their interest therein."
271. Adjudged meaning of the statute quoted in the last section.

§255. The constitutional provision relevant to the duration of patent rights, is that such rights, when granted, shall be granted for limited times.[1] The Patent Act of 1790[2] provided, that under the circumstances and conditions prescribed therein, the Secretary of State, and the Secretary of War, and the Attorney General, or any two of them, might issue letters patent for an invention, for any term not exceeding fourteen years. The same provision was made in the Patent Act of 1793.[3] Under that law, patents

[1] Constitution of the United States, Article I. Section 8.

[2] 1 Statutes at Large, Ch. 7, Section 1, p. 109.

[3] 1 Statutes at Large, Ch. 11, Section 1, p. 321.

were generally, if not universally, granted for the full fourteen years; but whether so granted or not, there was, prior to 1832, no mention in the statutes of any way in which any patent, once granted, could be extended, and its duration thus prolonged. In July of the last-mentioned year, it was enacted: "That application to Congress to prolong or renew the term of a patent, shall be made before its expiration."[1] The same section also provided a method of proceeding, to be followed by applicants in such cases. The entire section was, however, merely a self-imposed limitation on a constitutional power of Congress: the power to promote the progress of science and useful arts, by securing for limited times, to inventors the exclusive right to their respective inventions. Inasmuch as Congress could disregard that limitation in any particular case,[2] the section was not one of great importance, even while it remained on the statute book; and it was repealed by the Patent Act of July 4, 1836.[3] Since that date, the extending of patents by Congress, has been regulated by no other law than the Constitution.

§ 256. Patents may be extended by Congress at any time, either before or after their expiration.[4] This power was exercised as early as 1808.[5] In one later case such an extension was granted nearly three years before the then existing exclusive right was to expire;[6] and in another, more than twenty-one years intervened between the expiration of the original term of the patent, and the granting of the extension.[7] Congressional extensions, when granted, are usually granted for the term of seven years; but they may lawfully be granted for any limited length of time, whether longer or shorter than that.

[1] 4 Statutes at Large, Ch. 162, Section 2, p. 559.

[2] The Fire Extinguisher Case, 21 Fed. Rep. 42, 1884.

[3] 5 Statutes at Large, Ch. 357, Section 21, p. 125.

[4] Bloomer *v.* Stolley, 5 McLean, 161, 1850; Jordan *v.* Dobson, 2 Abbott, 407, 1870; The Fire Extinguisher Case, 21 Fed. Rep. 42, 1884.

[5] Evans *v.* Jordan, 9 Cranch, 199, 1815.

[6] Bloomer *v.* McQuewan, 14 Howard. 539, 1852.

[7] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

§ 257. Some special acts, for the extension of patents, merely extend their duration by a simple legislative edict, and do no more.[1] Others instruct the Commissioner of Patents to ascertain the truth relevant to sundry questions of fact mentioned therein; and authorize him to decide whether in view of those facts, and of sundry considerations of justice and of public policy, the patent ought to be extended; and direct him to extend it, if his decision is in the affirmative.[2] When patents are extended in this latter method, those provisions of the special act which limit the operation of the extension, need not be recited in the certificate of extension, which the Commissioner indorses upon the patent or otherwise puts forth. The law reads the certificate in the light of that statute, without any such recital.[3]

§ 258. Special Acts of Congress granting or authorizing extensions of patents, come within the general rule, that the validity of a statute cannot be questioned in courts, on any allegation that its passage was procured by fraud or bribery.[4] Such Acts are considered as engrafted on the general patent laws, and are to be construed in connection with them.[5] Although the Constitution authorizes Congress to grant exclusive rights in inventions only to inventors, Congress may provide, when exercising its power in particular cases, that assignees of the inventors shall have the same rights under the extended term, that they had under the original term of the patent extended.[6]

§ 259. Patent Office extensions of patents, were first authorized by the Patent Act of July 4, 1836.[7] By the Patent Act of March 3, 1861, they were prohibited, as to all patents

[1] Bloomer *v.* McQuewan, 14 Howard, 539, 1852; Woodworth *v.* Edwards, 3 Woodbury and Minot, 123, 1847.

[2] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

[3] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

[4] Gibson *v.* Gifford, 1 Blatch. 529, 1850.

[5] Bloomer *v.* McQuewan, 14 Howard, 539, 1852; Jordan *v.* Dobson, 2 Abbott, 408, 1870.

[6] Blanchard's Gun-Stock Turning Factory *v.* Warner, 1 Blatch. 259, 1848.

[7] 5 Statutes at Large, Ch. 357, Section 18, p. 124.

thereafter granted.[1] The last extension of the kind, was granted in 1875, and expired in 1882. It is improbable that any general law, authorizing such extensions, will ever again be enacted in the United States. Inasmuch, however, as actions are still liable to be brought for past infringements of some of those formerly in force, and also because part of the rules and doctrines of law established in suits for infringements of Patent Office extensions, are equally applicable to suits based on Congressional extensions, it is expedient to explain those rules and doctrines in this book.

§ 260. The Patent Act of 1836 provided,[2] that whenever any patentee of an invention should desire an extension of his patent, he might make application therefor in writing, to the Commissioner of the Patent Office, setting forth the grounds thereof; and that the Commissioner should thereupon, and on the payment of a specified fee, cause to be published a notice of the application, and of the time and place when and where the same would be considered. The Secretary of State, the Commissioner of the Patent Office, and the Solicitor of the Treasury, were constituted a board to hear and decide upon the evidence produced before them both for and against the extension. If, upon such hearing in any particular case, it appeared to the board, having a due regard to the public interest, that it was just and proper that the term of the patent should be extended by reason of the patentee, without neglect or fault on his part, having failed to obtain from the use and sale of his invention, a reasonable remuneration for the time, ingenuity and expense bestowed upon the same, and upon its introduction into public use; the statute made it the duty of the Commissioner to extend the patent, by making a certificate thereon of such extension, for the term of seven years from and after the expiration of the first term. The statute also provided that no such extension should be granted after the expiration of the term for which it was

[1] 12 Statutes at Large, Ch. 88, Section 16, p. 249.

[2] 5 Statutes at Large, Ch. 357, Section 18, p. 124.

originally issued; and that when so extended, a patent should have the same effect in law as though it had been originally granted for the term of twenty-one years; and that the benefit of such renewal should extend to assignees and grantees of the right to use the thing patented, to the extent of their respective interests therein.

The Patent Act of 1848[1] amended the above provisions by vesting the power of the board, in the Commissioner of Patents alone; and by directing him to take into consideration the original patentability and novelty of the inventions covered by patents sought to be extended, as well as to be governed by the rules and principles that had theretofore governed the board.

No other change was ever made in the statute relevant to the subject, until in 1861 it was repealed as to future patents. As to patents granted before March 2, 1861, it was re-enacted in the Patent Act of 1870,[2] and again re-enacted in the Revised Statutes.[3] In both these re-enactments, one provision is found, which did not exist in the former law, namely the provision that the application should be filed not more than six months nor less than ninety days before the expiration of the original term of the patent.

§ 261. The statutes relevant to extensions have all mentioned "patentees" as being persons entitled to apply for extensions, and have mentioned no others. When the first of those statutes was enacted in 1836, nobody but an inventor or his executor or administrator, could be a patentee. In 1837, however, Congress enacted, that any patent thereafter issued, might be made and issued to the assignee or assignees of the inventor.[4] In all subsequent cases, where that course was pursued, the inventors and the patentees were not the same persons; but no corresponding change was ever made in the statute relevant to extensions. The

[1] 9 Statutes at Large, Ch. 47, Section 1, p. 231.

[2] 16 Statutes at Large, Ch. 230; Sections 63 to 67, p. 208.

[3] Revised Statutes, Sections 4924 to 4928.

[4] 5 Statutes at Large, Ch. 45, Section 6, p. 193.

question has therefore arisen, whether, in such cases, it was the inventor who had a right to apply for an extension, or whether the patentee was the person who had that right, or whether both the inventor and the patentee must have joined in such an application. Where the inventor would have an equitable interest in the extension if granted, it was proper for him to apply for that extension alone.[1] When granted, the legal title to such an extension would vest in the patentee, because such an extension was in the nature of an amendment of his patent; but the equitable title might vest wholly in the inventor, or vest partly in the inventor and partly in the patentee, or vest partly in the inventor and partly in third persons, according to the equitable facts of each case. When the inventor would have no equitable interest in the extension if granted, no extension could be obtained, either on his application, or on that of the patentee, or on that of both together; because it was not the intention or scope of the statute to grant extensions of patents for the sole benefit of others than the inventors of the things secured thereby.[2]

Whether the executor or administrator of an inventor-patentee, had a right to apply for an extension, was the first of the ten questions which were submitted to the Supreme Court in the celebrated case of Wilson *v.* Rousseau. That question was argued in the affirmative by Webster, Seward and Latrobe, and decided in the affirmative by the court.[3]

Where a joint patent was taken out by joint inventors, all had to join in an application for an extension of that patent, if all were living; and if any were dead, the legal representatives of the deceased had to unite in such an application.[4]

§ 262. No Patent Office extension was ever grantable after the expiration of the original term.[5] Such extensions could

[1] Sayles *v.* Dubuque and Sioux City Railroad Co. 3 Bann. & Ard. 220, 1878.

[2] Wilson *v.* Turner, Taney's Circuit Court Decisions, 292, 1845.

[3] Wilson *v.* Rousseau, 4 Howard, 673. 1846.

[4] Wickersham's Case, 4 Off. Gaz. 155, 1873.

[5] Act of 1836, Section 18; Act of

be granted at any time before the midnight at the end of the last day of that term; because fourteen-year patents did not expire till the last hour of the fourteenth anniversary of the day of their respective dates.[1] Patents limited in law to the term of fourteen years from the date of earlier foreign patents, were extendible, at the discretion of the Commissioner of Patents, as well as those not so limited;[2] but in such a case the extension had to be granted before the expiration of the foreign patent, even though the extended patent purported on its face to run for some time longer.[3]

§ 263. Whether an inventor-patentee needed to possess any interest in the first term of his patent at the time of applying for an extension thereof, was the fifth question submitted to the Supreme Court in the case of Wilson *v.* Rousseau.[4] That question was decided in the negative. Even where the assignee of the first term of a patent surrendered and reissued it, the inventor-patentee had a right to ignore the reissue, and to apply for and receive an extension of the original patent.[5]

§ 264. It was against the policy of the law, if not against its letter, to extend any patent, in the extension of which, if granted, the inventor would have no property right. The right to an extension was given by the law, chiefly with a view to the advantage of the inventor, and not of his assignee or grantee.[6] It never was necessary, however, that the inventor should be in a condition to receive the legal title to the extension, or even that the entire equitable estate in it, should belong to him. An interest in the proceeds of the exclusive right during the extended term, was enough to

1870, Section 63; Revised Statutes, Section 4924.

[1] Johnson *v.* McCullough, 4 Fisher, 170, 1870.

[2] Tilghman *v.* Mitchell, 9 Blatch. 27, 1871.

[3] New American File Co. *v.* Nicholson File Co. 8 Fed. Rep. 816, 1881.

[4] Wilson *v.* Rousseau, 4 Howard 673, 1846.

[5] Potter *v.* Braunsdorf, 7 Blatch. 97, 1869; Crompton *v.* Belknap Mills, 3 Fisher, 536, 1869.

[6] Wilson *v.* Turner, Taney's Circuit Court Decisions, 292, 1845.

satisfy the policy of the law in this respect.[1] Even where the original patent was granted to an assignee, and where the extension was, therefore, in point of legal title, a prolongation of his patent, the extension was held to be valid, because the inventors had interests in its proceeds.[2] Moreover, inventors are presumed in law to have had a sufficient interest to support extensions actually granted, unless the contrary is proved to have been the fact.[3]

§ 265. The certificate of extension which was provided for by the statute,[4] was generally indorsed on the original parchment letters patent; but where the original document was lost or was out of the control of the person applying for the extension, that certificate was indorsed upon a certified copy of the letters patent and was equally valid.[5]

§ 266. Jurisdiction to extend a particular patent, was acquired by the Commissioner, under the statutes in force prior to July 8, 1870, whenever the proper person filed an application for such an extension, and paid the requisite fee;[6] provided the application was filed, and the fee paid, long enough before the expiration of the original term of the patent, to enable the Commissioner to investigate the matter in the way prescribed by statute.[7] After July 8, 1870, the law remained the same on this point, except that under the statute of that date, and under the Revised Statutes, the application had to be filed not more than six months, nor less than ninety days before the first term of the patent would expire.[8] The jurisdiction always depended, therefore, upon the application being filed and the fee paid by the proper person at the proper time. The decision of the

[1] Gear *v.* Grosvenor, 1 Holmes, 215, 1873.

[2] Sayles *v.* Dubuque and Sioux City Railroad Co. 3 Bann. & Ard. 220, 1878.

[3] Ruggles *v.* Eddy, 10 Blatch. 56, 1872.

[4] Patent Act of 1836, Section 18.

[5] Potter *v.* Braunsdorf, 7 Blatch. 108, 1869.

[6] Gear *v.* Grosvenor, 1 Holmes, 218, 1873.

[7] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

[8] 16 Statutes at Large, Ch. [illegible] Section 63. p. 208; Revised Statutes, Section 4924.

Commissioner, relevant to the existence of his jurisdiction, was never conclusive in any case.' The validity of a Patent Office extension, is therefore open to inquiry in an infringement suit, when it is questioned on the theory that the person who applied for it, was not such a person as had the legal right to do so. In deciding that question, however, the courts regard with respect the practical construction of the statute, which was necessarily involved in the granting of the extension.[2] Indeed the Supreme Court has held that the practical construction given to a statute, by the executive branch of the government charged with its execution, is entitled to great weight, when the true meaning of that statute is drawn into judicial inquiry.[3]

§ 267. The meritorious facts which entitled an inventor-patentee to a Patent Office extension were that, without fault or neglect on his part, he had failed to obtain from the use and sale of his invention, a reasonable remuneration for the time, ingenuity, and expense bestowed upon it, and upon its introduction into public use.[4] Unlike the foundation facts which entitle a patentee to a reissue, these points are not required by the statute to exist absolutely. The statutory provision is that they shall appear to the satisfaction of the Commissioner of Patents. It is therefore immaterial whether the courts are satisfied of their existence or not. The fact that a particular extension was granted, shows that the Commissioner was satisfied of the existence of those facts in that case; and evidence that they did not in fact exist, is therefore inadmissible in a suit for infringement of the patent during that extension.[5]

§ 268. The statute made it the duty of the Commissioner to advertise all applications for extensions, and to refer such cases to the principal examiner having in charge the class of

[1] Wilson *v.* Rousseau, 4 Howard, 687, 1846.

[2] Brooks *v.* Bicknell, 3 McLean, 250, 1843.

[3] Grant *v.* Raymond, 6 Peters, 244, 1832.

[4] Patent Act of 1836, Section 18; Patent Act of 1870, Section 66; Revised Statutes, Section 4927.

[5] Clum *v.* Brewer, 2 Curtis, 506, 1855; Jordan *v.* Dobson, 2 Abbott, 408, 1870.

inventions to which the patent sought to be extended belonged, and having received the report of the examiner, to hear and decide each particular case at the time and place designated in the advertisement. All these provisions were directory, and none of them were jurisdictional. The validity of no extension could therefore be affected by proof, in an infringement suit, that some or all of those acts were omitted by the Commissioner, or were irregularly performed.'

§ 269. No fraud, practised upon or by the Commissioner, relevant to securing or granting an extension, can ever become the subject of inquiry in any suit for infringement. The decision of the Commissioner, in granting an extension, does not, however, foreclose all inquiry into allegations of fraud, as it does into allegations of inadvertence, error, or ministerial irregularity. The law is not so absurd as to make a man's own decision that he has committed no fraud, and suffered none to be committed upon him, a conclusive adjudication of that point. But charges so grave deserve a special proceeding for their investigation. They are not to be bandied about as collateral makeweights in infringement suits. When investigated, they must be investigated in a special proceeding brought to repeal the grant of the extension.[2]

§ 270. "The benefit of the extension of a patent shall extend to the assignees and grantees of the right to use the thing patented, to the extent of their interest therein."[3] This enactment, in almost precisely the same words, has always found a place in statutes relevant to extensions of patents.[4] The meaning of this law was never learned from its perusal. It is one of the cases in which persons who could neither think nor write with precision or with clearness, were put to penning statutes for a nation. It is an

[1] Brooks *v.* Jenkins, 3 McClean, 435, 1844; Colt *v.* Young, 2 Blatch. 473, 1852; Tilghman *v.* Mitchell, 9 Blatch. 27, 1871.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 796, 1869; Mowry *v.* Whitney, 14 Wallace, 434, 1871.

[3] Revised Statutes, Section 4928.

[4] Patent Act of 1836, Section 18: Patent Act of 1870, Section 67.

instance in which Congress made a law for millions, without having any accurate idea of the nature of the law it was making. The duty of ascribing a definite meaning to the enactment, devolved, therefore, upon the courts. But the clause was so ambiguous that the judges could not agree in regard to it. A provision which should have been put beyond question by a competent and faithful Congress, when it was enacted in 1836, was still a subject of controversy in the Supreme Court more than thirty-seven years later. Now that more than fifty years have passed since its enactment, the text writer can collate the adjudicated cases, and can deduce and state the adjudicated meaning of the clause. That meaning is as follows.

§ 271. Every person who, at the beginning of any extended term of any patent, has a right to use a particular specimen of any thing covered by that patent, has the same right to use that specimen during that extended term, unless his right was expressly limited so as not to include that term; and if such a person is the owner of such a specimen, he may sell it to be used by others during that extension.'

The limitations expressed in this rule are not to be overlooked. 1. It applies only to persons whose right to use existed at the time of the extension. It has therefore been the practice of some patentees to avoid the rule altogether, by making their licenses expire a day or more before the end of the existing terms of their respective patents. 2. The rule confers no right upon any person on account of his having had a right to make or sell specimens of the patented thing. 3. The rule does not apply to any patent for a process.[2] 4. The rule confers no right under an extension, that

[1] Wilson *v.* Rousseau, 4 Howard, 677, 1846; Bloomer *v.* McQuewan, 14 Howard, 539, 1852; Chaffee *v.* Belting Co. 22 Howard, 217, 1859; Bloomer *v.* Millinger, 1 Wallace, 340, 1863; Mitchell *v.* Hawley, 16 Wallace, 544, 1872; Eunson *v.* Dodge, 18 Wallace, 414, 1873; Paper-Bag Cases, 105 U. S. 766, 1881; Woodworth *v.* Curtis, 2 Woodbury and Minot, 524, 1847; Goodyear *v.* Rubber Co. 1 Clif. 349, 1859; Wooster *v.* Sidenberg, 13 Blatch. 88, 1875; Black *v.* Hubbard, 3 Bann. & Ard. 39, 1877.

[2] Wetherill *v.* Zinc Co. 6 Fisher, 50, 1872.

did not exist under the former term. Accordingly, if the former right was subject to a royalty, the right under the extension will be subject to the same royalty.[1] 5. The rule confers no right to make or use or sell any new specimen of the patented thing;[2] though it does confer a right to repair the articles to which it applies.[3] 6. The rule does not apply where the right to use, when granted by the patentee, was expressly limited to the existing term of the patent.[4] The right provided by the rule of this section is a property right; and the specimens to which it refers, and the right to use those specimens, may therefore be transferred by sale, devise, levy of execution, or assignment in insolvency.[5]

[1] Union Mfg. Co. *v.* Lounsbury, 41 New York, 363, 1869.

[2] Hodge *v.* Railroad Co. 6 Blatch. 165, 1868; Wood *v.* Railroad Co. 2 Bissell, 62, 1868.

[3] Wilson *v.* Simpson, 9 Howard, 109, 1850; Aiken *v.* Print Works, 2 Clif. 485, 1865; Farrington *v.* Detroit, 4 Fisher, 216, 1870.

[4] Mitchell *v.* Hawley, 16 Wallace, 544, 1872.

[5] Woodworth *v.* Curtis, 2 Woodbury and Minot, 524, 1847.

CHAPTER XI.

TITLE.

272. The nature of titles, and the methods of their acquisition.
273. Title by occupancy.
274. Title by assignment.
275. Characteristics, authentication, and effect of assignments.
276. Dormant assignments.
277. Assignments of rights of action for past infringements.
278. Construction of assignments.
279. Reformation of assignments.
280. Assignments of extensions.
281. Recording and notice.
282. Warranty of title.
283. No implied warranty of validity.
284. Express warranties of validity.
285. Equitable titles; how created.
286. Equitable titles; how treated.
287. Title by grant.
288. Extra-territorial rights conveyed by grants.
288*a*. Mortgages of patents.
289. Title by creditor's bill.
290. Title by bankruptcy.
291. Title by death.
292. Tenancy in common. Joint-tenancy.
294. Rights of tenants in common as against each other.
295. Partition.

§ 272. TITLES to patent rights are capable of two independent classifications. One relates to the nature of title, and the other relates to the methods by which title may be acquired. In the first of these aspects, titles are divisible into those which are purely legal, those which are purely equitable, and those which are both legal and equitable. In the second aspect, they are divisible into those: 1. By occupancy. 2. By assignment. 3. By grant. 4. By creditor's bill. 5. By bankruptcy. 6. By death. Titles which are both legal and equitable may be acquired in either of these methods. Titles which are purely equitable may be acquired by either, except the first; and those which are purely legal may be transferred by either, except the first, fourth and fifth. It is the plan of this chapter to treat the subject of title under this sixfold division; and, in general, to treat it with a view to title which is both legal and equitable, and is therefore complete; but also, to incorporate

into that treatment such statements as may show the relations which purely legal and purely equitable titles bear to *each other and to the law*, and to conclude the whole with a discussion of such points as relate to patents owned contemporaneously by a plurality of persons.

§ 273. Title by occupancy is that title to a patent which a person may acquire by inventing any new and useful process, machine, manufacture, composition of matter or design, and by applying for and obtaining a patent thereon. During the time between the day of invention and the date of letters patent therefor, that title is inchoate, but is nevertheless recognized by both law and equity.[1] Such an inchoate right may be assigned; and an assignment thereof will convey the legal title to the letters patent, as soon as the letters patent are granted.[2] This rule applies not only to cases where the assignments are recorded before the granting of the patents,[3] but also to cases where, though executed before, they are not recorded till after that event.[4] So also, it applies to cases where applications are divided after they are assigned,[5] and to cases where the assignments are executed after the applications for patents are rejected, and before those rejections are reversed.[6] The inchoate right to a Patent Office extension of a patent, when such a right was provided by law,[7] was also a proper subject of assignment, even while it remained inchoate;[8] and such an assignment also operated to convey the legal title to such an extension, whenever such an extension was granted by the Commissioner of Patents.[9]

[1] Gayler *v.* Wilder, 10 Howard, 493, 1850; Hendrie *v.* Sayles, 98 U. S. 551, 1878.

[2] Gayler *v.* Wilder, 10 Howard, 493. 1850.

[3] Consolidated Electric Light Co. *v.* Edison Electric Light Co. 25 Fed. Rep. 719, 1885.

[4] United States Stamping Co. *v.* Jewett, 7 Fed. Rep. 869, 1880.

[5] Puetz *v.* Bransford, 31 Fed. Rep. 461, 1887.

[6] Gay *v.* Cornell, 1 Blatch. 510, 1849.

[7] From July 4, 1836, to March 2, 1861.

[8] Nicholson Pavement Co. *v.* Jenkins, 14 Wallace, 456, 1871.

[9] Railroad Co. *v.* Trimble, 10 Wallace, 380, 1870.

The title by occupancy, which an inventor acquires when he invents, is not affected by the fact that he is at the time in the employ of another;[1] for persons employed, as much as employers, are entitled to their own independent inventions.[2] The original title of a patentee to a patent issued to him, is presumed to continue till he is shown to have parted with it;[3] and the grantee named in a reissue patent is presumed to be the lawful owner of that patent until he is shown not to have owned the patent which he surrendered in order to obtain that reissue, or is shown to have parted with the title to the reissue after that date.[4]

§ 274. An assignment of a patent is an instrument in writing, which, in the eye of the law, purports to convey the entire title to that patent, or to convey an undivided share in that entire title.[5] An assignment may purport to convey the ownership of the patent, or an undivided share of that ownership, or it may purport to convey the exclusive right, or an undivided share thereof, to make, use and sell the invention throughout the United States. Such a document, in the latter form, is as truly an assignment, as is a document which employs the other phraseology.[6] And an assignment in either form, is not less an assignment because it is coupled with a license back to the assignor.[7]

Assignments of legal titles to patents must be in writing, because the statute provides no other method of effecting such an assignment;[8] and because, since patent rights are creatures of statute and not of common law, the transfer of

[1] Hapgood *v.* Hewitt, 119 U. S. 226, 1886; Solomons *v.* United States, 137 U. S. 346, 1890; Dalzell *v.* Dueber Mfg. Co. 149 U. S. 320, 1893.

[2] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

[3] Fischer *v.* Nell, 6 Fed. Rep. 89, 1881.

[4] Washburn & Moen Mfg. Co. *v.* Haish, 4 Fed. Rep. 900, 1880.

[5] Gayler *v.* Wilder, 10 Howard, 477, 1850; Waterman *v.* Mackenzie, 138 U. S. 255, 1891; Pope Mfg. Co. *v.* G. & J. Mfg. Co. 144 U. S. 249, 1892.

[6] Rapp *v.* Kelling, 41 Fed. Rep. 792, 1890; Johnson Signal Co. *v.* Union Signal Co. 59 Fed. Rep. 23, 1893.

[7] Pope Mfg. Co. *v.* Clark, 46 Fed. Rep. 792, 1891; Russell *v.* Korn, 58 Fed. Rep. 384, 1892.

[8] Revised Statutes, Section 4898.

the legal title thereto cannot be regulated by the rules of the latter system.[1] But an equitable title may be created by parol ;[2] and such a title may, perhaps, by parity of reasoning, be transferred by the same method. But a recital in a writing that a particular person is an owner with the subscriber of a patent granted to the latter, is not even an equitable assignment.[3]

Titles conveyed by assignments are usually unconditional, but they may also be held upon special tenures. One instance of such a tenure is presented where the assignment contains a condition that the assignee shall pay a specified royalty to the assignor during the life of the patent assigned,[4] or shall sell the patent and pay the proceeds to the assignor, or to others for his benefit,[5] or shall not make any assignment of the patent or license under it.[6] And other estates than a complete one, may be created in patents by assignments. An estate for years and an estate in remainder are examples of these.[7]

§ 275. The patent assigned ought to be described in the assignment by its number and date, and by the name of the patentee, and by the name of the invention which it purports to cover; but an assignment will be valid though it is lacking or erroneous in one or more of these particulars, if the description which it contains excludes doubt as to the patent intended to be conveyed.[8] The designation of the assignee in an assignment, is also sufficient where the person intended can be identified, even where evidence outside

[1] Gayler *v.* Wilder, 10 Howard, 498, 1850.

[2] Dalzell *v.* Dueber Mfg. Co. 149 U. S. 320, 1893; Whiting *v.* Graves, 3 Bann. & Ard. 225, 1878.

[3] Kearney *v.* Railroad Co. 27 Fed. Rep. 701, 1886.

[4] Littlefield *v.* Perry, 21 Wallace, 220, 1874; Boesch *v.* Graff, 133 U. S. 701, 1890.

[5] Jonathan Mills Mfg. Co. *v.* Whitehurst, 56 Fed. Rep. 594, 1893.

[6] Platt *v.* Fire Extinguisher Co. 59 Fed. Rep. 901, 1894.

[7] Solomons *v.* United States, 21 Court of Claims, 481, 1886.

[8] Case *v.* Morey, 1 New Hampshire, 349, 1818; Holden *v.* Curtis, 2 New Hampshire, 63, 1819; Harmon *v.* Bird, 22 Wendell (N.Y.), 113, 1839; Hill *v.* Thuermer, 13 Indiana, 351, 1859.

of the assignment is required for that purpose.[1] An assignment of an invention or patent for a machine will not convey any patent for a process in the performance of which that machine finds its only utility.[2] An assignment by a natural person requires no other authentication than the assignor's signature; and where such an assignment is executed by an attorney in fact, it must be executed in the name of the assignor, and cannot lawfully be executed by the attorney in his own name.[3] Assignments are sometimes acknowledged before magistrates; but if such an acknowledgment is of any value, it is so merely because it obviates the necessity of proving the signature of the assignor, and if it obviates that necessity, it does so by virtue of the law of the particular State in which it was acknowledged.[4] An assignment by a corporation needs not to be authenticated by its corporate seal, but is properly executed, if executed in the name and by the authority of the corporation, and by a proper officer, who signs for the corporation, and signs as an officer thereof.[5] An assignment to a corporation confers no title upon any stockholder therein;[6] and an assignment to a corporation which is not organized till after the date of the assignment will, at least by way of estoppel, inure to its benefit when organized, and will be good as against the assignor.[7]

A married woman, an infant, or a person under guardianship may be the assignee of an invention or of a patent. Such persons may also assign their inventions or patents by complying, not only with the United States law which requires assignments of patents to be in writing, but also

[1] Fisk Clark & Flagg *v.* Hollander, MacArthur & Mackay, 360, 1883.

[2] Downton *v.* Mfg. Co. 9 Fed. Rep. 402, 1879; Downton *v.* Allis, 9 Fed. Rep. 771, 1881.

[3] Machesney *v.* Brown, 29 Fed. Rep. 145, 1886.

[4] New York Pharmical Association *v.* Tilden, 14 Fed. Rep. 740, 1882.

[5] Gottfried *v.* Miller, 104 U. S. 527, 1881.

[6] Gottfried *v.* Miller, 104 U. S. 528, 1881.

[7] Dyer *v.* Rich, 1 Metcalf (Mass.), 180, 1840.

with those laws of their particular States which govern analogous acts of such persons.[1]

§ 276. An assignment for which the consideration was never paid, and which was never acted upon by either of the parties thereto, conveys no title to the assignee;[2] but no assignment which has been acted upon by the parties thereto can be revoked on the ground of a partial failure to pay the promised price.[3]

§ 277. Rights of action for past infringements of a patent are not conveyed by any mere assignment of that patent;[4] but they may be conveyed by any assignment which purports to convey them, whether that document purports also to convey the patent,[5] or purports to convey the rights of action alone.[6]

§ 278. The construction of assignments depends primarily upon the meaning of all the language in which they are composed, rather than upon that of any particular words they contain;[7] and if that language is clear in the eye of the law, its effect cannot be varied by any parol evidence;[8] but if that language is ambiguous, it may be construed in the light of certain classes of parol proof. The parties will never be permitted to testify what they intended to signify by the language they used, because if they were, assignors might narrow, and assignees might widen, the scope of the rights conveyed, by simply making oath to alleged former states of their own minds. Perjury could seldom be detected in such a case, and such a rule would put property at the mercy of avarice. Nor is any evidence admissible

[1] Fetter *v.* Newhall, 17 Fed. Rep. 843, 1883.

[2] Railroad Co. *v.* Trimble, 10 Wallace, 380, 1870.

[3] Hartshorn *v.* Day, 19 Howard, 222, 1856; Mackaye *v.* Mallory, 12 Fed. Rep. 328, 1882.

[4] Moore *v.* Marsh, 7 Wallace, 515, 1868; May *v.* County of Juneau, 30 Fed. Rep. 245, 1887; Koalatype Co. *v.* Hoke, 30 Fed. Rep. 444, 1887; May *v.* County of Saginaw, 32 Fed. Rep. 629, 1888.

[5] Hamilton *v.* Rollins, 3 Bann. & Ard. 160. 1877: Jones *v.* Berger, 58 Fed. Rep. 1007, 1893.

[6] Hayward *v.* Andrews, 12 Fed. Rep. 786, 1882.

[7] Washburn *v.* Gould, 3 Story, 122, 1844.

[8] Railroad Co. *v.* Trimble, 10 Wallace, 367, 1870.

which merely shows that one of the parties to an assignment made such declarations, or did such acts, in pursuance of that assignment, as indicate that he understood the document in a sense most favorable to himself. If such evidence were admissible, the honest mistake of an assignor, in construing his contract, would often deprive an assignee of rights which he had honestly bought; and the honest mistake of an assignee would often deprive an assignor of rights which he never had sold. But parol evidence is admissible to construe an ambiguous assignment, if that evidence shows the existence of such collateral documents, or surrounding circumstances, attending the execution of that assignment, as throw light upon the meaning of its words;[1] or show that both parties to that assignment, practically construed it, after its execution, and in so doing construed it alike.[2] If ambiguities still remain in an assignment after all other recognized methods of solving them have been employed, they are to be solved against the grantor, in a suit between him and the grantee, or their respective privies, as he is supposed to have written the document, and therefore to be chargeable with the obscurity;[3] but as between the grantee or his privies, and strangers to the assignment, ambiguities in such cases are solved against the grantee.[4]

§ 279. Reformation of an assignment may be had by means of a bill in equity filed for that purpose, if that assignment does not conform to the mutual intention of the parties to its execution; but neither party can secure such

[1] Read *v.* Bowman, 2 Wallace, 591, 1864; Phelps *v.* Classen, 1 Woolworth, 212, 1868; Wetherell, *v.* Zinc Co. 6 Fisher, 50, 1872; Lowrey *v.* Cowles Co. 56 Fed. Rep. 492, 1893, and 68 Fed. Rep. 366, 1895.

[2] Topliff *v.* Topliff, 122 U. S. 131, 1886; Wilcoxen *v.* Bowles, 1 Louisiana An'l. 230, 1846; Parrott *v.* Wikoff, 1 Louisiana An'l. 232, 1846. Coleman *v.* Grubb, 23 Penn. St. 409, 1854; Levy *v.* Dattlebaum, 63 Fed. Rep. 994, 1894.

[3] Smith *v.* Selden, 1 Blatch. 475, 1849; May *v.* Chaffee, 2 Dillon, 385, 1871; Falley *v.* Giles, 29 Indiana, 114, 1867.

[4] Levy *v.* Dattlebaum, 63 Fed. Rep. 994, 1894.

reformation on proof of what his intention was, unless he also proves that the intention of the other party was the same.[1] But no reformation of an assignment can affect the right of any innocent purchaser, for a valuable consideration, who had no notice, at the time of his purchase, that the mutual intention of the parties was different from the assignment which passed between them.[2]

§ 280. No extension of a patent is conveyed by an assignment of the first term thereof.[3] Nor is any extension, which is not provided for by the general law when an assignment is made, covered by the word "renewal" in such an assignment. In such a case, that word is held to mean "reissue" and not to mean "extension."[4] But if, at the time such an assignment is made, the patent statutes do provide for extensions of patents of the class to which the assigned patent belongs, then the word "renewal" is a sufficient word to convey such an extension.[5] An assignment of an invention, without limitation or qualification, will convey, not only the original term, but also any Patent Office extension, of the patent granted for that invention.[6] Whether such an assignment will convey any Congressional extension is an undecided point. An affirmative decision upon it will not necessarily follow the rule in Hendrie *v.* Sayles, but it is not improbable that the courts will take the step required to pass from the one doctrine to the other, whenever the question arises.

§ 281. Recording in the Patent Office, within three months after its date, is necessary to the validity of an assignment or grant of a patent as against any subsequent purchaser or mortgagee, for a valuable consideration, without notice.[7]

[1] Downton *v.* Allis, 9 Fed. Rep. 771, 1881.

[2] Gibson *v.* Cook, 2 Blatch. 149, 1850; Woodworth *v.* Cook, 2 Blatch. 151, 1850.

[3] Wilson *v.* Rousseau, 4 Howard, 646. 1846.

[4] Wilson *v.* Rousseau, 4 Howard, 646, 1846.

[5] Pitts *v.* Hall, 3 Blatch. 201, 1854; Goodyear *v.* Cary, 4 Blatch, 303, 1859; Chase *v.* Walker, 3 Fisher, 122 1866.

[6] Hendrie *v.* Sayles, 98 U. S. 554, 1878.

[7] Revised Statutes, Section 4898.

This statutory provision operates to give constructive notice to subsequent purchasers and mortgagees, of the assignments which are duly recorded thereunder; but it does not apply to any assignment executed prior to the granting of letters patent, unless that assignment is one upon which a patent is to be issued to the assignee, and also identifies with certainty the invention conveyed thereby.[1] But where an assignment conveys a patent, and also conveys all improvements that the assignor may thereafter make on the invention claimed therein, the due recording of that assignment operates to give constructive notice, not only of the sale of that patent, but also of the sale of those improvements.[2] Nor does the provision apply to any assignment made by a judge or register in bankruptcy, under title LXI. of the Revised Statutes; but such an assignment though unrecorded more than three months after its date and delivery, will prevail against a subsequently executed but previously recorded assignment of the bankrupt or his executor or administrator.[3] Neither does the provision apply to any assignment which conveyed accrued rights of action only.[4] In such a case, the assignee, in order to protect his right, should give the infringer notice of the assignment; so that if the infringer afterward pays the assignor, or pays some subsequent assignee, for that right of action, he will do so at his peril, and will not discharge his liability to the first assignee.[5] Recording an assignment of a patent, is not necessary to its validity, as between the parties to

[1] Wright *v.* Randal, 8 Fed. Rep. 599, 1881; New York Paper Bag Co. *v* Union Paper Bag Co. 32 Fed. Rep. 788, 1887.

[2] Aspinwall Mfg. Co. *v.* Gill, 32 Fed. Rep. 701, 1887.

[3] Prime *v.* Mfg. Co. 16 Blatch. 456, 1879.

[4] Gear *v.* Fitch, 3 Bann. & Ard. 573, 1878.

[5] Woodbridge *v.* Perkins, 3 Day (Connecticut), 364, 1809; Vanbuskirk *v.* Hartford Fire Insurance Co. 14 Connecticut, 144, 1841; Campbell *v.* Day, 16 Vermont, 558, 1844; Clodfelter *v.* Cox, 1 Sneed (Tenn.), 330, 1853; Loomis *v.* Loomis, 26 Vermont, 198, 1854; Murdock *v.* Finney, 21 Missouri, 138, 1855; McWilliams *v.* Webb, 32 Iowa, 577, 1871.

that assignment ;[1] nor as against an infringer of the patent ;[2] *nor as against an innocent purchaser for a valuable consideration without notice*, who takes his assignment within three months after the date of the prior unrecorded assignment ;[3] nor as against any subsequent purchaser who had actual notice thereof, when purchasing ;[4] nor as against any subsequent purchaser who paid no valuable consideration for the assignment which he took.[5] A merely good consideration will, therefore, not support an assignment as against any prior unrecorded assignment of the same patent, given for a valuable consideration.

The notice which will protect a prior unrecorded assignment, against a subsequent assignment for a valuable consideration, may be actual, or it may be constructive only. Such constructive notice may be based on the fact that the subsequent assignee was informed, at the time of his purchase, that the prior assignee was making, using, or selling specimens of the invention covered by the patent involved. Such making, using, or selling is such a possession of the invention, as charges all purchasers who are cognizant thereof, with notice of whatever title the maker, user, or seller may possess.[6] Whether such constructive notice may also be based on the fact that the subsequent purchaser was a corporation in which the assignor was a director, is a question upon which the precedents are now opposing.[7]

[1] Holden *v.* Curtis, 2 New Hampshire, 61, 1819; Case *v.* Redfield, 4 McLean, 527, 1849; Black *v.* Stone, 33 Alabama, 327, 1858; Moore *v.* Bare, 11 Iowa, 198, 1860; Turnbull *v.* Plow Co. 6 Bissell, 229, 1874.

[2] Brooks *v.* Byam, 2 Story, 525, 1843; Pitts *v.* Whitman, 2 Story, 609, 1843; Boyd *v.* M'Alpin, 3 McLean, 427, 1844; Case *v.* Redfield, 4 McLean, 526, 1849; McKernan *v.* Hite, 6 Indiana, 428, 1855; Sone *v.* Palmer, 28 Missouri, 539, 1859.

[3] Gibson *v.* Cook, 2 Blatch. 144, 1850

[4] Peck *v.* Bacon, 18 Connecticut, 377, 1847; Continental Windmill Co. *v.* Empire Windmill Co. 8 Blatch. 295, 1871; Ashcroft *v.* Walworth, 1 Holmes, 152, 1872.

[5] Saxton *v.* Aultman, 15 Ohio State, 471, 1864

[6] Prime *v.* Mfg. Co. 16 Blatch. 455, 1879; Dueber Watch Case Co. *v.* Dalzell, 38 Fed. Rep. 597, 1889.

[7] Continental Windmill Co. *v.* Empire Windmill Co. 8 Blatch. 295, 1871; Cutter Co. *v.* Sheldon, 10 Blatch. 1, 1872; Davis Wheel Co. *v.* Davis Wagon Co. 20 Fed. Rep. 700, 1884.

Where title has once vested in a subsequent purchaser, for a valuable consideration, without notice of a prior unrecorded assignment more than three months old; that title becomes absolute and may be purchased by persons who had actual knowledge of the prior assignment.[1] If this rule were otherwise, titles thus derived might become valueless for want of qualified purchasers.[2]

The foregoing parts of this section contemplate cases where the things covered by several assignments of the same assignors, are unquestionably identical; and where there is no ground for controversy relevant to the respective dates of the conflicting transactions. Where either or both of these circumstances are otherwise, other points of law will also arise. Where, for example, the subsequent assignment purported to convey no more than the right, title, and interest of the assignor, in the specified patent, that assignment can never prevail against any prior unrecorded assignment which left any interest in the assignor;[3] if indeed it can prevail against one which left no such interest.[4]

The date of an assignment is the day of its delivery, and not the date which appears upon its face, if the latter differs from the former;[5] and the three months within which, after that date, an assignment is required to be recorded, are calendar months.[6]

§ 282. Warranty of title is implied in every assignment of a patent right unless that assignment purports to convey merely the right of the assignor; or unless it is otherwise limited to narrower ground than the entire patent right which it describes. Every such assignment will therefore

[1] Wright *v.* Randall, 8 Fed. Rep. 599, 1881.

[2] Varick *v.* Briggs, 6 Paige (N.Y.) 329, 1837; Empire State Nail Co. *v.* Faulkner, 55 Fed. Rep. 824, 1893.

[3] Brown *v.* Jackson, 3 Wheaton, 449, 1818; Ashcroft *v.* Walworth, 1 Holmes, 152, 1872; Turnbull *v.* Plow Co. 6 Bissell, 230, 1874; Regan Vapor Engine Co. *v.* Pacific Gas Engine Co. 47 Fed. Rep. 513, 1891.

[4] Oliver *v.* Platt, 3 Howard, 363, 1845; May *v.* LeClaire, 11 Wallace, 232, 1870.

[5] Dyer *v.* Rich, 1 Metcalf (Mass.), 180, 1840.

[6] Guaranty Trust Co. *v.* Railroad Co. 139 U. S. 145, 1890.

transfer whatever title the assignor may subsequently acquire by purchase or otherwise.[1] But an assignment of the right, title, and interest of the assignor without anything more, will not operate to convey any title which is subsequently acquired by him.[2]

§ 283. No warranty of validity is implied in any assignment of a patent right. If the assignor knows the patent to be invalid, at the time he makes the assignment, he is guilty of fraud, and the assignee may have relief against him, on that ground; but if both parties are equally innocent of knowledge of invalidity, the loss consequent on any invalidity afterward brought to light, must fall upon the then owner of the patent.[3]

Some State courts have held, that when sued by an assignor for the purchase price of a patent, any assignee may defend on any ground of invalidity which he can prove to exist. This view is based on the theory that in such a case there is a failure of consideration. This theory is not correct, because an assignor may lose, and an assignee may gain as much on account of the assignment of an invalid patent as on account of a valid one. An assignment of an invalid patent is a sufficient consideration to support a promissory note, in any case where there is neither warranty nor fraud.[4] To allow an assignee, who has made profit from the patent assigned, to defend against a suit for the promised price, on the ground of some defect he has been able to discover in the patent, would be very unjust.[5] Such a rule might enable an assignee to reap enormous gains from practically exclusive rights, and then to avert payment for those rights, on some far-fetched ground of invalidity, which never for one moment had disturbed his

[1] Faulks *v.* Kamp, 17 Blatch. 433, 1880. Brush Electric Co. *v.* California Electric Light Co. 52 Fed. Rep. 963, 1892.

[2] Perry *v.* Corning, 7 Blatch. 195, 1870.

[3] Hiatt *v.* Twomey, 1 Devereux & Battle's Equity Cases (N. C.), 315, 1836; Cansler *v.* Eaton, 2 Jones' Equity Cases (N. C.), 499, 1856.

[4] Thomas *v.* Quintard, 5 Duer (N. Y.), 80, 1855.

[5] Milligan *v.* Mfg. Co. 21 Fed. Rep. 570, 1884.

exclusive possession of the patented privilege. Even where an assignee is not shown to have derived any benefit from the assignment of a particular patent, he ought not to be permitted to defend against a suit for the price he promised to pay therefor; because that assignment operated, at least to prevent the assignor from making, using, or selling specimens of the patented thing. It is perfectly well settled that loss or disadvantage to the promisee, is a sufficient consideration to support a contract, even where that contract resulted in no benefit to the promisor.[1]

§ 284. Express warranties of validity may of course be incorporated in assignments of patents; and where so incorporated, they will subject assignors to actions for damages, if the patents assigned are found to be in fact invalid.[2] Parol warranties of validity, when they accompany written assignments of patents, are inadmissible as foundations for actions for damages based on alleged invalidity of those patents;[3] but such parol statements may be admissible as aiding to prove fraud, in a case where other evidence shows that the assignor knew the patent to be invalid when he made the assignment.[4] In such a case, however, the assignee's right of action rests upon the fraud and not upon the parol warranty.[5] It follows, therefore, that the parol warranties of validity which sometimes accompany assignments of patents have little legal value.

§ 285. Equitable titles to patent rights may arise in a number of different ways. Such a title accrues to an assignee when a patent is granted to an inventor,[6] or to a subsequent assignee chargeable with notice,[7] for an invention made or

[1] Parsons on Contracts, Book 2, Ch. 1, Sec. 2.

[2] Wright *v.* Wilson, 11 Richardson (S. C. Law Reports), 151, 1856.

[3] Van Ostrand *v.* Reed, 1 Wendell, (N. Y.), 432, 1828; Jolliffe *v.* Collins, 21 Missouri, 341, 1855.

[4] McClure *v.* Jeffrey, 8 Indiana, 83, 1856.

[5] Rose *v.* Hurley, 39 Indiana, 78, 1872.

[6] Littlefield *v.* Perry, 21 Wallace, 226 1874; Nesmith *v.* Calvert, 1 Woodbury & Minot, 34, 1845; Continental Windmill Co. *v.* Empire Windmill Co. 8 Blatch. 295, 1871.

[7] Pontiac Boot Co. *v.* Merino Shoe Co. 31 Fed. Rep. 286, 1887.

completed or patented, after the execution of an assignment adapted to convey it; and a document which conveys a patent, and which also purports to convey all improvements on the invention covered thereby which may thereafter be made by the assignor, is an example of such an assignment.[1] Such a title accrues to an inventor when a patent is granted to his assignee, in pursuance of an assignment, which was accompanied by a contract providing that the assignee should pay to the inventor all or some portion of the proceeds of the patent.[2] Such a title accrues to an assignee of a term for years, in a patent right, if that term is limited to expire before the expiration of the existing term of the patent.[3] Such a title accrues to a consolidated corporation in patents owned by its constituent corporations.[4] Such a title accrues to an employer, where an employee makes an invention in pursuance of a contract to invent for that employer;[5] and such a contract may be an oral one, and not be within the statute of frauds.[6] And such a title will doubtless arise out of any contract which purports to give a person a beneficial interest in a patent right; but which does not amount to an assignment or grant of legal title, nor to a license to make, to use, or to sell the invention. So also, any facts which would create a constructive or a resulting trust, if they related to other kinds of intangible personal property, will doubtless have the same effect upon property in patents when they relate thereto.

§ 286. In whatever way an equitable title to a patent right may have arisen, it will be translated into a legal title in a proper case,[7] by means of a bill for specific performance

[1] Aspinwall Mfg. Co. *v.* Gill, 32 Fed. Rep. 699, 1887.

[2] Sayles *v.* Dubuque & Sioux City Railroad Co. 5 Dillon, 563, 1878.

[3] Cook *v.* Bidwell, 8 Fed. Rep. 452, 1881.

[4] Edison Electric Light Co. *v.* New Haven Electric Co. 35 Fed. Rep. 236, 1888.

[5] Bonsack Mach. Co. *v.* Hulse, 57 Fed. Rep. 523, 1893; Hulse *v.* Bonsack Mach. Co. 65 Fed. Rep. 864, 1894.

[6] Dalzell *v.* Dueber Mfg. Co. 149 U. S. 320, 1893.

[7] Kennedy *v.* Hazleton, 128 U. S. 667, 1888.

of contract or other action in equity;[1] and where no affirmative relief is sought by the holder of an equitable title to a patent, such a title will be upheld by a court of equity, as against all claims made under the naked legal title. But if the holder of the legal title assigns the patent to a purchaser for a valuable consideration, without notice of the equitable title, such a purchaser will take the entire ownership of the patent, freed from the prior equitable encumbrance.[2] One district judge has decided this point the other way, holding that the maxim *caveat emptor* applies to such a case.[3] But that decision was rendered before that in Hendrie *v.* Sayles; and was made in evident forgetfulness of the really applicable maxim that, "between equal equities the law will prevail;" and of the well established doctrine, that, if a purchaser for a valuable consideration, without notice of a prior equitable right, obtains a legal title at the time of his purchase, he will be entitled to priority in equity, as well as in law.[4] The maxim of *caveat emptor* applies where a seller has no title whatever.[5] When a seller has the legal title, but not the equitable, then the other maxim governs the rights of assignees.

§ 287. A grant, from one person to another, of a patent right, is a conveyance in writing of the entire right, or of an undivided interest therein, within and throughout a certain specified portion of the territory of the United States.[6] The subject matter of letters patent is not divisible in any other category than a territorial one;[7] and therefore grants can not be made to convey one of several inventions covered

[1] Hapgood *v.* Rosenstock, 23 Fed. Rep. 87, 1885; New York Paper Bag Machine Co. *v.* Union Paper Bag Machine Co. 32 Fed. Rep. 783, 1887.

[2] Hendrie *v.* Sayles, 98 U. S. 549, 1878.

[3] Consolidated Fruit Jar Co. *v.* Whitney, 2 Bann. & Ard. 385. 1876.

[4] Bispham's Principles of Equity, Section 40.

[5] Abbett *v.* Zusi, 5 Bann. & Ard. 38, 1879.

[6] Gayler *v.* Wilder, 10 Howard, 494, 1850; Moore *v.* Marsh, 7 Wallace, 521, 1868; Littlefield *v.* Perry, 21 Wallace, 219, 1874.

[7] Goodyear *v.* Railroad Co. 1 Fisher, 627, 1853; Suydam *v.* Day, 2 Blatch. 21, 1846; Washing Machine Co. *v.* Earle, 3 Wallace, Jr. 320, 1861.

by a patent;[1] nor to convey an exclusive right to make, use and sell a patented invention for one of several purposes to which it is applicable. The rules which relate to the form, authentication, construction, revocation, reformation and effect of assignments, refer with equal force to grants; except as otherwise stated or implied in this section, and except as the explained nature of a grant clearly indicates otherwise. In addition to those rules, there are several which refer to grants and not to assignments; and to the latter it is now in order to attend.

A grant is not void for ambiguity where it purports to convey all of the territory of the United States except a number of counties theretofore conveyed to others, but not specified in the grant; because the reservation is such an one as is capable of being made certain by competent evidence.[2] It is not inconsistent with the character of a document as a grant, that it contains a clause of forfeiture in case of non-payment of royalties, or a clause providing that the grantor shall prosecute and defend suits relating to the exclusive right granted.[3] And a grant is not forfeited by failure to pay a royalty; or to keep some other promise made by the grantee therein, unless the grant provides that such a failure shall work such a forfeiture.[4] Nor is it inconsistent with a grant that it is subject to an outstanding license;[5] or that the document limits the exercise of the exclusive right to the making, using and selling of a particular number of specimens of the patented invention involved.[6] But no instrument can be a grant which reserves a right to the grantor to make, but not to sell or use,[7] or to sell, but not to make or use,[8] specimens of the

[1] Pope Mfg. Co. *v.* Gormully Mfg. Co., 144 U. S. 250. 1892.

[2] Washburn & Moen Mfg. Co. *v.* Haish, 4 Fed. Rep. 908, 1880.

[3] Littlefield *v.* Perry, 21 Wallace, 220, 1874.

[4] Atkins *v.* Park, 61 Fed. Rep. 957, 1894.

[5] Russell *v.* Kern, 58 Fed. Rep. 384, 1893.

[6] Wilson *v.* Rousseau, 4 Howard, 646, 1846; Waterman *v.* Mackenzie, 138 U. S. 256, 1891; Washburn *v.* Gould, 3 Story, 122. 1844; Ritter *v.* Serrell, 2 Blatch. 379, 1852.

[7] Waterman *v.* Mackenzie, 138 U. S. 256, 1891.

[8] Pitts *v.* Jameson, 15 Barbour (N. Y. Supreme Court), 315, 1853.

patented thing, within the territory covered by the instrument.

§ 288. A grant of an exclusive right to make, use, and sell a particular patented invention, within a particular part of the United States, confers the right to use and sell, anywhere within the United States, those specimens of that invention which are made and sold under the grant, and within the territory covered thereby.[1] And an agreement between grantees, not to sell or use the patented article in the territory of each other, is not binding upon purchasers from either of the grantees,[2] unless they buy with notice of the restriction. But a lawful sale in a foreign country, of an article patented in that country, and also in the United States, does not authorize the use or sale in the United States of the article thus sold in the foreign country,[3] except possibly where the patents of the two countries, on that article, are owned by the same party, and the foreign sale was made by him. And a patentee owning a United States patent, and also a patent of some foreign country, on the same article, may couple his sales of that article in any foreign country, with a restriction prohibiting its importation into the United States; and that restriction will be binding upon all persons in the United States who have knowledge or other notice thereof.[4]

§ 288*a*. A mortgage may be executed to cover an entire patent, or an undivided part thereof; or the entire right, or an undivided interest therein, within a certain specified part of the United States. And the due recording of such a mortgage in the Patent Office makes the title of the mortgagee complete; so that he is entitled to grant licenses, receive royalties, bring suits against infringers, and recover profits or damages from them, as long as his mortgage continues in force; and it will continue in force until it is

[1] Adams *v.* Burke, 17 Wallace, 453, 1873; Hobbie *v* Jennison, 149 U. S. 355, 1893; Keeler *v.* Folding Bed Co. 157 U. S. 659, 1895.

[2] Pratt *v.* Mareen, 25 Ill. App. 516, 1888.

[3] Boesch *v.* Graff, 133 U. S. 703, 1890.

[4] Dickerson *x.* Matheson, 57 Fed. Rep. 524, 1893.

ended by a payment of the debt secured thereby, at the time provided for therein, or by redemption, on a bill in equity, within a reasonable time thereafter.[1] But such a mortgage will not affect an outstanding license, particularly where the mortgagee is chargeable with notice thereof.[2]

§ 289. A creditor's bill may operate to transfer a complete title, or an equitable title, to a patent right, whenever a judgment is obtained against its owner, and an execution issued on that judgment is returned *nulla bona;* and the court in which the creditor's bill is filed may appoint a trustee or master to execute a proper assignment.[3] But a suit, instituted by the filing of such a bill, is not a patent suit in such a sense as to confer jurisdiction on a Federal court.[4] Where jurisdiction is not conferred upon those courts by variant citizenship, or other cause known to the law, it will be necessary to proceed in the courts of the States. In such of the States as have preserved equity pleadings and proceedings, a creditor's bill is the proper document to file in such a court, when pursuing such relief; but in the States which have adopted codes of civil procedure, in place of the common law and equity plans of judicature, the end in view may be reached by what are called proceedings supplementary to executions.[5]

§ 290. Adjudication of bankruptcy and appointment of an assignee operated, under the bankrupt law of 1867, to vest in such assignee all patent rights of the bankrupt,[6] and all rights of action based thereon, except such as were held in trust by him, and except such as were exempted from attachment, or seizure, or levy on execution, by virtue of the laws of the United States, or by virtue of the laws of the State in which the bankrupt had his domicile at the time of

[1] Waterman *v.* Mackenzie, 138 U. S. 256, 1891.

[2] Waterman *v.* Shipman, 55 Fed. Rep. 984, 1893.

[3] Ager *v.* Murray, 105 U. S. 126, 1881; Wilson *v.* Fire Alarm Co. 52 Off. Gaz. 901, 1890.

[4] Ryan *v.* Lee, 10 Fed. Rep. 917, 1882.

[5] Pacific Bank *v.* Robinson, 57 California, 522, 1881.

[6] Kittle *v.* Hall, 29 Fed. Rep. 510, 1887.

the commencement of the bankruptcy proceedings.[1] But a title to a patent passed to an assignee in bankruptcy, under the law of 1867, subject to his election not to accept it, if in his opinion it was worthless, or would be burdensome and unprofitable.[2] Though this bankruptcy law was repealed in 1878, many titles to patents lately in force were transferred by its operation; and it is therefore still a law of practical importance. Whenever new bankruptcy statutes are hereafter enacted, it is probable that similar provisions will be inserted also in them. Corresponding proceedings in insolvency under State laws, do not have the operation of bankruptcy proceedings in this particular. They do not confer upon the assignee in insolvency any legal title to the patent rights of the insolvent.[3] But it is probable that courts which have jurisdiction of such proceedings may compel the insolvent to execute such an assignment to the assignee in insolvency, as will convey the same rights to the latter, as those which, without such a document, were conveyed to an assignee in bankruptcy under the bankrupt law of 1867.[4]

And the title to the patents of dissolved corporations will generally pass, under the operation of State laws, to the receivers, or other officials who are appointed to wind up their affairs.[5]

§ 291. Death of an inventor, before the grant of a patent for his invention, causes a transfer of his inchoate title to his executor or administrator, in trust for the heirs at law of the deceased in case he dies intestate, or in trust for his devisees in case he leaves a will disposing of the invention.[6] Such an inchoate title has several of the same qualities, in the hands of the executor or administrator, that it had in

[1] Revised Statutes, Sections 5046, 5053, 5045.

[2] Sessions *v.* Romadka, 145 U. S. 37, 1892.

[3] Ashcroft *v.* Walworth, 1 Holmes, 154, 1872; McCulloh *v.* Association, 45 Fed. Rep. 479, 1891.

[4] Ager *v.* Murray, 105 U. S. 131, 1881.

[5] McCulloh *v.* Association, 45 Fed. Rep. 479, 1891.

[6] Revised Statutes, Section 4896; De La Vergne Mach. Co. *v.* Featherstone, 147 U. S. 209, 1893.

the hands of the deceased. If it was an unassigned inchoate title in the hands of the inventor, it is likewise so in the hands of his legal representative. If the deceased had parted with the equitable title, and had, at his death, only the inchoate legal title, the equitable title will be unaffected by the death of the inventor, and will remain the property of its purchaser.[1] So also, if the inventor had parted, prior to his death, with the inchoate legal title, and retained the equitable title, then the latter, and not the former, will devolve upon his executor or administrator. Death of the owner of any legal or equitable title to a patent right already in existence, causes a transfer of that title to his executor or administrator, in like manner as it causes the transfer of any other intangible personal property of the deceased.[2] Such a legal representative may convey the title by assignment or by grant, by means of any suitable instrument in writing, and in pursuance of such general or special authority from the probate court as is prescribed, in that behalf, by the laws of the particular State whose court that tribunal is.[3] Where there are several joint executors or administrators, the assignment or grant of one of them is legally the assignment or grant of them all;[4] and if an administrator denominates himself an executor, or if an executor calls himself an administrator, in such a document, that document will be none the less efficacious to convey the title which he holds in his true capacity.[5]

§ 292. Tenancy in common, in a patent right, will arise whenever the sole owner of such a right, in all or in part of the territory of the United States, conveys to another an undivided interest in the whole or in part of the right which

[1] Northwestern Extinguisher Co. v. Philadelphia Extinguisher Co. 1 Bann. & Ard. 177, 1874.

[2] Brooks v. Jenkins, 3 McLean, 441, 1844; Hodge v. North Missouri Railroad Co. 1 Dillon, 104, 1870; Shaw Valve Co. v. New Bedford, 19 Fed. Rep. 753, 1884; Bradley v. Dull, 19 Fed. Rep. 913, 1884.

[3] Brooks v. Jenkins, 3 McLean, 441, 1844.

[4] Wintermute v. Redington, 1 Fisher, 239, 1856.

[5] Newell v. West, 13 Blatch. 114 1875.

he owns. Mutual ownership of some sort arises when a plurality of persons are joint inventors of a process or thing, for which they obtain a joint patent; and also when a plurality of persons obtain, by one assignment or grant, the undivided ownership of a patent, or the undivided ownership of a patent right in a part of the territory of the United States. Whether such mutual ownership constitutes tenancy in common, or constitutes joint-tenancy is a question upon which no positive answer can at present be given; unless such an answer can be based upon the fact that the courts, without examining the question, generally treat such mutual ownership as though it were, undeniably, tenancy in common. It is therefore prudent to avoid, as far as possible, the circumstances which created a joint-tenancy at English common law; for if joint-tenancy should be held to exist in any patent right, its doctrine of survivorship would deprive the heirs or devisees of a dying joint-tenant of their just inheritance, and would confer that inheritance upon the joint-tenant who survived.[1]

§ 294. One tenant in common of a patent right may exercise that right to any extent he pleases, without the consent of any co-tenant. He may make, use and sell specimens of the patented invention to any extent, and may license others to do so; and neither he nor his licensees can be enjoined from a continuance in so doing.[2] Nor can any recovery of profits or damages be had against any such licensee at the suit of any co-tenant of any such licensor.[3] It seems to logically follow that no recovery of profits or damages can be had against one co-tenant who, without the consent of the others, has made, used or sold specimens of the patented thing. That doctrine has however been denied by one federal judge;[4] and doubted by another;[5] though it has been

[1] Blackstone, Book 2, Ch. 25, last paragraph.

[2] Clum *v.* Brewer, 2 Curtis, 523, 1855; Aspinwall Mfg. Co. *v.* Gill, 32 Fed. Rep. 697, 1887; Grier *v.* Baynes, 49 Fed. Rep. 367, 1892.

[3] Dunham *v.* Railroad Co. 7 Bissell, 223, 1876.

[4] Pitts *v.* Hall, 3 Blatch. 207, 1854.

[5] Dunham *v.* Railroad Co. 7 Bissell, 223, 1876.

enforced by a third,[1] and by the Supreme Court of Massachusetts;[2] and by the Supreme Court of New York.[3] Either one of several co-tenants in a patent right may of course sell his right independently of the others;[4] but where joint trustees are appointed to hold the legal title to a patent, and to manage it according to their mutual judgment and discretion, a joint deed of all those trustees is necessary to convey that right to another.[5]

§ 295. Partition of a patent right, held by tenancy in common, may of course be made by the common consent and mutual action of all the owners of that right; but no such partition can be made against the will of either owner, except possibly in a court of equity. This rule follows from the fact that no partition of estates held by tenancy in common was compellable at common law;[6] and from the fact that no United States statute has provided for any such partition; and from the fact that the State statutes relevant to partition of property which is held under the laws of the States, cannot apply to any property which is created by the laws of the nation. Whether a compulsory partition of a patent right, held by tenants in common, is within the power of courts of equity, is a question upon which there is probably no precedent in the reports.

[1] Whiting *v.* Graves, 3 Bann. & Ard. 225, 1878.

[2] Vose *v.* Singer, 4 Allen (Mass.), 232, 1862.

[3] De Witt *v.* Mfg. Co. 5 Hun (N. Y.), 301, 1875.

[4] May *v.* Chaffee, 2 Dillon, 388, 1871.

[5] Wiscott *v.* Agricultural Works, 11 Fed. Rep. 302, 1882.

[6] Blackstone, Book 2, Ch. 12.

CHAPTER XII.

LICENSES.

296. Licenses defined and described.
297. Express licenses to make, with implied leave to use, or implied leave to sell the things made.
298. Express licenses to use, with implied leave to make for use.
299. Express licenses to sell, with implied leave to the vendees to use and to sell the things they purchase.
300. Licenses to make and use, without implied leave to sell.
301. Licenses to make and sell, or to use and sell, with implied leave to the vendees to use and to sell the articles they buy.
302. Express licenses so restricted as not to convey implied rights.
303. Written and oral licenses.
304. Recording and notice.
305. Licenses given by one of several owners in common, and licenses given to one of several joint users.
306. Construction of licenses.
307. Warranty and eviction.
308. Clauses of forfeiture.
309. Effects of forfeiture.
310. Assignability of licenses.
311. Purely implied licenses.
312. Implied licenses from conduct, and first by acquiescence.
313. Implied license from conduct by estoppel.
314. Implied license from actual recovery of a full license fee.

§ 296. ANY conveyance of a right under a patent, which does not amount to an assignment or to a grant, is a license.[1] It is a license, if it does not convey the entire and unqualified monopoly, or an undivided interest therein, throughout the particular territory to which it refers.[2] Consistently with this definition, the following have been held to constitute licenses only: an exclusive right to make and sell, but not to use:[3] an exclusive right to make and use, but not to

[1] Waterman *v.* Mackenzie, 138 U. S. 255, 1891; Seibert Oil Cup Co. *v.* Lubricator Co. 34 Fed. Rep. 221, 1888; Hatfield *v.* Smith, 44 Fed. Rep. 355, 1890; Rice *v.* Boss, 46 Fed. Rep. 195, 1891.

[2] Gayler *v.* Wilder, 10 Howard, 494, 1850; Sanford *v.* Messer, 1 Holmes, 149, 1872; Hill *v.* Whitcomb, 1 Holmes, 321, 1874.

[3] Hayward *v.* Andrews, 106 U. S. 673, 1882; Dorsey Rake Co. *v.* Mfg. Co. 12 Blatch. 203, 1874.

sell :[1] an exclusive right to use and sell, but not to make :[2] an exclusive right to make, to use, and to sell to be used, for certain purposes, but for no other :[3] and the exclusive conveyance of some, but not all, of the claims of a patent.[4] "The right to manufacture, the right to sell, and the right to use, are each substantive rights, and may be granted or conferred separately by the patentee."[5] Any one or two of those rights may be expressly conveyed by a patentee, while the other is expressly retained by him. In the absence of express reservation, however, some licenses are extended by implication, so as to convey, not only what they expressly cover, but also some other right which is necessary to the full enjoyment of the right expressly conveyed. This practice is not in conflict with the rule which prohibits the enlargement of an instrument in writing by parol evidence; because that rule is directed only against the admission of oral evidence of the language, used by the parties in a contract which was reduced to writing.[6] This practice relates to the legal effect of the language actually written, and is based on that maxim of the common law which prescribes, that any one granting a thing, impliedly grants that, without which, the thing expressly granted would be useless to the grantee.[7]

§ 297. An express license to make specimens of a patented thing, is without value, unless it implies a right to use, or a right to sell, the specimens made thereunder. It is not to be presumed that a right so nugatory as a bare right to make, was the only subject of a license for which a valuable

[1] Mitchell *v.* Hawley, 16 Wallace, 544, 1872; Rice *v.* Boss, 46 Fed. Rep. 195, 1891.

[2] Hamilton *v.* Kingsbury, 17 Blatch. 265, 1879; Brush Electric Co. *v.* California Electric Light Co. 52 Fed. Rep. 959, 1892.

[3] Gamewell Telegraph Co. *v.* Brooklyn, 14 Fed. Rep. 255, 1882; Jaros Underwear Co. *v.* Fleece Underwear Co. 60 Fed. Rep. 623, 1894.

[4] Pope Mfg. Co. *v.* Gormully Mfg. Co. 144 U. S. 249, 1892.

[5] Adams *v.* Burke, 17 Wallace, 456, 1873.

[6] Greenleaf on Evidence, Section 277.

[7] Steam Stone Cutter Co. *v.* Shortsleeves, 16 Blatch. 382, 1879; Brush Electric Co. *v.* California Electric Light Co. 52 Fed. Rep. 960, 1892.

consideration was paid. Whether the implied right, which accompanies such a license, is a right to use or a right to sell, can best be determined by ascertaining the circumstances which surrounded the giving of the particular license in question. If the licensee was engaged in a business which made it convenient for him to use the thing involved; then the right to use will be implied in preference to the right to sell, because it is the more natural implication in such a case. On the other hand, if the licensee had no occasion to use the thing in view, but was engaged in making and selling similar things, for the use of others, then a right to sell will be implied from a right to make.[1] Rights to both use and sell will not be implied from an express license to make, because only one of those rights is necessary to the beneficial enjoyment of such a license. An express license to make specimens of a particular thing, does not imply a license to use a particular patented machine for that purpose, even where the patent on that machine was owned by the licensor, at the time of the license, and even where that machine was then the best-known means of making the thing licensed.[2]

§ 298. An express license to use a limited or unlimited number of specimens of a patented article, implies a right to make those specimens, and to employ others to make them, and will protect those others in making them for the use of the licensee.[3] If the license to use, covers a greater length of time than one specimen of the thing to be used will last; then there is an implied right in the licensee to repair or to rebuild that specimen, or to replace it by another specimen made or purchased for that purpose.[4]

[1] Steam Cutter Co. *v.* Sheldon, 10 Blatch. 8, 1872.

[2] Troy Nail Factory *v.* Corning, 14 Howard, 193, 1852.

[3] Steam Stone Cutter Co. *v.* Shortsleeves, 16 Blatch. 381, 1879; Johnson Signal Co. *v.* Union Switch & Signal Co. 55 Fed. Rep. 487, 1893.

[4] Wilson *v.* Stolley, 4 McLean, 275, 1847; Bicknell *v.* Todd, 5 McLean, 236, 1851; Woodworth *v.* Curtis, 2 Woodbury & Minot, 524, 1847; Steam Cutter Co. *v.* Sheldon, 10 Blatch. 8, 1872.

§ 299. An express license to sell specimens of a patented thing, does not imply any right to make those specimens, if it can be presumed that they may be obtained by purchase; because no person requires any license to enable him to lawfully buy an article covered by any patent. But a license to sell does imply that a right to use and to sell again shall be conferred on the vendees of the licensee, for otherwise no persons would buy except for exportation, and sales for exportation are seldom sufficiently practicable to raise a presumption that they alone were contemplated by the parties to a license to sell.

§ 300. A license to make and use does not authorize any sale of the thing so made, nor authorize any purchaser of that thing to use the same.[1] Nor does a sale, coupled with an express license to use, give any right to use after the license has been forfeited or has expired.[2] The purchaser of a patented thing gets no other right to use it than such right as the seller had an express or an implied right to convey.[3] And the purchaser of a thing which is useful only in producing a patented article,[4] or in being combined with other things to constitute a patented article,[5] or when used to perform a patented process,[6] gets thereby no right to use his purchased thing for such a purpose.

§ 301. A license to make and sell, or a license to use and sell, implies a right in the purchaser to use and to sell again, the thing thus lawfully sold to him. When a specimen of a patented invention is sold with the authority of the owner of the patent which covers it, and without any restriction on the ownership or use of the thing conveyed, then that specimen passes out of the exclusive right which is

[1] Wilson *v.* Stolley, 3 McLean, 277, 1847.

[2] Wortendyke *v.* White, 2 Bann. & Ard. 25, 1875; Porter Needle Co. *v.* National Needle Co. 17 Fed. Rep. 586, 1883.

[3] Chambers *v.* Smith, 5 Fisher, 14 1870.

[4] Stevens *v.* Cady, 14 Howard, 528, 1852; Stevens *v.* Gladding, 17 Howard, 447, 1854; Elgin Wind Power Co. *v.* Nichols, 65 Fed. Rep. 220, 1894.

[5] Roosevelt *v.* Electric Co. 20 Fed. Rep. 724, 1884.

[6] United Nickel Co. *v.* Electrical Works. 25 Fed. Rep. 479, 1885.

secured by the patent, and may be used as long, or sold as often, as though it had never been subject to a patent.[1] And a restriction is not operative, upon a purchaser of the patented thing, who has no notice of the restriction.[2] The same results also follows from a sheriff's sale of a patented article, where that sale was made in pursuance of an execution, issued against the owner of the patent right, and lawfully levied on that article, as the property of that owner.[3] But no person acquiring the ownership of mutilated portions of a specimen of a patented thing, can lawfully reconstruct that specimen by adding the missing parts; and still less can he lawfully use or sell the entire article when reconstructed.[4] Nor can a purchaser lawfully repair his purchased machine, by replacing parts which are patented alone,[5] or which are the main elements of patented sub-combinations;[6] but a purchaser may repair a patented machine which he has purchased, by replacing worn out unpatented parts, so long as the identity of the machine is not destroyed.[7]

§ 302. Express licenses which, if unrestricted, would convey implied rights, may be so restricted that they will not have that effect.[8] A license to make and sell *may* be so restricted that the things made and sold under it cannot be lawfully used in certain specified parts of the United States; or so restricted that the licensee cannot make and

[1] Morgan Envelope Co. *v.* Albany Paper Co. 152 U. S. 432, 1894; Bloomer *v.* McQuewan, 14 Howard, 539, 1852; Chaffee *v.* Belting Co. 22 Howard, 217, 1859; Adams *v.* Burke, 17 Wallace, 453, 1873; Paper-Bag Cases, 105 U. S. 771, 1881; McKay *v.* Wooster, 2 Sawyer, 373, 1873; May *v.* Chaffee, 2 Dillon, 385, 1871; Detweiler *v.* Voege, 8 Fed. Rep. 600, 1881; Holliday *v.* Matthewson, 24 Fed. Rep. 185, 1885.

[2] Edison Electric Light Co. *v.* Goelet, 65 Fed. Rep. 614, 1894.

[3] Wilder *v.* Kent, 15 Fed. Rep. 217, 1883.

[4] American Cotton Tie Co. *v.* Simmons, 106 U. S. 89, 1882; Davis Electrical Works *v.* Edison Electric Light Co. 60 Fed. Rep. 276, 1894.

[5] Morgan Envelope Co. *v.* Albany Paper Co. 152 U. S. 435, 1894.

[6] Singer Co. *v.* Foundry Co. 34 Fed. Rep. 394, 1888.

[7] Young *v.* Foerster, 37 Fed. Rep. 203, 1889.

[8] Hamilton *v.* Kingsbury, 15 Blatch. 64, 1878; Hamilton *v.* Kingsbury, 17 Blatch. 264, 1879.

sell the patented thing anywhere in the United States, with intent to have it exported to a foreign country.[1] A license to use and sell may likewise be restricted in the same way. A license to make and use may be so restricted that the patented thing cannot be used in certain specified parts of the United States,[2] and cannot be used anywhere in the United States, during certain specified spaces of time.[3]

§ 303. Licenses may be written, or they may be oral.[4] The former have advantages over the latter, because they can be made exclusive, and can usually be proved with more ease and more certainty, and because the latter may sometimes be invalid because obnoxious to some statute of frauds. These points constitute abundant reasons for embodying all such contracts in plain black and white documents, rather than committing them to the "slippery memory of man." And a written license, which purports to be exclusive, will operate as a non-exclusive license, if it was given by one who had authority to give the latter, but not the former kind of license.[5] A license is valid, if made before the patent is issued, as well as if made afterward;[6] and a contract for a license is enforcible as a license, if no formal license is ever given in pursuance of the contract.[7]

§ 304. No license is required to be recorded,[8] and no record of a license affects the rights of any person; for a license is good against the world,[9] whether it is recorded or not,[10] and a purchaser of a patent takes it subject to all

[1] Dorsey Rake Co. *v.* Mfg. Co. 12 Blatch. 204, 1874.

[2] Wicke *v.* Kleinknecht, 1 Bann. & Ard. 608, 1874.

[3] Mitchell *v.* Hawley, 16 Wallace, 544, 1872.

[4] Jones *v.* Berger, 58 Fed. Rep. 1007, 1893; Union Switch & Signal Co. *v.* Johnson Signal Co. 61 Fed. Rep. 944, 1894.

[5] Union Switch and Signal Co. *v.* Johnson Signal Co. 61 Fed. Rep. 943, 1894.

[6] Brush Electric Co. *v.* California Electric Light Co. 52 Fed. Rep. 963, 1892.

[7] American Paper Bag Co. *v.* Van Nortwick, 52 Fed. Rep. 752, 1892.

[8] Brooks *v.* Byam, 2 Story 525, 1843. Consolidated Fruit Jar Co. *v.* Whitney, 2 Bann. & Ard. 38, 1875; Buss *v.* Putney, 38 N. H. 44, 1859; Jones *v.* Berger, 58 Fed. Rep. 1007, 1893.

[9] Chambers *v.* Smith, 5 Fisher, 14, 1870.

[10] Farrington *v.* Gregory, 4 Fisher, 221, 1870.

outstanding licenses.[1] So also, if a license is embodied in two papers, one of which limits the scope of the other, an assignee of the broader document will take subject to the limitations of the narrower, even if he had no notice of its provisions, nor even of its existence. Nor will the fact that the broader document was recorded, and the narrower one unrecorded, alter or affect the operation of this rule.[2] It follows, that where two licenses conflict, the first must prevail, even though the taker of the second had no notice of the existence of the first; and it also follows that any license will prevail as against the claims of any subsequent assignee or grantee of the patent right involved.[3]

§ 305. A license from one of several owners in common of a patent right, is as good as if given by all those owners;[4] and a license given to one of several joint makers or users of a patented thing is as good as if given to all, if the licensor gives it with the understanding that the thing licensed to be done is to be done jointly, or is to be done by the express licensee on behalf of the other party.[5]

§ 306. The construction of a license in writing depends upon the same general rules as the construction of other written contracts.[6] For example, it is to be construed in the light of the circumstances which surrounded its execution.[7] Accordingly, where the owner of several patents licenses a person to make, use or sell a particular class of things which, if made, used or sold without a license, would infringe all those patents, then that license confers a right under them all.[8] And this is the rule even where the licensor's title accrued to him, after the date of the license.[9]

[1] Pratt *v.* Wilcox Mfg. Co. 64 Fed. Rep. 592, 1893.

[2] Hamilton *v.* Kingsbury, 17 Blatch. 264 and 460, 1880.

[3] Continental Windmill Co. *v.* Empire Windmill Co. 8. Blatch. 295, 1871.

[4] Dunham *v.* Railroad Co. 7 Bissell, 224, 1876.

[5] Bigelow *v.* Louisville, 3 Fisher. 603, 1869.

[6] Wetherell *v.* Zinc Co. 6 Fisher, 50, 1872.

[7] Burdell *v.* Denig, 92 U. S. 722, 1875.

[8] Dey *v.* Stellman, 1 Fisher 487, 1859.

[9] Pratt *v.* Wilcox Mfg. Co. 64 Fed. Rep. 591, 1893.

§ 307. No warranty of validity of the letters patent is implied in any license given thereunder, and unattended proof of invalidity is therefore no defence to any suit for promised royalties.[1] As long as a licensee continues to enjoy the benefit of the exclusive right, he must pay the royalty which he promised to pay, and he cannot escape from so doing by offering to prove the patent to be void.[2] And the licensee must pay the promised royalty, not only on the exact invention claimed in the patent, but also on whatever is near enough like that invention to infringe the patent.[3] Nor can a licensee renounce his license without the consent, acquiescence or fault of the licensor;[4] but a false representation by the licensor to the licensee, of the rate of the royalty paid by other licensees, is such a fault as will entitle the licensee to renounce his license.[5] A license implies that the licensee shall not be evicted from its enjoyment, and such an eviction is a defence to a suit for royalties accruing after it occurred.[6]

Such an eviction occurs whenever the patent is adjudged void in an interference suit prosecuted in equity in pursuance of Section 4618 of the Revised Statutes, or whenever the patent is repealed by the decree of a court in which an action is brought by the United States for that purpose.[7] Such eviction also occurs whenever the licensee is enjoined from acting under it at the suit of the owner of a senior patent;[8] and, by parity of reasoning, it occurs whenever a judgment or decree is obtained by the owner of a senior

[1] Birdsall *v.* Perego, 5 Blatch 251, 1865; Sargent *v.* Larned, 2 Curtis, 340, 1855; Marsh *v.* Dodge, 4 Hun (N. Y.), 278, 1875; Bartlett *v.* Holbrook, 1 Gray (Mass.), 118, 1854; Marston *v.* Sweet, 66 N. Y. 207, 1876; Pope Mfg. Co. *v.* Owsley, 27 Fed. Rep. 105, 1886.

[2] Burr *v.* Duryee, 2 Fisher, 285, 1862.

[3] St. Paul Plow Works *v.* Starling, 140 U. S. 195, 1891.

[4] St. Paul Plow Works *v.* Starling, 140 U. S. 195, 1891.

[5] Hat-Sweat Mfg. Co. *v.* Waring 46 Fed. Rep. 106, 1891; Hat-Sweat Mfg. Co. *v.* Porter, 46 Fed. Rep. 757, 1891.

[6] White *v.* Lee, 14 Fed. Rep. 791, 1882.

[7] McKay *v.* Smith, 39 Fed. Rep. 557, 1889.

[8] Pacific Iron Works *v.* Newhall, 34 Connecticut, 67, 1867.

patent, against the licensee, for an infringement which consisted of acting under the license, but not when such a suit is merely proposed to be brought by the owner of a senior patent.[1]

Such an eviction will also probably be held to occur whenever the patent is defied by unlicensed persons, so extensively and so successfully as to deprive the licensee of the benefit of his share in the exclusive right which it was supposed to secure. But a single successful defiance is not enough to constitute such an eviction.[2] Nor does such an eviction result from the patentee granting later licenses at lower rates.[3]

§ 308. A license not expressly limited in duration, continues till the patent expires or the license is forfeited.[4] Forfeiture of a license does not follow from the single fact that the licensee has broken some covenant which was made by him when accepting the license; unless the parties expressly agreed that such a forfeiture should follow such a breach.[5] And even where such an agreement is made, it will not always be enforced. For example, non-payment of royalty on the very day it becomes due, will not work a forfeiture, if that non-payment arose from lack of certainty relative to the place of payment, and from lack of demand from the licensor.[6] Nor will forfeiture of a license result from the fact that the licensee has infringed the patent by doing acts, with the invention, which were

[1] American Electric Co. *v.* Consumers Gas Co. 47 Fed. Rep. 43, 1891; Consumers Gas Co. *v.* Electric Co. 50 Fed. Rep. 778, 1892.

[2] Pope Mfg. Co. *v* Owsley, 27 Fed. Rep. 108, 1886.

[3] McKay *v.* Smith, 39 Fed. Rep. 557, 1889; National Rubber Co. *v.* Rubber Shoe Co. 41 Fed. Rep. 48, 1890.

[4] St. Paul Plow Works *v.* Starling, 140 U. S. 195, 1891.

[5] White *v.* Lee, 5 Bann. & Ard. 572, 1880; Consolidated Purifier Co. *v.* Wolf, 28 Fed. Rep. 814, 1886; Densmore *v.* Tanite Co. 32 Fed. Rep. 544, 1887; Seibert Oil Cup Co. *v.* Lubricator Co. 34 Fed. Rep. 221 1888; Hammacher *v.* Wilson, 26 Fed. Rep. 241, 1886; Washburn and Moen Mfg. Co. *v.* Wire Fence Co. 42 Fed. Rep. 675, 1890; Brush Electric Co. *v.* California Electric Light Co. 52 Fed. Rep. 964, 1892; Platt *v.* Fire Extinguisher Mfg. Co. 59 Fed. Rep. 900, 1894.

[6] Dare *v.* Boylston, 6 Fed. Rep. 493, 1880

unauthorized by the license. The license will not protect him in such doings, but it will continue to protect him in doing the acts which it did authorize.[1] Indeed forfeitures are not favored by the law; and courts are always prompt to seize upon any circumstance which indicates an agreement or an election to waive one;[2] and an injunction will issue to prevent a threatened wrongful declaration of forfeiture.[3]

§ 309. Where a license is really forfeited, and the licensee continues to work under it as though it were still in force, the licensor has an option to sue him as an infringer, or to sue him for the promised royalties.[4] If he selects the first of these remedies, the infringer may generally interpose any defence that he could have set up in the absence of a license.[5] If there is an exception to this rule, that exception exists where the license contained an agreement on the part of the licensee not to contest the validity of the patent. Whether or not there is such an exception to the general rule, has never yet been settled, though the point has been raised and considered.[6] The question seems to be whether a forfeited contract is binding upon the party that suffered the forfeiture; and if so, whether a party can make a valid contract to omit a legal defence when brought into court in response to the suit of another party.[7] If the licensor selects the second of the remedies mentioned in this section he must sue at law and not in equity.[8]

[1] Wood *v.* Wells, 6 Fisher 383, 1873; Steam Cutter Co. *v.* Sheldon, 10 Blatch, 1, 1872.

[2] Insurance Co. *v.* Eggleston, 96 U. S. 572, 1877.

[3] Baker Mfg. Co. *v.* Washburn & Moen Mfg. Co. 18 Fed. Rep. 172, 1883.

[4] Woodworth *v.* Wood, 1 Blatch. 166, 1846; Cohn *v.* Rubber Co. 3 Bann. & Ard. 572, 1878; Union Mfg. Co. *v.* Lounsbury, 42 Barbour (N.Y.) 125, 1864; Starling *v.* Plow Works. 32 Fed. Rep. 290, 1887.

[5] Woodworth *v.* Cook, 2 Blatch. 160, 1850; Burr *v.* Duryee, 2 Fisher, 283, 1862, Brown *v*, Lapham, 27 Fed Rep. 77, 1886.

[6] Wooster *v.* Mfg. Co. 23 Off. Gaz. 2513, 1883.

[7] Pope Mfg. Co. *v.* Gormully, 144 U. S. 232, 1892.

[8] Consolidated Purifier Co. *v.* Wolf, 28 Fed, Rep. 816, 1886; Crandall *v.* Plano Mfg. Co. 24 Fed, Rep. 738, 1885; Washburn & Moen Mfg. Co. *v.* Freeman Wire Co, 41 Fed. Rep. 410, 1890; Washburn & Moen Mfg. Co. *v.* Barbed Wire Co. 42 Fed. Rep. 675, 1890.

§ 310. No license is assignable by the licensee to another, unless it contains words which show that it was intended to be assignable.[1] The most suitable phrase with which to express such an intention, would include the word "assigns;" but in one case it was held that the words "legal representatives" would answer the purpose, because the license fairly indicated that the parties understood that phrase to include "assigns" as well as "executors or administrators."[2] But even unassignable licenses may sometimes be invoked by persons who are not exactly identical with the licensees. A railroad company which was formed by the consolidation of prior railroad companies, may invoke the licenses which were given to either of its constituent corporations; because the consolidated company is a successor rather than an assignee of those companies.[3] So also, a license to a corporation, will protect a receiver who is authorized to manage its business during its embarrassments.[4] But a receiver who is appointed in supplementary proceedings, under the New York Code of Civil Procedure, to settle the business of an insolvent individual, does not acquire any right to an unassignable license which belonged to the insolvent person.[5]

Where a license is given to a partnership, composed of several persons, and where that partnership is dissolved, and its business is continued by one of the partners, that partner is entitled to that license;[6] but where such a dissolution ends the business of the partnership, the license

[1] Troy Factory *v.* Corning, 14 Howard, 193, 1852; Rubber Co. *v.* Goodyear, 9 Wallace, 788, 1869; Hapgood *v.* Hewitt, 119 U. S. 226, 1886; Baldwin *v.* Sibley, 1 Clifford, 150, 1858; Searls *v.* Bouton, 12 Fed. Rep. 143, 1882; Bull *v.* Pratt, 1 Connecticut, 342, 1815; Adams *v.* Howard, 22 Fed. Rep. 657, 1884; Waterman *v.* Shipman, 55 Fed. Rep. 986, 1893.

[2] Hamilton *v.* Kingsbury, 15 Blatch. 69, 1878.

[3] Lightner *v.* Railroad Co. 1 Lowell, 338, 1869.

[4] Emigh *v.* Chamberlin, 2 Fisher, 192, 1861.

[5] Waterman *v.* Shipman, 55 Fed. Rep. 985, 1893.

[6] Belding *v.* Turner, 8 Blatch. 321, 1871.

lapses;[1] except that a receiver appointed to wind up the partnership affairs, may invoke the license to protect him in so doing.[2] But a license to one person gives no right to any partner of that person, or to any corporation organized by the licensee;[3] and if it authorizes the licensee to act only at a particular place, it will not protect any of his doings elsewhere.[4] And no license to a man and any partner he may take, will protect any assignee of that man when acting alone.[5] Nor does an unassignable license pass to an executor or administrator of a deceased licensee.[6] The non-assignability of a license, may be waived by the licensor, and will be so waived if he accepts the promised royalty from the assignee of the license;[7] or ratifies the transfer of the license, by otherwise treating the assignee as the licensee was entitled to be treated.[8]

Assignable licenses are assignable only in their entirety; unless they expressly or impliedly authorize their assignment in parts, and to a plurality of persons.[9] And the royalties payable to a licensor are assignable by him; and the assignee's rights to those royalties follow the license, when it is assigned to a person who has notice of those rights.[10] The purchaser of a license takes it subject to all the restrictions connected therewith, whether he has notice of those restrictions or not;[11] and subject to liability for the same rate of royalty for his doings, that the licensee

[1] Haffcke *v.* Clark, 50 Fed. Rep. 531, 1892.

[2] Montrose *v.* Mabie, 30 Fed. Rep. 234, 1887.

[3] Eclipse Windmill Co. *v.* Windmill Co. 24 Fed. Rep. 650, 1885.

[4] Rubber Co. *v.* Goodyear, 9 Wallace, 788, 1869.

[5] Gibbs *v.* Hoefner, 19 Fed. Rep. 324, 1884.

[6] Oliver *v.* Chemical Works, 109 U S. 81, 1883.

[7] Bloomer *v.* Gilpin, 4 Fisher, 55, 1859.

[8] Hammond *v.* Organ Co. 92 U. S, 724, 1875; Lane & Bodley Co. *v.* Locke, 150 U. S. 196, 1893.

[9] Brooks *v.* Byam, 2 Story, 545, 1843; Consolidated Fruit Jar Co. *v.* Whitney, 1 Bann. & Ard. 356, 1874; Adams *v.* Howard, 22 Fed. Rep. 656, 1884; Brush Electric Co. *v.* California Electric Light Co. 52 Fed. Rep. 964, 1892.

[10] Grier *v.* Baynes, 46 Fed. Rep. 524, 1891.

[11] Chambers *v.* Smith, 5 Fisher, 12, 1870.

would have had to pay for similar acts;[1] but not subject to any royalty, or other money, due from the license to the licensor, at the time of the assignment of the license.[2]

§ 311. Purely implied licenses may arise from the conduct of patentees and grantees of patents, or from recoveries by them, of profits or damages for certain classes of infringements. Many of the rules which have thus far in this chapter, been stated and explained in connection with purely express licenses, and in connection with express licenses having implied incidents, are also applicable to licenses which are purely implied. Little or nothing remains to be said about the latter, except to state the classes of circumstances out of which they are found to spring.

§ 312. Implied licenses, from conduct of owners of patent rights, may arise out of any one of a considerable number of classes of facts; but, when analyzed, those facts will probably always be found to thus operate by virtue of the doctrines of acquiescence, or the doctrines of estoppel. Where the owner of a patent right acquiesces in the doings of one who makes, uses, or sells specimens of the patented invention, and where that owner also accepts partial compensation for such doings; a license will be implied unless the case also presents other facts which negative such an implication.[2] Payment of full compensation would be a still more convincing ground upon which to base an implied license; and such a license may be based on a clear case of acquiescence, even if no payment whatever is proved to have as yet been actually received. But acquiescence in unpaid-for use, does not always imply that no compensation is to be expected. Where the user knew of the patent, and the patentee knew of the use, and did not object thereto; it is more reasonable to imply an agreement for a *quantum meruit* or a royalty, than to imply that the

[1] Paper Stock Co. *v.* Disinfecting Co. 147 Mass. 323, 1888,

[2] Goodyear *v.* Rubber Co. 3 Blatch. 449, 1856.

[3] Blanchard *v.* Sprague, 1 Cliff. 297, 1859; Seibert Oil Cup Co. *v.* Lubricator Co. 34 Fed. Rep. 221, 1888; Keyes *v.* Eureka Mining Co. 158 U. S. 150, 1895.

patentee donated the use of his invention to the user, or to imply that the user unlawfully seized upon the invention of the patentee.[1] But where the patentee was specially employed by the user to develop the business of the latter, at the time the former made the invention used in that business; the law implies a license to continue that use without paying royalty.[2] In no case, however, can a license be implied from acquiescence, unless the licensor had knowledge of the thing acquiesced in; nor can acquiescence be predicated even of knowledge and omission to interfere with the doings of the infringer, if that omission is fairly accounted for on other grounds.

§ 313. The estoppel which will work an implied license, is that sort which is most accurately denominated estoppel by conduct; and all of the following elements are necessary to its existence. 1. There must have been a representation or a concealment of material facts. 2. The representation must have been made with knowledge of the facts. 3. The party to whom it was made must have been ignorant of the truth of the matter. 4. It must have been made with the intention that the other party should act upon it. 5. The other party must have been induced to act upon it.[3] 6. That act must be hurtful to the party acting, in case the estoppel is not enforced in his favor.[4]

If the owner of a patent right were to explain the patented invention to a person ignorant of the patent; and were to advise him to make, to use, or to sell a specimen

[1] United States *v* Palmer, 128 U. S. 269, 1888; McKeever *v.* United States, 23 Off. Gaz. 1527, 1883; Drainage Construction Co. *v.* Chelsea, 41 Fed. Rep. 47, 1890.

[2] Solomons *v.* United States, 137 U. S. 346, 1890; Lane & Bodley Co. *v.* Locke. 150 U. S. 198, 1893; McAleer *v.* United States, 150 U. S. 431, 1893; Barry *v.* Mfg. Co. 22 Fed. Rep. 397, 1884; Herman *v.* Herman, 29 Fed. Rep. 94, 1886; Solomons *v.* United States, 21 Court of Claims, 483, 1886; 22 Court of Claims, 342. 1887; Withington-Cooley Mfg Co. *v.* Kinney, 68 Fed. Rep. 505, 1895.

[3] M'Millin *v.* Barclay, 5 Fisher, 201, 1871; Bigelow on Estoppel, Ch. 18, p. 437.

[4] Railroad Co. *v.* Duboise, 12 Wallace, 64, 1870; Hill *v.* Epley, 31 Penn. State, 334, 1858; Dezell *v.* Odell, 3 Hill (N. Y.), 215, 1842; Patterson *v.* Lyttle, 11 Penn. State, 53, 1849.

of that invention, with intent to induce him to infringe the patent unknowingly; and if that person were thereby induced to incur expense in infringing or in preparing to infringe that patent; then it would follow from these doctrines of estoppel, that an implied license would result to a person thus misled. The same result would follow, if the owner of a patent right were to conceal the existence of the patent from a person who, to his knowledge, was about to infringe it unknowingly; if that concealment were done with intent to allow that person to infringe; and if that person incurred expense in infringing or in preparing to infringe, which he would not have incurred if he had known of the patent. So, also, where a person sells a patented machine to another without having any interest in or under the patent, he will be estopped from prosecuting his vendee for infringement on the basis of any after acquired title. And where a person sells a patent which employs an invention which infringes a prior patent; the person selling is estopped from bringing an action against his grantee for that infringement; and that estoppel operates as a license, not only as against the seller but also as against owners in common with him of the prior patent.[1] And where an inventor before applying for a patent thereon, sells a specimen of his invention to a manufacturer, who avowedly buys it to copy it, by making other specimens for sale, and where the seller gives the buyer no notice of intention to apply for a patent on that invention; the inventor is estopped from bringing an action on such a patent against any one, for using or selling a specimen of the invention which was made by the purchaser from him.[2]

§ 314. An actual recovery of a full license fee for making, and selling to others to be used, though not an unsatisfied judgment or decree therefor, operates as an implied license to any purchaser of the thing thus made and sold, to use it to the same extent that he could lawfully have

[1] Curran *v.* Burdsall, 20 Fed. Rep. 835, 1883.

[2] Anderson *v.* Eller, 50 Fed. Rep. 775, 1892

done, if the maker had been licensed to make and sell it.[1] But where the money recovered in an infringement suit for unlicensed making and selling a specimen of a patented thing, is recovered as damages for such making and selling alone; that recovery does not operate as an implied license authorizing the use of that specimen.[2] And where an action in equity, against an infringing user of a patented thing, is brought to recover the profits which he derived from that use; that action cannot be successfully resisted on the ground that the profits, which the infringing maker, or an infringing seller of that thing, derived from his infringment, have already been recovered from him; because each infringer is liable, in equity, for his own profits only;[3] and because the payment to the owner of a patent, of the profits which one infringer has reaped from infringement, cannot operate in equity, to relieve another infringer from liability to the owner of the patent for other profits which he derived, either from the same infringement or from a different infringement, connected or disconnected therewith. Therefore the existence of a decree for profits against a manufacturer for making and selling a patented article, does not constitute any defence to a suit for infringement brought against a user of the very same article.[4] And no action of a patentee, by way of suit, or by way of amicable collection of money for infringement against an infringing maker or seller of a patented article, can deprive

[1] Spaulding *v.* Page, 1 Sawyer, 709, 1871; Gilbert & Barker Mfg. Co. *v.* Bussing, 12 Blatch. 426, 1885; Perrigo *v.* Spaulding, 13 Blatch. 391, 1876; Steam Stone Cutter Co. *v.* Mfg. Co. 17 Blatch. 31, 1879; Booth *v.* Seevers, 19 Off. Gaz. 1140, 1881; Stutz *v.* Armstrong, 25 Fed. Rep. 147, 1885; Fisher *v.* Amador Mine, 25 Fed. Rep. 201, 1885; Tuttle *v.* Matthews, 28 Fed. Rep. 98, 1886; American Bell Telephone Co. *v.* Albright, 32 Fed. Rep. 287, 1887.

[2] Birdsell *v.* Shaliol, 112 U. S. 445, 1884; Kelley *v.* Ypsilanti Mfg. Co. 44 Fed. Rep. 21 1890; New York Filter Co. *v.* Schwarzwalder, 58 Fed. Rep. 579, 1893; Philadelphia Trust Co. *v.* Edison Electric Light Co. 65 Fed. Rep. 554, 1895.

[3] Elizabeth *v.* Pavement Co. 97 U. S. 140, 1877; Tatham *v.* Lowber, 4 Blatch. 87, 1857; Covert *v.* Sargent, 38 Fed. Rep. 238, 1889.

[4] Tuttle *v.* Matthews, 28 Fed. Rep. 98, 1886.

any licensee of the patentee, who has the exclusive right to use the patented article in a given territory, of the right to collect money from the user in that territory, of the very infringing article which was involved in the suit or settlement between the patentee and the manufacturer or seller of that article. Recoveries based on unlicensed use of a patented process or thing, are necessarily confined to such use as occurred before the suit was brought, if the action be at law, or to such as occurred before the final decree, if the action is in equity; and it therefore follows that no such recovery can operate to license any one to continue such use, or to begin a new use of that thing or that process.[1]

[1] Suffolk Co. *v.* Hayden, 3 Wall. 315. 1865.

CHAPTER XIII.

INTERFERING PATENTS.

315. Causes and characteristics of interfering patents.
316. Actions in equity between interfering patents.
317. The proper issues in such actions.
318. The force of the decision of the Commissioner of Patents on a prior interference in the Patent Office.
319. Injunctions in interference actions.
320. The proper decrees in such actions.

§ 315. PATENTS which contain one or more claims in common, are interfering patents.[1] But a generic claim, and a specific claim, the first of which secures a particular process or mechanism, with its indispensable characteristics, with or without its minor features, and the last of which secures the same process or mechanism, with but not without its minor features, are not co-extensive claims, and therefore do not interfere with each other.[2] All but one of several interfering patents are necessarily void, as to the interfering claim or claims; though all may be valid as to the other claims which they respectively contain.[3] There are two causes which lead to the granting of interfering claims. Such claims may be granted because of inadvertence or erroneous judgment on the part of the Patent Office; and they may be granted because applications do not always happen to be made in the order of invention. The first cause may operate when the Patent Office examiners overlook an anticipating patent, while examining an application in point of novelty; or when they form an erro-

[1] Nathan Mfg. Co. *v.* Craig, 49 Fed. Rep. 370, 1892; Dederick *v.* Fox, 56 Fed. Rep. 717, 1893.

[2] Stonementz Mach. Co. *v.* Brown Mach. Co. 57 Fed. Rep. 605, 1893.

[3] Gold and Silver Ore Co. *v.* Disintegrating Ore Co. 6 Blatch. 311, 1869.

neous opinion that an existing patented claim is substantially different from the claim under immediate inspection. The second cause may operate when one person who is an original, but not the first, inventor of a particular thing, applies for and receives a patent thereon, before another person, who is an original and the first inventor of that thing, files his application in the Patent Office. Under such circumstances, it is the duty of the Commissioner to declare an interference between the patent, and the unpatented application, and if, in that interference proceeding, the latter applicant is adjudged to be the prior inventor, and if the application is otherwise unobjectionable, it becomes the duty of the Commissioner to grant him a patent.[1] The Commissioner has however no authority to recall the patent theretofore granted to the wrong party. That patent can be set aside by the courts alone.

§ 316. A suit in equity is the prescribed proceeding by means of which the interfering claims of two or more patents may be adjudicated upon, in point of comparative novelty .[2] Such an action may be joined with an action for infringement,[3] where the complainant's patent was issued first. But where the defendant's patent was issued first, an action for infringement of the complainant's patent by the defendant, cannot be joined with such an interference action.[4] And where such a suit in equity is brought without joining an action for infringement therewith; a cross bill, based on alleged infringement by the complainant of the defendant's patent, is not proper.[5] Nor is a cross bill proper, which seeks to institute an interference action, in response to an action for infringement alone.[6] The

[1] Revised Statutes, Section 4904; Hubel *v.* Dick, 28 Fed. Rep. 139, 1886.

[2] Revised Statutes, Section 4918.

[3] Leach *v.* Chandler, 18 Fed. Rep. 262, 1883; Swift *v.* Jenks, 29 Fed. Rep. 642, 1887; Holliday *v.* Pickhardt, 29 Fed. Rep. 853, 1887.

[4] American Roll-Paper Co. *v.* Knopp, 44 Fed. Rep. 611, 1891.

[5] Stonemetz Mach. Co. *v.* Brown Mach. Co. 46 Fed. Rep. 851, 1891.

[6] New Departure Bell Co. *v.* Hardware Co. 62 Fed. Rep. 462, 1894.

complainant in an interference suit may be the patentee or assignee of either of the interfering patents, or a grantee or licensee thereunder; for all these persons fall within the category mentioned in the statute; a category which includes every person interested in any one of the patents, or in the working of the invention claimed under any of them. The defendant may be any patentee, assignee or grantee who owns an interest in another of the interfering patents; for all such persons are "owners" thereof. It is neither necessary that all the possible complainants should join in a suit, nor that all the possible defendants should be brought before the court. The statute provides that no decree entered in such a suit, shall affect either patent, except so far as the patent affected is owned by parties to the suit, or by persons deriving title under them after the rendition of such decree. The proper practice is to make all persons complainants who have a right, and who are willing, to be so made; and to make all persons defendants who are liable to be made so, and who are inhabitants of the district where the suit is brought, or who shall be found in that district.[1]

A bill cannot be filed in an interference suit until the complainant's patent is actually granted;[2] and until the defendant's patent is actually granted there is no occasion for such a bill. No cross-bill is either necessary or proper in a suit of this kind, because the statute provides that in such a suit the court may adjudge either of the patents to be void. The defendant may therefore obtain all rightful affirmative relief without becoming himself a complainant in a cross-bill.[3] And the defendant's right to such relief prevents the complainant from dismissing his bill without the defendant's consent.[4]

[1] 18 Statutes at Large, Part 3, Ch. 137, Sec. 1, p. 470. *In re* Hohorst, 150 U. S. 661, 1893.

[2] Hoeltge *v.* Hoeller, 2 Bond, 388, 1870.

[3] Lockwood *v.* Cleveland, 6 Fed. Rep. 721, 1884.

[4] Electric Accumulator Co. *v.* Brush Electric Co. 44 Fed. Rep. 606, 1890.

§ 317. There may be an issue of law in an interference suit depending upon the construction of the various letters patent involved therein, and consisting of the question of the presence or absence of interference between them; and such an issue when it arises in such a suit, may be decided on a demurrer.[1] There is but one issue of fact in an interference suit. That issue relates to the dates wherein the interfering matter was respectively invented by the interfering inventors. If the complainant's invention is the older, the defendant's interfering claim is void for want of novelty.[2] And the complainant's interfering claim is void for want of novelty, if the defendant's invention is found to antedate the other.[3] Evidence that a third person anticipated both inventors is not admissible in an interference suit; because such evidence is not relevant to any decree the court has jurisdiction to make in such a case. Such evidence, if acted upon, would result in a decree voiding both patents. The statute authorizes a decree voiding either patent, but authorizes none voiding both. A decree voiding one is not a decree impliedly validating the other. Such a decree leaves the successful patent open to every possible objection save want of novelty; and leaves it open to every possible objection of want of novelty, save such as might otherwise have been based on the existence of the unsuccessful patent; and leaves it open also to that objection, as between all persons, except the parties to the interference suit and their privies. If a defendant in an interference suit could attack the complainant's patent on the ground that a third person anticipated the complainant's invention, he could, with equal propriety, attack it on any or all of the numerous other grounds upon which patents may be attacked in point of validity. To suppose that the statute of interference suits authorizes any such extended litigation, is apparently to

[1] Morris *v.* Mfg. Co. 20 Fed. Rep. 121, 1884

[2] Pacific Cable Ry. Co. *v.* Butte City Ry. Co. 52 Fed. Rep. 865, 1892.

[3] National Cash Register Co. *v.* Lamson Store Service Co. 60 Fed. Rep. 603, 1894.

misapprehend its purpose and misconstrue its language.[1]

§ 318. The evidence upon which interference suits are decided, consists of the best evidence on the question in issue. On this question the Commissioner's decision is *prima facie* evidence in favor of the patent last granted; because he would not have granted it if he had not decided it to be entitled to priority in point of date of invention.[2] The Commissioner's decision is weighty,[3] but is not conclusive; because, if it were, the court would have no function but to enforce that decision; and because, if it were conclusive in law, it would bind nobody but the senior patentee. In such a case the operation of a decree based on a Commissioner's decision, if wrong in fact, would be to deprive a patentee of all right to make, use or sell the thing which he was the first to invent and the first to patent; and to throw that invention open to the residue of the world.[4]

The law of evidence, if applicable to depositions taken in a Patent Office interference, would make those depositions admissible in a subsequent interference suit between the same parties on the same question of priority.[5] But Judge SHIRAS has held that such depositions are not thus admissible, where there is no insuperable obstacle to retaking the testimony of the deponents.[6]

§ 319. Injunctions are not expressly authorized by the statute which provides for interference suits. Justice NELSON once decided that a preliminary injunction could be granted in such a case, on the ground that "the power conferred upon the Circuit Court to entertain bills in equity,

[1] Pentlarge *v.* Pentlarge, 19 Fed. Rep. 817, 1884; Lockwood *v.* Cleveland, 20 Fed. Rep. 164, 1884; American Clay Bird Co. *v.* Clay Pigeon Co. 31 Fed. Rep. 467, 1887; Nathan Mfg. Co. *v.* Craig, 47 Fed. Rep. 522, 1891.

[2] Pacific Cable Ry. Co. *v.* Butte City Ry. Co. 52 Fed. Rep. 865, 1892; Wire Book Sewing Machine Co. *v.* Stevenson, 11 Fed. Rep. 155, 1882; Chicopee Folding Box Co. *v.* Rogers, 32 Fed. Rep. 695, 1887.

[3] Appleton *v.* Ecaubert, 62 Fed. Rep. 747, 1894.

[4] Union Paper Bag Machine Co. *v.* Crane, 1 Holmes, 429, 1874.

[5] 1 Greenleaf on Evidence, Section 553.

[6] Clow *v.* Baker, 36 Fed. Rep. 692, 1888.

in controversies arising under the Patent Act, is a general equity power, and carries with it all the incidents belonging to that species of jurisdiction."[1] Justice BLATCHFORD was of counsel for defendant in that case, and was its reporter; but when he came to the bench he declined to follow the precedent, saying: "I am not aware of any principle which would authorize the Court, in a suit of this character, to restrain a defendant from bringing suits on his patent before that patent is adjudged to be invalid."[2] Of course Justice BLATCHFORD was aware of what Justice NELSON had decided. He must therefore have held that the reason Justice NELSON gave was not a good one, unless there is a substantial difference between the forms of injunction asked for in the two cases. The injunction prayed before Justice NELSON was that the defendant be restrained from using or selling his interfering patent; and the injunction prayed in the other case was that the defendant be restrained from bringing suits upon his interfering patent. In both cases the thing sought to be enjoined was an attempted enjoyment of the patented right. The two decisions seem therefore to be in conflict, and the law upon the point cannot be said to be settled.

§ 320. The hearing of an interference case may disclose that there is no interference between the patents before the court; or that there is such an interference. In the former event, the proper decree to enter is one dismissing the complainant's bill; and in the latter event, the proper decree is one adjudging the patent issued on the later of the inventions to be void, so far as it secures the interfering matter, and so far as the title of the parties to the suit extends.[3] Such a decree should be entered regardless of whether the patent to be voided is that of the defendant or that of the complainant. If it is the latter, a decree merely dismissing the complainant's bill will not answer the purpose; because

[1] Potter *v.* Dixon, 5 Blatch. 165, 1863.

[2] Asbestos Felting Co. *v.* Salamander Felting Co. 13 Blatch. 454, 1876.

[3] Gilmore *v.* Golay, 3 Fisher, 522, 1869; Sturges *v.* Van Hagan, 6 Fisher, 572, 1873.

such a decree does not necessarily involve any such conclusion.[1] It may mean only that there is no interference; or it may merely mean that the complainant has no proper title to the patent which he invokes.

[1] Tyler *v.* Hyde, 2 Blatch. 310, 1851.

CHAPTER XIV.

REPEAL OF PATENTS.

321. Patents obtained by fraud, or granted by mistake.
322. Jurisdiction of equity to repeal patents so obtained or so granted.
323. Practice in such cases.

§ 321. PATENTS and reissues may sometimes be obtained by fraud; and sometimes be granted by mistake. The facts which constitute the fraud, or which make the granting a mistaken one, may generally be interposed as one of the defences to an infringement suit; but where those facts are such that no one of those defences can be based upon them, they cannot be interposed merely because they constitute a fraud,[1] or constitute a mistake.[2] Nor can any individual bring any action to repeal or otherwise set aside a patent, on any ground of fraud; or indeed on any ground whatever, except that of an interference.[3] Where frauds are ingenious enough to keep clear of all known defences to infringement suits, the wrongs which they cause are without a remedy, unless the United States Courts will repeal a patent which United States officers have fraudulently been induced to grant, or to reissue. So also, where a patent is granted by mistake, instead of being refused, as it ought; and where the ground of refusal does not constitute ground of defence to a suit for infringement; the wrongs which such a mistake will occasion must be remedied by a repeal of the patent, or they are remediless.

§ 322. Equity has jurisdiction to repeal letters patent for inventions where they were obtained by fraud, whenever

[1] Railroad Co. *v.* Dubois, 12 Wallace, 64, 1870.

[2] Doughty *v.* West, 6 Blatch, 433, 1869.

[3] Mowry *v.* Whitney, 14 Wallace, 439, 1871.

the United States files a bill stating the facts and praying that the letters may be annulled.[1] And the same jurisdiction exists, where such letters patent are issued by any such mistake as those for which courts of equity grant relief, except so far as the peculiar provisions of the patent statutes may limit the general rule; but this jurisdiction to repeal letters patent, which may be claimed to have been issued by mistake, does not extend to error of judgment in deciding any debatable question of difference of invention.[2]

§ 323. A bill to repeal a patent must be filed by the United States;[3] acting through the United States district attorney of the district wherein it is filed;[4] and he acts under the direction of the Attorney General of the United States;[5] and it must be filed in the Circuit Court of the United States for that district;[6] and be filed before the expiration of the patent which it seeks to repeal.[7] No citizen has any power to compel the United States or the district attorney to file such a bill; or to control its prosecution after such a bill is filed.[8] The mere pendency of a bill to repeal a patent, will not affect the progress of an infringement suit based on that patent;[9] and no injunction will issue to restrain a patentee from bringing infringement suits, pending a bill in equity to repeal the patent upon which he proposes to bring them.[10]

[1] United States *v.* Bell Telephone Co. 128 U. S. 373, 1888.

[2] Bell Telephone Co. *v.* United States, 68 Fed. Rep. 565, 1895.

[3] Mowry *v.* Whitney, 14 Wallace, 440, 1871.

[4] Attorney General *v.* Rumford Chemical Works, 2 Bann. & Ard. 308, 1876.

[5] United States *v.* Bell Telephone Co. 128 U. S. 350, 1888.

[6] Revised Statutes, Section 629, p. 9.

[7] Bourne *v.* Goodyear, 9 Wallace, 811, 1869.

[8] New York & Baltimore Coffee Polishing Co. *v.* New York Coffee Polishing Co. 9 Fed. Rep. 580, 1881.

[9] American Bell Telephone Co. *v.* National Telephone Co. 27 Fed. Rep. 666, 1886.

[10] United States *v.* Colgate, 21 Fed. Rep. 318, 1884.

CHAPTER XV.

QUI TAM ACTIONS.

324. *Qui tam* actions, defined and described as they exist in the patent laws.
325. The wrongs which are the foundations of such actions.
326. The first two of those three classes of wrongs.
327. The third of those three classes of wrongs.
328. Wrongs of either class are completed when the articles are illegally marked, without any subsequent using or selling.
329. The amount of the recoverable penalty.
330. The parties in *qui tam* patent cases.
331. The forum for *qui tam* patent actions.
332. The form of the suit, and the requisites of a declaration, in such an action.
333. Injunctions to restrain the commission of wrongs of either of the first two classes.
334. Appeals in *qui tam* patent cases.

§ 324. THESE are certain actions at law, which derive their name from the Latin words *qui tam*, used at the beginning of the declaration in such an action, in times when all declarations were written in the Latin language. No such action was known to the common law of England; but several actions of the kind have long been prescribed by statute, in that country, and in this. *Qui tam* actions relevant to patents are authorized by Section 4901 of the Revised Statutes. That statute forbids certain classes of acts; and provides that whoever commits an act of either of those classes, shall be liable to a penalty of not less than one hundred dollars, with costs; and that any person may sue for that penalty, in any District Court of the United States within whose jurisdiction the offence was committed; and that one half of the penalty, when recovered, shall go to the plaintiff, and the other half to the United States.

§ 325. The forbidden acts are: 1. Unauthorized marking, upon any patented article, of the name, or any imitation of the name, of the patentee. 2. Unauthorized marking,

upon any patented article, of 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. 3. Marking upon any unpatented article the word "patent," or any word importing that the same is patented, for the purpose of deceiving the public.

§ 326. The first two of these three classes of acts are injurious to the public, and to the patentees. They are injurious to the public in that they are adapted to mislead persons into buying and using articles which were made and sold in violation of patents, and which therefore can not be lawfully used even by innocent purchasers. The law provides that those who have a right to make and sell patented articles shall mark those articles with the word "patented;"[1] and that other persons shall not so mark such articles.[2] When buying anything which is not so marked, a purchaser properly concludes that it is not patented, and that he may therefore use it without risk of a suit for infringement; and when buying anything that is so marked, the purchaser concludes, with equal propriety, that it was made and sold by the patentee or some one lawfully authorized by him, and that therefore it may be lawfully used to any extent desired. It is clear, that on these accounts, the first two of the forbidden acts are detrimental to public security, and therefore opposed to public policy. The same acts are also injurious to patentees, and they will be considered in that aspect in a subsequent section. But the second of the forbidden acts is not committed by marking the word "patented" upon a case containing patented articles of such a character that they could have been thus marked.[3]

§ 327. The last of the three forbidden classes of acts is injurious to the public, in that it is adapted to mislead persons into an opinion that they have no right to make and use, or make and sell, other specimens of the thing marked

[1] Revised Statutes, Section 4900.
[2] Revised Statutes, Section 4901.
[3] Smith *v.* Walton, 51 Fed. Rep. 17, 1892; 56 Fed. Rep. 499, 1893.

as being patented. When an unpatented thing is so marked, it is immaterial whether it is a patentable thing or not.[1] This point is so clear that it would not be thought to require or admit elaboration, had not a judge in one case expressed a contrary opinion.[2] Whether a thing is patentable or not depends on considerations of which the public as a whole are necessarily ignorant. They may therefore be deceived by seeing the word "patented" upon an unpatentable unpatented article, as readily as by seeing the same word upon a patentable unpatented article. That word warns them not to copy that article. They are as reluctant to disregard that warning on a supposition that the article is not patentable, as they are on the hypothesis that it is not patented; and they are as effectually diverted from exercising their right to copy it in the one case as in the other.

Intent to deceive the public is a necessary element of the forbidden act now under consideration; and that intent must exist at the time of the marking;[3] and it does not exist when the person marking, is himself mistaken relevant to his right so to mark;[4] or where the word "patented" is accompanied by other words or characters which indicate that the article was once the subject of a patent, but that the patent has expired at the time of the marking.[5] Inasmuch as all persons are presumed to intend the natural consequences of their acts, proof of an act which was adapted to deceive the public, is sufficient proof of the intent to deceive, unless the doer establishes his innocence of that intent. The burden of proof therefore lies upon the defendant, in this particular.[6] That burden can be carried

[1] Oliphant *v.* Salem Flouring Mills Co. 5 Sawyer, 128, 1878; Winne *v.* Snow, 19 Fed. Rep. 509, 1844.

[2] United States *v.* Morris, 2 Bond, 1866.

[3] Hotchkiss *v.* Wooden Ware Co. 53 Fed. Rep. 1018, 1891.

[4] Walker *v.* Hawxhurst, 5 Blatch. 494, 1867; Russell *v.* Newark Machine Co. 55 Fed. Rep. 300, 1893.

[5] Wilson *v.* Mfg. Co. 12 Fed Rep. 57, 1882.

[6] Brig Struggle *v.* United States, 9 Cranch, 74; 1815.

by showing that the person marking, honestly believed that the thing marked was really patented by a particular patent; but it cannot be carried by showing that the person marking did not know whether the article marked was patented or not; and the question whether a particular thing marked patented is really patented by a particular patent, is a question of construction for the Court.[1] Where the defendant is a corporation, the intent to deceive the public may be that of an officer or agent, who acted within the scope of his authority, in causing the marked article to be made and prepared for sale.[2] The forbidden act treated in this section, is not committed by marking upon a patented article the number and date of a patent which does not cover it, where it is also marked with the number and date of a patent which does cover it.[3]

§ 328. Proof that the article illegally marked patented was afterward sold, or was otherwise presented to the notice of the public, is not a necessary element in either of the acts which are forbidden by the statute; but proof that the intent to deceive the public existed when the marking was done is such an element. Accordingly, if a person illegally marks an article, his offence is complete, and is not condoned by a subsequent omission to profit by that offence; but where a person marks an article without any intent to deceive, and afterward uses the article so marked for purposes of deception, he does not violate the statute.[4] Where a person illegally marks an article in one judicial district of the United States, and offers it for sale in another, he violates the statute in the former district but not in the latter.[5]

§ 329. The penalty prescribed by the statute for either of the forbidden acts is "not less than one hundred dollars;"

[1] Tompkins *v.* Butterfield, 25 Fed. Rep. 556, 1885.

[2] Tompkins *v.* Butterfield, 25 Fed. Rep. 559, 1885; Hotchkiss *v.* Wooden Ware Co. 53 Fed. Rep. 1018, 1891.

[3] Russell *v.* Newark Machine Co. 55 Fed. Rep. 300, 1893.

[4] Nichols *v.* Newell, 1 Fisher, 647, 1853.

[5] Pentlarge *v.* Kirby, 19 Fed. Rep. 504, 1884.

and Justice CURTIS well decided that such language must, in a penal statute like this, be strictly construed, and that, when so construed, it authorizes a penalty of precisely one hundred dollars and no more.[1] And Judge THAYER instructed a jury that where several unpatented articles are marked "patented" on the same day, and at the same time, so that the act of marking is practically continuous, but one offence is committed under the statute, and only a single penalty is recoverable for all the articles thus marked.[2]

§ 330. The plaintiff in a *qui tam* action for illegally marking a patented or unpatented article may be any "person,"[3] whether he was injured by the doings of the defendant or not.[4] It was decided under a similar statute relevant to copyrights, that a plurality of persons could not join as plaintiffs in an action of the kind.[5] The language of that copyright statute was identical with that of the present patent statute in this particular; and the same good reasoning which carried the court to its conclusion in the copyright case, will probably carry any court to the same conclusion in any *qui tam* action under the patent statute. The person who sues must be a natural and not an artificial person; and he must sue in his own name and not in that of the United States,[6] though it is not improper for him to state that he sues for the United States, as well as for himself.[7]

The defendant may be the particular natural person who did the marking complained of. The death of the defendant will end a *qui tam* patent case, and will terminate the right of action on which it is based.[8]

§ 331. Jurisdiction in *qui tam* actions, unlike that in other kinds of patent suits, is conferred upon District Courts, not

[1] Simpson *v.* Pond, 2 Curtis, 502, 1855.

[2] Hotchkiss *v.* Wooden Ware Co. 53 Fed. Rep. 1021, 1891.

[3] Revised Statutes, Section 4901.

[4] Winne *v.* Snow, 19 Fed. Rep. 508, 1884.

[5] Ferrett *v.* Atwill, 1 Blatch. 153, 1846.

[6] United States *v.* Morris, 2 Bond 27, 1866.

[7] Winne *v.* Snow, 19 Fed. Rep. 508, 1884.

[8] Schreiber *v.* Sharpless, 17 Fed. Rep. 589, 1883.

upon Circuit Courts, of the United States, and is conferred upon the particular court within the district of which the forbidden act was committed.[1]

§ 332. The proper form of common law action in *qui tam* cases is that of debt.[2] Inasmuch, however, as no particular form is prescribed by the Federal statute, the code forms of complaints or petitions are to be used in code States.[3] The declaration, complaint, or petition, as the case may be, ought to state all the elements of the forbidden act upon which it is based;[4] and to charge that the act was contrary to the form of the statute in such cases made and provided.[5] It is not enough to charge that the act was contrary to the law in such cases made and provided,[6] but to aver it to have been contrary to the form of the statutes in such cases made and provided, though inartistic, is not fatal.[7] It is not necessary to aver the uses to which the penalty, when recovered, is to be applied.[8] A declaration, complaint or petition in a *qui tam* patent case, is tested in point of sufficiency by the rules applicable to civil actions in the State in which the District Court is established, when that sufficiency is drawn in question in that court.[9]

§ 333. The first two of the classes of acts forbidden by Section 4901 of the Revised Statutes are not only injurious to the public, in the manner already explained, but they are also injurious to the rightful patentees. Such acts enable infringers to increase the amount of their infringements, by inducing the public to believe that the articles they sell were lawfully made, and may be lawfully sold and

[1] Revised Statutes, Section 4901; Winne *v.* Snow, 19 Fed. Rep. 509, 1884; Pentlarge *v.* Kirby, 19 Fed. Rep. 505, 1884.

[2] Stimpson *v.* Pond, 2 Curtis, 505, 1855; Jacob *v.* United States, 1 Brockenbrough, 520, 1821.

[3] Revised Statutes, Sections 721, 914.

[4] Ferrett *v.* Atwill, 1 Blatch. 155, 1846.

[5] Sears *v.* United States, 1 Gallison, 259, 1812.

[6] Smith *v.* United States, 1 Gallison, 264, 1812.

[7] Kenrick *v.* United States, 1 Gallison, 273, 1812.

[8] Sears *v.* United States, 1 Gallison, 259, 1812.

[9] Fish *v.* Manning, 31 Fed. Rep. 340, 1887.

used. So also, such acts may enable infringers to palm off on the public an inferior article, the using of which will disappoint the purchaser, and thus operate to injure the reputation of the genuine thing. For these reasons, it has been held that a person who is guilty of an act of either of the first two classes may be restrained by an injunction from any repetition of such an act.[1]

§ 334. A writ of error lies to the Circuit Court of Appeals for the circuit from the final judgment of a District Court in a *qui tam* patent case; but no such writ of error lies from a Circuit Court of Appeals to the Supreme Court of the United States; though such a case may go to the latter tribunal upon a certificate from the former, or upon a certiorari from the Supreme Court.[2]

[1] Washburn & Moen Mfg. Co. *v.* Haish, 4 Bann. & Ard. 571, 1879.

[2] 26 Statutes at Large, Chap. 517, Sec. 6.

CHAPTER XVI.

INFRINGEMENT.

335. Infringement of process patents, illustrated by the case of Tilghman *v.* Proctor.
336. Illustrated by the case of Mowry *v.* Whitney.
337. Illustrated by the case of Cochrane *v.* Deener.
338. Equivalents in processes and additions thereto.
339. Infringement of patents for machines or manufactures.
340. Comparative results.
341. The test of comparative modes of operation.
342. Comparative modes of operation as illustrated by the case of the Cawood patent.
343. As illustrated by the Driven-Well cases.
344. As illustrated by Blanchard's patent for turning irregular forms.
345. As illustrated by Hayden's Brass-Kettle machine.
346. As illustrated by the case of Burr *v.* Duryee.
346*a*. As illustrated by The Electric Signal case.
347. Addition.
348. Transposition of parts.
349. Omission.
350. Substitution of equivalents.
352. The test of sameness of function, of equivalents.
353. The test of substantial sameness of way of performance.
354. Question of the necessity of age in equivalents.
359. Primary and secondary inventions in respect of the doctrine of equivalents.
362. Review of the matters considered in Section 359.
363. Changes of form considered in respect of questions of infringement.
364. Subject of the last section illustrated by the case of Strobridge *v.* Lindsay.
365. Illustrated by the case of Ives *v.* Hamilton.
366. Illustrated by the case of Morey *v.* Lockwood.
367. Illustrated by the case of the American Diamond Rock Boring Co. *v.* The Sullivan Machine Co.
368. Illustrated by the case of Elizabeth *v.* Pavement Co.
369. Infringement of patents for compositions of matter.
370. Substitution of ingredients.
371. Substitution of ingredients as illustrated by the Giant-Powder cases.
372. Disclaimers of particular equivalents.
373. Changes of the proportion in compositions of matter.
374. The various classes of compositions of matter.
375. Infringements of patents for designs.
376. Comparative utility not a criterion of infringement.
377. Knowledge of a patent not a necessary element in its infringement.

§ 335. A PATENT for a process is infringed by him, who, without ownership or license, uses substantially the process which the patent claims; whether or not he uses substantially the apparatus which the patent describes,[1] and whether he uses the materials prescribed by the patent, or uses equivalents therefor.[2] Infringement of a process patent may occur even where precise identity does not exist in respect of the process claimed by the patent, and that used by the infringer. In the leading case just cited, the apparatus used by the infringer was totally unlike that described by the patent; and the process used by the infringer differed from the patented process in several particulars. The claim of the patent was: "The manufacturing of fat acids and glycerine from fatty bodies by the action of water at a high temperature and pressure." The description of the process which was contained in the specification of the patent, stated that the water should be mixed with the fatty body in the proportion of two or three parts of fat to one of water; and that the mixture should be heated to about 612° Fahrenheit; and should be subjected to a pressure sufficient to prevent the heat from converting the water into steam.

The infringer mixed from four to seven per cent. of lime with the water and the fat; and heated the mixture to only about 310° Fahrenheit; and subjected it to a pressure correspondingly lower than what would have been necessary to prevent the conversion of the water into steam, if he had used the higher degree of heat. So also, he heated his mixture by means of superheated steam introduced into the vessel containing it, instead of applying heat to the outside of the vessel; and he maintained the intimacy of the mixture by continuously pumping the water from the bottom to the top of the mingled mass, instead of continuously forcing the mixture through a coil of tubes. Notwithstanding all these differences, the Supreme Court held the

[1] Tilghman *v.* Proctor, 102 U. S. 730, 1880.

[2] Schwarzwalder *v.* Filter Co. 66 Fed. Rep. 158, 1895.

defendant's process to substantially include that of the patent, and therefore to be an infringement of the latter. This holding was not inconsistent with the opinion that the addition of the lime to the mixture, was a useful addition to the patented process, nor with the possibility that the defendant's method of maintaining the intimacy of the mixture, was superior to that of the patent, nor with the probability that the heating by the introduction of superheated steam, was more perfect than by conducting the heat into the mixture through the walls of the inclosing vessel, nor with the fact that the lower degree of heat and of pressure used by the defendant was more safe, and perhaps more economical, than the higher degree of each, which was suggested in the patent.

§ 336. Similar circumstances characterized the question of infringement in the case of Mowry *v.* Whitney.[1] The patent in that case covered a process, which consists in taking cast iron car-wheels from their moulds as soon as they become solid enough to retain their shape; and in immediately placing the wheels in a furnace or chamber, previously heated to about the temperature of the wheels when taken from the moulds; and in thereupon reheating those wheels; and then in causing them to finally cool with a great degree of slowness.

The infringer's process consisted in taking the wheels red hot from the moulds; and in thereupon putting them in an unheated chamber, interlaying them with charcoal, and covering the whole with a perforated metal plate; and in then causing the charcoal to burn so as to reheat the wheels to a somewhat indefinitely high temperature; and in so adjusting the draft, as to make the charcoal burn out and the wheels to consequently cool down, with a great degree of slowness. The Supreme Court found all of the steps of the complainant's process in the defendant's doings, though confessedly the reheating was done by different

[1] Mowry *v.* Whitney, 14 Wallace, 620, 1871.

means, and the slow cooling regulated on different principles, from those which caused and controlled the corresponding parts of the complainant's process.

§ 337. The case of Cochrane *v.* Deener[1] involved the infringement of a patent for a process of winnowing impurities out of ground wheat, while the flour is being separated from the other parts of the meal by means of fine cloth sieves, commonly called "bolts." The patent described a suitable apparatus by means of which to practice this process. It consisted of a series of cylindrical sieves, covered with cloth of progressively finer meshes, and having within them a series of air pipes, so disposed that when the ground wheat was in the sieves, and the sieves were revolving, air blasts were blown from the ends of those pipes, into and among the particles of ground wheat. Those air blasts operated to blow the impurities through the opening in the top of the bolting chamber, at the same time that the revolutions of the sieves operated to separate the flour from the middlings. The result of the whole operation was to separate the ground wheat into three sorts of matter, and to place those three sorts in three different receptacles.

The defendant accomplished the same result, by winnowing the impurities out of the ground wheat, while the flour was being separated from the other parts of the meal by means of fine cloth sieves. But the defendant's sieves were flat, and the air blasts were blown through those sieves from below and reached the impurities through the cloth, instead of reaching them from the ends of pipes located on the same side of the cloth, as that occupied by the ground wheat. The Supreme Court, however, held that process to infringe the complainant's patent, notwithstanding these differences.

§ 338. No process patent is infringed where any one of the series of acts which constitute the process is omitted

[1] Cochrane *v.* Deener, 94 U. S. 787, 1876.

by the supposed infringer, unless some equivalent act is substituted for the one omitted.[1] Precisely what constitutes equivalency, as between acts, has never been decided or stated by the Supreme Court. Reason seems to indicate that one act is the equivalent of another when it works in substantially the same way to accomplish the same result. Accordingly, it has been held that tamping oil wells with benzine, is equivalent to tamping them with water in respect of the series of acts which constitute the process covered by the Roberts torpedo patent.[2] An addition to a patented process does not avert infringement, even where the addition is an improvement.[3]

§ 339. Machines and manufactures may well be treated together in respect of infringement, because no exact line can be drawn between them, and because the same rules of infringement are applicable to both those classes of tangible things. A patent for a machine or manufacture is infringed by him who, without ownership or license, makes, or uses, or sells any specimen of the thing covered by any claim of that patent. It is not an infringement of a patent, to make, use, or sell any specimen of any invention described but not claimed therein;[4] because a patent covers only what it claims. But whoever infringes any one claim of a patent infringes the

[1] Royer *v.* Coupe, 146 U. S. 531, 1892; Dittmar *v.* Rix, 1 Fed. Rep. 342, 1880: Hammerschlag *v.* Garrett, 10 Fed. Rep. 479, 1882; Cotter *v.* Copper Co. 13 Fed. Rep. 234, 1882; Arnold *v.* Phelps, 20 Fed. Rep. 315, 1884; Brush Electric Co. *v.* Jullen Electric Co. 41 Fed. Rep. 679, 1890; Brush Electric Co. *v.* Accumulator Co. 47 Fed. Rep. 49, 1891.

[2] Roberts *v.* Roter, 5 Fisher, 206, 1872.

[3] Lalance & Grosjean Mfg. Co. *v.* Habermann Mfg. Co. 53 Fed. Rep. 380, 1892; Tuttle *v.* Matthews, 28 Fed. Rep. 98, 1886; New York Filter Co. *v.* Schwarzwalder 58 Fed. Rep. 579, 1893; Edison Electric Light Co. *v.* Philadelphia Trust Co. 60 Fed. Rep. 398, 1894.

[4] Howe *v.* Williams, 2 Cliff. 262, 1863; Waterbury Brass Co. *v.* Miller, 9 Blatch. 93, 1871; Toohey *v.* Harding, 4 Hughes, 253, 1880; Buffington's Iron Building Co. *v.* Eustis, 65 Fed. Rep. 807, 1895.

patent, whether or not it contains other claims which he does not infringe.[1]

Whether a particular thing made or used or sold by a particular person, infringes a particular claim of a particular patent, is always a question of fact. In some cases that question can readily be decided by the application of one rule of law, and sometimes by the application of another, and sometimes it can be decided only by the judicial sagacity of the tribunal before which the question is tried. Such relevant rules of law as are well established, will now be stated, and, as far as necessary, will be illustrated by describing the leading cases which embody them.

§ 340. The respective results of a machine or manufacture covered by the claim of a patent, and of a machine or manufacture alleged to infringe that claim, do not furnish a criterion by which to decide the question of infringement. Those results may be identical, while the things which produce them are substantially different. Any person may accomplish the result performed by a patented thing without infringing the patent, if he uses means substantially different from those of the patent.[2] To hold the contrary of this rule would be to retard, and not to promote the progress of the useful arts.[3] So also, on the other hand, the result of an alleged infringing machine or manufacture may be entirely different from the result described in the patent without causing that machine or manufacture to escape the charge of infringement, even when that charge is based on unlicensed using. This rule results from the well-established point of law that it is an infringement of a

[1] Moody *v.* Fiske, 2 Mason, 115, 1820; Wyeth *v.* Stone, 1 Story, 273, 1840; Pitts *v.* Whitman, 2 Story, 609, 1848; Colt *v.* Arms Co. 1 Fisher, 108, 1851; Pitts *v.* Wemple, 2 Fisher 10 1855; Foss *v.* Herbert, 1 Bissell, 121, 1856; Morris *v.* Barrett, 1 Bond, 254, 1859; Singer *v.* Walmsley, 1 Fisher, 558, 1860; McComb *v.* Brodie, 1 Woods, 153, 1871; McComb *v.* Ernest, 1 Woods, 195, 1871.

[2] O'Reilly *v.* Morse, 15 Howard, 62, 1853; Steam Gauge & Lantern Co. *v.* Mfg. Co. 29 Fed. Rep. 447, 1886.

[3] Smith *v.* Downing 1 Fisher, 84, 1850.

patent to use any machine or manufacture claimed therein, though such use is for a purpose which is not mentioned in the patent.[1] But it has been held that a machine, which can do a particular kind of work, is not an infringement of a patent on a different machine, which cannot do the same work.[2]

§ 341. Mode of operation is a criterion of infringement on one side of that question, but not on the other. If the mode of operation of an alleged infringing thing is substantially different from that covered by the claim alleged to be infringed, it follows that the charge of infringement must be negatived ;[3] but if the mode of operation is substantially the same, it does not follow that the charge of infringement must be affirmed. In that case the question must be decided by some additional criterion. To establish an infringement of a claim, the facts must be subjected to several successive tests. If the case fails on either of those tests, no further inquiry need be made ; but an infringement cannot be affirmed till all those tests have been applied and have been withstood. The first of these is that which relates to identity of mode of operation. It is therefore important to know wherein this requisite identity consists. A dogmatic statement on that point has probably never been ventured by any court. The nature of the question seems not to admit of an answer which shall be at once short and sufficient. The best way to investigate the subject is probably to reason by analogy from precedents ; and accordingly several of the sections which immediately follow, are devoted to an analysis of cases, with a view to furnishing the investigator with data for such reasoning.

§ 342. The Cawood patent[4] covered a machine which

[1] Mable *v.* Haskell, 2 Cliff. 511, 1865; McComb *v.* Brodie, 1 Woods, 159, 1871; Zinn *v.* Weiss 7 Fed. Rep. 916, 1881; Union Stone Co *v.* Allen, 14 Fed. Rep. 353, 1882; Cincinnati Ice Machine Co. *v.* Brewing Co. 31 Fed. Rep. 472, 1887.

[2] Norton *v.* Jensen, 49 Fed. Rep. 875, 1892.

[3] Field *v.* De Comeau, 116 U. S. 187, 1886; Yale Lock Co. *v.* Sargent, 117 U. S. 378, 1886; Smith *v.* Downing, 1 Fisher, 83, 1850; Eames *v.* Cook, 2 Fisher, 149, 1860.

[4] Cawood Patent, 94 U. S. 706, 1876.

combined the mode of operation of an anvil, with the mode of operation of a vise. A drawing of the machine is printed on page 492 of 1 Wallace. The railroad rail mended upon it, was supported by it as by an anvil; and at the same time was clasped by it as by a vise. The Supreme Court held that the "Michigan Southern" machine did not infringe the Cawood patent, because while that machine did clasp the rail as a vise, it did not support the rail as an anvil. The same tribunal also held that the Beebe and Smith machine did not infringe the Cawood patent, because its mode of operation was different. It both supported and clasped the rail, but it clasped it by holding it between two jaws, which jaws, when in position, rested in a V-shaped notch in the anvil. The exterior of the jaws were also V-shaped, in order to fit the notch, and they clasped the rail because of their gravity, and not in the manner of a vise. They also supported the rail, but in a manner peculiar to themselves, and not in the manner of an anvil.

§ 343. The driven-well patent, reissue No. 4372, covers an interesting invention. That invention is practiced by driving into the ground a long tube closed and pointed at its lower end, and having perforations through its sides just above that end; and by attaching a pump to its upper end; and by working that pump whenever water is desired. The mode of operation of that well is as follows: The working of the pump rarefies the air in the tube, and outside of the tube in the neighborhood of its lower end, and that rarefication causes the air above the ground to force the water in several millions of cubic feet of the surrounding earth, into and up the tube.

The alleged infringer in one case,[1] followed the patent in every particular except that instead of driving the tube into the earth, or into a hole previously made by driving down a rod smaller than the tube, he bored a hole into the earth with an auger larger than the tube which he placed in the hole after the auger was withdrawn. This apparently slight

[1] Andrews *v.* Long, 12 Fed. Rep. 871, 1880.

change caused the well to have a substantially different mode of operation from that covered by the patent. The pump, indeed, rarefied the air in the tube as before, but that rarefication did not extend into the ground around the outside of the tube, because the space outside of the lower end of the tube was in direct communication with external air, through the annular space which surrounded the tube throughout its entire length, and which was due to the fact that the tube was smaller than the hole in which it was placed. Because of this difference, Judge McCRARY, with excellent discrimination, held that the well of the defendant did not infringe the driven-well reissue.

§ 344. Blanchard's patent for a machine for turning and cutting irregular forms consisted of a combination of a model, a guide, and a cutter-wheel. When the machine was in operation, the guide followed the irregularities of the model, as the model revolved; and the guide also caused the cutter to follow the same irregular curves, while the rough block was revolved under the cutting edges. Both model and block had a continuous lateral motion, as well as a continuous rotary motion, and therefore the guide and the cutter-wheel proceeded in corresponding spiral courses. In that way, the guide traversed all parts of the surface of the model, and the cutter-wheel traversed all portions of the rough block, and thus reduced the latter to conformity with the shape of the model. An infringer in one case [1] so combined the parts of the machine that the model and rough block both rotated by an intermittent motion, and moved laterally by a rectilinear reciprocating motion. Justice GRIER held that this mode of operation was substantially unchanged from that of the patent.

§ 345. Hayden's patent for a machine for making brass kettles consisted of two general divisions. 1. An engine lathe with its mandrel to revolve the pulleys and the gearing, and having special devices for the special work in hand. 2. A furnishing or spinning tool and tool carriage,

[1] Blanchard *v.* Reeves, 1 Fisher, 103, 1850.

secured to the frame of the lathe, and having special devices to make it work harmoniously with the lathe in producing the kettles which the two divisions of the machine jointly operated to manufacture. These two divisions were operated by one motive power, like a shaft, which might be connected with a water wheel, or with a steam engine, or with any other suitable source of motion.

The infringer in one case[1] operated the first division of the machine by one such motive power; but he operated the second division by another, namely, by the hand of a workman turning a crank. Judge WOODRUFF held that this was not such a change of mode of operation as amounted to enough to negative infringement.

§ 346. The Wells hat-body machine consisted of a revolving brush to separate and throw fibres of fur; a perforated vacuum cone to receive the fur on its exterior surface; and an intermediate tunnel, to guide the fur from the brush to the cone. The patent which was granted for that invention was three times surrendered and reissued. The second reissue was involved in a celebrated Supreme Court case.[2] That reissue described the machine which Wells invented, and it claimed the mode of operation, substantially as described, of forming "bats" (hat bodies) of fur fibres. The object of this claim was to cover the machine of Seth Boyden; a machine which had the same general mode of operation as that of Wells, but which was substantially different from the latter in one of its parts. This attempt to base a charge of infringement on sameness of "mode of operation" alone was occasioned by the fact that Justice CURTIS, in delivering the opinion of the Supreme Court in the case of Winans *v.* Denmead,[3] had used the phrase with great frequency. He used it exactly twenty times in that case; and the counsel for the Wells patent, when arguing the case of Burr *v.* Duryee, formulated seven doctrines

[1] Waterbury Brass Co. *v.* Miller, 9 Blatch. 94, 1871.

[2] Burr *v.* Duryee, 1 Wallace, 531, 1863.

[3] Winans *v.* Denmead, 15 Howard, 330, 1853.

which they stated were deducible from that score of instances. Among those doctrines the fourth was this: That copying a mode of operation is an infringement. But Justice GRIER, who was one of the majority of the court which decided Winans *v.* Denmead, was convinced that the latter decision was erroneous, or that it did not mean what it was generally understood to signify, for in Burr *v.* Duryee he delivered the unanimous opinion of the Supreme Court rejecting the complainant's contention. The case of Winans *v.* Denmead cannot therefore be fairly cited as an authority on this point, for if it is not consistent with Burr *v.* Duryee, it was overruled by the latter, and if it is consistent with the latter case, its expressions are likely at least to mislead the reader, as they misled the counsel for the Wells patent. Harmoniously with its decision in Burr *v.* Duryee, the Supreme Court has ever since had a positive tendency to disregard whatever is abstract and intangible in questions of infringement, and to base its conclusions upon the concrete features of the issues at bar.

§ 346*a*. The Pope electric railroad signal consisted of the combination of an electric battery; a peculiar arrangement of electric circuits; and two or more circuit closers, operating two or more visual or audible signals, situated at intervals along the line of a railroad. That peculiar arrangement of electric circuits essentially consisted in attaching two line wires to the positive and negative poles of a battery, respectively; and in extending both of those wires any required distance in a direction substantially parallel to the line of the railroad; and insulating both from the earth and from each other; and in connecting one of them at intervals with insulated rails in one of the two lines of rails of the railroad track; and in connecting the other one of those wires at the same intervals with insulated rails in the other line of rails in the same track; and interposing an electro-magnet at some point in each of these latter connections. An alleged infringer in one case [1] used an electric

[1] Electric Signal Co. *v.* Hall Signal Co. 114 U. S. 87, 1885.

railroad signal differing from that of Pope mainly in the peculiar arrangement of the electric circuits. That difference consisted mainly in disconnecting the negative pole of the battery from its line wire, and in connecting that pole with the earth adjacent thereto, and in connecting the remote end of the disconnected line wire with the earth adjacent to that end. These changes of arrangement changed the mode of operation of the apparatus, in that they caused the electricity to traverse circuits of equal length when the series of circuit closers were successively operated, whereas Pope's arrangement caused the electricity to traverse circuits of widely variant lengths at such times. This change of mode of operation resulted in a uniformity of electrical resistance among all the circuits, and thus much increased the utility of the apparatus. The Supreme Court therefore held the alleged infringer's combination to be an independent invention, substantially different from that of Pope, and not an infringement of his patent.

§ 347. Addition to a patented machine or manufacture does not enable him who makes, uses, or sells the patented thing with the addition, to avoid a charge of infringement.[1] This is true even where the added device facilitates the working of one of the parts of the patented combination, and thus make the latter perform its function with more excellence and greater speed;[2] or where the added part hinders the patented combination from having some of its minor merits.[3] But if a patented combination differs from some older combination, only in the omission of one of the parts of the latter, and in a resulting difference of mode of operation, the restoration of the older structure by adding

[1] Western Electric Co. *v.* LaRue, Fed. Rep. 858, 1890. 139 U. S. 607, 1891; Carr *v.* Rice, 1 Fisher, 209 1856; Roemer *v.* Simon, 20 Fed. Rep. 197, 1884; Royer *v.* Coupe, 29 Fed. Rep. 366, 1886; Filley *v.* Stove Co. 30 Fed. Rep. 434, 1887; Williames *v.* Barnard, 41

[2] Cochrane *v.* Deener, 94 U. S. 786, 1876; Wirt *v.* Brown, 30 Fed. Rep. 187, 1877.

[3] Sawyer Spindle Co. *v.* Morrison Co. 52 Fed. Rep. 593, 1892.

the part which the patented combination omitted, would not constitute an infringement of the latter.[1]

§ 348. Changing the relative positions of the parts of a machine or manufacture does not avert infringement, where the parts transposed perform the same respective functions after the change as before.[2] In the first of the cases just cited, the thing transposed was a beater shaft in a corn-sheller. Both in its original and in its new position, its function was to force the ears of corn into the throat of the sheller. In the second case, the thing transposed was the outlet vapor flue of a quicksilver furnace; and that flue operated in the same way to perform the same function in the infringing apparatus that it did in the patented furnace.

But changing the relative positions of the parts of a machine does avert infringement, where the changing of those positions so changes the functions of the parts, that the machine acquires a substantially different mode of operation, even though the result of the machine remains the same.[3] A suit for infringement cannot be sustained against him who makes, uses, or sells a substantially different combination, even though it includes exactly the same ingredients as those claimed in combination by the patent in suit.[4] The owner of a patent for a combination cannot suppress a newer, better, and substantially different combination of the same ingredients.[5]

§ 349. Omission of one ingredient of a combination covered by any claim of a patent, averts any charge of infringe-

[1] Shoemaker *v.* Merrow, 61 Fed. Rep. 948, 1894.

[2] Adams *v.* Mfg. Co. 3 Bann. & Ard. 1, 1877; Knox *v.* Quicksilver Mining Co. 6 Sawyer, 438, 1878; North Western Horse Nail Co. *v.* Horse Nail Co. 28 Fed. Rep. 234, 1886; Consolidated Rolling Mill Co. *v.* Coombs, 39 Fed. Rep. 33, 1889; Devlin *v.* Paynter, 64 Fed. Rep. 400, 1894.

[3] Brooks *v.* Fisk, 15 Howard, 221, 1853.

[4] Gill *v.* Wells, 22 Wallace, 14, 1874; Snow *v.* Railway Co. 121 U. S. 629, 1886; Singer Mfg. Co. *v.* Brill, 54 Fed. Rep. 384, 1892.

[5] Seymour *v.* Osborne, 11 Wallace, 555, 1870.

ment based on that claim.[1] A combination is an entirety. If one of its elements is omitted, the thing claimed disappears. Every part of the combination claimed is conclusively presumed to be material to the combination, and no evidence to the contrary is admissible in any case of alleged infringement.[2] The patentee makes all the parts of a combination material, when he claims them in combination and not separately.[3] 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. Such a claim is infringed by him who, without ownership or license, makes, uses, or sells any apparatus made up of enough of the described devices to produce the specified result, by the specified mode of operation.[4] The rule stated at the head of this section is perhaps the best known and most frequently applied of all the rules which pertain to infringement; but it has no application to anything which depends upon a particular form for patentability, and which for convenience may be made in several sections. A shoe last, for example, even if made in only two sections, may infringe

[1] Prouty *v.* Ruggles, 16 Peters, 341, 1842; Eames *v.* Godfrey, 1 Wallace, 78, 1863; Case *v.* Brown, 2 Wallace, 320, 1864; Dunbar *v.* Myers, 94 U. S. 187, 1876; Fuller *v.* Yentzer, 94 U. S. 297, 1876; Rowell *v.* Lindsay, 113 U. S. 102, 1884; Shepard *v.* Carrigan, 116 U. S. 597, 1885; Sharp *v.* Riessner, 119 U. S. 636, 1886; Derby *v.* Thompson, 146 U. S. 482, 1892; Weatherhead *v.* Coupe, 147 U. S. 335, 1893; Dobson *v.* Cubley, 149 U. S. 120, 1893; Wright *v.* Yuengling, 155 U. S. 52, 1894; Black Diamond Coal Co. *v.* Excelsior Coal Co. 156 U. S. 617, 1895.

[2] Vance *v.* Campbell, 1 Black, 430, 1861; Fay *v.* Cordesman, 109 U. S. 420, 1883; Sargent *v.* Lock Co. 114 U. S. 86, 1884; Shepard *v.* Carrigan, 116 U. S. 597, 1885; Yale Lock Co. *v.* Sargent, 117 U. S. 378, 1885; McClain *v.* Ortmayer, 141 U. S. 425, 1891.

[3] Water-Meter Co. *v.* Desper, 101 U. S. 332, 1879; Brown *v.* Davis, 116 U. S. 249, 1885; Williams *v.* Stolzenbach, 23 Fed. Rep. 41, 1885; Otley *v.* Watkins, 36 Fed. Rep. 324, 1888.

[4] Silsby *v.* Foote, 14 Howard, 218, 1852.

a patent for a last of the same shape, but which is made in three sections instead of in two.[1]

§ 350. No substitution of an equivalent, for any ingredient of a combination covered by any claim of a patent, can avert a charge of infringement of that claim.[2] But like substitution of something which is not an equivalent, will have that effect.[3] The doctrine of equivalents may be invoked by any patentee, whether he claimed equivalents in his claim,[4] or described any in his specification,[5] or omitted to do either or both of those things. The patentee, having described his invention and shown its principles, and claimed it in that form which most perfectly embodies it, is, in contemplation of law, deemed to claim, every form in which his invention may be copied, unless he manifests an intention to disclaim some of these forms.[6] Combination patents would generally be valueless in the absence of a right to equivalents, for few combinations now exist, or can hereafter be made, which do not contain at least one element, an efficient substitute for which could readily be suggested by any person skilled in the particular art.[7] But where a patentee states in his specification that a particular part of his invention is to be constructed of a particular material, and states or implies that he does not contemplate any other material as being suitable for the purpose, it is not certain that any other material will be treated by a court

[1] Mable *v.* Haskell, 2 Cliff. 511, 1865; White *v.* Walbridge, 46 Fed. Rep. 526, 1891.

[2] O'Reilly *v.* Morse, 15 Howard, 62, 1853; Imhaeuser *v.* Buerk, 101 U. S. 655, 1879; Reed *v.* Chase, 25 Fed. Rep. 94, 1885; American Box Machine Co. *v.* Day, 32 Fed. Rep. 585, 1887; Ligowski Clay Pigeon Co. *v.* Clay Bird Co. 34 Fed Rep. 331, 1888.

[3] Railway Co. *v.* Sayles, 97 U. S. 562, 1878.

[4] Dental Vulcanite Co. *v.* Davis, 102 U. S. 229, 1880; Hunt Bros. Fruit Packing Co. *v.* Cassidy, 53 Fed. Rep. 261, 1892.

[5] Union Metallic Cartridge Co. *v.* United States Cartridge Co. 2 Bann. & Ard. 594, 1877.

[6] Western Electric Co. *v.* La Rue, 139 U. S. 606, 1891.

[7] Turrell *v.* Spaeth, 3 Bann. & Ard. 458, 1878.

as an equivalent of the one recommended in the patent.[1]

§ 352. One thing, to be the equivalent of another, must perform the same functions as that other.[2] If it performs the same function, the fact that it also performs another function is immaterial to any question of infringement.[3] Therefore, it sometimes happens that a junior device is an equivalent of a senior device in a sense that will constitute it an infringement of a patent for the latter; at the same time that the senior device is not an equivalent of the junior device in a sense that will cause the former to negative invention or novelty in the latter.[4] One thing may accordingly be an equivalent of another, though it does more than that other, but it cannot be such an equivalent if it does less.[5] But the test of function is only the first of several tests of equivalency. The fact that one thing performs the same function as another, though necessary, is not sufficient to make it an equivalent thereof.[6]

§ 353. Function must be performed in substantially the same way by an alleged equivalent, as by the thing of which it is alleged to be an equivalent, in order to constitute it such.[7] This substantial sameness of way is not necessarily

[1] Aiken *v.* Bemis, 3 Woodbury & Minot, 348, 1847; Harris *v.* Allen, 15 Fed. Rep 106, 1883; Schillinger *v.* Cranford, 37 Off. Gaz. 1349, 1885; Reece Button-Hole Mach. Co. *v.* Globe Button-Hole Mach. Co. 61 Fed. Rep. 965, 1894.

[2] Machine Co. *v.* Murphy, 97 U. S. 125, 1877; Rowell *v.* Lindsay, 113 U. S. 103, 1884; Roller Mill Patent 156 U. S. 271, 1895; Railway Mfg. Co. *v.* Railroad Co. 30 Fed. Rep. 238, 1887; Seeley *v.* Brush Electric Co. 44 Fed. Rep. 420, 1890.

[3] Foss *v.* Herbert, 2 Fisher, 31, 1856; Sarven *v.* Hall, 9 Blatch. 524, 1872; Wheeler *v.* Reaper Co. 10 Blatch. 195, 1872; Kendrick *v.* Emmons, 3 Bann. & Ard. 623, 1878; Norton *v.* California Can Co. 45 Fed. Rep. 638, 1891; Masseth *v.* Palm, 51 Fed. Rep. 825, 1892.

[4] *In re* Hebard, 1 McArthur's Patent Cases, 550, 1857; Loercher *v.* Crandall, 11 Fed. Rep. 857, 1881; Section 36 of this book.

[5] Bliss *v.* Haight, 3 Fisher, 626, 1869.

[6] Eames *v.* Godfrey, 1 Wallace, 78, 1863; Conover *v.* Roach, 4 Fisher, 12, 1857; Merriam *v.* Drake, 5 Fisher. 259, 1872.

[7] Burr *v.* Duryee, 1 Wallace 573, 1863; Werner *v.* King, 96 U. S. 230, 1877; Dryfoos *v.* Wiese, 124 U. S. 37, 1887; Forncrook *v.* Root, 127 U. S. 181, 1887; Sargent *v.* Burgess, 129 U. S. 19, 1889; Sickels *v.* Borden, 3 Blatch. 535, 1856; Peard *v.* Johnson, 23 Fed. Rep. 509, 1885; Tonduer *v.* Chambers, 37 Fed. Rep. 337, 1889; Pacific Railway Co. *v.* Butte City Railway Co. 58 Fed. Rep. 420, 1893.

an identity of merit,[1] nor a theoretical scientific sameness.[2] In a purely scientific sense, a screw always performs its function in a substantially different way from a lever, and in substantially the same way as a wedge. Screws and wedges are equally inclined planes, while a lever is an entirely different elementary power. But screws and levers can practically be substituted for each other in a larger number of machines than screws and wedges can be similarly substituted. When a lever and a screw can be interchanged and still perform the same function with a result that is beneficially the same, they are said to perform the same function in substantially the same way.[3] But one thing may be an equivalent of another in one environment, and not such an equivalent in another situation.[4] Springs and weights are generally equivalents;[5] but where the environment is such that a spring will operate successfully while a weight will not so operate, there they are not equivalents.[6] While in most cases a mere handle is not an equivalent of a lever, it is such an equivalent where its connections are such that it performs the same function in substantially the same way.[7] But infringement is averted by using a hand, instead of a lever of a claimed combination, to work a rod.[8] However, in one case, the Supreme Court went to the length of deciding a confined column of water in a cylinder, worked by a pump and working a piston, to be an equivalent of a combination of a vibrating

[1] Brush *v.* Condit, 132 U. S. 49, 1889; Roosevelt *v.* Telegraph Co. 33 Fed. Rep. 510, 1887; Standard Folding Bed Co. *v.* Osgood, 58 Fed. Rep. 584, 1893.

[2] Gordon *v.* Warder, 150 U. S 52, 1893.

[3] Turrell *v.* Spaeth, 3 Bann. & Ard. 458, 1878.

[4] Cochrane *v.* Deener, 94 U. S. 789, 1876; Hubel *v.* Dick, 28 Fed. Rep. 136, 1886.

[5] Imhaeuser *v.* Buerk, 101 U. S. 656, 1879; American Roll Paper Co. *v.* Weston, 45 Fed. Rep. 692, 1891.

[6] Cross *v.* MacInnon, 11 Fed. Rep. 601, 1882.

[7] Corn-Planter Patent, 23 Wallace, 235, 1874; Steam Gauge & Lantern Co. *v.* Mfg. Co. 28 Fed. Rep. 619, 1886.

[8] Brown *v.* Davis, 116 U. S. 249, 1885.

arm, toggle joint, and other mechanical devices, when used to transmit vibratory power.[1]

§ 354. Whether a device, in order to be an equivalent of another, must have been known at the time of the invention of the machine which contains the latter, is a question which was elaborately investigated and discussed in Sections 354 to 358 of the former editions of this book; because it then appeared to be not only very important, but also unsettled. But the weight of reason was always much on the side of the negative of that question; and the weight of authority has now accumulated so preponderatingly upon the same side, that the question may now be held to be settled in the negative.[2] It is therefore safe to define an equivalent 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.

§ 359. Primary inventions are entitled to a somewhat looser application of this definition of an equivalent than those inventions which are secondary.[3] A primary invention is one which performs a function never performed by

[1] Blake *v.* Robertson, 94 U. S. 732, 1876.

[2] O'Reilly *v.* Morse, 15 Howard, 123, 1853; Burr *v.* Duryee, 1 Wall. 573, 1863; Mason *v.* Graham, 23 Wall. 275, 1874; Cochrane *v* Deener, 94 U. S. 780, 1876; Union Paper Bag Machine Co. *v.* Murphy, 97 U. S. 125, 1877; Clough *v.* Mfg. Co. 106 U. S. 178, 1882; Cantrell *v.* Wallick, 117 U. S. 695, 1885; Sickles *v.* Borden, 3 Blatch. 535, 1856; Cahoon *v.* Ring, 1 Cliff. 620, 1861; Roberts *v.* Harnden, 2 Cliff. 506, 1865; Graham *v.* Mason, 5 Fisher, 11, 1869; Harwood *v.* Mfg. Co. 3 Fisher, 530, 1869; Vogler *v.* Semple, 7 Bissell, 382, 1877; Potter *v.* Stewart, 18 Blatch. 563, 1881; Evory *v.* Burt, 15 Fed. Rep. 112, 1883; United Nickel Co. *v.* Pendleton, 15 Fed. Rep. 745, 1883; Murphy *v.* Trenton Rubber Co. 45 Fed. Rep. 570, 1891; Norton *v.* California Can Co. 45 Fed. Rep. 638, 1891; Jones Co. *v.* Munger Co. 49 Fed. Rep. 67, 1891; National Cash Register Co. *v.* American Cash Register Co. 53 Fed. Rep. 373, 1893; Merrow *v.* Shoemaker, 59 Fed. Rep. 128, 1893; Beach *v.* Box Machine Co. 63 Fed. Rep. 606, 1894; Edison Electric Light Co. *v.* Boston Lamp Co. 62 Fed. Rep. 399, 1894; Stahl *v.* Williams, 64 Fed. Rep. 124, 1894.

[3] Miller *v.* Eagle Co. 151 U. S. 207, 1894; Dederick *v.* Seigmund, 51 Fed. Rep. 235, 1892.

any earlier invention;[1] while a secondary invention is one which performs a function previously performed by some earlier invention, but which performs that function in a substantially different way from any that preceded it.[2] The three leading Supreme Court cases, which have attended to the distinction now under treatment, attended thereto in the following terms:

In the first of these cases the court said: "If the patentee be the original inventor of the device or machine called the divider, he will have a right to treat as infringers all who make dividers 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. 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."[3]

In the second of these cases the court said: "In such cases, 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."[4]

[1] Norton *v.* Jensen, 49 Fed. Rep. 862, 1892; National Cash Register Co. *v.* American Cash Register Co. 53 Fed. Rep. 372, 1892; Boston Lasting Mach. Co. *v.* Woodward, 53 Fed. Rep. 481, 1893; Celluloid Mfg. Co. *v.* Arlington Mfg. Co. 44 Fed. Rep. 86, 1890.

[2] Butz Thermo-Electric Co. *v.* Electric Co. 36 Fed. Rep. 192, 1888.

[3] McCormick *v.* Talcott, 20 Howard, 405, 1857.

[4] Railway Co. *v.* Sayles, 97 U. S. 556, 1878.

In the third of those cases the court said: "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." And the court also said that secondary patents ought to receive a narrower construction than this.[1]

§ 362. The three leading cases and the other cases which follow them,[2] teach general doctrines rather than precise rules; and those general doctrines may be concisely stated as follows.

There are two tests of equivalency. 1. Identity of function. 2. Substantial identity of way of performing that function.[3] Primary as well as secondary patents are infringed by no substitutions that do not fully respond to the first of these tests. The second of these tests is somewhat elastic, because it contains the word "substantial." That word is allowed to condone more and more important differences in the case of a primary patent, than in the case of a secondary one.[4] In the case of a patent narrowed in construction by an extensive state of the preceding art, the word "substantial" will give but little elasticity to the application of the doctrine.[5] If fewer inventions preceded

[1] Morley Machine Co. *v.* Lancaster, 129 U. S. 273, 1889.

[2] Pope Mfg. Co. *v.* Gormully Mfg. Co. 144 U. S. 242, 1892; Sessions *v.* Romadka, 145 U. S. 45, 1892; Knapp *v.* Morss, 150 U. S. 230, 1893; Miller *v.* Eagle Co. 151 U. S. 204, 1894.

[3] Steam Gauge and Lantern Co. *v.* Rogers, 29 Fed. Rep. 453, 1886; Clark *v.* Wilson, 30 Fed. Rep. 373, 1887; Butz Thermo-Electric Co. *v.* Electric Co. 36 Fed. Rep. 195, 1888; Harmon *v.* Struthers, 48 Fed. Rep. 443, 1890; National Typographic Co. *v.* New York Typograph Co. 46 Fed. Rep. 116, 1891; New Departure Bell Co. *v.* Bevin Mfg. Co. 64 Fed. Rep. 864, 1894.

[4] Miller *v.* Eagle Co. 151 U. S. 207, 1894.

[5] Duff *v.* Pump Co. 107 U. S. 639, 1883; Knapp *v.* Morss, 150 U. S. 230, 1893; Boyd *v.* Janesville Hay Tool Co. 158 U. S. 267, 1895; Dederick *v.* Selgmund, 51 Fed. Rep. 235, 1892; Standard Folding Bed Co. *v.* Osgood, 51 Fed. Rep. 678, 1892; Joslin *v.* Northern Pacific Ry. Co. 55 Fed. Rep. 68 1893; Bundy Mfg. Co. *v.* Time Recorder Co. 64 Fed. Rep. 853, 1894; Schuyler Electric Co., *v.* Electric Supply Co. 66 Fed. Rep. 315, 1895.

the one at bar, the word will have somewhat more of carrying power. When the invention at bar is strictly primary, and especially if it is extremely useful, then the word "substantial" will be made to cover differences alike numerous and important, and even highly creditable to the infringer who invented them.[1] Probably the most striking instances of the latter sort which are to be found in the books, are to be found in the telephone cases.[2]

§ 363. A change of form does not avoid an infringement of a patent, unless the patentee specifies a particular form as the means by which the effect of the invention is produced,[3] or otherwise confines himself to a particular form of what he describes.[4] Even where a change of form somewhat modifies the construction, the action or the utility of a patented thing, non-infringement will seldom result from such a change. The best way to show the scope and meaning of these rules is to collect and explain the instances in which changes of form have been held to be immaterial to questions of infringement.

§ 364. Strowbridge *v.* Lindsay[5] was a case, the patent involved in which, covered a coffee mill. The hopper and grinding shell of that mill were formed in a single piece,

[1] Hubel *v.* Dick, 28 Fed. Rep. 136, 1886; Brush Electric Co. *v.* Ft. Wayne Electric Co. 40 Fed. Rep. 833, 1889; Rapid Store Service Ry. Co. *v.* Taylor, 43 Fed. Rep. 256, 1887; Harmon *v.* Struthers, 43 Fed. Rep. 443, 1890; Brush Electric *v.* Electric Co. 43 Fed. Rep. 541, 1890; Brush Electric Co. *v.* Electric Imp. Co. 52 Fed. Rep. 977, 1892; National Cash Register Co. *v.* American Cash Register Co. 53 Fed. Rep. 372, 1892; Mergenthaler Co. *v.* Press Pub. Co. 57 Fed. Rep. 505, 1893; Reece Button-Hole Mach. Co. *v.* Globe Button-Hole Mach. Co. 61 Fed. Rep. 964, 1894; Bowers *v.* Von Schmidt, 63 Fed. Rep 580, 1894; Beach *v.* Box Mach. Co. 63 Fed. Rep. 606, 1894; Rogers Typograph Co. *v.* Mergenthaler Co. 64 Fed. Rep. 803, 1894.

[2] The Telephone Cases. 126 U. S. 531, 1888; American Bell Telephone Co. *v.* Spencer, 8 Fed. Rep. 509, 1881; American Bell Telephone Co. *v.* Dolbear, 15 Fed. Rep. 488, 1883.

[3] O'Reilly *v.* Morse, 15 Howard, 123, 1853; Ewart Mfg. Co. *v.* Iron Co. 31 Fed. Rep. 150, 1887; Pacific Cable Ry. *v.* Butte City Ry. Co. 55 Fed. Rep. 763, 1893.

[4] Pope Mfg. Co. *v.* Mfg. Co. 34 Fed. Rep. 890, 1888.

[5] Strowbridge *v.* Lindsay, 6 Fed. Rep. 510, 1881.

and were suspended within the box, by the upper part of the hopper, or by a flange thereon. The defendant's mill was like the complainant's, except that the hopper and the grinding shell were separate constructions, but were firmly fastened together before they were suspended in the box. That change of form resulted in a change of construction, but in no change of action or of utility. It was of course held not to avoid infringement.

§ 365. Ives *v.* Hamilton[1] was a case wherein the patent covered a combination of a saw-mill saw, with a pair of curved guides at the upper end of the saw; and a lever, connecting rod of a pitman, straight guides, pivoted cross-head, and slides or blocks, and crank-pin, or their equivalents, at the opposite end; whereby the toothed edge of the saw was caused to move unequally forward and backward at its two ends while sawing. The result was a rocking or vibratory motion in the saw instead of a straight reciprocating motion theretofore characteristic of saw-mill saws. The defendant substituted for the curved guides of the patent, similar guides made crooked by a broken line. But the Supreme Court held this change of form not to avoid infringement, saying that a curve is often treated even in mathematical science as constituting a succession of very short straight lines, or as one broken line constantly changing its direction.

§ 366. Morey *v.* Lockwood,[2] was a case in which the bill was based on the patent for the Davidson syringe; an invention which furnishes a good illustration of one of the rules which relate to infringement, as well as of one of those which relate to novelty. In it the bulb was placed in an axial line with two flexible tubes, and received fluid at one of its ends, from one of those tubes, and discharged the same, from its other end, into and through the other of those tubes. The Supreme Court held the patent to have been infringed by the Richardson syringe, in which the bulb was

[1] Ives *v.* Hamilton, 92 U. S. 431, 1875.

[2] Morey *v.* Lockwood, 8 Wallace, 230, 1868.

placed above the axial line of the two flexible tubes, and received the fluid from one of those tubes near the point where it discharged the same into the other.

§ 367. The American Diamond Rock Boring Co. *v.* The Sullivan Machine Co.,[1] was a case involving a patent for a rock-boring implement, consisting of a hollow metal boring head armed with diamonds, and which when moved with a combined rotary and forward motion, bored an annular hole into rock, leaving a central core to be subsequently broken by a wedge and then readily removed. The defendant used a rock-boring tool, consisting of a hollow metal boring head, but having its bottom partly plugged so as to leave two holes elsewhere than in the centre of the head, and having a convex surface armed with diamonds. This tool bored a simple hole into rock without leaving any core to be afterward removed. The change of form involved a modification of the action, and perhaps a modification of the utility of the invention, but it was held not to avoid infringement of a claim which did not mention the annular form of the implement.

§ 368. Elizabeth *v.* Pavement Co.[2] was a case based on the Nicholson pavement patent. That pavement consisted primarily of rows of parallel-sided wood blocks, set endwise, on a continuous foundation, the rows being separated by parallel-sided strips of board, set edgewise between them, and resting on the same foundation, and about half as wide as the blocks were long. The defendant made a pavement differing from the Nicholson in nothing, except that the sides of the strips were not parallel with each other, the strips being thicker at the top than at the bottom edge, and except that the upper angles of the strips were let into corresponding notches cut in the sides of the blocks. The Supreme Court held that though this change in the form of the blocks and of the strips might constitute an

[1] American Diamond Rock Boring Co. *v.* Sullivan Machine Co. 14 Blatch. 119, 1877.

[2] Elizabeth *v.* Pavement Co. 97 U. S. 137, 1877.

improvement in point of utility, it did not operate to avoid infringement.

§ 369. Patents for compositions of matter give rise to questions of infringement somewhat peculiar to themselves. Infringement depends, in such cases, upon sameness or equivalence of ingredients, and upon substantial sameness of the proportions of those ingredients. Omission of one or more of the ingredients, of a patented composition of matter avoids infringement, as truly as omission of one of its parts avoids infringement of a patent for a combination of mechanical devices.[1] Addition to a patented composition of matter, of an ingredient which the patent purposely avoided, and which when added substantially changes the character of the composition, also avoids infringement.[2] But an addition which results in no substantial change of character, and which was made merely for the purpose of an attempt to evade the patent, will not have that effect.[3]

§ 370. Substitution of one equivalent for another, in a patented composition of matter, is generally as ineffectual to avoid infringement as is like substitution in a machine. An equivalent for one ingredient of a patented composition of matter is anything which in that composition performs the same function as that ingredient.[4] In the case cited, it was held that chloride of zinc in solution, was an equivalent of common dry salt, in the composition of matter covered by the patent at bar, "because in the process of manufacture they practically produce the same results." No attention was given to the queston whether they produced that result in substantially the same way. So also the Supreme Court has held that the term "equivalent" means "equally good" when it refers to the ingredients of compositions of matter.[5] Where the composition of matter involved, is a compound of metals, an equivalent of either of those, is another metal

[1] Otley v. Watkins, 36 Fed. Rep. 324, 1888.

[2] Byam v. Eddy, 2 Blatch. 521, 1853.

[3] Rich v. Lippincott, 2 Fisher, 6, 1853.

[4] Woodward v. Morrison, 1 Holmes, 181, 1872.

[5] Tyler v. Boston, 7 Wallace, 330, 1868.

having similar properties, and producing substantially the same effect in that composition.[1] And a substitute is not less than an equivalent, because it is derived from a different source than that for which it is a substitute, or because the patentee had no knowledge of it when he received his patent.[2]

§ 371. A substituted ingredient may perform the required function better than the patented ingredient, and may perform that function in a somewhat different manner, and still be an equivalent for the latter.[3] In the case cited the patent covered a compound of nitro-glycerine and absorbent matter, of which infusorial earth was stated to be the preferred variety. The absorbent matter, when mixed with three times its weight in nitro-glycerine, absorbed the whole, and still retained the form of a powder. This compound made dynamite. The defendant's compound consisted of nitro-glycerine and mica scales mixed in nearly equal proportions, the mica scales not absorbing the nitro-glycerine, but merely holding it in suspension upon their surfaces. This compound was called mica powder. Its use at the Hoosic Tunnel demonstrated its superiority over dynamite, in point of efficiency, economy, and safety; and there is evidently a difference between a powder which absorbs a liquid as in minute capillary tubes, and one which does not absorb, but which carries a liquid upon the surfaces of its particles. But notwithstanding these differences, Judge SHEPLEY, in an accomplished opinion, held the mica powder to infringe the dynamite patent. So also, in a later case on the same patent,[4] the same judge held a certain gunpowder to be an equivalent of the infusorial earth, because it performed every function of the latter substance, though it also performed the additional function, at the time of the explosion of the compound, of co-operating with the

[1] Matthews v. Skates, 1 Fisher, 609, 1860.

[2] Standard Paint Co. v. Bird, 65 Fed. Rep. 511, 1894.

[3] Atlantic Giant Powder Co. v. Mowbray, 2 Bann. & Ard. 447, 1876.

[4] Atlantic Giant Powder Co. v Goodyear, 3 Bann. & Ard. 161, 1877.

nitro-glycerine in rending the rock, instead of remaining, like infusorial earth, an inert substance. The doctrine which results from this case is that one ingredient is an equivalent of another in the composition of matter, if it performs the same function, even though it also performs another function, which that other is wholly incompetent to accomplish.

§ 372. When a patent expressly states that the composition of matter which it covers, does not include a specified ingredient of similar compositions, the substitution of that ingredient for one of those covered by the patent, is enough to avoid infringement, even though the two ingredients perform that same function in that composition of matter. But this does not amount to saying that the two things are not equivalents. It merely amounts to the doctrine that a patentee may disclaim a particular equivalent if he chooses.[1] And where a particular construction is disclaimed that disclaimer is binding even if it was unnecessary.[2]

§ 373. Changes of the proportions of the ingredients of a composition of matter will not avoid infringement of a patent for such a composition, where those changes do not affect its essential character in any way more important than to increase its bulk more than they increase its cost.[3]

§ 374. The doctrines of the last five sections appear to be applicable to compositions of matter in general, whether they consist of chemical unions, or of mechanical mixtures, or of metal amalgams. Jurisprudence will doubtless follow science, if science hereafter shows any reason for distinguishing between the different classes of compositions of matter in respect of questions of infringement; but no such distinctions are yet traceable in the adjudicated cases.

§ 375. A design patent is infringed by any design which, to general observers interested in the subject, or to purchasers of things of similar design, has the same appearance

[1] Byam *v.* Farr, 1 Curtis, 260, 1852.

[2] Cartridge Co. *v.* Cartridge Co. 112 U. S. 624, 1884.

[3] Eastman *v.* Hinckel, 5 Bann. & Ard. 1, 1870.

as that of the design covered by the patent,[1] but no other.[2] The fact that an analysis of two forms of design discloses differences between them, is therefore insufficient to show lack of that substantial identity of appearance, which constitutes infringement. Such a question of identity is to be decided on the basis of the opinions of average observers, and not upon the basis of the opinions of experts.

§ 870. The comparative utility of the plaintiff's and the defendant's process, machine, manufacture, or composition of matter, is not alone a criterion of infringement; because the observed superiority of one over the other may have arisen from superiority of the materials or of the workmanship used in constructing the specimens under inspection. Indeed it has been held that the superiority or inferiority of utility in a defendant's machine, does not necessarily import non-infringement, even where it can be traced to slight differences in mode of operation.[3] No man is permitted to evade a patent by simply constructing the patented thing so imperfectly that its utility is diminished.[4] On the other hand, a defendant's machine may be better than that covered by the patent in suit; but if that superiority resulted from some addition to the latter, it will have no tendency to avoid infringement.[5] Nor is infringement avoided by the fact that the defendant constructed and used his machine to produce one of the simpler of the forms of

[1] Gorham v. White, 14 Wallace, 528, 1871; Perry v. Starrett, 3 Bann. & Ard. 485, 1878; Dryfoos v. Friedman, 18 Fed. Rep. 824, 1884; Tomkinson v. Mfg. Co. 28 Fed. Rep. 895, 1884; Redway v. Ohio Stove Co. 38 Fed. Rep. 584, 1889; Sutro Bros. Braid Co. v. Schloss, 44 Fed. Rep. 857, 1890; Macbeth v. Gillinder, 54 Fed. Rep. 172, 1891; Smith v. Stewart, 55 Fed. Rep. 438, 1893.

[2] New York Belting Co. v. New Jersey Rubber Co. 53 Fed. Rep. 815, 1893.

[3] Waterbury Brass Co. v. Miller, 9 Blatch. 77, 1871; Shaver v. Mfg. Co. 30 Fed. Rep. 72, 1887.

[4] Chicago Fruit House Co. v. Busch, 2 Bissell, 472, 1871; Roberts v. Harnden, 2 Cliff. 500, 1865.

[5] Pitts v. Wemple, 1 Bissell, 87, 1855; Carter v Baker, 1 Sawyer, 512, 1871.

things produced by the machine of the plaintiff, and was thus enabled to produce a larger number in an equal space of time.[1] The superiority or inferiority of a defendant's process, machine, manufacture, or composition of matter, as compared with that covered by a patent upon which he is sued, can generally be traced to its cause. When that can be done, attention should be taken from the difference in utility, to the cause of that difference. Non-infringement will result if that cause is such a difference in function, mode of operation, or character of construction, as is of itself sufficient to justify that conclusion. In some cases, however, it may not be possible to ascertain the cause of the observed difference of utility between two inventions, or to detect the existence of any such cause otherwise than by its effects. In such a case, a decided difference of utility is evidence tending to show substantial difference between the characters of the two inventions.[2] When evidence of difference of utility between a plaintiff's invention and a defendant's doings, is introduced on an issue of infringement, it must be considered only in connection with all the other evidence upon that subject.[3] If considered alone, it is likely to mislead, because difference of utility often springs from causes which do not constitute substantial difference of invention.

§ 377. To constitute an infringement of a patent, it is not necessary that the infringer should have known of the existence of the patent at the time he infringed it;[4] or, knowing of its existence, it is not necessary that he should have known his doings to constitute an infringement.[5]

[1] Blanchard *v.* Beers, 2 Blatch. 420, 1852.

[2] Many *v.* Sizer, 1 Fisher 27, 1849.

[3] Singer *v.* Walmsley, 1 Fisher, 585, 1860.

[4] Parker *v.* Haworth, 4 McLean, 373, 1848; Matthews *v.* Skates, 1 Fisher, 608, 1860; National Car Brake Shoe Co. *v.* Mfg. Co. 19 Fed. Rep. 520, 1884; Royer *v.* Coupe, 29 Fed. Rep. 361, 1886; Bate Refrigerating Co. *v.* Gillett, 31 Fed. Rep. 815, 1887.

[5] Parker *v.* Hulme, 1 Fisher, 54 1849; Norton *v.* Automatic Can Co. 57 Fed. Rep. 933, 1993.

And infringement is not averted by the fact that the infringer contrived his own process, machine, manufacture, or composition of matter, as the case may be, without any knowledge of the patent infringed thereby.[1]

[1] United States *v.* Berdan Fire Arms Co. 156 U. S. 566, 1895.

CHAPTER XVII.

COURTS, PARTIES AND CAUSES.

378. Introductory explanation.
379. Jurisdiction of United States courts of first resort in patent cases.
380. Non-jurisdiction of State courts in patent cases.
388. Jurisdiction of State courts over controversies growing out contracts relevant to patents.
389. Jurisdiction of individual United States courts of first resort in patent cases.
390. Qualifications of the rule of the last section.
391. Jurisdiction of the Court of Claims.
392. Absence of Jurisdiction of the Court of Claims over causes of action based on unauthorized making, using, or selling by the United States Government of specimens of a patented process or thing.
393. Presence of jurisdiction of United States Circuit Courts over actions brought against agents of the United States Government, and based on unauthorized making, using, or selling, by those agents, on behalf of the Government, of specimens of a patented process or thing.
394. Who may be a plaintiff or complainant in a patent action.
395. Who may be plaintiff or complainant in an action based on an assigned accrued right of action for infringement.
396. Executors and administrators as plaintiffs and complainants.
397. Assignees of executors or administrators as plaintiffs and complainants.
398. Attorneys in fact cannot be nominal plaintiffs or complainants.
399. Owners in common as joint plaintiffs or complainants.
400. Licensees cannot be nominal plaintiffs, nor sole nominal complainants.
401. Who may be made a defendant in a patent action.
402. Minors, married women, and lunatics as defendants.
403. Agents, salesmen, and employees as defendants.
404. Employers as defendants.
405. Persons as defendants who have caused others to infringe.
406. Joint infringers as defendants.
407. What facts constitute joint infringement.
408. Partners as defendants.
409. Private corporations as defendants.
410. Officers, directors, and stockholders of corporations as defendants.
411. The same subject continued.

412. Stockholders of corporations.
413. Officers of corporations.
414 Directors of corporations.
415. Statutory liability of officers, directors, and stockholders of corporations.
416. Consolidated corporations as defendants in actions based on infringements committed by their constituent corporations.
417. Causes of action based on a plurality of patents or on both terms of an extended patent, or on a patent and a trade-mark.

§ 378. THE foregoing part of this text-book treats of the rights of inventors and patentees, and of their assignees, grantees, licensees, and legal representatives; and also treats of the wrongs which are committed when those rights are infringed. The remaining part explains the remedies which may be invoked, sometimes to prevent, and sometimes to repair such wrongs of infringement. The present chapter is devoted to the courts which may originally administer those remedies; and to the parties who may invoke them, and against whom they may be invoked; and to the causes of action which justify patent litigation between those parties in those courts.

§ 379. The Circuit Courts of the United States have original jurisdiction, regardless of the amount involved, of all suits at law or in equity, arising under the patent laws of the United States.[1] The same jurisdiction belongs also to the District Courts of the Territories of the United States,[2] and to the Supreme Court of the District of Columbia.[3]

§ 380. Whether State courts have any jurisdiction of actions for infringements of patents was a question which, under the Revised Statutes of 1874, was clearly answerable in the negative.[4] But in 1875 Congress enacted a statute which provided: "That the Circuit Courts of the United States shall have original cognizance, concurrent with the courts of the several States, of all suits of a civil nature at

[1] Revised Statutes, Section 629; Miller-Magee Co. *v.* Carpenter, 34 Fed. Rep. 434, 1888.

[2] Revised Statutes, Section 1910, and Section 1911, as amended June 29, 1876, 19 Statutes at Large, Ch. 154, p. 62.

[3] Sections 760 and 764 of the Revised Statutes relating to the District of Columbia; Cochrane *v.* Deener, 94 U. S. 782, 1876.

[4] Revised Statutes, Section 711.

common law or in equity, where the matter in dispute exceeds, exclusive of costs, the sum or value of five hundred dollars, and arising under the Constitution or laws of the United States."[1]. This statute of 1875 appeared to assume that, in the absence of congressional prohibition, the State courts would inherently have concurrent jurisdiction with the Federal courts of all suits of a civil nature, at common law or in equity, arising under the Constitution or laws of the United States; and it seemed to remove the prohibition contained in the Revised Statutes. Accordingly, in the former editions of this book, Sections 381 to 387 were devoted to the great question whether, in the absence of congressional prohibition, State courts would have jurisdiction of civil actions arising under the Constitution or laws of the United States. In those sections it was shown that ALEXANDER HAMILTON and Justice WASHINGTON held the affirmative of that question, while Justice STORY, Chancellor KENT, and Justice FIELD held the negative; and that the Supreme Court had never decided the question; but that the strongest relevant reasons supported the negative opinion. But, independent of that great question, the Supreme Court has now decided that the statute of 1875, as amended in 1887 and 1888, does not affect the jurisdiction granted by earlier statutes to any court of the United States over specified cases arising under the Constitution and laws of the United States; and therefore the later statute does not apply to any case arising under the patent laws of the United States.[2] Thus it is now established that State courts have no jurisdiction of such cases. And it accordingly has been so said by several Federal judges,[3] and by several State courts.[4]

[1] 18 Statutes at Large, Part 3, Ch. 137, Section 1, p. 470.

[2] *In re* Hohorst, 150 U. S. 661, 1893.

[3] White *v.* Rankin, 144 U. S. 636, 1892; Myers *v* Cunningham, 44 Fed. Rep. 347, 1890; Elgin Wind Power & Pump Co. *v.* Nichols, 65 Fed. Rep. 217, 1895; Hupfeld *v.* Automaton Piano Co. 66 Fed. Rep. 789, 1895.

[4] Continental Store Service Co. *v.* Clark, 100 N. Y. 370, 1886; Waterman *v.* Shipman, 130 N. Y. 308, 1891; Havana Press Drill Co. *v.* Ashurst, 148 Ill. 137, 1893.

§ 388. Actions brought to enforce contracts between private parties, relevant to patent rights, are not actions arising under the patent laws of the United States; and therefore are not cognizable as such in the United States courts.[1] And actions to set aside such contracts fall in the same category.[2] These rules of law are well established, and are unchallenged. But a majority of the Supreme Court has gone further, and in spite of a vigorous dissent from the minority, has held another doctrine which is as follows. Where a complainant files a bill, in which he states a patent right, and states its use by the defendant; and, in a charging part, recites the particulars of an alleged license claimed by the defendant to be a justification of that use, and avers that there is no such license in existence, and prays for an injunction and an account of infringer's profits; and where the defendant files an answer, admitting the patent right, and admitting the use, and defending only on the ground of the alleged license; then the action is not one arising under the patent laws of the United States.[3] But there is no warrant for pressing that conclusion any further than it necessarily goes; no warrant for applying its doctrine to any case which lacks any of the elements upon which it was based.

Where a complainant files a bill in which he states a patent right, and states its use by the defendant, and says nothing about any contract or license, and prays for an injunction and an account of infringer's profits; and where the defendant thereupon files an answer in which he does not traverse any part of the bill, but pleads, by way of confession and avoidance, that he has a license which covers his use of the patent, it will not do to apply the rule in Hartell *v.* Tilghman. If that rule were applied to such a case, it would result in a dismissal of the bill for want of

[1] Brown *v.* Shannon, 20 Howard, 56, 1857; Albright *v.* Teas, 106 U. S. 613, 1882; Marsh *v.* Nichols, 140 U. S. 344, 1891.

[2] Wilson *v.* Sandford, 10 Howard, 101. 1850.

[3] Hartell *v.* Tilghman, 99 U. S. 547, 1878.

jurisdiction. Then if the complainant should file a new bill in a State court, precisely like the other, and if the defendant should thereupon file an answer saying nothing about any license, but denying the validity of the patent, that suit would also have to be dismissed, because it would present no controversy except one touching the validity of a patent for an invention. Any infringer of a patent could thus defeat every suit based on his infringement, by simply making one defence in one court and another defence in another court, no matter how weak both of those defences might be. A consequence so unjust could not be tolerated; and the Supreme Court has unanimously decided that where a plaintiff decides to sue a defendant as a naked infringer, the Federal courts have jurisdiction, and that such jurisdiction cannot be ousted by any answer which the defendant may decide to interpose.[1]

§ 389. Actions for infringement of patents, being transitory in their nature, could formerly be brought in any district in which the defendant was an inhabitant or should be found.[2] But a statute of March 3, 1887, appeared to restrict such suits to the district in which the defendant is an inhabitant;[3] and that statute was construed to exempt corporations from such suits outside of the district or districts of the States in which they are respectively incorporated,[4] though it was also held that a defendant waived this restriction and exemption, unless he invoked it as promptly as possible.[5] But the Supreme Court has now decided that the clause of the statute of March 3, 1887, defining the district in which a suit shall be brought, is not applicable to

[1] White *v.* Rankin, 144 U. S. 628, 1892; Elgin Wind Power and Pump Co. *v.* Nichols, 65 Fed. Rep. 217, 1895.

[2] 18 Statutes at Large, Part 3, Ch. 137, Section 1, p. 470.

[3] 24 Statutes at Large, Ch. 373, p. 552.

[4] Halstead *v.* Manning, 34 Fed. Rep. 565, 1888; Miller *v.* Wheeler & Wilson Mfg. Co. 46 Fed. Rep. 882, 1891; Adriance *v.* McCormick Mach. Co. 55 Fed. Rep. 287, 1892; National Typewriter Co. *v.* Pope Mfg. Co 56 Fed. Rep. 849, 1893.

[5] McBride *v.* Plow Co. 40 Fed. Rep. 163, 1889; Vermont Farm Mach Co. *v.* Gibson, 50 Fed. Rep. 424, 1892.

patent cases.[1] And therefore, actions for infringements of patents may again generally be brought in any district in which the defendant is an inhabitant, or shall be found. Wherever the defendant is a natural person, he can therefore be sued in any district wherein he can be served with process; provided he is not decoyed or forced into that district for that purpose, nor caught there when attending court as a party or a witness. But where the defendant is a corporation, the matter of finding the defendant is not always so simple. Being intangible, a corporation cannot be seen with the eyes, as a natural person can. It exists ideally throughout the territory of the State which created it.[2] It can be found wherever, within that territory, one of its officers, directors, or agents can be discovered. Unless prohibited by its charter, or excluded by local law, a corporation may transact business in States wherein it has no corporate existence.[3] For example, a Pennsylvania corporation may do business in New Jersey, and in the course of that business may infringe a patent there. Whether, under such circumstances, a corporation is "found" in New Jersey by a United States marshal who serves process upon one of its officers or agents in that State, is a question which depends upon New Jersey law, and one which that law answers in the affirmative.[4] A corresponding question is answered in the same way by the law of Illinois, though the Illinois statute which bears upon the subject is general and not special, like that of New Jersey.[5] In the case last cited, the business which the defendant Missouri corporation did in Illinois included infringement of the complainant's patent. After that case was argued, and before it was decided, the present text writer argued a case before the same distinguished Judge DRUMMOND, in which still more

[1] *In re* Hohorst, 150 U. S. 662, 1893.

[2] Bank of Augusta *v.* Earle, 13 Peters, 519, 1839.

[3] *Ex parte* Schollenberger, 96 U. S. 378, 1877.

[4] Williams *v.* Empire Transportation Co. 3 Bann. & Ard. 533, 1878.

[5] Wilson Packing Co. *v.* Hunter, 4 Bann. & Ard. 184, 1879.

advanced ground was held by the court. In that case the United States Circuit Court for the Northern District of Illinois hold that it had jurisdiction of a bill, filed against the Grand Trunk Railway Co. of Canada, and based on infringement committed by that corporation in Michigan; service having been made on an agent of the corporation in its office in the northern district of Illinois, although neither that agent, nor the business transacted in that office, had any connection with the infringement.[1]

It does not follow from either of the foregoing cases, that every corporation is found wherever one of its officers or agents is caught. On the contrary, it is not possible to get jurisdiction of any corporation by serving process on even its president, unless the corporation exists under the laws of the State wherein the service is made, or is then doing some corporate business in that State.[2] Nor does it follow, from anything in this section, that every corporation can be sued in the Federal courts in every State wherein it does business. Whether that is the case in a particular instance, depends upon the statute of the State in which the business is done. It is probable that no State allows foreign corporations to do business within its territory, without making them suable in its own courts. In effecting the latter result, most of the States have probably used statutory language broad enough to make those corporations equally suable in those Federal courts which sit within their boundaries. But it is also probable that some States have specified the particular State courts in which foreign corporations, doing business within their limits, shall submit to be sued, and have not used language broad enough to cover the Federal courts. Wherever that is found to be the fact, it is an omission which ought to be remedied by the State legislature, for it is clear that no State ought to permit any foreign corporation to come into its territory, and infringe the patents of its citizens, without providing that such a

[1] Sayles *v.* Grand Trunk Railway Co. Manuscript, 1879.

[2] Wilson Packing Co. *v.* Hunter, 4 Bann. & Ard. 187, 1879.

corporation shall consent to be "found" within that State, in order to give the proper courts jurisdiction to administer a remedy.

§ 390. A number of qualifications exist to the general rule of the last section; and this section is devoted to stating and explaining those qualifications.

Where a State contains more than one district, every patent action brought in that State against a single defendant, who is an inhabitant of that State, must be brought in the district where he resides; and where there are two or more defendants residing in different districts of a State, such an action, if brought against them in that State, must be brought in one of those districts.[1]

Where a district contains more than one division, every such action brought in that district, against a single defendant, who is an inhabitant of the State, in which that district is, must be brought in the division where he resides; and where there are two or more defendants residing in different divisions of a district, such an action, if brought against them in that district, must be brought in *one* of those divisions. For this provision exists in all of the various statutes which divide sundry of the judicial districts of the United States. Those districts include the Northern and the Southern of Ohio; the Northern of Illinois; the Eastern and the Western of Michigan; the Eastern and the Western of Tennessee; the Southern of Georgia; the Southern of Mississippi; the Eastern and the Western of Louisiana; the Western of Missouri; the District of South Dakota; the District of Iowa; the District of Minnesota; the District of Kansas; the District of Montana; and the District of Idaho.

The Circuit Court for the Southern District of New York has no jurisdiction of any action based on any infringement committed in the Northern District of the same State.[2] But it has been held in one case that where such a suit is brought in the Southern District, the court will proceed to

[1] Revised Statutes, Section 740.

[2] Revised Statutes, Section 657; Hodge *v.* Railroad Co. 6 Blatch. 85, 1868.

judgment unless the defendant sets up the want of jurisdiction in his pleadings.[1]

§ 391. The Court of Claims is the tribunal which has jurisdiction of all actions brought by owners of patent rights against the government of the United States, for compensation for implied licenses to the government, to make and use patented inventions.[2] Such suits are subject to a six year statute of limitation; and in the absence of an established royalty the claimant is entitled to recover what a reasonable royalty for an express license would have been.[3]

§ 392. What remedy a patentee has when the government makes or uses specimens of his patented invention without his consent, is a question which was long debated. But it has now been settled that the Court of Claims has no jurisdiction of an infringement suit brought against the United States.[4]

§ 393. The Court of Claims having no jurisdiction of a case based upon an unauthorized making or using by the government, of a patented invention, it is important to know whether, in such a case, an action will lie against those agents of the government who personally committed the infringement. That question was long unsettled; but it has now been decided in the affirmative, in a learned and elaborate opinion of Judge COLT;[5] and it is not probable that his conclusion will be reversed by the Supreme Court, or by the majority of the Circuit Courts of Appeals.

§ 394. The plaintiff or complainant in an action based on an infringement of a patent may be the patentee, or the sole assignee of that patent; or any grantee under a patent may sue alone, for any infringement committed within his territory.[6] It is not necessary for the plaintiff, in an action

[1] Black *v.* Thorn, 10 Blatch. 84, 1872.

[2] United States *v.* Palmer, 128 U. S. 269. 1888.

[3] United States *v.* Berdan Fire Arms Co. 156 U. S. 569, 1895.

[4] Schillinger *v.* United States, 155 U. S. 169, 1894.

[5] Head *v.* Porter, 48 Fed. Rep. 481, 1891.

[6] Revised Statutes, Section 4919; Wilson *v.* Rousseau, 4 Howard, 646, 1846; Stein *v.* Goddard, 1 McAllister 82, 1856; Siebert Oil Cup Co. *v.* Beggs, 32 Fed. Rep. 790, 1887.

at law, to own any interest in the patent at the time he brings his action. It is enough if he was the patentee, assignee, or grantee of the rights infringed, at the time the infringement sued upon was committed.[1] But this rule does not generally apply to actions in equity, for such actions are generally dependent upon an injunction, and no injunction can be granted to restrain future infringements of a patent, on the suit of a person who has no interest in the patent threatened to be infringed.[2] Though where a complainant owns a patent infringed, when he files his bill for an injunction and a money recovery, jurisdiction will not lapse when he assigns the future of his patent.[3]

§ 395. Actions at law brought by assignees or grantees, for infringements committed prior to the time they obtained title, must, according to the common law, be brought in the name of the person who held the legal title to the patent right when and where it was infringed by the defendant. This rule was not abrogated by the Federal statutes which permitted suits to be brought by assignees, unless Justice CLIFFORD was in error in saying, in substance, that the assignees which were contemplated by that statute, are assignees of patents and not assignees of rights of action under patents.[4] But Judge SAGE has held that where an assignment of a patent, assigns also rights of action for prior infringements of that patent, the assignee may maintain an action at law in his own name for those infringements, as well as for subsequent infringements of that patent.[5] And actions in equity, if maintainable at all in such a case, may be brought in the name of the assignee; and such an action will be maintainable where the suit is based on infringements and threatened infringements, committed after the complainant obtained title, as well as upon infringements

[1] Moore *v.* Marsh, 7 Wallace, 515, 1868.

[2] Waterman *v.* Mackenzie, 138 U. S. 255, 1891.

[3] New York Belting Co. *v.* New Jersey Rubber Co. 47 Fed. Rep. 505, 1891.

[4] Moore *v.* Marsh, 7 Wall. 515, 1868.

[5] Adams *v.* Stamping Co. 25 Fed. Rep. 270, 1885.

committed before that event.[1] An action in equity will also be maintainable in such a case, if the assignor of the right of action was a corporation, and has been dissolved or has expired;[2] or if for any reason it is impossible for the assignee of the right of action to sue in the name of the assignor.[3] Where the assignor is dead at the time the assignee desires to bring an action at law, and where no legal representative of the assignor exists, or is likely to exist unless the appointment of one is obtained for the special purpose of using his name as nominal plaintiff in the assignee's suit, it would seem no great stretch of equity jurisdiction to allow the assignee to file a bill in his own name, and thus avoid the useless and expensive circuity of compelling him first to secure the appointment of an administrator, and then to bring an action at law in the name of the latter. No principle adverse to such a proceeding was perceived by Chief Justice MARSHALL when, in a similar case of expensive circuity at law, the more direct and less expensive methods of equity were invoked before him.[4]

§ 396. Where a patentee, assignee, or grantee, who was entitled to sue for an infringement of a patent, died before beginning an action thereon, such an action may be brought by his executor or administrator,[5] upon his fulfilling the conditions and giving the guarantees of fidelity and solvency required by the law of the State wherein the court is established in which the action is proposed to be brought.[6] But it is not certain that, when beginning a patent action in a Federal court in a State other than that of his appointment,

[1] Dibble *v.* Augur, 7 Blatch. 86, 1869; Henry *v.* Stove Co. 2 Bann. & Ard. 224, 1876; Gordon *v.* Anthony, 16 Blatch. 234, 1879; Merriam *v.* Smith, 11 Fed. Rep. 589, 1882; Shaw *v.* Lead Co. 11 Fed. Rep. 715, 1882; Consolidated Oil Well Packer Co. *v.* Eaton, 12 Fed. Rep. 870, 1882.

[2] Lenox *v.* Roberts, 2 Wheaton, 373, 1817.

[3] Hayward *v.* Andrews, 106 U. S. 675, 1882.

[4] Riddle *v.* Mandeville, 5 Cranch, 329, 1809.

[5] May *v.* County of Logan, 30 Fed. Rep. 253, 1887.

[6] Rubber Co. *v.* Goodyear, 9 Wallace, 791, 1869; Wilkins *v.* Ellett, 108 U. S. 256, 1882; Picquet *v.* Swan, 3 Mason, 472, 1824.

an executor or administrator must conform to the conditions, or give the guarantees, prescribed by the local laws.[1] Whether the various State laws, relevant to foreign executors or administrators suing in State courts, are binding in such cases as these, is a point upon which there appears to be a conflict of authority. The cases last cited appear to support the negative of the question, while those cited just before seem to sustain the affirmative view. It is possible that a distinction may be drawn on this point between actions based on patents and actions arising out of local law and brought into Federal courts on grounds of diverse citizenship. If that distinction is found to be important, it may lead to a decision that executors and administrators may begin and prosecute patent cases in Federal courts in States other than that of their appointment, without any regard to the probate or other analogous laws of those States. If it is held otherwise, then the laws of the States relevant to the conditions upon which foreign executors or administrators are permitted to sue in their courts, will require the attention of the practitioner in such cases. In some States those conditions amount to local probate, and in others they amount to no more than the giving of a bond for costs. But whether onerous or easy, and whether necessary or unnecessary to be regarded in patent cases, an omission to regard them cannot be availed of by a defendant, unless availed of in his pleadings.[2]

§ 397. Where an executor or administrator of a deceased patentee, or assignee or grantee of a patent right, assigns that right to another, or assigns to another a right of action for its infringement, that other can sue thereon in any State, without any proceedings in the nature of local probate,

[1] Hodge *v.* Railroad Cos. 4 Fisher, 162, 1870; Northwestern Fire Extinguisher Co. *v.* Philadelphia Fire Extinguisher Co. 1 Bann. & Ard. 177, 1874.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 791, 1869.

provided he can sue in his own name.[1] Whether he can sue in his own name will depend upon whether he is entitled to an injunction, or if not entitled to an injunction, it will depend upon whether equity can take jurisdiction on some other ground; or if not entitled to sue in equity at all, it will depend upon whether the laws of the particular State authorize assignees of rights of action to bring actions at law in their own respective names.[2]

§ 398. Patentees and other persons entitled to bring actions for infringements of patents may appoint attorneys in fact to bring those actions in the names of the appointors; but not in the names of the attorneys in fact.[3]

§ 399. Owners in common of patent rights must sue jointly for their infringement, or the defendant may plead in abatement or demur.[4] This rule applies where a patentee has assigned an undivided part of his patent,[5] and also to cases where the owner of the patent has granted an undivided interest therein, in that part of the territory of the United States wherein the infringement sued upon was committed. In the first of these cases the action must be brought by the patentee and assignee jointly; and in the other case it must be jointly brought by the owner of the patent and his grantee. Indeed, the rule necessarily applies to every case where a plurality of persons own the undivided interest in a patent right, whether in the whole, or only in a part of the territory of the United States. And it has been held in one case, that the owner of a patent right in a part of the territory of the United States, may join with the owner of the same patent right in another part of that territory, in

[1] Harper *v.* Butler, 2 Peters, 238, 1829; Trecothick *v.* Austin, 4 Mason, 36, 1825; Leake *v* Gilchrist, 2 Devereaux (N. C.), 73, 1829; Peterson *v.* Chemical Bank, 32 N. Y. 21, 1865; Riddick *v.* Moore, 65 N. C. 382, 1871; May *v.* County of Logan, 30 Fed. Rep. 253, 1887.

[2] May *v.* County of Logan, 30 Fed. Rep. 253, 1887.

[3] Goldsmith *v.* Collar Co. 18 Blatch. 82, 1880.

[4] Van Orden *v.* Nashville, 67 Fed. Rep. 332, 1895.

[5] Moore *v.* Marsh, 7 Wallace, 515, 1868; Waterman *v.* Mackenzie, 138 U. S. 255, 1891; Dick *v.* Struthers, 25 Fed. Rep. 104, 1885.

suing for infringement of the patent in the territory of the latter, on the ground that all the owners of territorial rights under the patent are interested in having it sustained.[1] But there is no occasion for a person who has only an interest in the proceeds of a patent, without having any title in the patent itself, to join in a suit for its infringement.[2]

§ 400. Licensees under patents cannot bring actions for their infringement.[3] Where a person has received an exclusive license to use or to sell a patented invention within a specified territory, all actions at law against persons who, without right, have done anything covered by the license, must be brought in the name of the owner of the patent right, but generally for the use of the licensee;[4] and all actions in equity must be brought by the owner of the patent right and the exclusive licensees suing together as joint complainants,[5] but the holder of a license less than exclusive must not join in an action in equity for an infringement of the patent under which he is licensed,[6] even where the infringement consisted in making and selling one form of the patented invention, which the licensee was exclusively licensed to make and sell.[7] Actions at law brought in the name of the owner of a patent right, but actually begun by an exclusive licensee, may be maintained by the latter, even against the will of the nominal plaintiff.[8] And where an exclusive licensee brings an action in equity in the

[1] Otis Mfg. Co. *v.* Crane Mfg. Co. 27 Fed. Rep. 558, 1886.

[2] Bogart *v.* Hinds, 25 Fed. Rep. 485, 1885.

[3] Gayler *v.* Wilder, 10 Howard 477, 1850; Paper-Bag cases, 105 U. S, 766, 1881; Blanchard *v.* Eldridge, 1 Wallace Jr. 337, 1849; Potter *v.* Holland, 4 Blatch. 206, 1858; Sanford *v.* Messer, 1 Holmes, 149, 1872; Nelson *v.* McMann, 4 Bann. & Ard. 203, 1879; Gamewell Telegraph Co. *v.* Brooklyn, 14 Fed. Rep. 255, 1882; Ingalls *v.* Tice, 14 Fed. Rep. 297, 1882; Wilson *v.* Chickering, 14 Fed. Rep. 917, 1883.

[4] Littlefield *v.* Perry, 21 Wallace, 223, 1874; Goodyear *v.* McBurney, 3 Blatch. 32, 1853.

[5] Waterman *v.* Mackenzie, 138 U. S. 255, 1891; Hammond *v.* Hunt, 4 Bann. & Ard. 113, 1879; Huber *v.* Sanitary Depot, 34 Fed. Rep. 752, 1888.

[6] Blair *v.* Lippincott Glass Co. 52 Fed. Rep. 226, 1892.

[7] Pope Mfg. Co. *v.* Clark, 46 Fed. Rep. 792, 1891.

[8] Goodyear *v.* Bishop, 4 Blatch. 438, 1860.

name of himself and the owner of the patent right, that action may be maintained without the co-operation and even against the objection of the latter.[1]

Where the owner of a patent is himself an infringer of a licensee's exclusive right to use or to sell the invention covered thereby, no action at law can remedy the wrong. The licensee cannot bring such an action in his own name in that case, any more than in another; and he cannot sue in the name of the wrong-doer, for he would thus make the latter both plaintiff and defendant. Such a state of facts constitutes such an impediment to an action at law as authorizes the licensee to sue the owner of a patent in a court of equity.[2] And a stranger to the title who joined in the infringement, may be joined with the owner as a defendant.[3]

Where an exclusive licensee, who pays royalties in proportion to the extent of his use or his sales of the patented invention, allows infringers to use or to sell that invention without interference from him, the owner of the patent right may sue those infringers in his own name and for his own use.[4]

§ 401. The defendant in an action for an infringement of a patent may be a natural person. A private corporation may also be held liable as defendant in such an action.[5] And a receiver, appointed by a State court for an infringing corporation, may be sued for its infringement or for his own infringement as receiver, without the consent of the State court which appointed him.[6] Among public corpora-

[1] Brush-Swan Electric Light Co. *v.* Electric Co. 48 Fed. Rep. 224, 1891; Brush Electric Co. *v.* Electric Co. of San Jose, 49 Fed. Rep. 73, 1892; Brush Electric Co. *v.* California Electric Co. 52 Fed. Rep. 945, 1892.

[2] Littlefield *v.* Perry, 21 Wall. 223, 1874; Root *v.* Railway Co. 105 U. S. 216, 1881; Rapp *v.* Kelling, 41 Fed. Rep. 792, 1890; Adriance *v.* McCormick Mach. Co. 55 Fed. Rep. 290, 1893; 56 Fed. Rep. 918, 1893.

[3] Waterman *v.* Shipman, 55 Fed. Rep. 986, 1893.

[4] Still *v.* Reading, 20 Off. Gaz. 1026, 1881.

[5] York & Maryland Line Railroad Co. *v.* Winans, 17 Howard, 30, 1854.

[6] Hupfeld *v.* Automaton Piano Co. 66 Fed. Rep. 789, 1895.

tions, the liability of a city for infringing a patent has been affirmed,[1] and that of a county has sometimes been affirmed and sometimes denied.[2] If such a distinction exists between a city and a county, it is founded on the fact that cities are created and exist mainly for the special use of the people who compose them; while counties are subdivisions of States, made for the purposes of political organization, and civil and judicial administration.[3] The same reasons, if valid, would indicate that organized villages are generally liable for infringements, while ordinary townships are not. The general rule on the subject would then appear to be that cities and villages are liable for infringements of patents, unless the charters or statutes which created or which regulate them otherwise require or provide, while counties and townships are not so liable unless they are made so by the legislative power which called them into being.[4] School districts probably fall in the some catagory as townships in respect to this sort of liability.[5] No State can be sued for any infringement of a patent.[6]

§ 402. Natural persons cannot escape liability for their infringements of patents on the ground that they are minors, married women, or lunatics.[7] A minor is not less liable to an action because the act of infringement was done at the command of his father;[8] but if a married woman commits an infringement in the presence of her husband, she is not

[1] Bliss *v.* Brooklyn, 4 Fisher, 596, 1871; Asbestine Mfg. Co. *v.* Hepp, 39 Fed. Rep. 326, 1889.

[2] Jacobs *v.* Hamilton County, 4 Fisher, 81, 1862, May *v.* County of Mercer, 30 Fed. Rep. 246, 1887; May *v.* County of Juneau, 30 Fed. Rep. 241, 1887, May *v.* County of Logan, 30 Fed. Rep. 260, 1887; May *v.* County of Ralls, 31 Fed. Rep. 473, 1887.

[3] Ward *v.* County of Hartford, 12 Connecticut, 406, 1838; Commissioners of Hamilton County *v.* Mighels, 7 Ohio State, 118, 1857.

[4] May *v.* County of Buchanan, 29 Fed. Rep. 473, 1886; May *v.* County of Cass, 30 Fed. Rep. 762, 1887.

[5] Wilson *v.* School District, 32 New Hampshire, 118, 1855.

[6] Eleventh Amendment to the Constitution of the United States.

[7] Cooley on Torts, Chapter IV.

[8] Humphreys *v.* Douglass, 10 Vermont, 71, 1838; Scott *v.* Watson, 46 Maine, 362, 1859.

liable to an action therefor, unless it can be shown that she did it without his influence or consent.[1] In the absence of such evidence, the husband is alone liable for the torts of the wife which are committed in his presence;[2] or under his direction;[3] and for the infringements which are committed jointly by both.[4] The only distinction between the liability of lunatics and of sane persons, for such torts as infringements of patents, seems to be that the former can never be held liable for more than actual damages, in an action at law,[5] or his actual profits, in an action in equity.[6]

§ 403. An agent or salesman who sells specimens of a patented thing on commission is liable as an infringer for so doing.[7] And the foreman of a factory is liable for infringements done under his supervision.[8] But a mechanic who, when working for wages, makes or uses a patented thing, or uses a patented process, at the command of his employer, is not liable to an action at law, on that account,[9] though he may doubtless be restrained by an injunction from continuing such making or using.[10] A decree for an account of profits would not be proper in such a case, because a mechanic cannot be said to make any profits from such an infringement. Nor would a decree for damages be any more proper in an action in equity, than would a judgment for damages in an action at law.

§ 404. Whoever directs or requests another to infringe a patent, is himself liable to an action for the resulting infringe-

[1] Bishops Law of Married Women, Volume 2, Section 258.

[2] Bishop's Law of Married Women, Volume 1, Section 43.

[3] American Bell Telephone Co. *v.* Cushman, 57 Fed. Rep. 844, 1893.

[4] Green *v.* Austin, 22 Off. Gaz. 683, 1882.

[5] Cooley on Torts, page 102.

[6] Avery *v.* Wilson, 20 Fed. Rep. 857, 1884.

[7] Potter *v.* Crowell, 3 Fisher, 112, 1866; Maltby *v.* Bobo, 14 Blatch. 53, 1876; Steiger *v.* Heidelberger, 4 Fed. Rep. 455, 1880; Cramer *v.* Fry, 68 Fed. Rep. 207, 1895.

[8] Cahoone Mfg. Co. *v.* Harness Co. 45 Fed. Rep. 584, 1891.

[9] Delano *v.* Scott, Gilpin 498, 1834; United Nickel Co. *v.* Worthington, 13 Fed. Rep. 392, 1882; Young *v.* Foorster, 37 Fed. Rep. 208, 1889.

[10] Goodyear *v.* Mullee, 5 Blatch. 437, 1867.

ment, on the plain principle that what one does by another he does by himself.[1] So, also, if an infringement is committed by A. B. for the benefit of C. D., but without the knowledge or authority of the latter, the latter will still be liable as an infringer, if he approves the tort after its commission.[2] An infringement which is committed by an employee in the regular course of his employer's business will also render the latter liable to an action, even if the employer forbade the acts which constituted the infringement,[3] or even if the employer did not know that such was the character of those acts.[4]

§ 405. It is a general principle of law, that whoever does an act which naturally causes another to commit a tort, is himself liable to an action therefor.[5] The applicability of this doctrine to patent suits is a subject which is as yet almost wholly unexamined by the courts. When so examined, it will probably be found to have its limitations. If A. B. unlawfully makes a specimen of a patented thing, and sells it to C. D., a man whose business it is to use things of that class, there seems to be no injustice in holding the former responsible, not only for his own illegal making and selling, but also for the illegal using committed by the latter, for that making and selling naturally resulted in that using. On the other hand, if E. F., a merchant, gives G. H., a manufacturer, an order for a quantity of articles which may be made either with or without a particular patented machine, and if G. H. makes those articles with that machine because he ordinarily and naturally uses that machine for such purposes, it seems to be clear that E. F. is not liable

[1] Green *v.* Gardner, 22 Off. Gaz. 683, 1882.

[2] See Judson *v.* Cook, 11 Barbour (N. Y.), 642, 1852; Allred *v.* Bray, 41 Missouri, 484, 1867.

[3] See Philadelphia & Reading Railroad Co. *v.* Derby, 14 Howard, 468, 1852.

[4] Wooster *v.* Marks, 17 Blatch. 368, 1879; McKnight *v.* McNiece, 64 Fed. Rep. 116, 1894.

[5] Guille *v.* Swan, 19 Johnson (N. Y.), 381, 1822; Brooks *v.* Ashburn, 9 Georgia, 297, 1851; Lewis *v.* Johns, 34 California, 629, 1868; Smith *v.* Felt, 50 Barbour (N. Y.), 612, 1868.

for that unlawful making.[1] But if I. J. unlawfully makes a patented machine and leases it to K. L. to be used, it seems right to hold the former liable to an action for that use.

§ 406. Where several persons co-operate in any infringement, all those persons are of course liable therefor. In that, as in all cases of torts for which several persons are liable, all may be sued jointly, or any of them may be sued alone.[2] But where a patentee sues one of several joint infringers collusively, for the purpose of getting a mutual advantage over another joint infringer, the court, on learning the facts, will dismiss the case.[3]

So, also, an action may be brought against several joint defendants, and sustained against such of them as the evidence shows to be liable, even though not sustained against all.[4] Where an action at law is sustained against several joint infringers, the judgment will be entered against all, regardless of whether the benefits of the infringement were confined to part of them, or extended to the whole;[5] though only one payment can be enforced;[6] and a decree for profits, in an action in equity, will be entered only against those of the defendants who are proved to have actually realized profits from the infringement.[7]

§ 407. The facts which will constitute co-operative joint infringement fall, when analyzed, into a large number of classes. A few of them may be mentioned in this section, but a much larger number must be left to the reflections of the reader, or to the development of litigation.

Where one man owns and others operate an infringing

[1] Keplinger *v.* De Young, 10 Wheaton, 358, 1825; Brown *v.* District of Columbia, 3 Mackey, 502, 1884.

[2] Jennings *v.* Dolan, 29 Fed. Rep. 862, 1887; Bray *v.* Denning, 56 Fed. Rep. 1019, 1893.

[3] Ring Refrigerator Co. *v.* St. Louis Ice Mfg. Co. 67 Fed. Rep. 535, 1895.

[4] Reutgen *v.* Kanowrs, 1 Washington, 172, 1804.

[5] Cooley on Torts, p. 136.

[6] Jennings *v.* Dolan, 29 Fed. Rep. 862, 1887.

[7] Elizabeth *v.* Pavement Co. 97 U. S. 140, 1877; Featherstone *v.* Cycle Co., 53 Fed. Rep. 110, 1892.

machine, all are jointly liable to an action therefor.[1] Where one person makes and sells a part of a patented combination, and another person independently make and sells the residue of that combination, both intending that the purchaser shall assemble the parts, and use the combination, there the maker and seller of either of the parts is liable to an action as infringer.[2] So, also, where a person makes and sells a composition of matter, or makes or sells any material, or thing which is described in a patent, and which is useful only for the purpose of performing a process covered by that patent, or which is thus sold with knowledge that it is to be used in performing that process, there also the seller is liable to an action at law or in equity.[3] But where the material thus sold is useful for some other purpose than to perform the patented process, and where the seller does not know when selling it, that it is purchased to be thus used, he incurs no liability to an action for infringement.[4] But if there was an intention that the thing made and sold should be incorporated into the patented combination, an action for infringement cannot be defeated by showing that it could have been used for some purpose alone, or in unpatented combinations.[5]

Persons who contribute money for the express purpose of supporting others in infringing a patent, are also liable as infringers;[6] and where an infringer makes a voluntary assignment for the benefit of creditors, and the assignee

[1] Woodworth *v.* Edwards, 3 Woodbury & Minot, 121, 1847.

[2] Wallace *v.* Holmes. 9 Blatch. 73, 1871; Schneider *v.* Pountney, 21 Fed. Rep. 403, 1884; Travers *v.* Beyer, 26 Fed. Rep. 450, 1886; Stearns *v.* Phillips, 43 Fed. Rep. 795, 1890.

[3] Rumford Chemical Works *v.* Hecker, 2 Bann. & Ard. 363, 1876; Willis *v.* McCullen, 29 Fed. Rep. 641, 1886; Alabastine Co. *v.* Payne, 27 Fed. Rep. 560, 1886; Celluloid Mfg. Co. *v.* Zylonite Co. 30 Fed. Rep. 437, 1887; Boyd *v.* Cherry, 50 Fed. Rep. 282, 1883.

[4] Maynard *v.* Pawling, 5 Bann. & Ard. 551, 1880; Millner *v.* Schofield, 4 Hughes, 261, 1881; Snyder *v.* Bunnell, 29 Fed. Rep. 47, 1886; Geis *v.* Kimber, 36 Fed. Rep. 109, 1888.

[5] Saxe *v.* Hammond, 1 Holmes, 456, 1875; Bowker *v.* Dows, 3 Bann. & Ard. 518, 1878.

[6] Bate Refrigerating Co. *v.* Gillett, 30 Fed. Rep. 684, 1887.

continues the infringement, both may be sued jointly for the infringement committed before, and also that committed after the assignment.[1]

Where the owner of a patent on something which infringes an older patent, licenses another to use his device, and furnishes to his licensee, plans and drawings for making his device, and requiring, to that end, the making of the device of the prior patent, without procuring or intending to procure the consent of its owner, that licensor is a joint infringer with his licensee of the prior patent.[2] And where one who has contracted to erect a building, lets a portion of the work to a sub-contractor, and in the prosecution of their respective parts, each of them infringes a patent of another, both of them are liable as joint infringers.[3] So also a person who is employed as manager of a partnership, and in that capacity infringes a patent, is a joint infringer with the partners.[4]

But a man does not infringe a patent, by making an unpatented thing which is adapted for use with a patented thing, and selling that unpatented thing to a licensee under the patent.[5]

Where one of several joint infringers is sued for their infringement, the other one or ones may be admitted as joint defendant to help defend the suit.[6]

§ 408. A partnership is liable to an action for an infringement committed in the regular course of the partnership business, by one or more of the partners, or under his or their orders; and also for any infringement committed outside of that regular course of business, if it was previously authorized or afterward adopted as the act of the partner-

[1] Gordon *v.* Harvester Works, 23 Fed. Rep. 147, 1885.

[2] Toppan *v.* Tiffany Car Co., 39 Fed Rep. 420, 1889.

[3] Jackson *v.* Nagle, 47 Fed. Rep. 703, 1891.

[4] Featherstone *v.* Cycle Co. 53 Fed. Rep. 110, 1892.

[5] Robbins *v.* Columbus Watch Co., 50 Fed. Rep. 555, 1892.

[6] Curran *v.* Car Co., 32 Fed. Rep. 835, 1887; Standard Oil Co. *v.* Southern Pacific Co., 54 Fed. Rep. 521, 1893; Ring Refrigerator Co. *v.* St. Louis Ice Mfg. Co., 67 Fed. Rep. 540, 1895.

ship by all the partners. But no partnership is liable for any infringement committed outside of the regular course of the partnership business, unless it was so authorized or adopted.[1]

§ 409. Private corporations are responsible for *infringement*, committed, authorized, or ratified by them, under substantially the same rules as those which govern the similar responsibility of natural persons. It was formerly supposed that corporations could not be held liable for torts, because torts are never authorized by corporate charters, and are therefore *ultra vires*. But this idea was soon found to produce gross injustice in its practical operation; and was therefore abandoned by the courts.[2] The law is, that every private corporation is liable for all the torts which were authorized by that corporation, and for all torts done in pursuance of any authority to act on its behalf, on the subject to which the torts relate, and for all torts ratified by the corporation after they are committed.[3] And in deciding upon this liability, the courts consider corporate officers, agents, and servants as possessing a large discretion, and they accordingly hold the corporation liable for all their acts within the most extensive range of the corporate powers.[4] The agent of a corporation in committing an infringement may be another corporation; and the relation of agency exists and binds the principal, where the agent infringes a patent in authorized pursuance of the business which the principal was chartered to transact.[5] Unless their charters otherwise provide, public corporations which are liable at all for infringements of patents, are doubtless liable under the same circumstances and to the same extent as private corporations are.[6]

[1] See Story on Partnership, Sections 166 and 168.

[2] Baltimore and Potomac Railroad Co. *v.* Fifth Baptist Church, 108 U. S. 330, 1882; Salt Lake City *v.* Hollister 118 U. S. 256, 1886.

[3] May *v.* County of Mercer, 30 Fed. Rep. 248, 1887.

[4] See Cooley on Torts, p. 119.

[5] York and Maryland Line Railroad Co. *v.* Winans, 17 Howard, 38, 1854.

[6] May *v.* County of Mercer, 30 Fed. Rep. 248, 1887.

§ 410. Under what circumstances and to what extent an officer, director, or stockholder of a corporation is personally liable for infringements committed by it, are open questions.

It has been adjudicated that where persons actively and personally conduct infringements of patents, they cannot avert an injunction by proving that they acted under the charter of a corporation, and as officers, directors, or stockholders thereof.[1] And in other cases it has been held that an action for infringement of a patent will not lie against an officer, director, or stockholder of a solvent infringing corporation.[2] And Judge LOWELL held that an action at law cannot be maintained against the officers, directors, or shareholders of a corporation which infringes a patent, even where such persons personally conducted the business which constituted the infringement.[3] If that is the law upon the point, it must also be the law that no damages can be recovered by an action in equity against any such person. But it will not follow, where profits have been realized by persons from infringements committed by them in the disguise of a corporation, that they can lawfully retain those profits, and leave the patentee remediless. And it is possible that Judge LOWELL was wrong in his opinion. His examination of the point does not appear to have been characterized by all that thoroughness with which his judicial opinions were generally developed; and he himself remarked that his conclusion was contrary to what counsel had conceded in several earlier cases. The point is one of much importance. Upon it may often depend the just

[1] Goodyear *v.* Phelps, 3 Blatch. 91, 1853; Poppenhusen *v.* Faulk, 4 Blatch. 495, 1861; National Brake Shoe Co. *v.* Mfg. Co. 19 Fed. Rep. 515, 1884; Iowa Barbed Steel Wire Co. *v.* Barbed Wire Co. 30 Fed. Rep. 123, 1887; Cahoone Mfg. Co. *v.* Harness Co. 45 Fed. Rep. 583, 1891; Armstrong *v.* Savannah Soap Works, 53 Fed. Rep. 125, 1892; Edison Electric Light Co. *v.* Packard Electric Co. 61 Fed. Rep. 1005, 1893.

[2] Howard *v.* St. Paul Plow Works, 35 Fed. Rep. 744, 1888; Boston Woven Hose Co. *v.* Starr Rubber Co. 40 Fed. Rep. 167, 1889.

[3] United Nickel Co. *v.* Worthington, 13 Fed. Rep. 393, 1882.

reward of invention, and the just punishment of tort. An examination of the subject in the light of analysis and of analogies may therefore be acceptable to the profession.

§ 411. Wrongs are divisible, in one aspect, into two classes: wrongs of commission and wrongs of omission. Where an officer, director, or stockholder of a corporation is engaged in managing its business, and as a part of that business manages and directs the infringement of a patent, that person is chargeable with a wrong of commission. Where such a person has power to prevent his corporation from infringing a patent, and omits to exercise that power, and where the corporation therefore infringes that patent, then that person is chargeable with a wrong of omission. Where a person is an officer, director, or stockholder of a corporation, but has no personal power to cause it to infringe a particular patent, nor to restrain it from so doing, that person is chargeable with no wrong of either sort.

§ 412. Stockholders seldom have any power, merely as stockholders, to control the action of their corporation in such a matter of detail as the infringement of a particular patent. Unless it can be shown that the stockholder whom it is sought to hold liable in a particular case, did possess power of that kind, it is clear that the common law will not compel him to respond in damages for any infringement with which he was not personally connected. If the law were otherwise, a man could lawfully be made to suffer for wrongs which he did not commit, and could not prevent, and from which he received no advantage. Indeed, it is the general rule of the common law that mere stockholders in a corporation are not liable for its debts,[1] and if not liable for its debts, they surely ought not to be liable for its torts.

§ 413. The officers of a corporation are the persons who are charged with the superintendence and control of its transactions. It is doubtless their duty to refrain from directing infringements to be committed; and also to prevent the agents and servants of their corporations from commit-

[1] Shaw *v.* Boylan, 16 Indiana, 386, 1861.

ting infringements of patents when prosecuting the corporate business. If such an officer directs and causes a specific thing to be done which turns out to constitute an infringement, it is extremely difficult to see why he should be permitted to shift all the responsibility for the tort upon the intangible corporation, that is to say, upon the innocent stockholders as a body.

If an agent or a servant of a corporation commits an infringement in the course of the corporate business, the officers whose function it is to control that agent or that servant are chargeable with a wrong of omission. They are guilty of *non-feasance* in the performance of their official duties. If their omission to prevent the infringement is the result of gross inattention on their part, they are liable to the corporation for any loss it may incur on account of the infringement; but it is otherwise if the omission resulted from an error of judgment.[1] Whether such an officer is liable at common law to the owners of the patent infringed, seems to depend upon other considerations.

If an officer, in pursuance of his general authority, directs a servant of a corporation to make a machine for a particular purpose, which machine may be made so as to infringe a patent or may be made so as not to have that effect, it seems that the officer is bound to see that it is not made so as to infringe, and that if the servant makes it in that way, the officer is liable to the patentee.[2] But if a servant of a corporation, without any special orders to do so, makes or uses or sells a thing which turns out to be an infringement of a patent, it seems that no superior officer is personally liable therefor at common law.[3] It appears reasonable that officers of corporations should be bound to see that whatever they cause to be done is done lawfully; but it would perhaps not be ordinarily right to make them personally

[1] Spering's Appeal, 71 Pennsylvania State, 11, 1872.

[2] See Hewett *v.* Swift, 3 Allen (Mass.), 425, 1862.

[3] See Bath *v.* Caton, 37 Michigan, 202, 1877.

responsible to strangers for acts spontaneously committed by their subordinates.

§ 414. Directors of corporations, unlike other officers, act only in a collective capacity. Where an entire board of directors unanimously order a particular thing to be done which will constitute an infringement of a patent, and where that thing is accordingly done by the corporation's agents or servants, there seems to be no reason why those directors should not be held personally liable to an action for that infringement. If the corporation is alone liable in such a case, then crafty and dishonest men may often manage to divide the spoils of infringement, and leave nothing but an insolvent or dormant corporation to be sued by the patentee. It would evidently be a reproach to our laws if such a scheme could be made to work. Whoever attempts to defend the legal safety of such a mode of reaping the harvest of another, should have his attention called to the following sentence, written by Justice CAMPBELL, and approved by the Supreme Court, and worthy to be quoted in every law-book, and remembered by every man. "It is certainly true that the law will strip a corporation or individual of every disguise, and enforce a responsibility according to the very right, in despite of their artifices." [1]

Where the action of a board of directors in ordering an infringement, results from the votes of a majority only, the relations of the minority voters to the resulting infringement must be different from that of the others. The members of the minority ought not, in such a case, to be held liable for the action of the board, or for its results, unless they afterward adopt it by ratification. Where an infringement is ordered by a quorum of a board of directors, in the absence of the residue, the residue will be free from common law liability for the wrong unless they afterward ratify it, or unless they are chargeable with such gross non-attendance upon the meetings of the board as justly causes them

[1] York and Maryland Line Railroad Co. *v.* Winans, 17 Howard, 40, 1854.

to be held responsible for whatever is done by their colleagues in their absence. The mere fact of being a director in a corporation is not sufficient to render a person liable at common law for any tort committed by that corporation or its managers or agents.[1]

§ 415. But there is a statutory liability in such cases as those which we are considering. Most of the States have statutes which provide that, under various circumstances therein specified, the officers, directors, or stockholders of a corporation shall be personally liable for its debts or liabilities. Section 721 of the Revised Statutes of the United States provides that "The laws of the several States, except where the Constitution, treaties, or statutes of the United States otherwise require or provide, shall be regarded as rules of decision in trials at common law, in cases where they apply." Under this section of the Revised Statutes, these laws of the States will probably have the same effect in a patent suit in a United States court, that they would have in any action of trespass on the case in a State court.[2] Such of the State statutes referred to as make stockholders, officers, or directors responsible for the "liabilities" of their corporations are clearly broad enough to cover liabilities arising out of infringements of patents. Indeed Justice STORY decided that such liabilities were covered by the word "debts" in such a statute.[3] In most of the States the statutory individual liability of officers, directors, and stockholders of coporations is more limited than it was in Massachusetts when Justice STORY made that decision. It is outside the scope of this text-book to set forth the details of the State statutes which bear upon the point. It will

[1] Arthur *v.* Griswold, 55 New York, 406, 1874.

[2] McCluny *v.* Silliman, 3 Peters, 270, 1830; McNeil *v.* Holbrook, 12 Peters, 84, 1838; Vance *v.* Campbell, 1 Black, 427, 1861; Haussknecht *v* Claypool, 1 Black, 431, 1861; Wright *v.* Bales, 2 Black, 535, 1863; Leffingwell *v.* Warren, 2 Black, 599, 1862; Hanger *v.* Abbott, 6 Wallace, 537, 1867; Campbell *v.* Haverhill, 155 U. S. 614, 1895; Parker *v.* Hall, 2 Fisher, 62, 1857; Parker *v.* Hawk, 2 Fisher, 58, 1857; Rich *v.* Ricketts, 7 Blatch. 230, 1870; Hayden *v.* Oriental Mills, 15 Fed. Rep. 605, 1883.

[3] Carver *v.* Mfg. Co. 2 Story, 448, 1843.

frequently happen that the controlling legislative edicts which relate to the matter will be found in the special charters of particular corporations, rather than in the general statutes of the several States. The general principle which runs through all such laws seems to be that where a corporation is so managed that it cannot be made to respond to lawful claims based on its contracts or torts, those officers or directors who caused that inability, or those officers, directors, or stockholders who profited thereby, shall be made to respond in its place.

§ 416. A consolidated corporation is liable to actions in equity for infringements committed before the consolidation, by each of its constituents, if the property and franchises which the consolidated corporation acquired from that constituent were of sufficient value, over and above all paramount claims, to equal the profits or damages sought to be recovered in such actions.[1] This proposition results from the fact that equity regards the property of a corporation as held in trust for the payment of its debts, and recognizes the right of creditors to pursue that property into whosesoever possession it may be transferred, unless it has passed into the hands of a *bona fide* purchaser.[2]

The liability of consolidated corporations to actions at law, for infringements committed by their constituent corporations, before the consolidation, is a matter which does not rest on common law principles, so much as upon the statutes of the States wherein those consolidated corporations came into being, or upon the private Acts which authorized the consolidations, or upon the charters of the constituent or of the consolidated companies. Whenever occasion arises to hold a consolidated corporation liable to an action at law for such a cause, a proper authority for so doing can probably always be found in one or another of these sources.

[1] Sayles *v.* The Lake Shore and Michigan Southern Railway Co. Manuscript, 1878.

[2] Mumma *v.* Potomac Co. 8 Peters, 286, 1834; Curran *v.* Arkansas, 15 Howard, 311, 1853; Railroad Co. *v.* Howard, 7 Wallace, 409, 1868.

§ 417. A plurality of patents may be sued upon in one action, where the inventions covered by those patents are embodied in one infringing process, machine, manufacture, or composition of matter;[1] but not otherwise.[2] But any action based on alleged infringement, in one process or thing, of a plurality of patents, may be sustained by evidence that one of those patents was so infringed, though the others were not;[3] and an action brought for alleged unlawful making, using, and selling may be sustained by evidence of either of those three sorts of infringement.[4] So also, an action may be based on infringement committed during the first term, and on infringement committed during an extended term, of any patent, and may be sustained on proof of either or both of those infringements. And several actions may be based on several infringements of the same patent, committed at different times by the same infringer.[5] It has also been held that one action will lie for an infringement of a patent and an infringement of a trade-mark, where the trade-mark and the patent were both infringed together.[6]

[1] Seymour *v.* Osborne, 11 Wallace, 516, 1870; Bates *v.* Coe, 98 U. S. 48, 1878; Nourse *v.* Allen, 3 Fisher, 63, 1859; Gillespie *v.* Cummings, 3 Sawyer, 259, 1874; Horman Patent Mfg. Co. *v.* Railroad Co. 15 Blatch. 414, 1879; Gamewell Fire-Alarm Telegraph Co. *v.* Chillicothe, 7 Fed. Rep. 351, 1881; Nellis *v.* Mfg. Co. 13 Fed. Rep. 451, 1882; Lilliendahl *v.* Detweller, 18 Fed. Rep. 177, 1883; Consolidated Electric Light Co. *v.* Electric Light Co. 20 Fed. Rep 502, 1884; Griffith *v.* Segar, 29 Fed. Rep. 707, 1887.

[2] Nellis *v.* McLanahan, 6 Fisher, 286, 1873; Hayes *v.* Dayton, 8 Fed. Rep. 702, 1880; Barney *v.* Peck, 16 Fed. Rep. 413, 1883; Hayes *v.* Bickelhoupt, 23 Fed. Rep. 184, 1885; Huber *v.* Sanitary Depot, 34 Fed. Rep. 752, 1888.

[3] Matthews *v.* Mfg. Co. 18 Blatch. 86, 1880.

[4] Locomotive Truck Co. *v.* Railway Co. 10 Blatch. 293, 1872.

[5] Roemer *v.* Neumann, 23 Fed. Rep. 447, 1885.

[6] Jaros Underwear Co. *v.* Fleece Underwear Co. 60 Fed. Rep. 622, 1894.

CHAPTER XVIII.

ACTIONS AT LAW.

418. Actions of trespass on the case.
419. The question of the propriety of actions of assumpsit for infringements of patents, considered in the light of precedents.
420. Considered in the light of expediency.
421. Forms of civil actions prescribed by State codes and statutes, where applicable to patent cases.
422. Declarations in trespass on the case.
423. The statement of the right of action, in respect of the inventor.
424. In respect of the novelty and utility of the invention.
425. In respect of the absence of public use or sale more than two years before application for a patent.
426. In respect of the patentee, where he is another than the inventor.
427. In respect of the application for the patent.
428. In respect of the letters patent.
429. In respect of a reissue.
430. In respect of a disclaimer.
431. In respect of an extension.
432. In respect of the plaintiff's title.
433. In respect of profert of title.
433*a*. In respect of marking "patented."
434. In respect of infringement.
435. In respect of the time of infringement.
436. In respect of the damages.
437. The conclusion of the declaration.
438. Substantial and not technical accuracy required in declarations.
439. Dilatory pleas.
440. Twenty-seven defences pleadable in bar in patent actions.
441. The twenty-seven defences reviewed in respect of their natures and effects.
442. Special pleading.
443. The general issue accompanied by a statutory notice of special matter.
444. Notices of special matter.
445. Defences based on facts of which courts take judical notice, need not be pleaded.
446. The first and second defences.
447. The third defence.
448. The fourth defence.
449. The fifth and sixth defences.
450. The seventh defence.
451. The eighth defence.
452. The ninth and tenth defences.
453. The eleventh defence.
454. The twelfth defence.
455. The thirteenth defence.
456. The fourteenth defence.
457. The fifteenth defence.
458. The sixteenth defence.
459. The seventeenth defence.
460. The eighteenth defence.
461. The nineteenth defence.
462. The twentieth defence.

468. The twenty-first defence.
464. The twenty-second defence.
465. The twenty-third and twenty-fourth defences.
466. The twenty-fifth defence.
467. The twenty-sixth defence: estoppel.
468. Estoppel by matter of record: *res judicata*
469. Estoppel by matter of deed.
470. The twenty-sixth defence; how pleaded.
471. The twenty-seventh defence; statutes of limitations.
472. The national statute of limitation.
476. State statutes of limitations do not apply to any right of action which is attended to by a national statute of limitation.
477. State statutes do apply to all rights of action which are not attended to by a national statute of limitation.
478. Replications, rejoinders, and sur-rejoinders, where licenses or releases are pleaded.
479. Replications, where the national statute of limitation is pleaded.
480. Replications and rejoinders, where a State statute of limitation is pleaded.
481. The similiter.
482. Demurrers.
483. Demurrers to declarations.
484. Demurrers to pleas.
486. Joinders in demurrer.
487. Trial of actions at law for infringement of patents.
488. Trial by jury.
489. Rules of practice.
490. Rules of evidence.
491. Letters patent as evidence.
492. Reissue letters patent are *prima facie* evidence of their own validity.
494. Letters patent presumed to be in force till the end of the term expressed on their face.
495. Evidence of title.
496. Neither licenses, nor releases, need be negatived in a plaintiff's *prima facie* evidence.
497. Evidence of the defendant's doings.
498. Expert evidence of infringement.
499. Hypothetical questions for experts.
500. Expert testimony relevant to the state of the art.
501 Cross-examination of experts.
502. Evidence of damages.
503. Defendant's evidence in chief.
504. Evidence to sustain the first defence
505. To sustain the second defence.
506. To sustain the third defence, when based on prior patents.
507. When based on prior printed publications.
508. When based on prior knowledge or use.
509. Rebutting evidence to the third defence, when based on prior knowledge or use.
510. Rebutting evidence to the third defence, however based.
511. Evidence to sustain the fourth defence.
512. To sustain fifth defence.
513. The sixth defence.
514. The seventh defence.
515. The eighth defence.
516. The ninth defence.
517. The tenth defence.
518. The eleventh defence.
519. The twelfth defence.
520. The thirteenth defence.
521. The fourteenth defence.
522. The fifteenth defence.
523. The sixteenth defence.
524. The seventeenth defence.

525. The eighteenth defence.
526. The nineteenth defence.
527. The twentieth defence.
528. The twenty-first defence.
529. The twenty-second defence.
530. The twenty-third defence.
531. The twenty-fourth defence.
532. The twenty-fifth defence.
533. The twenty-sixth defence.
534. The twenty-seventh defence.
535. How testimony is taken in actions at law.
536. When the judge may direct the jury to return a verdict for the defendant.
537. Instructions to juries.
538. Verdicts.
539. New trials.
540. Trials by a judge without a jury.
541. Trial by referee.
542. Judgments.
543. Costs.
544. Costs under the statute.
545. Attorney's docket fees.
546. Clerk's fees.
547. Magistrate's fees.
548. Witness fees.
549. Taxation of costs.
550. Writs of error.
551. Bills of exception.
552. Erroneous instructions, and refusals to instruct.
553. Exception to instructions, and to refusals to instruct.
554. Time when exceptions must be noted, and time when bills of exception must be drawn up and signed.

§ 418. AN action of trespass on the case, is prescribed by the United States statutes, as the proper legal remedy, for infringements of patents.[1] Patent rights are not based upon the common law; but are founded wholly upon the Constitution and statutes of the United States.[2] Where a statute creates a right, and prescribes a legal remedy for its enforcement, it is the general rule that no other common law remedy can be used for that purpose.[3] Unless patent rights are exempt from this rule, it will follow that an action of trespass on the case is the only action which United States courts can entertain, when sitting as common law courts in patent cases. Whether patent rights are thus exempt, is a question which once arose in a Supreme Court case, but which was not decided because it was apparently overlooked by the counsel and by the court.

[1] Revised Statutes, Section 4919.
[2] Section 149 of this Book.
[3] Wiley *v.* Yale, 1 Metcalf (Mass.), 554, 1840; Elder *v.* Bemis, 2 Metcalf (Mass.) 604, 1841; Smith *v.* Woodman, 8 Foster (28 N. H.), 528, 1854.

The case was that of the Packet Co *v.* Sickles. It was originally an action of assumpsit, based on an alleged contract between the parties, relevant to compensation for the use of a patented machine. A recovery was adjudged on that contract in the court below; but the Supreme Court reversed the judgment on the ground that the contract was not in writing, and was not to be performed within one year, and was therefore void under the statutes of frauds.[1] On the case being remanded, the plaintiff amended the declaration by adding two counts in assumpsit for money had and received. The case was thus changed from an action of assumpsit on a contract, to an action of assumpsit to recover compensation for the infringement of a patent. The defendant did not notice the questionable propriety of an action of assumpsit for that purpose, and therefore pleaded non-assumpsit. The jury found for the plaintiff, and having been instructed by the court to assess the damages on the basis of the value of the use of the machine, it rendered a verdict for $11,333, with interest from the day when the suit was brought.

Now if an action of assumpsit had been proper, it would be difficult to show any impropriety in the charge of the court, though in an action of trespass on the case it would have been clearly wrong.[2] When the case again reached the Supreme Court, it was again reversed; this time because the charge did not conform to the precedents relevant to the measure of damages in actions at law for infringements of patents. But no due notice appears to have been taken of the fact that the case at bar was an action of assumpsit, while those precedents had been established in actions of trespass on the case.[3] Had that distinction been attended to, the court could hardly have sustained the propriety of the form of action, and at the same time have reversed the

[1] Packet Co. *v.* Sickles, 5 Wallace, 580, 1866.

[2] Seymour *v.* McCormick, 16 Howard, 480, 1853.

[3] Packet Co. *v.* Sickles, 19 Wallace, 617, 1873.

case for error in the charge. The suit was treated precisely as though it had been an action of trespass on the case. If the court had meant to affirm the propriety of actions of assumpsit for infringements of patents, it would not have so treated the suit; for its ruling would seem to be inappropriate to that form of action. The precedent is therefore not fairly citable on either side of the question of the propriety of an action of assumpsit for the infringement of a patent.

§ 419. That an action of assumpsit may be based on an infringement of a patent, has been stated to be the law by at least two United States judges.[1]

In the first case cited, Judge HUGHES said: "Let us now suppose the case of a person who takes possession of and uses another's horse, wagon and team, or threshing-machine, without his knowledge, consent or authority. . . . In such a case, the owner may recover damages in trespass for the tort; or he may waive the tort, and sue in assumpsit on the implied promise to pay what is equitably due for the use and possession of the property. . . .The case I have supposed is, in principle, precisely the case we have at bar, for there is no magical quality in the property of a patentee in his patent to distinguish this case from the one just supposed, where ordinary property has been taken and used without the owner's consent. . . . The act of the defendant was nothing but the simple one of a person taking and using anothers' property, without authority, to his own advantage, and incurring a liability to compensate the owner for such use of the property. The case is, in principle, precisely identical with that of such a use of a horse, or a boat, or a wagon and team, or threshing-machine—giving a right of action in assumpsit."

[1] Sayles *v.* Richmond, Fredericksburg & Potomac RailroadCompany, 4 Bann. & Ard. 245, 1879; Steam Stone Cutter Co. *v.* Sheldons, 15 Fed. Rep. 609, 1883.

In the second case Judge WHEELER said: "When the Windsor Manufacturing Company sold machines, embodying these inventions, to the defendants for use, it invaded the orator's rights and converted the orator's property to its own use. These acts were tortious, and an action would lie for these wrongs. As that company received money for the orator's property, the orator could waive the tort, and sue in assumpsit for the money, or, what is the same in effect, proceed for an account of the money received. In an action or proceeding for the money, the measure of damages would be the amount of money received, not the amount of damage done, and all right of recovery beyond that would be waived."

§ 420. It is against the policy of the law that the owner of a patent right should lose by reason of its infringement. To prevent such a result, the action of trespass on the case is well adapted, because it measures the plaintiff's recovery by the plaintiff's loss. But it is also against the policy of the law that an infringer should gain by reason of his infringement. To prevent such a result, the action of trespass on the case is not well adapted, because an infringer may often gain far more than the patentee loses by reason of the wrongful act of the former. Patents are peculiar property in this respect. A horse or a wagon is worth about as much to one man as to another, but the use of a patent may be worth ten times as much to a rich infringer as to a poor patentee. It would be a reproach to the patent laws if any infringer could unlawfully make, use, and sell specimens of his neighbor's patented invention, and, when called to account in a court of justice, could cancel his liability by paying one-tenth of the proceeds of his tort to the owner of the patent. No complete system of law offers such a premium for its own violation. To prevent such failures of justice, it was long the theory and the practice of the United States courts, that equity had jurisdiction to enforce a patentee's right to recover an infringer's profits, independently of all other equitable titles, rights, and

romodios.[1] But that theory was overruled, and that practice was stopped by the Supreme Court, in the case of Root *v.* Railway Co.[2] The new rule which was stated and enforced in that case, calls aloud upon courts of law to entertain actions of assumpsit for infringements of patents, if by any means they can find authority for so doing. If no such authority can be deduced from the common law, then it ought to be conferred by legislation; for unless it exists or is supplied, it must often happen that infringers will profit by their infringement, far more than inventors can profit by their inventions.

§ 421. A majority of the States have abolished all common law actions, and have substituted for the whole of them a single form of proceeding which they call a civil action. The United States statutes provide that "The practice, pleadings, and forms and modes of proceeding in civil causes, other than equity and admiralty causes, in the circuit and district courts, shall conform, as near as may be, to the practice, pleadings, and forms and modes of proceeding existing at the time in like causes in the courts of record of the State within which such circuit or district courts are held, any rule of court to the contrary notwithstanding,"[3]

[1] Stevens *v.* Kansas Pacific Railway Co. 5 Dillon, 486, 1879; Nevins *v.* Johnson, 3 Blatch. 80, 1853; Sickles *v.* Mfg. Co. 1 Fisher, 222, 1856; Jenkins *v.* Greenwald, 2 Fisher, 41, 1857; Imlay *v.* Railroad Co. 4 Blatch. 228, 1858; Perry *v.* Corning, 6 Blatch. 134, 1868; Howes *v.* Nute, 4 Cliff. 174, 1870; Cowing *v.* Rumsey, 8 Blatch. 36 1870; Packet Co. *v.* Sickles, 19 Wallace, 611, 1873; Smith *v.* Baker's Administrators, 1 Bann. & Ard. 117, 1874; Wetherill *v.* Zinc Co. 1 Bann. & Ard. 485, 1874; Burdell *v.* Denig, 92 U. S. 720, 1875; Birdsall *v.* Coolidge, 93 U. S. 68, 1876; Vaughan *v.* East Tennessee, Virginia & Georgia Railroad Co. 2 Bann. & Ard. 537, 1877; Vaughan *v.* Central Pacific Railroad Co. 3 Bann. & Ard. 28, 1877; Sayles *v.* Dubuque & Sioux City Railroad Co. 3 Bann. & Ard. 219, 1878; Gordon *v.* Anthony, 16 Blatch. 234, 1879; Hendrie *v.* Sayles, 98 U. S. 546, 1879; Bignall *v.* Harvey, 18 Blatch. 353, 1880; Atwood *v.* Portland Co. 10 Fed. Rep. 283, 1880; Stevens *v.* Baltimore & Ohio Railroad Co. 6 Fed. Rep. 283, 1881.

[2] Root *v.* Railway Co. 105 U. S. 189, 1881.

[3] Revised Statutes, Section 914.

and that "Damages for the infringement of any patent may be recovered by action on the case."[1] Both these apparently inconsistent provisions are contained in the same enactment. They must therefore be construed together; and effect must be given to both. This result is reached by following Section 4919 as far as it necessarily goes, and by conforming in other respects to Section 914.[2] With this view, it has been held that the complaints and petitions which are prescribed for civil actions by the codes of sundry of the States, may be used in bringing actions on the case for infringements of patents in Federal Courts sitting in those States, respectively;[3] and indeed, in one case, it has been held that the forms of pleading and procedure in such an action in a Federal Court should be the same as those employed in civil actions in the State Courts of the State in which that Federal Court is located.[4] But in a later case, it has been decided, that the pleadings in an action at law, for infringement of a patent, should conform to the common law, even in a code State;[5] and inasmuch as many of the States still employ common law actions and pleadings in their own courts, it is necessary for pleaders to accurately know the proper characteristics of a declaration, in an action of trespass on the case, for the infringement of a patent.

§ 422. The proper parts of such a declaration are the following: 1. The title of the Court. 2. The title of the term. 3. The venue. 4. The commencement. 5. The statement of the right of action. 6. The conclusion.

The true title of the United States Circuit Court established in Connecticut is "Circuit Court of the United States for the District of Connecticut," and the title of the circuit court which is established in any other district is the same, except as to the name of the district.[6]

[1] Revised Statutes, Section 4919.

[2] Cottier *v.* Stimson 18 Fed. Rep. 690, 1883.

[3] May *v.* County of Mercer, 30 Fed. Rep. 250, 1887.

[4] Celluloid Mfg. Co. *v.* Zylonite Co. 34 Fed. Rep. 744, 1888.

[5] Myers *v.* Cunningham, 44 Fed. Rep. 349, 1890.

[6] Revised Statutes, Section 608.

The proper term of the court in which to entitle the declaration, is the term at which the appearance of the defendant is due.[1] It is unnecessary to entitle a declaration in the name of the case in which it is filed; though it is convenient to indorse that name on the back of the declaration, for the purpose of enabling the document to be readily found in a file.

The venue should be laid in the district where the action is commenced, regardless of the district or districts wherein the infringement was committed.[2] An infringement suit, being based on a transitory cause of action, the place laid in the declaration draws to itself the trial of all questions of infringement, wherever committed; except in the single case where the United States statutes otherwise provide.[3]

The commencement contains a statement of the names of the parties to the action, and of the capacity in which they respectively sue or are sued, if it is other than a natural personal capacity. Though it is probably unnecessary, it is undoubtedly prudent to state the nation of which the parties are respectively citizens, and if that nation is the United States, to allege also the particular State of which the parties are citizens respectively. Where either party is a corporation, that fact must be stated, and the name of the State or other sovereignty wherein it was created and exists should also be alleged. The commencement properly closes with a brief recital that the form of action is that of trespass on the case.

§ 423. The statement of the right of action should contain the name and residence of the inventor, in order to identify him, and to enable the defendant to make inquiries into the history of the alleged invention. If that name or that residence were concealed from the defendant, he might thereby be deprived of the means of learning of several perfect defences. As the statutes stand at present, there is no

[1] 1 Chitty on Pleading, 15 American Edition, p. 263.

[2] McKenna *v.* Fisk, 1 Howard, 248, 1843.

[3] Revised Statutes, Section 657; Section 390 of this book.

necessity for stating the citizenship of the inventor in any declaration, unless the inventor is also a party to the action. Such a necessity will however arise whenever Congress discriminates between citizens of the United States and citizens of other countries, in respect of the terms upon which it may authorize patents to be granted.

§ 424. The novelty and the utility of the invention must be put in issue by proper averments in the declaration;[1] but it is not necessary to state the particular time at which the invention was made, so that it appears to have been made before the application for the patent was filed.[2] The circumstance that letters patent are themselves *prima facie* evidence of novelty and utility does not render unnecessary a proper allegation of those facts in the declaration. Evidence cannot take the place of pleading, and proper pleading is necessary to make any kind of evidence admissible in support of the right of a patentee to recover for an infringement of his patent.

§ 425. The statement of the right of action must also aver that the invention was not in public use or on sale in this country for more than two years before the inventor's application for the patent; because that fact is one of those which are necessary to give the Commissioner of Patents jurisdiction to grant such a document.[3] It is a fact which is of the essence of the right of action, and it must therefore be stated in the declaration.[4]

§ 426. If the patentee is neither a party to the action, nor the inventor of the thing or process covered by the patent; it is natural and proper to separately state his name in

[1] Coop *v.* Development Institute, 47 Fed. Rep. 900, 1891; Overman Wheel Co. *v.* Elliott Cycle Co. 49 Fed. Rep. 859, 1892; Goebel *v.* Supply Co. 55 Fed. Rep. 827, 1893; Ross *v.* Ft. Wayne, 58 Fed. Rep. 407, 1893.

[2] Wilder *v.* McCormick, 2 Blatch. 31, 1846.

[3] Revised Statutes, Section 4886; Gandy *v.* Belting Co. 143 U. S. 592, 1892.

[4] Gray *v.* James, 1 Peters' Circuit Court Reports, 482, 1817; Blessing *v.* Copper Works, 34 Fed Rep. 754, 1888; Nathan Mfg. Co. *v.* Craig, 47 Fed. Rep. 522, 1891; Consolidated Brake Shoe Co. *v.* Detroit Spring Co., 47 Fed. Rep. 895, 1890.

order to fully and surely identify the patent. It is well also to state his residence and his citizenship, though there is at present no requirement of law on either of these points.

§ 427. It is not necessary to state in a declaration the particulars of the application for the letters patent, nor the particulars of the proceedings of the Patent Office in considering that application; because the courts will presume that everything was rightly done which the law required to be done in order to authorize the Commissioner to issue the patent.[1] It is customary and proper to say in a declaration that the inventor made due application for letters patent, but not even that general allegation appears to be required.[2]

§ 428. The declaration may indicate the letters patent in the language of the grant, and make profert thereof; and if that is done, it is not necessary to set out the specification either verbatim or substantially;[3] though it is not improper, except in point of prolixity, to incorporate the whole of the patent and specification into the declaration.[4]

The declaration must state that the letters patent were issued in the name of the United States of America, under the seal of the Patent Office, and were signed by the Secretary of the Interior, or an Assistant Secretary of the Interior, as the case may be, and countersigned by the Commissioner of Patents, and that they were delivered to the patentee.[5] Inasmuch as patents are granted for various spaces of time, it is necessary to state the particular term for which the letters patent in suit were issued. It is

[1] Cutting *v.* Myers, 4 Washington, 221, 1818.

[2] Wilder *v.* McCormick, 2 Blatch. 31, 1846.

[3] Cutting *v.* Myers, 4 Washington, 223, 1818; McMillin *v.* Transportation Co. 18 Fed. Rep. 260, 1884; Post *v.* Hardware Co. 25 Fed. Rep. 905, 1885; Bogart *v.* Hinds, 25 Fed. Rep. 484, 1885; Wise *v.* Railroad Co. 33 Fed. Rep. 277, 1888; American Bell Telephone Co. *v.* Southern Telephone Co. 34 Fed. Rep. 803, 1888; Dickerson *v.* Greene, 53 Fed. Rep. 247, 1892; Enterprise Co. *v.* Snow, 67 Fed. Rep. 235, 1895; Germain *v.* Wilgus, 67 Fed. Rep. 597, 1895.

[4] Wilder *v.* McCormick, 2 Blatch. 35, 1846.

[5] Revised Statutes, Section 4883; 25 Statutes at Large, Ch. 15, p. 40; Cutting *v.* Myers, 4 Washington, 222, 1818.

necessary also to plead the legal effect of the patent, by saying that it did grant to the patentee, his heirs or assigns, the exclusive right to make, use and vend the invention covered thereby, throughout the United States and the Territories thereof.[1]

§ 429. Where the patent upon which the action is based is a reissue, the original letters patent should be set forth precisely as though no surrender and reissue had occurred; and in addition thereto, it is proper to state the particular kind of defect which made the original a proper subject of a reissue; and to state also that such defect arose from inadvertence, accident, or mistake, as the case may be, and without any fraudulent or deceptive intention; and to state that the original patent was surrendered, and who surrendered it; and to state that the Commissioner of Patents caused a new patent to be issued for the same invention; and to state finally the name of the person to whom such new patent was granted. These particulars lie at the foundation of the right of the grantee of a reissue patent to receive such a grant; and although the reissue is *prima facie* evidence that the truth on all these points is favorable to the validity of the patent, it is none the less proper to put those facts in issue by proper pleading. And it is hardly prudent to venture a case on a more indefinite form of pleading; though a more indefinite form of pleading has once been held sufficient in such a case.[2]

§ 430. Where a disclaimer has been filed, that fact ought to be stated in the declaration, and its legal effect ought to be indicated, because disclaimers constitute amendments of original patents, and operate to vary their scope.[3] In such a case also, the declaration ought to state that the disclaimer was filed without unreasonable delay, because that fact is necessary to the right of a patentee to maintain a suit on a patent which required a disclaimer.[4]

§ 431. Where the patent in suit was extended by the

[1] Revised Statutes, Section 4884.
[2] Spaeth *v.* Barney, 22 Fed. Rep. 828, 1885.
[3] Revised Statutes, Section 4917.
[4] Revised Statutes, Section 4922.

Commissioner of Patents, and where the action is based partly or wholly on its extended term, the declaration must state that the extension was made in due form of law, and must show that it was made before the expiration of the original term. It ought to state also that the extension was for the term of seven years from the expiration of the first term; but as that is true of all such extensions, it is possible that the omission would be an immaterial one.

Where the patent has been extended by a special Act of Congress, and where the suit is partly or wholly based on such extension, the declaration must state the legal effect of the Act of extension, and it must especially show the particular space of time covered thereby.

§ 432. Where the plaintiff is an assignee or grantee of the patentee, it is safer to set forth all the mesne assignments or grants down to him, than merely to state that the exclusive right which was infringed by the defendant, came to the plaintiff by assignment or by grant. This point of pleading seems deducible by analogy from the rule relevant to declaring on an assigned term for years of real estate.[1] And it has once been decided, that a bill, and inferentially a declaration, must not only state how and when the plaintiff became the owner of the patent, but must also allege ownership at the time of bringing the suit;[2] but Justice BROWN said, in his oration on the Twentieth Century, before the Yale Law School in June, 1895, that "it is one of the ancient maxims of the law, that a state of things once proven to exist, is presumed to continue." It therefore appears that the decision last mentioned was inadvertently made; and that where a declaration traces the title into the plaintiff, it needs to state nothing more on the subject of title. Title papers should be set forth by their legal effect, rather than incorporated bodily into the declaration.

§ 433. No profert need be made in any declaration, of any assignment or grant of any interest under letters patent,

[1] 1 Chitty on Pleading, 368.

[2] Krick *v.* Janson, 52 Fed. Rep. 823, 1892.

because, although those instruments are sometimes under seal, they are not required to be so,[1] and therefore do not fall within the definition of a deed.[2] If, however, the title of the plaintiff is founded upon letters testamentary or letters of administration, he must make profert of the same, because they constitute exceptions to the general rule that profert is necessary only of deeds.[3] 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.[4]

§ 433*a*. The declaration must state, either that no person ever made or sold the patented article under the authority of the patent; or that such of the patented articles as were thus made or sold, had the word "patented," together with the day and year the patent was granted, fixed thereon, or when, from the character of the article this could not be done, then to the package wherein one or more of them was enclosed; or otherwise that the defendant was duly notified that his doings were an infringement of the patent, and continued, after such notice, to infringe.[5]

§ 434. Infringement may be stated in a declaration in general terms.[6] Such a statement may plainly allege that the defendant, without the leave or license of the owner of the patent, did use, or that he did make, or that he did sell, a specimen or specimens of the thing or process covered by the patent, or by specified claim thereof where not all are infringed, within the territory covered by the plaintiff's title thereto, and within the time during which the plaintiff held the title within that territory, and contrary to the form of the Act of Congress in such cases made and provided, and against the privileges granted by the patent.[7] This last

[1] Revised Statutes, Section 4898.

[2] Stephen on Pleading, Ninth American Edition, 437.

[3] Gould's Pleading, Ch. VIII, Section 43.

[4] 1 Chitty on Pleading, 366.

[5] Dunlap *v.* Schofield, 152 U. S. 244, 1894.

[6] American Bell Tel. Co. *v.* Southern Tel. Co. 34 Fed. Rep. 803, 1888.

[7] Cutting *v.* Myers, 4 Washington, 223, 1818.

statement seems hardly necessary, for it is but a conclusion of law from the facts stated. And the allegation that the infringement was contrary to the statute is unnecessary, unless the plaintiff seeks to recover exemplary as well as actual damages.[1] Nor is it generally necessary in a declaration to negative the hypothesis of a license; for licenses, where they exist, may more properly be first mentioned in the pleadings of the defendant.[2] But where the declaration shows that strangers to the suit have an exclusive United States license, it must also show that the defendant is not lawfully operating thereunder.[3] While an allegation of either making, using, or selling will be sufficient in a declaration to show a cause of action, no allegation of any one of these kinds of infringement will support evidence of either of the others. A declaration ought therefore to allege as many of them as the plaintiff has any expectation of being able to prove.

Where a suit is brought against a plurality of defendants, it has been held, that the declaration need not expressly state that their infringement was joint.[4]

§ 435. The time of the infringement is properly stated by alleging that it occurred on a specified day, and on divers other days between that day and some later specified date; and no plaintiff will be permitted to prove infringement outside of the space of time which he specified in his declaration.[5] Repeated infringements may be sued for in one action;[6] but all of the infringements complained of in one declaration must have been committed after the plaintiff obtained the title to the patent, and before the beginning of the action. Where the plaintiff is an assignee, and where

[1] Parker *v.* Haworth, 4 McLean 373, 1848.

[2] Gelpcke *v.* Dubuque, 1 Wallace, 222, 1863; Catlin *v.* Insurance Co. 1 Sumner, 440, 1833; Fischer *v.* Hayes, 6 Fed. Rep. 79, 1881.

[3] Still *v.* Reading, 20 Off. Gaz. 1026, 1881.

[4] Indurated Fibre Co. *v.* Grace, 52 Fed. Rep. 126, 1892.

[5] Eastman *v.* Bodfish, 1 Story, 530, 1841; LePage Co. *v.* Russia Cement Co. 51 Fed. Rep. 949, 1892.

[6] Wilder *v.* McCormick, 2 Blatch. 32; 1846.

he not only has rights of action against the defendant, for infringements committed after the date of his assignment, but also has purchased rights of action against the same party, for infringements committed before such purchase, he must, if he sues at law, bring a separate action for the latter causes, and must bring that action in the name of the person who owned the patent at the time they accrued.

§ 436. The damages incurred by the plaintiff on account of a defendant's infringement must be stated specially, because no particular damage necessarily arises from infringements of patents, and therefore none is implied by the law.[1] The special damages to be alleged in any particular case depend upon the circumstances of that case; depend upon the particular criterion of damages upon which the plaintiff relies. The various measures of damages in patent cases are stated and explained in the nineteenth chapter of this book. One or more of them will be found to be applicable to every case which is likely to arise. From among them, the pleader may select those which he expects to be able to prove to be pertinent, and may then draw his special statement of damages accordingly. Such a special statement is required by the substantial principles of pleading, as well as by its technical rules. Without it, the defendant would not be apprised of all the issues of the case. He would not know, till the day of trial, whether the plaintiff would prove an established royalty, or prove interference with his business, or prove what would be a reasonable royalty, as the criterion of his damages. The defendant would therefore have to go to court provided with witnesses on all these points, or would have to trust his sagacity, and guess which of these points he would be called upon to meet. It was to prevent such inconveniences that written pleadings were originally designed; and for the same purpose, among others, they are still retained as a part of actions in courts.

§ 437. The conclusion of a proper declaration in a patent case alleges that, by force of the statutes of the United

[1] 1 Chitty on Pleading, 396.

States, a right of action has accrued to the plaintiff to recover the actual damages which the declaration specifies, and such additional amount, not exceeding in the whole three times the amount of such actual damages, as the court may see fit to adjudge and order, besides costs. The conclusion ends with the ancient allegation of bringing suit.

§ 438. A declaration, though not drawn in due form, is sufficient for practical purposes, if it contains all that is essential to enable the plaintiff to give evidence of his right, and of its violation by the defendant, and affords to the defendant the opportunity of interposing every defence allowed to him by law.[1] Courts do not encourage merely technical objections to pleadings, and even on special demurrer, will seek to sustain those which, though not technically accurate, are substantially sufficient for the real purposes of pleading.

§ 439. Dilatory pleas in patent actions are not materially different in their nature and operation from corresponding pleas in other common law cases. It is therefore unnecessary to treat those preliminary defences in this book. Recourse may be had to the standard works on common law pleading for whatever information the patent pleader may require upon the subject.

§ 440. The defences which are pleadable in bar to an action, are very numerous in the patent law, and most of them are peculiar to this branch of jurisprudence. Where the facts appear to warrant so doing, a defendant may plead: 1. That the matter covered by the letters patent was not a statutory subject of a patent: or 2. That it was not an invention: or 3. That it was not novel at the time of its alleged invention: or 4. That it was not useful at that time: or 5. That the inventor actually abandoned the invention: or 6. That he constructively abandoned it, by not applying for a patent on it, till more than two years after it was in public use or on sale in this country: or 7. That the invention claimed in the original patent is substantially different

[1] Wilder *v.* McCormick, 2 Blatch. 37, 1846.

from any indicated, suggested, or described in the original application therefor: or 8. That the patentee surreptitiously or unjustly obtained the patent for that which was in fact the invention of another, who was using reasonable diligence in adapting and perfecting the same: or 9. That the invention was made by another jointly with the sole applicant: or 10. That it was made by one only of two or more joint applicants: or 11. That for the purpose of deceiving the public, the description and specification filed in the Patent Office was made to cover less than the whole truth relevant to the invention, or was made to cover more than was necessary to produce the desired effect: or 12. That the description of the invention in the specification is not 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: or 13. That the claims of the patent are not distinct: or 14. That the patentee unreasonably delayed to enter a needed disclaimer: or 15. That the original patent was surrendered and reissued in the absence of every statutory foundation therefor: or 16. That the claims of the reissue patent in suit are broader than those of the original, and that the reissue was not applied for till a long time had elapsed after the original was granted: or 17. That the reissue patent in suit covers a different invention from any which the original patent shows was intended to be secured thereby: or 18. That the invention claimed in the original patent, is substantially identical with an invention claimed in a prior patent granted on the application of the same inventor: or 19. That the patent was repealed: or 20. That the patent legally expired before the alleged infringement began, or before it ended: or 21. That the patentee made or sold specimens of the invention covered by his patent, without marking them "patented," and without notifying the defendant of his infringement: or 22. That the plaintiff has no title to the patent, or no such title as can enable him to maintain the action: or 23. That the defendant has a license, which

authorized part or all of the doings which constitute the alleged infringement: or 24. That the defendant has a release, discharging him from liability on account of part or all of the alleged infringement: or 25. That the defendant is not guilty of any infringement of the patent upon which he is sued: or 26. That the plaintiff is estopped from enforcing any right of action against the defendant: or 27. That the cause of action sued upon is partly or wholly barred by some statute of limitation.

§ 441. The first fourteen of these defences assail the validity of original patents; and either of them, if successfully maintained, will defeat any such patent, and therefore defeat any action based thereon. All of the fourteen are also applicable to actions based upon reissue patents, for though a defective or insufficient specification, or a defective or insufficient claim, or an excessive claim, can be cured by surrender and reissue,[1] those faults are sometimes retained and sometimes introduced in reissues.

The fifteenth, sixteenth, and seventeenth of these defences assail reissues as reissues. To what extent those defences, if successful, will affect the patent, or the action, are points which are explained in the chapter on reissues.[2]

The eighteenth defence assails the validity of original patents, and it may be applicable to all the claims of such a patent, or it may be applicable to only some of them. And a patent will not be invalidated throughout, by the fact that one or more of its claims, less than all of them, must be invalidated on this ground, any more than where such invalidity arises out of any other reason.

The nineteenth defence, when true, will certainly be a full one to any action based on alleged infringements which were committed after the repeal of the patent. Whether it will be a defence to any infringement committed before that time, will depend upon whether the patent is repealed *ab initio*, or only *in futuro*.

[1] Revised Statutes, Section 4916.

[2] Sections 221 and 249 of this book.

The twentieth defence will be available where the defendant can prove that the invention was patented with the knowledge and consent of the inventor in some foreign country before it was patented in the United States, and that such foreign patent expired before the United States patent purported to terminate. This defence, if successful, will not affect the validity of the patent. It will merely limit its duration to less than seventeen years.[1]

The twenty-first defence, if successful, will bar the action, but it will not affect the patent. Any oral or written notice of infringement, if given to the defendant without stopping his infringement, will oust the defence as to subsequent infringements.[2]

The last six of the twenty-seven defences are all without relevancy to the validity of the patent. Either of them may be partly or wholly successful, according to the circumstances of each action, regardless of the success or want of success which may attend the other twenty-one.

§ 442. Such of these defences as can be established from the face of the declaration, or of the letters patent upon which the suit is based, or can be based upon a fact of which the court will take judicial notice, may be made by demurrer; but if so made and overruled, such a defence cannot afterward be made in a plea, without leave of the court.[3]

The ancient rules of common law pleading would require a special plea for either of the twenty-seven defences which are enumerated in Section 440, save only the defence of non-infringement, and sometimes that of want of title.[4] But a loose and unscientific relaxation of that part of those rules crept at one time into practical pleadings, both in England and America. The abuse was reformed in England in the fourth year of William the Fourth;[5] but in the United States it has continued, except so far as it has been

[1] Section 163 of this book.

[2] New York Pharmical Association *v.* Tilden, 14 Fed. Rep. 740, 1882; Allen *v.* Deacon, 21 Fed. Rep. 122, 1884.

[3] Brickill *v.* Hartford, 57 Fed. Rep. 218, 1893.

[4] Stephen on Pleading, 160.

[5] Stephen on Pleading, 158.

limited or enlarged by legislation in particular States. But there was never any principle which guided this departure from the ancient law, and therefore no foundation for any science of the subject. Where an authoritative precedent can be found for a particular relaxation, that particular relaxation must be regarded. In the absence of such a precedent, the safe and proper course is to conform to the ancient common law rules, unless the pleader is willing to risk his defence upon the theory that State statutes relevant to pleadings are binding on Federal courts when trying patent actions of trespass on the case. The text writer believes that they are not binding under such circumstances, because actions of trespass on the case were first prescribed by Congress for patent suits in 1790,[1] and because the law has never since been changed in that particular, and because, therefore, there seems to be no good cause for holding that such an action under the Revised Statutes is a different proceeding from what it was under the earliest of the statutes at large.[2]

§ 443. The patent statute provides that five of the twenty-seven defences may be made under the general issue, accompanied with a certain statutory notice of special matter.[3] Those are the defences which, in Section 440 of this book, are numbered three, five, six, eight, and eleven, respectively. In the statute they are mentioned in a different order; and indeed the fifth and sixth are there grouped together, and the third is there separated into two parts. The reasons for changing the classification in those particulars, are probably obvious to the reader. The fifth and sixth defences are entirely distinct from each other; while the third is sustained by evidence of anticipating matter, whether that matter is a prior patent or printed publication as contemplated by one division of the statute, or is a prior knowledge or use as contemplated by another. Either of these five

[1] 1 Statutes at Large, Ch. 7, Sec. 4, p. 111.

[2] Myers *v.* Cunningham, 44 Fed. Rep. 349, 1890.

[3] Revised Statutes, Section 4920.

defences may also be made under a special plea, instead of under the general issue accompanied by notice, if the defendant so determines.[1] But if any defendant uses both these forms of pleading for any one defence, the court will on motion call upon him to select the one which he prefers, and to abandon the other.[2]

§ 444. Notices of special matter must be in writing, and must be served on the plaintiff or his attorney at least thirty days before the trial of the case.[3] No such notice requires any order of court as a prerequisite thereto; and depositions taken before the service of such a notice are as admissible under it as if taken afterward.[4] It is not the purpose of the statute to oblige the defendant to give notice of anticipating matter before taking testimony, and thus to enable the plaintiff to tamper with the witnesses. Its only purpose is to give the plaintiff thirty days before the trial in which to secure evidence to contradict the testimony of the defendant's witnesses, in case the latter is untrue.

Notices of want of novelty must state the names of the prior patentees, and the dates of their patents, where prior patents are relied upon; and where prior knowledge or use is relied upon, such a notice must state the names and residences of the persons alleged to have had the prior knowledge of the thing patented, and where and by whom it was used.[5] Where prior printed publications are relied upon as negativing the novelty of the patented invention, the statute does not say how such publications are to be identified in such notices. But the Supreme Court has decided that they must be pointed out with sufficient definiteness to relieve the plaintiff from making an unnecessarily laborious search therefor.[6] In the case just cited, a notice was held to be insufficient, which stated that the patented

[1] Evans *v.* Eaton, 3 Wheaton, 454, 1818; Grant *v.* Raymond, 6 Peters, 218, 1832; Day *v.* Car-Spring Co. 3 Blatch. 181, 1854.

[2] Read *v.* Miller, 2 Bissell, 16, 1867.

[3] Revised Statutes, Section 4920.

[4] Teese *v.* Huntingdon, 23 Howard, 2, 1859.

[5] Revised Statutes, Section 4920.

[6] Silsby *v.* Foote, 14 Howard, 218, 1852.

thing was described in a certain book therein mentioned, but did not state in what part of that book it was so described. Notices of prior knowledge or use are sufficiently specific, when they specify the city in which that knowledge or use existed or occurred, and give the names of persons who had that knowledge, or who engaged in that use, and state in what city those persons reside.[1] That is to say: the word "where" and the word "residence," as those words are used in the statute, refer to cities, villages, or towns, as the case may be, and do not refer to particular houses, factories or farms.

The names of witnesses as such, need not be mentioned in a notice, yet it is often necessary to use as witnesses, persons who are named in the notice as having been engaged in the prior use to be proved, or as having known of the anticipating process or thing. Accordingly where a notice alleges that A. B. used an anticipating machine in a certain city, and that C. D. had knowledge of that prior use, those facts may both be proved by E. F. without mentioning his name in the notice.[2] But if A. B. is the only available person by whom to prove his prior use, or if his testimony on that point is to be taken together with that of others, his name must still be mentioned in the notice: mentioned not as a witness to be called to prove a fact, but as the person who transacted that fact.

Notices need not state the particular time when an anticipating printed publication was published, nor when an anticipating process or thing was known or used;[3] but they must state the dates of all alleged anticipating patents.[4] If a notice does unnecessarily state a particular time, that statement will be regarded as harmless surplusage, and a variance therefrom in the evidence, will not render the latter inadmissible.[5]

[1] Wise *v.* Allis, 9 Wallace, 737, 1869.

[2] Planing-Machine Co. *v.* Keith, 101 U. S. 492, 1879; Many *v.* Jagger, 1 Blatch. 376, 1848.

[3] Phillips *v.* Page, 24 Howard. 164, 1860.

[4] Revised Statutes, Section 4920.

[5] Phillips *v.* Page. 24 Howard, 164, 1860.

§ 445. Where any defence to a patent action can be based upon a fact of which the court will take judicial notice without evidence, that defence may be made under the general issue without any special pleading.[1]

§ 446. The first and second defences are those which come within the rule of the last section relevant to judicial notice. The first defence is applicable mainly or only when a "principle" has been patented, as for example by the eighth claim of Morse,[2] or by the anæsthesia patent of Morton and Jackson.[3] The applicability of judicial notice to that defence is perhaps invariable. But where a patent is assailed for want of invention on account of prior facts which must be proved by evidence in order to be acted upon by courts, there appears to be no warrant for saying that the second defence need not be pleaded.[4] Justice requires that the plaintiff be notified beforehand of such a defence, as truly as of the defence of want of novelty; for it may equally be based on facts outside of the patent, and outside of the knowledge of the inventor and of the plaintiff.

§ 447. The third defence may be based upon a special plea, instead of on the general issue accompanied by notice, and when that practice is adopted, that plea is the only notice which the plaintiff can claim.[5] Federal courts of equity, without any statute prescribing that course, have always followed the law relevant to notices of want of novelty; and have uniformly rejected evidence on that point, unless the defendant, in his answer, gave the plaintiff the same kind and degree of information thereof, that the statute calls upon a defendant, who pleads the general issue at law, to give in his notice.[6] Courts of law will probably

[1] May *v.* Juneau County, 137 U. S. 408, 1890.

[2] O'Reilly *v.* Morse, 15 Howard, 112, 1853.

[3] Morton *v.* Infirmary, 5 Blatch. 116, 1862.

[4] Brickill *v.* Hartford, 57 Fed. Rep. 217, 1893; Britton *v.* White Mfg. Co. 61 Fed. Rep. 95, 1894.

[5] Evans *v.* Eaton, 3 Wheaton 504, 1818.

[6] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

follow the salutary example, and will call upon defendants who elect to plead specially, to make their special pleas as full in this respect, as the statute requires notices to be when the general issue is adopted. So, also, it has been held that special pleas, when used instead of notices, must be filed at least thirty days before the term of trial, or the plaintiff will be entitled to a continuance.[1] This holding was so reasonable that it can be supported on the ground that every court has power to make reasonable rules to regulate the time of filing pleas.[2] A special plea which has been stricken out by order of court, cannot operate as a notice, and thus furnish the foundation of a defence which requires a notice in the absence of a special plea.[3] And a plea or notice of want of novelty must state that the anticipating fact occurred before the invention claimed by the patent was made; for it is not enough to state that the anticipating fact occurred before the date of the patent.[4]

§ 448. The fourth defence is not among those which can be made under the general issue accompanied by notice. There is probably no case in which it has been successfully made in equity, without being set up in the answer; or at law, without being set up in a special plea. In the absence of such precedents, it would be unsafe for a pleader to attempt such an innovation on the rules of the common law.

§ 449. The fifth and sixth defences always require evidence outside of the patent, and outside of the doctrines of judicial notice. They may be made under the general issue accompanied by the statutory notice,[5] or under a special plea, but there is no reason to suppose that they can lawfully be made under the general issue alone.

§ 450. The seventh defence is not based on any express statute. Its foundation is the general spirit of the patent

[1] Phillips *v.* Comstock, 4 McLean, 525, 1849.

[2] Packet Co. *v.* Sickles, 19 Wallace, 611, 1873.

[3] Foote *v.* Silsby, 1 Blatch. 445, 1849.

[4] Brickill *v.* Hartford, 57 Fed. Rep. 219, 1893.

[5] Revised Statutes, Section 4920.

laws; and it has been expounded in a number of cases, beginning in the case of Railway Co. *v.* Sayles.[1] Evidence to support it must always be drawn from outside of the patent, and must be regularly introduced into the case. This defence is therefore to be made by a special plea, when it is made at all.

§ 451. The eighth defence may be made either by the general issue accompanied by notice,[2] or by a special plea. It applies to cases where another than the patentee preceded him in the first conception of the patented thing, but did not precede him in adapting it to actual use. If that other stopped with that conception, the validity of the patent is not affected thereby, but if he used reasonable diligence in adapting and perfecting the invention so conceived, no subsequent inventor can have a valid patent, surreptitiously or unjustly obtained by him for the same invention. Such a patent is surreptitiously obtained, where the patentee appropriates the idea from the first conceiver, and, exceeding him in speed, reduces the invention to proper form, and secures the patent, while the first conceiver is diligently laboring to adapt the invention to use. Such a patent is unjustly obtained, if it is issued to a subsequent inventor, without notice to the first conceiver, when a caveat of the first conceiver is on file in the Patent Office.[3] Where this defence is pleaded, all its elements must be incorporated in the plea. The allegation of unjust or surreptitious obtaining of the patent, must be accompanied by an allegation that the first conceiver was at the time using reasonable diligence in adapting and perfecting the invention.[4]

§ 452. The ninth and tenth defences are based on the fact that patents can lawfully be granted to no one but the

[1] Railway Co. *v.* Sayles, 97 U. S. 563, 1878; Consolidated Electric Light Co. *v.* McKeesport Light Co, 40 Fed. Rep. 26, 1889; Beach *v.* Box Machine Co. 63 Fed. Rep. 604, 1894; Michigan Central Railroad Co. *v.* Car-Heating Co. 67 Fed. Rep. 126. 1895.

[2] Revised Statutes, Section 4920.

[3] Phelps *v.* Brown, 4 Blatch. 362. 1859.

[4] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

inventors of the things covered thereby, or to those who represent them as assigns or legal representatives.[1] Neither of those defences can ever receive any support from the face of the patent, or from any fact of which any court can take judicial notice. Both depend upon evidence *aliunde*, and either must be interposed in a special plea, for the statute does not include either among those defences which may be made under the general issue accompanied by notice.[2]

§ 453. The eleventh defence may be set up under the general issue accompanied by notice,[3] or in a special plea. It is a defence which is oftener put in by pleaders who are at a loss how to defend, than it is by those who assail patents intelligently. It has seldom or never been made with success, because patents are seldom or never obnoxious to the objection which it involves. Even where a patent does contain too much or too little, this defence does not apply, unless the fault was intended, and was intended to deceive the public.[4]

§ 454. The twelfth defence is somewhat similar to the first member of the eleventh; but unlike that, it cannot be based on the general issue accompanied by notice; and it does not require the element of intention to deceive. It is based upon that provision of the statute which makes a full, clear, concise, and exact description of the invention a prerequisite to the jurisdiction of the Commissioner to grant a patent.[5] If a patent falls below the statutory requirement in that respect, that patent is void.[6] Whether a given patent does so fall is a question of evidence and not of construction.[7] Therefore this defence cannot be made by demurrer.[8]

[1] Sections 50 and 51 of this book.

[2] Butler *v.* Bainbridge, 29 Fed. Rep. 143, 1886.

[3] Revised Statutes, Section 4920.

[4] Hotchkiss *v.* Oliver, 5 Denio (N. Y.), 314, 1848; Celluloid Mfg. Co *v.* Russell, 37 Fed. Rep 679, 1889.

[5] Revised Statutes, Section 4888.

[6] O'Reilly *v.* Morse, 15 Howard, 62, 1853; Pacific Cable Ry. Co. *v.* Butte City Ry. Co. 58 Fed. Rep. 422, 1893.

[7] Loom Co. *v.* Higgins, 105 U. S. 580, 1881.

[8] Chase *v.* Fillebrown, 58 Fed. Rep. 376, 1893.

This defence must be interposed in a special plea; for neither the statute nor any precedent contemplates its being based on the general issue, either with or without notice; and still less does any rule of law provide for its being made on the trial of an action without being pleaded at all.

§ 455. The thirteenth defence is based on the statute which requires that, before any inventor shall receive a patent for his invention, he shall particularly point out, and distinctly claim, the part, improvement or combination which he claims as his invention.[1] It is a defence of decided merit, aimed by the policy of the law at nebulous claims. The courts have not heretofore gone quite so far in upholding this defence as the statute would perhaps justify. Probably the strongest judicial language heretofore used on the subject is that of the Supreme Court in the case of Carlton *v.* Bokee.[2] In that case Justice BRADLEY, in delivering the opinion, said that: "Where a specification, by ambiguity and a needless multiplication of nebulous claims, is calculated to deceive and mislead the public, the patent is void." This defence may be made by demurrer;[3] because the question of the validity of a patent, as against it, is a question of construction of the document, to decide which, a judge will seldom require aid from other evidence than the letters patent themselves. But a special plea is probably the best means of interposing this defence; though there is less meritorious necessity for special pleading to support it than there is to support any other defence which assails the validity of a patent.

§ 456. The fourteenth defence is based upon the statute which provides that where a new invention and an old one are both claimed in a patent, the patentee may sustain an action on the former, but not unless he disclaims the latter without unreasonable delay.[4] That the old invention was

[1] Revised Statutes, Section 4888.

[2] Carlton *v.* Bokee, 17 Wallace, 472, 1873.

[3] Brickill *v.* Hartford, 49 Fed. Rep. 373, 1892.

[4] Revised Statutes, Section 4922.

old, and that the delay to disclaim it was unreasonable, are *matters of fact depending upon evidence*. There is therefore no reason to suppose that this defence can be made in any action at law, without a special plea to give it entrance.

§ 457. The fifteenth defence goes to the jurisdiction of the Commissioner to reissue the patent in suit. In the chapter on reissues the defence is discussed with some fulness.[1] Whatever doubt may exist relevant to its scope, it is clear that the questions which are involved in its applicability to a particular case are mainly questions of fact, depending upon evidence *in pais*, and that a special plea is therefore the proper means of bringing it to the attention of the court.

§ 458. The sixteenth defence originated in the year 1882,[2] and though not based on the letter of any statute, it has been many times enforced. The first element in its foundation is a point of comparative construction of the original and the reissue patent. But inasmuch as a plaintiff, suing on a reissue, need not introduce the original in evidence, even that element depends upon proof by the defendant of the contents of the original. The second element is a variable quantity, for the particular length of time between the date of an original and the application for a reissue patent, which will be fatal to a broadened reissue, depends upon the circumstances of each case, and those circumstances can be made known to the court through evidence alone. These considerations point to the propriety of disregarding this defence, in an action at law, unless it is set up in a special plea, and the plaintiff thus notified of what he must meet on the trial.

§ 459. The seventeenth defence depends upon proof of the original patent, and requires at least that amount of evidence to support it. In cases where the question of sameness or difference of invention is a complicated one, courts may require the benefit of evidence on that subject

[1] Section 221 of this book.

[2] Miller *v.* Brass Co. 104 U. S. 350, 1882.

to aid them in deciding the point. In order to give both sides an opportunity to produce such evidence, a special plea seems necessary; but it has been decided that a general denial of the declaration is enough.[1]

§ 460. The eighteenth defence can be made by a demurrer in a case which is based on the prior patent, as well as on its alleged double;[2] but in other cases it requires a special plea, because it is a defence in confession and avoidance of the declaration.

§ 461. The nineteenth defence will of course require evidence of the record of the court which repealed the patent. But as that record cannot be contradicted by any evidence, and as no repeal could have been had without the knowledge of the plaintiff or his privies, there seems to be no meritorious reason why a special plea should be insisted upon to sustain this defence. But in the absence of a precedent, that will be the safest pleading for the defendant to file.

§ 462. The twentieth defence demands a special plea, because the evidence to prove it must come from outside of the patent, and when produced, it must generally be supported by expert testimony that the foreign patent produced is really one for the same invention as the United States patent in suit. Indeed, the defence may fail even then, for it cannot stand against proof that the foreign patent was surreptitiously taken out by another than the United States patentee, and without his knowledge or consent. It would be highly unjust to allow a plaintiff to be surprised on the trial of an action at law with proof of a foreign patent for his invention granted to another, after his invention was made, but before the date of his patent. Such a piece of evidence, if unexplained, would limit the duration of the United States patent, and thus perhaps defeat the suit.[3] But if the plaintiff could have time to

[1] Oregon Imp. Co *v.* Excelsior Coal Co. 132 U. S. 215, 1889.

[2] Russell *v.* Kern, 64 Fed. Rep. 581, 1894

[3] Revised Statutes, Section 4887.

prove that it was granted without the knowledge or consent of the inventor or patentee, it would have no unfavorable effect upon his rights. It is clear, therefore, that no such issue ought to be sprung upon a plaintiff when before the court. A special plea is requisite to give him notice of a fact apparently so unfavorable, but which may really be harmless when explained.

§ 463. The twenty-first defence can be made under the general issue, for it must be negatived in the declaration.[1]

§ 464. The twenty-second defence can be made under the general issue, where the defendant merely proposes to argue that the plaintiff's evidence does not make out any title, or makes out no such title as enables him to sue in an action at law. But where the defendant attacks the plaintiff's title on the basis of a paramount assignment to another, he ought to plead the defence specially, for otherwise the plaintiff might be surprised on the trial with evidence which, with a little time for preparation, he could perhaps explain away, or perhaps overthrow.

§ 465. The twenty-third and twenty-fourth defences both required to be pleaded specially according to the pleading rules of the ancient common law.[2] But under the relaxation which obtained in England, late in the last century, they could, in ordinary cases, have been proved under the general issue.[3] That relaxation does not, however, deserve to be extended by any process of reasoning by analogy; and it is possible that the courts will hold that it does not apply to patent litigation in the United States.

§ 466. The twenty-fifth defence is one to which the plea of the general issue is, and always was, appropriate, for it is a defence which consists simply in a denial of the alleged infringement.[4] And even where a proper defence of non-infringement involves evidence of the state of the art, the general issue is a sufficient plea under which to make such

[1] Dunlap *v.* Schofield, 152 U. S. 244, 1894.

[2] Stephen on Pleading, 158.

[3] 1 Chitty on Pleading, 491.

[4] Stephen on Pleading, 160.

a defence, because no notice to the plaintiff is necessary to render such evidence admissible.[1]

§ 467. The twenty-sixth defence is as proper in an action at law as it is in an action in equity.[2] Estoppels in patent cases are like those in other cases, in that they are divisible into three classes: Estoppels by matter of record; by matter of deed; and by matter *in pais*. The principles of estoppel constitute a systematic department of the law, to the delineation and development of which a number of text-writers have devoted careful and thorough consideration. No extensive discussion of the subject is therefore to be expected in this book. Something has already been written about estoppel *in pais*, in connection with the subject of implied licenses.[3] And it may be mentioned here, that a defendant is not estopped from denying the validity of a patent, by the fact that he formerly thought and represented it to be valid,[4] or the fact that he once made an application himself, for a patent on the same invention.[5] And something more may be added in this place, about estoppels by matter of record, and by matter of deed, for the patent precedents contain a few cases in which those doctrines have been applied to controversies touching letters patent for inventions. But the investigator will often need to resort to the standard text-books on estoppel, when seeking for the law applicable to such matters, as they may hereafter arise in patent litigation; for the instances in which the doctrines of estoppel have heretofore been applied to patent cases are comparatively few. Those doctrines may, however, be deduced from other kinds of causes, and then applied in patent litigation with all their inherent forces.[6]

[1] Dunbar *v.* Myers, 94 U. S. 198, 1876; Eachus *v.* Broomall, 115 U. S. 434, 1885; Grier *v.* Wilt, 120 U. S. 429, 1886.

[2] Dickerson *v.* Colgrove, 100 U. S. 584, 1879; City of Concord *v.* Norton, 16 Fed. Rep. 477, 1883.

[3] Section 313 of this book.

[4] De La Vergne Mach. Co. *v.* Featherstone, 49 Fed. Rep. 919, 1892.

[5] Page *v.* Buckley, 67 Fed. Rep. 142, 1895.

[6] Duboise *v.* Railroad Co. 5 Fisher, 208, 1871.

§ 468. Estoppel by matter of record arises out of the doctrine of *res judicata*; and indeed that sort of estoppel generally and properly passes under the name of that doctrine. It is a requirement of public policy and of private peace, that each particular litigation shall duly come to an end, and that when once ended, it shall not be revived. The law therefore properly requires that things adjudicated shall not again be drawn in question between the same parties, or between any persons whose connection with the adjudication is such that they ought not to be permitted to gainsay its result.[1] But things are not adjudicated in this sense till they are adjudicated finally. Interlocutory decrees, therefore, furnish no foundation for a plea of *res judicata*,[2] except where such an interlocutory decree is followed by a final decree soon enough for the latter to be invoked.[3] And it is only in respect of questions actually litigated and decided in a prior case, that the judgment is conclusive in another action,[4]

A final decree is pleadable, in a subsequent action, notwithstanding the defendant may have new defences to interpose: defences, which he did not deem it necessary to make to the former suit, or did not learn of in time to set them up in the former litigation.[5] And final decrees or judgments are not only binding on the parties to the actions from which they resulted, but they are also binding upon all persons who purchase interests in the subject-matter of litigation after such decrees of judgments are entered;[6]

[1] Heysinger *v.* Rouss, 40 Fed. Rep. 584, 1889.

[2] Rumford Chemical Works *v.* Hecker, 2 Bann. & Ard. 359, 1876; Roemer *v.* Neumann, 26 Fed. Rep. 332, 1886; Morss *v.* Knapp, 37 Fed. Rep. 353, 1889; Harmon *v.* Struthers, 48 Fed. Rep. 260, 1891.

[3] Bradley Mfg. Co. *v.* Eagle Mfg. Co. 57 Fed. Rep. 985, 1893.

[4] Bruise *v.* Peck, 54 Fed. Rep. 822, 1893; Mack *v.* Levy, 60 Fed. Rep. 751, 1894.

[5] Dubolse *v.* Railroad Co. 5 Fisher, 210, 1871; Gloucester Isinglass Co. *v.* LePage, 30 Fed. Rep. 371, 1887; Bradley Mfg. Co. *v.* Eagle Mfg. Co. 57 Fed. Rep. 989, 1893; Mack *v.* Levy, 60 Fed. Rep. 752, 1894.

[6] Consolidated Fruit Jar Co. *v.* Whitney, 2 Bann. & Ard. 33, 1875; Pennington *v.* Hunt, 20 Fed. Rep. 195, 1884.

and upon all persons who assumed the control and expense of the former litigation, even though not parties thereto.[1] So, also, judgments by default, decrees *pro confesso* and consent decrees are pleadable as *res judicata*, if they are final in their nature, with the same effect as are judgments or decrees which were rendered after a long-contested litigation.[2] But in order to be binding on either party to a new action, a former judgment or decree must be binding on both.[3] No former adjudication is pleadable in favor of either party to a suit unless it would have been pleadable against him, if it had been rendered the other way.[4] But a decree may be pleadable against a complainant, only on a single point in a subsequent case, though it would have been pleadable against the defendant on all the points in that case, if it had been rendered the other way; because to be rendered the other way, all those points would have to be decided for the complainant, whereas only one of those points might have to be decided against the complainant, in order to necessitate a decree for the defendant.[5] On the other hand, a decree may be pleadable for the complainant, only on the subject of the validity of his patent, and not upon the question of its infringement by the defendant.[6]

§ 469. Estoppel by *matter of deed* may also arise in patent affairs. Where, for example, an assignor or grantor of a patent right, afterwards infringes the right which he

[1] United States Felting Co. *v.* Asbestos Felting Co. 4 Fed. Rep. 816. 1880; American Bell Telephone Co. *v.* National Telephone Co. 27 Fed. Rep. 665, 1886; Eagle Mfg. Co. *v.* Miller, 41 Fed. Rep. 357, 1890; Eagle Mfg. Co. *v.* Bradley Mfg. Co. 50 Fed. Rep. 193, 1891; Bradley Mfg. Co. *v.* Eagle Mfg. Co. 57 Fed. Rep. 985. 1893.

[2] Bradford *v.* Bradford, 5 Connecticut, 131, 1823; Davis *v.* Murphy, 2 Rich. (S. C.), 560, 1846; United States Packing Co. *v.* Tripp, 31 Fed. Rep. 350, 1887.

[3] Mack *v.* Levy. 60 Fed. Rep. 752. 1894.

[4] Ingersoll *v.* Jewett, 16 Blatch. 378, 1879; Dale *v.* Rosevelt, 1 Paige (N. Y.), 35, 1828; Paynes *v.* Coles, 1 Mumford (Va.), 394, 1810; Greene *v.* City of Lynn, 55 Fed. Rep 522, 1893.

[5] Steam Gauge & Lantern Co. *v.* Meyrose 27 Fed. Rep. 213, 1886.

[6] Bradley Mfg Co. *v.* Eagle Mfg. Co. 57 Fed. Rep. 988, 1893.

conveyed, he is estopped by his conveyance, from denying the plaintiff's title,[1] or the validity of the patent, when sued for its infringement,[2] even where the invalidity is due to an unlawful reissue obtained after the assignment.[3] But such an assignor or grantor is not estopped, by his conveyance, from showing how narrowly the patent must be construed.[4]

§ 470. The defence of estoppel requires a special plea to introduce it into a litigation. Thus, for example, if a former judgment or decree is not pleaded as an estoppel by a defendant, he refers the merits of the controversy anew to the court. The former adjudication may be used as an argument, but it cannot be relied upon as a bar, unless it is set up in a special plea.[5]

§ 471. The twenty-seventh defence may be made by demurrer,[6] but if not so interposed it must always be specially pleaded by the defendant, or it will be disregarded by the court.[7] No defendant can avail himself of any statute of limitation, upon the general issue.[8]

§ 472. Section 55 of the Patent Act of 1870 related to remedies for infringements of patents, and its final clause provided that: "All actions shall be brought during the term for which the letters patent shall be granted or extended, or within six years after the expiration thereof."[9] That enactment continued to be in full force until the passage of the Revised Statutes, June 22, 1874. It was, however, omitted from that compilation, and by operation of

[1] Woodward *v.* Lasting Mach. Co. 60 Fed. Rep. 284, 1894.

[2] Consolidated Middlings Purifier Co. *v.* Guilder, 9 Fed. Rep. 156. 1881; Adee *v.* Thomas, 41 Fed. Rep. 345, 1890; Corbin Lock Co. *v.* Yale & Towne Mfg. Co. 58 Fed. Rep. 565, 1893; Martin & Hill Cash Carrier Co. *v.* Martin, 67 Fed. Rep. 787, 1895.

[3] Burdsall *v.* Curran, 31 Fed. Rep. 919, 1887.

[4] Babcock *v.* Clarkson, 63 Fed. Rep. 607, 1894; Western Telephone Construction Co. *v.* Stromberg, 66 Fed. Rep. 551, 1895; Martin Cash Carrier Co *v.* Martin, 67 Fed. Rep. 787, 1895.

[5] 1 Chitty on Pleading, 509.

[6] Brickill *v.* Hartford, 49 Fed. Rep. 373, 1882.

[7] 1 Chitty on Pleading, 498.

[8] Neale *v.* Walker, 1 Cranch's Circuit Court Reports, 57, 1802.

[9] 16 Statutes at Large, Ch. 230, Sec. 55, p. 206.

Section 5596 was thereby repealed as to all rights of action thereafter to accrue; but by virtue of Section 5599 it was left in full force as to all rights of action in existence at the date of the repeal.[1] No further national legislation has been had relevant to the subject up to the time of the publication of this book. This national statute of limitation has no application to any infringement committed since June 22, 1874. It applies fully to all infringements committed between that day and July 8, 1870, the day whereon it was enacted. To what extent it applies to infringements of unextended patents committed before the latter date, and how it applies to infringements of the original terms of extended patents, are intricate questions which are discussed in Sections 473, 474 and 475 of the former editions of this book, but which are now obsolete.

§ 476. State statutes of limitation can never apply to any right of action under a patent, if that particular right is subject to the running of a national statute of limitation.[2] This point of law follows from the fact that the States have no right to control the operation of the patent laws;[3] and from the fact that Congress never adopted State laws for the government of Federal courts in any case where the constitution, treaties or statutes of the United States specially attend to the subject.[4]

§ 477. State statutes of limitation on torts unaccompanied by force, apply to such rights of action for infringements of patents, as are not subject to any national statute of limitation.[5]

§ 478. Replications and subsequent pleadings are seldom required in patent cases, because most of the pleas applicable to such cases are pleas in bar by way of traverse, and

[1] Hayden *v.* Oriental Mills, 22 Fed. Rep. 103, 1884; May *v.* County of Buchanan, 29 Fed. Rep. 470, 1886; May *v.* County of Logan, 30 Fed. Rep. 256, 1887.

[2] Sayles *v.* Oregon Central Railroad Co. 4 Bann. & Ard. 429, 1879; Hayden *v.* Oriental Mills, 22 Fed. Rep. 103, 1884; May *v.* County of Logan, 30 Fed. Rep. 256, 1887.

[3] M'Culloch *v.* Maryland, 4 Wheaton, 436, 1819.

[4] Revised Statutes, Sec. 721; Sec. 34 of the Judiciary Act of 1789; 1 Statutes at Large, Ch. 20, p. 92.

[5] Campbell *v.* Haverhill, 155 U. S. 613, 1895.

not by way of confession and avoidance.[1] The principal exceptions are the plea of a license, the plea of a release, and the plea of a statute of limitation. If the plaintiff purposes to deny the existence of a license or release, as the case may be, his replication should be by way of traverse to the plea, and should conclude to the country, and thus tender issue. So, also, if the plaintiff can show that the license or release covered only a part of the infringement covered by the declaration, the general replication by way of traverse will be sufficient.[2] If the plaintiff cannot deny the existence of a full paper, but purposes to show that it was obtained by duress or by fraud, or that it has been effectually revoked, his replication will state the facts by way of confession and avoidance of the plea, and will conclude with a verification. It will then be the duty of the defendant to file a rejoinder to the replication. If he can deny the duress, or the fraud, or the revocation, as the case may be, his rejoinder will be by way of traverse, and will conclude by tendering issue. If, however, he cannot deny the truth of the replication, but can avoid its effect by showing that the plaintiff freely ratified the license or release after the alleged duress terminated, or the alleged fraud became known to him, or that he annulled the revocation after making it, then the defendant's rejoinder will be by way of confession and avoidance, and will conclude with a verification, and will render necessary a sur-rejoinder from the plaintiff, denying the truth of the rejoinder, and putting himself upon the country.

§ 479. When pleaded to an action based on an infringement committed before June 22, 1874, the national statute of limitation will require a replication by way of traverse, if the plaintiff intends to show that the action was brought during the term for which the patent was granted or extended, or within six years after the expiration thereof. If he cannot show that, it will be useless for him to prosecute his action further.

[1] Brickill *v.* Hartford, 57 Fed. Rep. 219, 1893.

[2] 1 Chitty on Pleading, 596.

§ 480. A State statute of limitation, when pleaded to an action based on an infringement of a patent, if it is not successfully met by a demurrer, will require a replication by way of confession and avoidance, based on some cause which, according to the laws of the particular State in which the suit is pending, is sufficient to take the case out of the statute. If there is no such cause, the plaintiff must abandon his action, or he may stand upon his demurrer, and having suffered judgment, go to the Circuit Court of Appeals on a writ of error. If such a replication is filed, the defendant must file a rejoinder by way of traverse, and tender issue by putting himself upon the country.

§ 481. A similiter must be filed or added by or on behalf of the other party, whenever either the plaintiff or defendant properly tenders issue. As the party to whom issue is well tendered, has no option but to accept it, the similiter may be added for him. It is a mere matter of form, but it is a form which should always be attended to in common-law pleading. Its omission has sometimes constituted a fatal defect.[1]

§ 482. A demurrer may be interposed by either party in an action at law, to any pleading of his opponent, except another demurrer.[2] When a demurrer is interposed, the court will examine all the pleadings in the case, and will generally decide against the party who first filed a substantially defective one.[3] The principal exception to this rule is, that where the declaration is the pleading demurred to, the demurrer will not be sustained if it is too large; that is, if it is pointed at an entire declaration, some independent part of which is good in law.[4] This exception does not apply to demurrers to pleas,[5] or replications,[6] or rejoinders,[7] for it is in the nature of those pleadings to be entire, and if bad in part, to be bad for the whole.

[1] Earle *v.* Hall, 22 Pickering (Mass.), 102, 1839.

[2] 1 Chitty on Pleading, 661, 666.

[3] 1 Chitty on Pleading, 668.

[4] 1 Chitty on Pleading, 665.

[5] 1 Chitty on Pleading, 546.

[6] 1 Chitty on Pleading, 644.

[7] 1 Chitty on Pleading, 651.

§ 483. Demurrable declarations occur in patent cases when the patent appears to be void on its face, or by reason of some fact within judicial notice; or when the plaintiff's pleader omits some of the allegations which are necessary parts of such a pleading; or when he makes those allegations in improper form; or where he makes the statement of infringement cover a space of time, part or all of which is remote enough to be barred by some applicable statute of limitation. It will rarely occur that the whole of an infringement declared upon can plausibly be claimed to be barred by a statute of limitation; but it may not be unknown for declarations to allege that the infringement sued on began at a point of time more than six years before the beginning of the action, and was continued till after that limit was passed. If, in such a case, the defendant would interpose a six-year State statute of limitation to that part of the infringement which occurred more than six years before the bringing of the suit, he may do so by a special demurrer aimed at the questionable part of the right of action. If, in such a case, he demurs generally to the whole declaration, his demurrer will be overruled, because it will appear on the argument that an independent divisible part of the right of action sued upon is unbarred by the statute.[1]

§ 484. Demurrable pleas occur in patent cases whenever the facts stated therein constitute no defence to the action; or when they are in improper form; or when a statute of limitation is pleaded to the whole of a right of action, only a part of which is old enough to be barred thereby, for a plea which is bad in part, is bad altogether.[2]

§ 486. A joinder in demurrer is the proper response to such a pleading in a patent action, as well as any other. If a plaintiff attempts to demur to a demurrer, or refuses to join issue of law upon it, he thereby discontinues his action; and if a defendant does so he discontinues his defence.[3]

[1] 1 Chitty on Pleading, 665.
[2] 1 Chitty on Pleading, 546.
[3] Gould's Pleadings, Chap. IX, Sec. 33; 1 Chitty on Pleadings, 169.

But the actual filing in writing of a joinder in demurrer is generally waived, and the demurrer brought on for argument without that formality.

When a demurrer to an entire declaration is sustained, or a ground which cannot be cured by amendment, the plaintiff may file an exception, and take the case to the Circuit Court of Appeals for a review of the decision upon the demurrer; and he must do so, or abandon his action. But where a demurrer to a declaration is overruled, the defendant may either file an exception and take the case to the Circuit Court of Appeals for review, or may obtain leave of court to file a plea to the declaration. If he takes the latter course, he cannot set up in that plea any defence which was set up in the overruled demurrer. And if his other defences fail on the trial, and he afterwards takes the case to the Circuit Court of Appeals, he cannot get a review of the decision of the Circuit Court overruling his demurrer to the declaration. For this reason, it is not wise to trust any vital defence to the carriage of a demurrer, except where the defendant has no other vital defence, or except where he is certain that his demurrer will not be overruled.

Where a demurrer to a plea is sustained, on a ground which cannot be cured by amendment, the defendant may file an exception, and take the case to the Circuit Court of Appeals for a review of the decision upon the demurrer; or he may go to trial upon any other plea which he may have filed, and which has not been demurred to, or has repelled a demurrer. If he takes the latter course, and is beaten on the trial, and afterwards takes the case to the Circuit Court of Appeals, he ought in that tribunal, to get a review of the decision of the Circuit Court sustaining the demurrer to his plea; for he could not prevent the filing of that demurrer, and without such a review can get no appeal from the decision of the Circuit Court sustaining it. But where a demurrer to a plea is overruled, the plaintiff must stand by that demurrer, and take the case to the Circuit Court of Appeals upon that issue alone, or if he goes to trial without doing so, he will thereby waive his demurrer;

and if he is unsuccessful on the trial, and thereafter takes the case to the Circuit Court of Appeals, he cannot secure in that court a review of the decision of the court below, overruling his demurrer to the plea.

§ 487. The trial of an action at law for infringement of a patent may be by a jury, or by a judge, or by a referee. The first of these sorts of trial is the only proper one, except in cases where both parties agree to substitute one of the others. Cases of the kind may be tried by the judge, where the parties file with the clerk a stipulation in writing waiving a jury;[1] and trial by a referee appointed by the court, with the consent of both parties, is a mode of trial fully warranted by law.[2]

§ 488. Trial by jury must, in the absence of contrary consent by the parties, be by a jury of twelve men. Unanimity is necessary to a verdict of a jury in a Federal court, even in California or Nevada; though the statutes of those States provide that in their courts, a legal verdict may be found when three-fourths of the members of a jury agree. The laws of those States on that point are not covered by Section 721 of the Revised Statutes, and so made rules of decision in Federal courts; because the Federal Constitution otherwise provides. That provision is found in its seventh amendment, and in the following language: "In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved." It is true that unanimity was not necessary to the verdicts of juries in England till after the reign of Edward the First,[3] and that it was never required in Scotland.[4] But the kind of "trial by jury," known in England and in the United States when the seventh amendment was proposed by Congress,[5] and when it was ratified by three-fourths of the

[1] Revised Statutes, Section 649

[2] Heckers *v.* Fowler, 2 Wallace, 123, 1864.

[3] Bracton, Liber IV. Chap. 19; Fleta, Liber IV. Chap. 9; Britton, Liber II. Chap. 21.

[4] Barrington on the Statutes, Chap. 29, p. 20; 17 & 18 Victoria, Chap. 59; 22 & 23 Victoria, Chap. 7; 31 & 32 Victoria, Chap. 100, Sec. 48.

[5] September 25, 1789.

States,[1] is doubtless the kind of trial guaranteed by that amendment. Therefore no law providing for any other kind of trial by jury can be enforced in a United States court.

§ 489. The practice in actions at law in the Federal courts is not uniform throughout the United States. There are no general rules governing the Circuit Courts when sitting as law courts, though there is such a system prescribed for them when sitting in equity. On the law side, each Circuit Court is governed, in matters of practice, by the laws of the State in which it is established, so far as those laws are applicable;[2] and on points where no law exists, it is governed by rules or customs of its own making or observance. No Act of Congress is necessary to enable United States courts to make and enforce its own rules of practice. It is only necessary that such rules be not repugnant to the laws of the United States.[3]

§ 490. The rules of evidence which are used in the trial of patent causes are the ordinary rules of the common law, as modified by the statutes of the particular States in which such trials occur,[4] and as adapted to the circumstances of patent litigation by the decisions of the United States courts.

§ 491. Evidence to support his declaration must of course be introduced by a plaintiff in a patent suit before the defendant can be called upon to prove any defence. Where the complainant or the defendant is a corporation, and that fact is not admitted in the defendant's plea, it must be proved by the plaintiff; and it may be proved by a certified copy of its charter or articles of incorporation. Aside from that preliminary matter, the first item of the plaintiff's evidence consists of the letters patent sued upon, or of a written or printed copy of the same, authenticated by the seal and certified by the Commissioner or the Acting Commissioner of

[1] November 3, 1791.

[2] Revised Statutes, Section 914.

[3] Heckers *v.* Fowler, 2 Wallace, 123, 1864.

[4] Vance *v.* Campbell, 1 Black, 427, 1861; Hausknecht *v.* Claypool, 1 Black, 431, 1861; Wright *v.* Bales, 2 Black, 535, 1862.

the Patent Office.[1] Either the letters patent, or such a copy thereof, is *prima facie* evidence of the validity of the letters patent, unless it appears on its face not to be such a form of document as the statute prescribes.[2] But the printed memorandum, which is usually made at the head of the specification of a patent, and which states the date of the filing of the application for that patent, is not even *prima facie* evidence of that date.[3] That point, if it is material in a particular case, must be proved by a certified copy of the application itself.

§ 492. Reissue letters patent are also *prima facie* evidence of their own validity, on all of the three points which are involved in that question. They are so in respect of the fifteenth defence; because the fact that the Commissioner assumed jurisdiction, by treating the original letters patent as a proper subject for a reissue, is at least *prima facie* evidence that he had jurisdiction.[4] They are so in respect of the sixteenth defence; because the presumption is that the Commissioner knew the law, and, knowing it, would not grant a broadened reissue after a long lapse of time from the date of the original.[5] They are so in respect of the seventeenth defence; because the presumption is that the Commissioner would not violate the law, by granting a reissue for a different invention from any which the original letters patent shows was intended to have been claimed therein.

§ 494. It is an undoubted presumption of law that letters patent, which appear on their face to be in full force, are so in fact. Such a document is therefore *prima facie* evidence that it neither has been repealed by a decree of court, nor has expired because of the expiration of some foreign

[1] Revised Statutes, Section 892.

[2] Hunt Bros.' Fruit Packing Co. *v.* Cassidy, 53 Fed. Rep. 259, 1892; Singer Mfg. Co. *v.* Brill, 54 Fed. Rep. 383, 1892; Holloway *v.* Dow, 54 Fed. Rep. 514, 1893; Harper & Reynolds Co. *v.* Wilgus, 56 Fed. Rep. 588, 1893; Chase *v.* Fillebrown, 58 Fed. Rep. 376, 1893.

[3] International Terra-cotta Co. *v.* Maurer, 44 Fed. Rep. 620, 1890.

[4] Brooks *v.* Bicknell, 3 McLean, 258, 1843.

[5] Clark *v.* Wooster, 119 U. S. 326, 1886.

patent for the same invention. It follows that neither the nineteenth nor twentieth defence needs to be anticipated by a plaintiff when introducing his *prima facie* evidence.

§ 495. After introducing the letters patent in evidence, unless the plaintiff is himself the patentee, his next step is to prove his title to the right, upon the infringement of which the action is based. Where the letters patent were originally granted to an assignee of the inventor, they are *prima facie* evidence of title in that assignee.[1] But where the plaintiff obtained his title after the letters patent were granted, he must prove himself to have been the assignee of the patent, or at least a grantee under it as to the territory wherein the alleged infringement occurred, when that infringement occurred. He may do either of these, by introducing in evidence the original assignments or grants which constitute his chain of title, after having proved them according to the rules of the common law; and by proving that chain not to have been cut or curtailed. But a certified copy of the patent office record of such an assignment or grant is not admissible as primary evidence of the original document.[2] To prove an original assignment or grant, according to the rules of the common law, where there was a subscribing witness, the first step is to produce him, and take his testimony to the genuineness of his signature; or if he cannot be produced, the first step consists in proving, if possible, what has become of him, and if that is impossible, in proving that fact. When this step has been taken, and also where there was no subscribing witness to the document to be proved, it can be proved by testimony of the genuineness of the signature of him who executed it, as assignor or grantor, as the case may be. Where an original assignment or grant, which is essential to the plaintiff's title, cannot be produced, its character may be proved according to the rules of the law of evidence relevant to such cases; and that proof will be practically

[1] Whitcomb *v.* Coal Co. 47 Fed. Rep. 655, 1891.

[2] Mayor of New York *v.* American Cable Ry. Co. 60 Fed. Rep. 1016, 1894; Paine *v.* Trask, 56 Fed. Rep. 233, 1893.

facilitated by the aid of a certified copy of the Patent Office record of the document.

§ 496. It is not necessary for any plaintiff to prove in his *prima facie* evidence that the defendant has no license or release with which to defend.[1] But it is required of him to prove that he never made nor sold any specimen of the invention without marking it "patented," together with the day and year the patent was granted; or that the defendant was duly notified that his doings constituted an infringement of the patent, and, after such notice, continued to infringe.[2]

§ 497. Proof of the making, selling, or using, by the defendant, of a specimen or specimens of a process or thing which the plaintiff claims is covered by his patent, constitutes the next step to be taken in proving a *prima facie* case. This point is often covered by a stipulation of the parties. Defendants are generally wise when they make such stipulations, because any attempts to conceal the nature of their doings are likely to prejudice the welfare of their defences. But in cases where the defendants have no refuge but concealment, the point of proof may be one of difficulty, for courts of law have no power to order inspections of a defendant's works;[3] though the defendant may be called as a witness, and compelled to describe what he has done;[4] and a discovery of the defendant's doings may be obtained by a bill in equity filed in aid of an action at law.[5] Where a defendant cannot be relied upon to testify fairly and fully, the plaintiff must secure other evidence; for it is necessary to a verdict in an action at law for an infringement of a patent, that both the nature and extent of that infringement be shown to the jury by satisfactory proof. Evidence of the nature of a defendant's doings is the first element of evidence of infringement; and evidence of their extent is an

[1] Fisher *v.* Hayes, 6 Fed. Rep. 79, 1881.

[2] Dunlap *v.* Schofield, 152 U. S. 244, 1894; Traver *v.* Brown, 62 Fed. Rep. 933, 1894.

[3] Parker *v.* Bigler, 1 Fisher, 287, 1857.

[4] Roberts *v.* Walley, 14 Fed. Rep. 169, 1882; Delamater *v.* Reinhardt, 43 Fed. Rep. 76, 1890.

[5] Colgate *v.* Compagnie Francaise, 23 Fed. Rep. 85, 1885.

indispensable part of the necessary evidence of damages.[1]

§ 498. Evidence of infringement is completed with evidence of the defendant's doings, if what he did was obviously and unquestionably identical with what is covered by the patent in suit,[2] or if he is estopped from denying identity between those doings and that patent.[3] And even where differences are apparent, the complainant, if he chooses, may rest when he has introduced evidence or a stipulation stating the character of the acts done by the defendant. In that case the court will interpret the words of the patent in the sense in which they are ordinarily employed, and, with the knowledge of the invention thus acquired, will determine whether the acts done by the defendant amount to infringement.[4] But judges do not always possess the requisite knowledge of the meaning of the terms of art or science used in letters patent, and are not always able to accurately weigh similarities and differences in mechanics, chemistry, electricity, or other physics, without receiving special information thereon. Therefore it is always proper and generally necessary to introduce expert testimony to show that the differences are all immaterial, and to show that the defendant's doings actually did constitute an infringement of the plaintiff's patent. Experts in patent cases are mainly experts in mechanics, chemistry, or electricity; and a man who has extensive theoretical and practical knowledge of either of those sciences, is a mechanical, chemical, or electrical expert, as the case may be; and a man may be an expert in any other science who possesses the same qualifications in it. The opinions of such experts are admissible upon the points of fact to which they are relevant; but in

[1] National Car Brake Shoe Co. *v.* Mfg. Co. 19 Fed. Rep. 519, 1884.

[2] Jennings *v.* Kibbe, 10 Fed. Rep. 669, 1882; Barrett *v.* Hall, 1 Mason, 471, 1818; Hayes *v.* Bickelhoupt, 23 Fed. Rep. 184, 1885; Freese *v.* Swartchild, 35 Fed. Rep. 141, 1888; Sugar Mfg. Co. *v.* Yaryan Mfg. Co. 43 Fed. Rep. 148, 1890.

[3] Time Telegraph Co. *v.* Himmer, 19 Fed. Rep. 322, 1884.

[4] American Linoleum Co. *v.* Nairn Linoleum Co. 44 Fed. Rep. 756, 1890.

order to have much weight, they must be accompanied by statements of good reasons upon which they are based.[1]

In deciding between contradictory expert testimony, juries should consider the respective reasons, ability, knowledge, and fairness of the experts.[2] To judge according to their number or their fame would be unsafe. The wealthier litigants are generally those who employ the more numerous and the more expensive expert witnesses; but it is not always the wealthier litigant who is right in a controversy, nor always the more famous expert who is right in his opinion. The carefully digested views of a young and studious scientist, may often be more nearly true than the more hastily formed opinion of a more experienced man.

§ 499. No expert can know whether a particular thing, done or made by a defendant, is the same as any thing covered by a particular patent, until he ascertains what that patent covers. But the latter question is one of construction for the court, and not a question of evidence, to be sworn to by an expert, and decided by the jury. In the regular course of proceedings in trials at law, as well as in hearings in equity, the construction of the patent is not announced by the judge till after the evidence is taken. This practice makes it proper to put hypothetical questions to expert witnesses. The hypothesis in such a question is one which embodies that construction of the patent upon which the examining counsel thinks it both safe and sufficient to rely. If, when charging the jury, the judge gives a

[1] United States Annunciator Co. *v.* Sanderson, 3 Blatch. 184, 1854; Livingston *v.* Jones, 1 Fisher, 521, 1859; Conover *v.* Rapp, 4 Fisher, 57, 1859; Norton *v.* Jensen, 49 Fed. Rep. 864, 1892; Briggs *v.* Central Ice Co. 54 Fed Rep. 379, 1892.

[2] Johnson *v.* Root, 1 Fisher, 351, 1858; Many *v.* Sizer, 1 Fisher, 17, 1849; Hudson *v.* Draper, 4 Fisher, 256, 1870; Page *v.* Ferry, 1 Fisher, 298, 1857; Carter *v.* Baker, 1 Sawyer, 512, 1871; Spaulding *v.* Tucker, Deady, 649, 1869; Cahoon *v.* Ring, 1 Cliff. 592, 1861; Cox *v.* Griggs, 1 Bissell, 362, 1861; Conover *v.* Roach, 4 Fisher, 12, 1857; Whipple *v.* Mfg. Co. 4 Fisher, 29, 1858; Conover *v.* Rapp, 4 Fisher, 57, 1859; Waterbury Brass Co *v.* New York Brass Co. 3 Fisher, 43, 1858; Bierce *v.* Stocking, 11 Gray (Mass.), 174, 1858.

different construction from that embodied in the hypothetical question, then the answer to that question will be seen to be immaterial, and the jury will do right to disregard it. Examining counsel ought therefore to be very certain that his hypothetical construction is the true one; or otherwise, to put as many hypothetical questions as there are probable favorable constructions. Doing the latter he may have a favorable answer upon which to argue to the jury, if he secures from the judge a construction which corresponds with either of his hypothetical questions. A statement of a witness that a particular thing does or does not infringe a particular patent, is inadmissible in evidence, because that statement includes a construction of the patent, and construction of patents is the duty of courts, and not of experts.[1]

§ 500. Though not permitted to testify to the construction of a patent,[2] experts are sometimes called upon to testify to facts which positively control that construction.[3] Where the state of the art is the subject of inconsistent evidence, and where the construction of the patent depends on what is the fact in that regard, the judge will not charge the jury that the patent means thus and so, but will tell them that if they find the state of the art to be so and so, then the patent is entitled to such and such a construction.[4] In cases of this kind it may occur that the jury, in deciding upon the state of the art, must receive information from experts relevant to the mechanical nature of prior things,[5] as well as information from other sources relevant to the prior existence of those things. All questions of identity of things are questions for the jury in an action at law,[6] and are therefore proper to be testified about by experts. Where

[1] Marsh *v.* Stove Co. 51 Fed. Rep. 203, 1892; Holmes *v.* Truman, 67 Fed. Rep 545, 1895.

[2] Waterbury Brass Co. *v* New York Brass Co 3 Fisher, 54, 1858.

[3] Marsh *v.* Stove Co. 51 Fed. Rep. 203, 1892.

[4] Burdell *v.* Denig, 92 U. S. 722, 1875.

[5] McKay & Copeland Mach. Co. *v.* Claflin, 58 Fed. Rep. 354, 1893.

[6] Tyler *v.* Boston, 7 Wallace, 327, 1868.

a patent covers such of the things described, as perform a particular function, it is the business of the jury to decide, and therefore proper for an expert to testify, which those things are.[1]

§ 501. The cross-examination of experts, cannot extend to inquiries into the characteristics of things not relevant to the case, put to them for the purpose of testing their knowledge or their fairness; because if the answers appeared to be undeniably correct, they would be wholly immaterial, and if thought to be erroneous they could be shown to be so, only by the testimony of others, who might themselves be the mistaken ones. To allow such a question, would thus operate to introduce an immaterial issue of fact into a case, and to draw the attention of the jury away from the issues of the pleadings.[2]

§ 502. The last part of a plaintiff's *prima facie* evidence, consists in proof of the amount of his damages, sometimes supplemented by evidence tending to show that a judgment ought to be entered for an amount greater than the actual damages sustained by him.[3] The matter is mentioned in this connection for the sake of symmetry; but it is so large that it constitutes the subject of a separate chapter of this book. To that chapter, recourse may be had for detailed information upon the subject.

§ 503. The next part of a trial is the introduction of evidence by the defendant to sustain his defences. The possible defences in patent cases are twenty-seven in number. In prior sections in this chapter, they are consecutively numbered for purposes of easy reference, and are treated in respect of the pleadings which they respectively require, and the results which they respectively produce in patent actions at law. It is now convenient to set forth, in the same order, some of the leading points of the law of evidence applicable to each.

[1] Silsby *v.* Foote, 14 Howard, 218, 1852.

[2] Odiorne *v.* Winkley, 2 Gallison, 51, 1814.

[3] Revised Statutes, Section 4919.

§ 504. The first defence will sometimes require evidence to show that the terms of art or science which are used in the patent, have such a meaning that the court is bound to construe the patent to be one for a principle, or for something other than a patentable process, or a machine, manufacture, composition of matter, or design. But where a patent plainly claims only the peculiar function of a described machine, the first defence can be maintained without any evidence outside of the patent; and the first defence may be made without any evidence outside of the patent, where the patent claims only a mechanical transaction, which may be performed by hand, or by any of several different mechanisms or machines.[1]

§ 505. The second defence may sometimes be supported by facts of which the court will take judicial notice.[2] But evidence to show the state of the art, is often required to show want of invention. A patent granted for an implement of agriculture, consisting of a hoe-handle with a hoe on one end and a rake on the other, would be void for want of invention, even if both new and useful.[3] The court would take judicial notice of the prior existence of handles having hoes attached thereto, and of other like handles having rakes fastened to one end; and on the basis of that judicial notice, would pronounce such a patent to be wholly invalid. A patent for a particular alleged combination in a rare and complicated machine, may also be open to precisely the same sort of objection; while the facts upon which it rests in the particular case, may be wholly unknown to people generally, and wholly unknown to judges who hear patent causes; though well understood by certain classes of mechanics. In the latter case, it is necessary to introduce evidence of those facts in order to show want of invention. Such evidence may consist of proof of the prior existence of the parts of the alleged combination, and proof of the

[1] Section 3*a* of this book.

[2] Brown *v.* Piper, 91 U. S. 37, 1875; Slawson *v.* Railroad Co. 107 U. S. 649, 1882; Phillips *v.* Detroit, 111 U. S. 606, 1883.

[3] Reckendorfer *v.* Faber, 92 U. S. 347, 1875.

fact that their union in the machine constitutes not a real combination, but an aggregation only.

And the prior art must generally be proved in order to support the second defence; and that proof will generally consist of one or more prior patents or printed publications. The method of introducing them in evidence, is explained in the next two sections where substantial identity between the invention of the patent in suit and the invention disclosed in a prior patent or printed publication, is presupposed. But where a prior patent or printed publication is set up to negative invention, rather than to negative novelty, identity may be absent. In such a case, the question is whether the difference or differences between the subject claimed in the patent in suit and the prior art, amount to invention; and it is generally necessary for a defendant to introduce expert testimony on that point.[1]

§ 506. The third defence, and the facts which support it, are explained at large in the third chapter of this book. In this connection, it is only necessary to explain the kinds of evidence by which those facts may be proved, and to state the special rules which govern the weight of such evidence.

Where novelty is duly sought to be negatived by prior United States patents, duly certified copies of those patents are admissible;[2] and it is a general practice among patent lawyers to waive the certificate, where a printed copy from the Patent Office is presented by opposing counsel. The certified copies of letters patent, which are admissible in evidence, include not only such individual copies as are furnished to private persons on payment of the proper fees; but also the certified bound volumes of copies which are gratuitously distributed by the Commissioner of Patents to all the State and Territorial capitols, and to all the United States District Court clerk's offices, except those which are located at the capitals of the States and Territories.[3]

[1] Waterman *v.* Shipman, 55 Fed. Rep. 987, 1893.

[2] Revised Statutes, Section 892.

[3] Revised Statutes, Section 490.

Where prior foreign patents are duly pleaded to negative novelty, they may be proved *prima facie*, by duly certified copies of those copies thereof, which are kept in the United States Patent Office.[1] If plenary proof of foreign letters patent is required, it can be made by producing a copy thereof, duly certified by that officer of the foreign government which issued the patent, who corresponds to the Commissioner of Patents in the United States.[2] Where an error creeps into a certified copy of any letters patent, it may be corrected by another and more carefully compared certified copy from the same office.[3] Letters patent, to be admissible, must agree in name and date with the statements in the pleadings, in proof of which they are offered.[4]

§ 507. Prior printed publications must be proved by the introduction of a specimen of the printed thing, which is relied upon, and by satisfactory evidence that it was published before the date of the patent in suit. Parol testimony of the contents of such printed matter is generally inadmissible.[5] The testimony of a person, that the printed thing produced was published before the date of the invention in suit, if believed by the jury, would be sufficient evidence on that point. What evidence short of that in convincing force, would answer the purpose in hand, has not been judicially settled. Printed publications are not generally evidence of the truth of the statements which they contain.[6] But where a book or public periodical appears to have been published in a specified year, or on a specified day, and where it contains matter which furnishes collateral evidence of the genuineness of the date, and where it is free from the suspicion of having been changed after it was put forth, it will be received in evidence, without direct testimony that it was published when it purports

[1] Revised Statutes, Section 893.

[2] Schoerken *v.* Swift & Courtney & Beecher Co. 7 Fed. Rep. 469, 1881.

[3] Brooks *v.* Jenkins, 3 McLean, 432, 1844.

[4] Bellas *v.* Hays, 5 Sergeant & Rawle (Penn.) 427, 1819.

[5] McMahon *v.* Tyng, 14 Allen (Mass.), 167, 1867.

[6] Seymour *v.* McCormick, 19 Howard, 106, 1856.

to have been.[1] But a certificate of the Commissioner of Patents, that a particular book was in the library of the Patent Office as early as a particular date, is not evidence of that fact.[2]

§ 508. Prior knowledge or use of a thing patented, may be proved by the testimony of the person or persons who had such prior knowledge, or who know of such prior use. Such testimony includes three points: the existence, the character, and the date of the thing previously known or used. Where a witness relies wholly on his memory for all three of these points, his testimony, though admissible, is not strong. It is generally impossible to remember with certainty the particular construction of a thing of which no specimen is known to remain in existence; and most memories are nearly unreliable on bare questions of dates. It is therefore desirable to fortify testimony of prior knowlegde or use by producing the anticipating thing, or a specimen thereof, and by connecting the history of that thing with events about which there is no room for doubt. Where the anticipating thing cannot be produced, the testimony which supports its prior existence, may still prevail, if the construction of the article was so simple, and so well understood, as to be unlikely to be forgotten, and especially if a number of credible witnesses agree in regard to its character and its date.

§ 509. Parol evidence of an anticipating thing, is likely to be met by other parol evidence, tending to show that such a thing never existed at the place alleged; or that it was substantially different from the patented invention sought to be anticipated; or that it did not exist at the alleged place till after the date of the patented invention. Testimony of the first sort is negative in its character, and therefore not so weighty as the affirmative evidence which it contradicts.[3] But it does not need to be so weighty, in

[1] Britton *v.* White Mfg. Co. 61 Fed. Rep. 95, 1894.

[2] Travers *v.* Cordage Co. 64 Fed. Rep. 773, 1894.

[3] Union Sugar Refinery *v.* Matthiessen, 2 Fisher, 600, 1865.

order to overthrow the latter, for a mere preponderance of evidence will not sustain the defence of want of novelty. That defence, in order to prevail must be proved beyond a reasonable doubt.[1] Testimony of an anticipating thing may also be met by evidence that the witness purchased a license under the patent; but such answering evidence is generally entitled to very little weight,[2] because the witness may not have understood that the facts of which he knew, constituted a legal defence to the patent, or he may have preferred to pay for a license, rather than to undergo the annoyance and incur the expense which is generally incident to actions for infringement.

§ 510. When anticipating matter is undeniably proved to have existed before the date of the patent in suit, want of novelty is *prima facie* proved;[3] because the printed memorandum of the date of the application for the patent, which is put at the head of the specification, is not evidence of that date.[4] But the plaintiff may meet the defendant's evidence of anticipating matter by proof that he, or his assignor, made the invention at a still earlier date. He may sometimes do this by means of a certified copy of the specification and drawings of his original application; and he may sometimes do so *prima facie,* by means of a like copy of the original petition upon which the letters patent were granted; but not by parol evidence relevant to the time when the petition, specification or drawing was filed.[5] If his application was not early enough for the purpose, the plaintiff may prove the real date of his invention by proving the date of either of those facts, which, in the chapter on novelty, were shown to constitute the birth of an invention thereafter patented.[6] If that fact

[1] Section 76 of this book.

[2] Evans *v.* Eaton, 3 Wheaton, 454, 1818.

[3] Havemeyer *v.* Rampbell, 21 Fed. Rep. 404, 1884.

[4] International Terra-Cotta Co. *v.* Maurer, 44 Fed. Rep. 619, 1890.

[5] Wayne *v.* Winter, 6 McLean, 344, 1855.

[6] Section 70 of this book.

was a tangible thing, its establishment requires the production and proof of that thing, or requires proof of its loss or destruction, and the best obtainable evidence of what its character was.[1]

After the plaintiff has introduced evidence that he, or his assignor, made the invention at a still earlier date than that proved for the anticipating matter; the defendant cannot introduce evidence to carry the date of the anticipating matter back of the new date thus proved by the plaintiff; but the defendant may introduce evidence to disprove, if he can, the plaintiff's new date of invention.[2]

§ 511. The fourth defence requires evidence that the patented invention will not perform any function which is ascribed to it in the letters patent,[3] or proof that its function is not a useful one, within the meaning of the law on that subject.[4]

The first of these sorts of proof may consist of testimony of a person who is skilful in the art to which the invention pertains, and who has endeavored, in good faith, to make the patented thing work, and has been unable to do so. In plain cases, it may also consist of the testimony of such a person, who has not actually experimented with a specimen of the patented thing, but who is able to demonstrate theoretically that it is impossible for such a specimen to operate. And in all cases the evidence must show a total incapacity in the invention to do anything claimed for it, because neither imperfect operation, nor a total failure to perform part of the claimed functions, will sustain a defence of want of utility.[5] And either practical or theoretical evidence of want of utility in the sense now under consideration may be overthrown by the testimony of a person who has

[1] Richardson *v.* Hicks, 1 McArthur's Patent Cases, 336, 1854.

[2] St. Paul Plow Works *v.* Starling, 140 U. S. 198, 1891.

[3] Rowe *v.* Blanchard, 18 Wisconsin, 462, 1864.

[4] Sections 82 to 84 of this book.

[5] Seymour *v.* Marsh, 6 Fisher, 115, 1872.

succeeded in causing the patented process or thing to produce a result ascribed to it in the patent.

The second of these sorts of proof may consist of evidence that the function of the patented thing is one which people generally profess to condemn as dangerous or immoral. Conventional and not absolute ethics is the criterion of judgment on this point.

§ 512. The fifth defence may be supported by any competent evidence which shows that the inventor relinquished all expectation to secure a patent, and formed an expectation that the invention would always be free to the public.[1] Such evidence may be either direct or circumstantial, but a mere preponderance of evidence cannot sustain this defence of actual abandonment, because it is one of those which, in order to prevail, must be proved beyond a reasonable doubt.[2]

§ 513. The sixth defence requires proof that the patented thing was in public use or on sale in this country, at a date more than two years prior to that upon which the application was made for the patent.[3] And this defence is explained in detail elsewhere in this book.[4]

§ 514. The seventh defence requires the introduction of the original application papers, or certified copies thereof; and in all except very plain cases it requires the testimony of experts to explain the outward embodiment of the terms contained in the original letters patent, and in the original application respectively.[5]

§ 515. The eighth defence calls for evidence that another than the patentee conceived the invention before he did; and that the other used reasonable diligence in adapting and perfecting the same; and that the patentee knew of that prior conception, and obtained the patent surreptitiously; or, if he did not know of the prior conception, that

[1] Babcock *v.* Degener, 1 McArthur's Patent Cases, 616, 1859.

[2] McCormick *v.* Seymour, 2 Blatch 256, 1851.

[3] Andrews *v.* Hovey, 123 U. S. 267; 124 U. S. 694, 1887.

[4] Sections 93–99.

[5] Bischoff *v.* Wethered, 9 Wallace, 812, 1869.

he obtained the patent unjustly, by obtaining it without notice to the prior conceiver, though the latter had a caveat on file in the Patent Office at the time.[1]

§ 516. The ninth defence requires proof that another than the patentee was joint inventor with him of the thing covered by the patent. Testimony on this point must be strong in order to prevail, because the tendency of courts and juries is to assign such evidence to the category of mechanical assistance in construction, or to that of suggested substitution of equivalents.[2]

§ 517. The tenth defence is more likely to be successful in the proof than the ninth; because it may not only be based on the counterpart of the circumstances which underlie the latter, but also on other circumstances, where those do not exist. It has sometimes happened that an inventor, having sold an undivided half interest in his invention, has joined with his vendee in applying as joint inventor for a patent therefor. Such errors have been known to result from ignorance of the law; and such an error has been said to have occurred in one case on account of a desire to give an important patent the benefit of the name of a more distinguished scientist than he who was the real producer of the subject of the claim. But in any case, it is certain that very clear and unequivocal evidence is necessary to support this defence.[3]

§ 518. The eleventh defence calls for proof that the letters patent contains less than the whole truth relevant to the invention, or that it contains more than is necessary to produce the desired result, and that the fault arose from intention to deceive the public. But positive and direct evidence is not required on the latter point. It is suffi-

[1] Revised Statutes, Sec. 4920; Agawam Co. *v.* Jordan, 7 Wallace, 587. 1868; Phelps *v.* Brown, 4 Blatch. 362, 1859.

[2] Agawam Co. *v.* Jordan, 7 Wallace, 587, 1868; Pitts *v.* Hall, 2 Blatch. 229, 1851; Locke *v.* Lane Co. 35 Fed. Rep. 293, 1888.

[3] Gottfried *v.* Brewing Co. 5 Bann. & Ard. 4, 1879; Butler *v.* Bainbridge, 29 Fed. Rep. 142, 1886; Consolidated Apparatus Co. *v.* Woerle, 29 Fed. Rep. 449, 1887; Schlicht & Field Co. *v.* Sewing Machine Co. 36 Fed. Rep. 585, 1888.

ciently shown by proof of any circumstances which satisfy the jury that such intention existed.[1]

§ 519. The twelfth defence can be supported by no evidence except that of persons skilled in the art to which the invention pertains, or with which it is most nearly connected. A patent for a chemical composition or process cannot be overthrown, on the ground of an insufficient description, by the testimony of a mechanical expert; nor can a patent for an improvement of a loom be overthrown on that ground, by the testimony of a machinist skilled only in printing-presses. If a description is sufficiently full, clear, concise, and exact to be effectually understood by any person skilled in that kind of machinery, or other subject of a patent, it is sufficiently so to meet this defence.[2]

§ 520. The thirteenth defence may sometimes succeed without any evidence outside of the letters patent themselves. It will, however, always be prudent to fortify the defence by the testimony of an expert who can show that the outward embodiment of the terms of the claim, is uncertain in character or in extent.

§ 521. The fourteenth defence requires several items of evidence for its support. It requires proof that one or more of the claims of the patent are void for want of embodying a subject-matter of a patent,[3] or for want of invention, or for want of novelty;[4] and that the patentee has long known the facts which make it invalid in that behalf. No disclaimer is ever necessary, in the absence of all of the first three of these circumstances; and no delay to file one is unreasonable in the absence of the fourth. Indeed, proof of a necessity for a disclaimer, and of long-existing knowledge of the facts out of which that necessity arose, will not always sustain this defence; because delay to file a disclaimer is not unreasonable, so long as there is any reason-

[1] Gray *v.* James, 1 Peters' Circuit Court Reports, 394, 1817; Dyson *v.* Danforth, 4 Fisher, 133, 1865.

[2] Loom Co. *v.* Higgins, 105 U. S. 580, 1881.

[3] O'Reilly *v.* Morse, 15 Howard, 121, 1853.

[4] Revised Statutes, Section 4922.

able doubt whether the known facts constitute a necessity for such a document[1].

§ 522. The fifteenth defence can seldom be supported by evidence that the original patent was neither inoperative nor invalid by reason of a defective or insufficient specification; because inoperativeness, from one of these causes, exists whenever the patent does not secure and cover all the inventions which it indicated, suggested, or described, and which might lawfully have been claimed in it;[2] and because, when not granted on account of such inoperativeness, reissues are generally granted on account of invalidity which arose by reason of a defective or insufficient specification, or by reason of a too extensive claim.[3] This defence therefore generally requires to be sustained by evidence showing that; whatever inoperativeness or invalidity on account of defective or insufficient specification, or on account of too extensive claims, is to be found in the original patent; the error arose otherwise than by inadvertence, accident, or mistake. The absence of all three of these mishaps from the history of the preparation of any original specification, may be proved by evidence which shows that the statements or claims alleged to have been omitted in one or another of these ways, were in fact omitted with deliberation or with care, or were omitted because they had to be, in order to secure the original patent,[4] or were disclaimed in order to secure an extension thereof.[5] Evidence to show either of the last two of these circumstances, if it exists at all, may generally be found among the correspondence on file in the Patent Office, and may be introduced in the form of certified copies of the letters which contain it.[6]

§ 523. The sixteenth defence can be supported by the

[1] Silsby *v.* Foote, 20 Howard, 290, 1857; Matthews *v.* Flower, 25 Fed. Rep. 834, 1885.

[2] Wilson *v.* Coon, 18 Blatch. 532, 1880.

[3] Revised Statutes, Section 4916.

[4] James *v.* Campbell, 104 U. S. 356, 1881; Yale Lock Co. *v.* Berkshire Bank, 135 U. S. 379, 1890; Dobson *v.* Lees, 137 U. S. 265, 1890.

[5] Leggett *v.* Avery, 101 U. S. 256, 1879.

[6] Revised Statutes, Section 892.

introduction of the original patent, if when it is compared with the reissue, the latter appears to claim something which the original did not, and appears to have been applied for a long time after the original was granted. How long this space of time must be, in order to sustain this defence, depends largely upon the particular circumstances of particular cases. Different spaces of time which have been held to be sufficient for the purpose, are collated in the chapter on reissues,[1] and the burden is on the plaintiff to excuse delay for more than two years.[2]

§ 524. The seventeenth defence always requires to be supported by the introduction of the original patent;[3] and generally requires expert testimony showing that the outward embodiment of something claimed in the reissue, is substantially different from anything described in the original patent and apparently intended to be claimed therein. The judge will not reject such expert testimony, unless the case is so clear that he would have decided the question on a demurrer, if it had been presented to him by that pleading.

§ 525. The eighteenth defence requires the introduction in evidence of the prior patent, granted on the application of the same inventor; but it will seldom require expert testimony, because, in order to prevail at all, this defence requires the claim of the prior patent to be so clearly co-extensive with the claim of the patent in suit, that its co-extensiveness is apparent upon the faces of the two patents. But expert testimony may be necessary to show such substantial identity of claims, where one or both of the claims may be formulated in phraseology, which cannot be understood without expert explanation.

§ 526. The nineteenth defence would require to be supported by the introduction of an officially attested copy of the record of the court repealing the patent,[4] or if that record

[1] Section 227 of this book.

[2] Wollensak *v* Reiher, 115 U. S. 101, 1884; Hoskin *v.* Fisher, 125 U. S. 222, 1887.

[3] Seymour *v.* Osborne, 11 Wallace, 516, 1870.

[4] Revised Statutes, Section 905.

is proved to have been destroyed by fire,[1] or rendered illegible by wear or time,[2] and not restored by the court to which it pertains,[3] it may be proved by a witness who examined and copied it when it was still unharmed.[4] But parol evidence will not be admitted of a record of which only a part is lost. The part which still exists, must be produced or proved by an officially attested copy.[5]

§ 527. The twentieth defence calls for the introduction in evidence, of a properly certified copy of the foreign patent which is relied upon to curtail the term of the patent in suit; and if the parties offer no testimony to aid the court in determining whether the foreign patent, so proved, is for the same invention as the United States patent upon which the action is based, then the court will determine that point from an inspection of the two documents.[6] But if expert evidence on that subject is offered, it will doubtless be received.[7] And a foreign patent is evidence of its own duration; and will be held not to have been extended, in the absence of evidence that it has been.[8]

§ 528. The twenty-first defence is supported by proof that the plaintiff has made or sold one or more specimens of the patented article without marking it "patented," together with the day and year whereon the patent was granted.[9] When such evidence is introduced, the burden is shifted to the plaintiff, to show that before suit was brought the defendant was duly notified that he was infringing the patent, and that he continued to infringe after such notice.[10]

§ 529. The twenty-second defence may sometimes be sustained by means of pointing out faults in the plaintiff's

[1] United States *v.* Delespine's Heirs, 12 Peters, 654, 1838.

[2] Little *v.* Downing, 37 New Hampshire, 355, 1858.

[3] Revised Statutes, Sections 899 and 900.

[4] 1 Wharton on Evidence, 135.

[5] Nims *v.* Johnson, 7 California, 110, 1857.

[6] De Florez *v.* Raynolds, 17 Blatch. 439, 1880.

[7] Bischoff *v.* Wethered, 9 Wallace, 812, 1869.

[8] Edison Electric Light Co. *v.* Electric Supply Co. 60 Fed. Rep. 404, 1890.

[9] Revised Statutes, Section 4900.

[10] Goodyear *v.* Allyn, 6 Blatch. 36, 1868.

proof of title. Where that proof is apparently complete, it can be attacked by the introduction of assignments or grants in writing, which intervene between some of the links of the plaintiff's chain of title in such a way as to destroy or impair its continuity. The numerous points of law relevant to title are explained in the eleventh chapter of this book. It is enough to say in this connection that no title will be recognized in a court of law, unless it is evidenced by instruments in writing.[1]

§ 530. The twenty-third defence may be sustained by evidence of a written or a parol license, or of an express or an implied license. And a license may be a defence to an infringement suit, even where the license fee is in arrears.[2] Licenses form the subject of the twelfth chapter of this book and to that chapter recourse may be had for further information in regard to the proper evidence to support this defence.

§ 531. The twenty-fourth defence may be sustained by proof of a total or partial release, given after the infringement was committed and before the action was commenced, or it may be sustained *pro tanto*, by a partial release given even after the action was begun.[3] A paper cannot be a release, if executed before the infringement to which it refers was committed, because no man can relinquish what he does not possess.

Whether a release, given only to a joint infringer with the defendant, can be invoked by the defendant himself, is a question to which no categorical answer can at present be given. It depends upon the question whether contribution can be enforced between infringers, and that point has never been settled by the courts. Nothing more useful can therefore be said in this connection than to state the principles upon which the two questions seem to depend.

The doctrine that there can be no contribution between tort-feasors, does not generally apply to cases where the

[1] Revised Statutes, Section 4898.
[2] Keyes *v.* Mining Co. 158 U. S. 150, 1895.
[3] Burdell *v.* Denig, 92 U. S. 721, 1875.

wrong-doers suppose their doings to be lawful.[1] This is sometimes true of infringers of patents. When they infringe, they are perhaps ignorant of the patents which they violate; or if they know of the patents, they are apt to give themselves the benefit of every suggested ground for doubt, and thus suppose that their doings do not constitute an infringement. Such wrong-doing is *mala prohibita*, rather than *mala in se*. Therefore, it seems to be generally, if not universally true, that where one of several joint infringers is sued alone, and suffers and pays a judgment for the joint infringement, he may compel his co-infringers to contribute their due portion of that payment by means of an action to enforce its refunding. That being so, it will follow that a release to one joint infringer will operate to release all his co-infringers from the claim of the patentee. Where contribution can be enforced between tort-feasors, a full release to one must release all; for if it did not do so, it would not fully release that one. The releasee would not be fully protected by his release, unless his co-infringers would also be protected by it, because otherwise the releasee would still be liable to an action for contribution brought against him by a joint tort-feasor who had been compelled to respond in damages for the joint infringement. The true rule, therefore, appears to be that a plain release given to either of several joint infringers may be successfully invoked in a court of law, not only by the nominal releasee, but also by either or all of his co-infringers.

§ 532. The twenty-fifth defence may be successful without any evidence, because the burden of proof is upon a plaintiff to show an infringement,[2] and because a plaintiff may fail to sustain that burden. Accordingly, in one leading law case the defendant was the prevailing party on the circuit, and in the Supreme Court, though the plow which he made was nearly identical with that covered by the

[1] Bailey *v.* Bussing, 28 Connecticut, 401, 1859.

[2] Brooks *v.* Jenkins, 3 McLean, 453, 1844; Royer *v.* Mfg. Co. 20 Fed. Rep. 853, 1884.

plaintiff's patent, and though the defendant introduced no evidence on the subject of infringement, nor indeed on any other.[1] So, also, in a leading case in equity, the defendant, though beaten on the circuit, successfully interposed the defence of non-infringement in the Supreme Court, without any evidence on that side of the issue, and against the contrary testimony of several experts.[2] But these were somewhat clear cases of non-infringement, and it would be injudicious to rely upon such a defence without evidence to support it, in any case wherein the question of infringement is really debatable in the light of the law. Where a thing made or used or sold by the defendant is proved or is stipulated, and where a competent expert testifies that it is substantially the same as that which appears to be covered by the patent in suit, it is generally advisable, and sometimes necessary, for the defendant to introduce evidence tending to show non-infringement, if he means to rely upon that defence.[3] Evidence of this sort may consist of the testimony of experts who are acquainted with the letters patent in suit, and with the doings of the defendant, and are of opinion that those doings are substantially different from everything which appears to be secured by the letters patent, and can give an intelligent reason for that opinion. But such testimony must describe the defendant's doings, to enable the court to judge the correctness of its comparisons.[4] This testimony, like all other testimony of experts on questions of infringement, is necessarily based on hypothetical constructions of the patents in suit, and is therefore to be disregarded, if the judge finds those hypothetical constructions to be substantially erroneous.

Whether the fact that the defendant conformed his doings to a junior patent is admissible as tending to show non-infringement of the patent in suit, is a question which the

[1] Prouty *v.* Ruggles, 16 Peters, 336, 1842.

[2] Railway Co. *v.* Sayles, 97 U. S. 554, 1878.

[3] Bennet *v.* Fowler, 8 Wallace, 447, 1869.

[4] Goldie *v.* Iron Co. 64 Fed. Rep. 240, 1894.

Supreme Court once decided in the affirmative,[1] and afterward in the negative.[2] The reason of the matter is with the later decision, because a thing may be a patentable improvement on a prior thing, at the same time that it is a clear infringement of a patent for that thing.[3] But junior patents are introduced in evidence in many cases without objection from plaintiffs, and are considered by courts as explanatory of defendant's doings, where those doings are shown to conform to junior patents.

§ 533. The twenty-sixth defence requires to be proved as pleaded. Where it depends upon estoppel *in pais*, it may be proved by parol, or by the production of documents, according as the ground of the estoppel consists of things done, or words spoken, or consists of words which were committed to writing. Where the defence depends upon estoppel by deed, the document must be produced or otherwise proved according to the rules of evidence applicable to such cases; and where it depends upon estoppel by record, or *res judicata*, the record must be proved in accordance with the laws governing such evidence.

§ 534. The twenty-seventh defence seldom requires any evidence to sustain it, because the Federal courts take judicial notice of the statutes of limitation;[4] and because the plaintiff's pleadings and proofs, when taken together, will generally show when the infringement sued upon was committed. But if the plaintiff's presentation of the case leaves the latter point uncertain to such an extent as to affect the question of the operation of a statute of limitation, the burden is then cast upon the defendant to prove that part or all of the infringement is old enough to be barred by the statute which he pleaded.[5]

[1] Corning *v.* Burden, 15 Howard, 252, 1853.

[2] Blanchard *v.* Putnam, 8 Wallace, 420, 1869; Norton *v.* Eagle Can Co. 59 Fed. Rep. 138, 1893.

[3] Westinghouse *v.* Power Brake Co. 66 Fed. Rep. 1006, 1895.

[4] Pennington *v.* Gibson, 16 Howard, 79, 1853; Cheever *v.* Wilson, 9 Wallace, 121, 1869.

[5] Russell *v.* Barney, 6 McLean, 577, 1855.

§ 535. Testimony in actions at law for infringements of patents may always be taken orally in open court; and it may be taken by depositions in writing where the witness lives more than one hundred miles from the place of trial, or when he is bound on a voyage at sea, or is about to go out of the United States and out of the judicial district in which the case is to be tried, or to a greater distance than one hundred miles from the place of trial, before the time of trial, or when he is ancient and infirm. The sorts of magistrates before whom such a deposition may be taken are judges of any United States court; judges of any supreme, superior, or county court, or court of common pleas in any of the United States; commissioners of United States circuit courts; clerks of United States circuit or district courts; mayors or chief magistrates of cities; and notaries public. If any such magistrate is counsel or attorney for either party, or interested in the event of the cause, he is disqualified from acting. Before such a deposition is taken, reasonable notice thereof must be given in writing by the party intending to take it, or his attorney of record, to the opposite party, or his attorney of record, as either may be nearest, and that notice must state the name of the witness, and the time and place of taking the deposition.[1] The formalities to be observed in taking and transmitting such depositions are prescribed in Sections 864 and 865 of the Revised Statutes; and they must be strictly complied with, in order to make such depositions admissible as against proper objections. Indeed, no such deposition is admissible in any event, unless it appears to the satisfaction of the court that the witness is dead, or gone out of the United States, or to a greater distance than one hundred miles from the place where the court is sitting, or that, by reason of age, sickness, bodily infirmity, or imprisonment, he is unable to travel and appear at court.[2] Where the witness testified in his deposition to the then existence of the fact which authorized its taking, that fact is presumed

[1] Revised Statutes, Section 863.

[2] Revised Statutes, Section 865.

to exist at the time the deposition is offered in evidence, and in the absence of contrary proof, the deposition itself will satisfy the court that it is entitled to be admitted.[1] Depositions may also be taken in patent cases in the mode prescribed by the laws of the respective States.[2]

Most objections to depositions, in order to be efficacious, must be made before the depositions are received in evidence; for when introduced with the acquiescence of the opposite party, they cannot afterward be excluded on the ground that they were not taken in accordance with the rules prescribed therefor.[3] But where evidence is pertinent to either of several possible defences, one or more of which were pleaded, and one or more of which were not pleaded by the defendant; the fact that the evidence was not objected to when taken or admitted, does not make it admissible in support of any defence which was not pleaded.[4]

§ 536. The judge may direct the jury to return a verdict for the defendant, where it is entirely clear that the plaintiff cannot recover, but not otherwise.[5] Such a direction may therefore be given, where want of novelty or want of invention is clearly shown by a prior patent,[6] but not where that question is doubtful.[7] And such a direction may be given where the question of infringement depends entirely upon the construction of the patent; and where that construction does not depend upon any doubtful question of the prior art.[8] But where the question of infringement depends upon the construction of the patent, and that construction depends upon a doubtful question in the prior art, the latter question should be left to the jury; and the

[1] Whitford *v.* Clark County, 119 U. S. 524, 1886.

[2] 27 Statutes at Large, Chap. 14, p. 7.

[3] Evans *v.* Hettich, 7 Wheaton, 453, 1822.

[4] Zane *v.* Soffe, 5 Bann. & Ard. 284, 1880.

[5] Klein *v.* Russell, 19 Wall. 463, 1873; Keyes *v.* Grant, 118 U. S. 25, 1886.

[6] Market St. Ry. Co. *v.* Rowley, 155 U. S. 625, 1895.

[7] San Francisco Bridge Co *v.* Keating, 68 Fed. Rep. 353, 1895.

[8] DeLoriea *v.* Whitney, 63 Fed. Rep. 611, 1894; Cramer *v.* Fry, 68 Fed. Rep. 201, 1895.

dependent question of infringement should also be left to the jury to decide.[1] A motion that the judge direct the jury to return a verdict for the defendant needs not to specify the reason on which it is based; but that reason will naturally be stated in the argument which is made to support the motion.[2]

§ 537. Instructions to juries set forth the construction of patents[3] and embody all the law that is applicable to the material facts in evidence, but need embody no other.[4] In ascertaining that law, the judges resort to the statutes of the United States, and to the decisions of the United States Supreme Court; and where further information is required, they examine or call to mind the decisions of the Circuit Courts of Appeals, and of the Circuit Courts of the United States. But judges are not bound to conform their instructions to any statements of law contained in any opinion of any court, unless that statement was strictly applicable to the case then before the court which made it.[5] The Supreme Court has sometimes decided cases, after full argument, quite contrary to its own previous *obiter dicta*; and the circuit court decisions contain a number of passing remarks which cannot be harmonized with the positive decisions of the supreme tribunal, nor be incorporated into any systematic and consistent science. The statements of the best text-writers are more likely to be followed by the federal courts than are the previous *dicta* of the judges of those courts, because the best legal authors steep their minds in all the subjects which they treat, and hold those subjects in solution there while writing their books, so as to avoid inconsistencies and attain harmony; while the *dicta* of judges are separately written down, without full opportunity for

[1] Royer *v.* Belting Co. 135 U. S. 325, 1890.

[2] May *v.* Juneau County, 137 U. S. 410, 1890.

[3] Holmes *v.* Truman, 67 Fed. Rep. 545, 1895.

[4] Haines *v.* McLaughlin, 135 U. S. 598, 1890.

[5] Day *v.* Rubber Co. 20 Howard, 216, 1857; Day *v.* Stellman, 1 Fisher, 487, 1859.

comparison with adjudicated precedents, or harmonization with established principles.

Instructions to juries may express the opinions of the judges upon the questions of fact to be decided,[1] but an instruction should not enforce those opinions upon the jury for its guidance,[2] and should not include the reading of a charge which has been given to a jury in another case.[3] While the judge is bound not to tell the jury how to decide any issue of fact, the judge will tell them what issues of fact they are to decide, and those are the issues in the pleadings, and not some other issue which the judge may think is the one upon which the merits of the case really depend.[4]

In the State courts of most of the States, counsel have a right to require all instructions to be given in writing; but the judges of the Federal courts are not controlled in the manner of charging juries by State regulations, and therefore instructions in patent cases may be given in writing, or may be given orally, at the option of the court.[5]

§ 538. The verdict in a patent action will be for the plaintiff, if every defence except non-infringement fails, and if that fails as to any one claim of the letters patent.[6] So also, the plaintiff is entitled to a verdict, where every defence fails except the sixteenth, seventeenth, and eighteenth, and where those defences lack application to one or more of the claims shown to have been violated.[7] So also, if the twenty-second, twenty-third, or twenty-fourth defence is the only successful one, and if that is successful only as to part of the alleged infringement, the plaintiff will be entitled to

[1] Haines *v.* McLaughlin, 135 U. S. 593, 1890; Coupe *v.* Royer, 155 U. S. 579, 1895.

[2] Turrill *v.* Railroad Co. 1 Wall. 491, 1863.

[3] Arey *v.* DeLorlea, 55 Fed. Rep. 323, 1893.

[4] Grant *v.* Raymond, 6 Peters, 244, 1832.

[5] Lincoln *v.* Power, 151 U. S. 442, 1894.

[6] Waterbury Brass Co. *v.* New York Brass Co. 3 Fisher, 43, 1858.

[7] Gage *v.* Herring, 107 U. S. 640, 1882; Gould *v.* Spicer, 15 Fed. Rep. 344, 1882; Cote *v.* Moffitt, 15 Fed. Rep. 345, 1883.

a verdict as to the residue; and the same thing may be true of the twenty-sixth or of the twenty-seventh defence.

§ 539. A new trial may be obtained by the defeated party, if the jury disregarded the instructions of the judge;[1] or failed to correctly apply them to the issues of the case;[2] but not where the only error complained of is an alleged wrong decision of such an issue, unless it was decidedly against the weight of evidence.[3]

Excessive assessment of damages, even where it is undeniably so, does not always entitle the defendant to a new trial. Such an error may be cured by the plaintiff remitting such a sum as the judge thinks constitutes the excess, in all cases where he thinks that the error of the jury arose from inadvertence; but where the circumstances of the case clearly indicate that the error arose from prejudice, or from reckless disregard of duty on the part of the jury, a new trial will be granted.[4] But no excessive verdict can be corrected by the Circuit Court of Appeals, unless the trial judge made some error which entitles the defeated party to a new trial.[5]

Errors made by judges may also entitle a party to a new trial, but no such error will have that effect unless it was excepted to at the time it was committed; nor where it consisted in erroneous admission of evidence, which the subsequent course of the trial rendered nugatory.[6] So, also, where the error of the judge consisted in erroneous instructions relevant to damages, the plaintiff may avoid a new

[1] Tucker *v.* Spalding, 13 Wallace, 453, 1881.

[2] Johnson *v.* Root, 2 Cliff. 108, 1862.

[3] Alden *v.* Dewey, 1 Story, 336, 1840; Stimpson *v.* Railroads, 1 Wallace, Jr. 164, 1847; Allen *v.* Blunt, 2 Woodbury & Minot, 121, 1846; Aiken *v.* Bemis, 3 Woodbury & Minot, 348, 1847; Wilson *v.* Janes, 3 Blatch. 227, 1854; Bray *v.* Hartshorn, 1 Cliff. 538, 1860; Roberts *v.* Schuyler, 12 Blatch. 448, 1875.

[4] Stafford *v.* Hair-Cloth Co. 2 Cliff. 83, 1862; Johnson *v.* Root, 2 Cliff. 108, 1862; Russell *v.* Place, 9 Blatch. 175, 1871.

[5] Hogg *v.* Emerson, 11 Howard, 607, 1850.

[6] Allen *v.* Blunt, 2 Woodbury & Minot, 121, 1846.

trial by consenting that the verdict be reduced to nominal damages and costs.[1]

Newly discovered evidence may also furnish a good ground for granting a new trial; but not where that evidence might, with due diligence, have been obtained before the former trial,[2] nor where it is merely cumulative.[3] But evidence is not merely cumulative, where it refers to facts not before agitated, though it may refer to defences which, in the former trial, were based on other facts.[4] A party moving for a new trial upon the ground of alleged newly discovered evidence, must succeed or fail on the strength or weakness of the case as it is disclosed in his affidavits, and in the answering affidavits of the other party; for the moving party is not permitted to rebut the latter; nor will he be entitled to a new trial, if the opposing affidavits make out a strong case against him.[5] When a new trial is granted on the ground of newly discovered evidence, the terms usually are that the costs of the former trial must first be paid by the applicant.[6]

§ 540. Trials by a judge without a jury require to be so managed that the issues of law and the issues of fact are kept entirely distinct; for his decisions on the former are reviewable by the Circuit Court of Appeals, while his finding of fact has the same operation as the verdict of a jury.[7] If the finding of the judge be a general one, it is conclusive on all issues of fact, and is also conclusive on all questions of law, except those which arise upon the pleadings, and those which the bill of exceptions specifically presents as having been ruled upon and excepted to in the progress of the trial.[8] If the finding of the judge be a special one, it

[1] Cowing *v.* Rumsey, 8 Blatch. 491, 1833.

[2] Washburn *v.* Gould, 3 Story, 122, 1844.

[3] Ames *v.* Howard, 1 Sumner, 482, 1833.

[4] Aiken *v.* Bemis, 3 Woodbury & Minot, 358, 1847.

[5] Ames *v.* Howard, 1 Sumner, 36, 1870.

[6] Aiken *v.* Bemis, 3 Woodbury & Minot, 358, 1847.

[7] Revised Statutes, Section 649; St. Paul Plow Works *v.* Starling, 140 U. S. 197, 1891.

[8] Insurance Co. *v.* Sea, 21 Wallace, 160, 1874.

will still be conclusive on the facts found; but the sufficiency of those facts to support the judgment will be open to review in the Circuit Court of Appeals.[1] Where the judge simply finds for the defendant, and enters a judgment accordingly, that judgment can be taken to the Circuit Court of Appeals for review only in the regular common law method of a bill of exceptions and a writ of error, and only on pure questions of law.[2] Where the judge finds as a fact that the patent is void for want of novelty, or that the defendant has not infringed it, and thereupon enters a judgment for the latter, it is undeniable that the fact so found is sufficient to support that judgment. In arriving at his opinion, the judge may have misunderstood or misapplied the tests of novelty, or of infringement, but still his finding is conclusive; because the Circuit Court of Appeals is authorized to examine nothing but the sufficiency of the facts found.[3] But if the judge finds that A. B. invented, made and used a certain described thing in the United States, prior to the invention of the patentee, or that the defendant made, used or sold only a certain described thing during the life of the patent, and therefore renders a judgment for the defendant, that judgment will be reversed by the Circuit Court of Appeals on a writ of error, if that court is of opinion that the thing invented, made and used by A. B. did not negative the novelty of the patent, or is of opinion that the thing made, used or sold by the defendant did really infringe the patent in suit.[4] These illustrations of the practice in trials by a judge without the aid of a jury show that where special findings of facts are adopted as the method of laying a foundation for a review of the case by the Circuit Court of Appeals, the finding ought to relate to the fundamental facts of the case, and not merely the conclusions of fact which are deducible therefrom.

[1] Revised Statutes, Section 700.

[2] Revised Statutes, Sections 649 and 700.

[3] Jennisons *v.* Leonard, 21 Wallace, 307, 1874.

[4] French *v.* Edwards, 21 Wallace, 147, 1874; Insurance Co. *v.* Sea, 21 Wallace, 160, 1874.

§ 541. Trial by referee may be instituted by an entry of the clerk of the court, made at the request of the parties, simply indicating that the case is to be referred to the person or persons named as referee; or it may be ordained by a stipulation in writing, signed by the parties or their attorneys, and filed in the case. When that is done, a rule may be issued, or an order of court may be entered, referring the case to the referee indicated by the parties, and directing him to hear and determine all the issues thereof. It thereupon becomes the duty of the referee to hear the parties, and then to decide the controversy and make a report to the court. The report may be special, setting forth the details of the evidence upon which it is based, or it may be general, giving only the conclusions to which that evidence carried the mind of the referee. To that report either party may except in writing, and upon the hearing of those exceptions, the court may adopt or reject the report and enter judgment accordingly, or it may recommit the report to the referee with further directions.[1]

Such is substantially the outline of the trial by referee, which is delineated in the decision just cited. Inasmuch as that form of trial is not provided for by any United States statute, its details are regulated by the laws of the particular State in which such a trial is had.[2] Recourse must therefore be had to those laws for sundry points of information relevant to the methods of taking testimony before referees; the time when referees' reports must be made; the weight attached to such reports on issues of fact; and the proper practice by means of which to secure the judgment of the court upon reviewable points.

§ 542. Judgments follow verdicts of juries, findings of judges, or reports of referees; unless those verdicts are set aside, those findings reconsidered and modified, or those reports rejected or recommitted. It is not the practice of the United States Circuit Courts to require a rule for a

[1] Heckers *v.* Fowler, 2 Wallace, 132, 1864.

[2] Revised Statutes, Sections 721 and 914.

judgment to be entered in any case. Judgments are entered by the clerk of the court under a special or general authority from the judge, and where so entered are binding as the act of the court.[1] The circumstances which justify courts in entering judgments in patent cases, for any sum above the amount of the verdict, finding, or report, but not exceeding three times the amount thereof, are explained in the chapter on damages. That the court has the same power in this particular, in cases where the damages are ascertained by the finding of the judge, or by the report of a referee, that it has in cases where they are ascertained by the verdict of a jury, is a point which has not been judicially decided, but is one which can hardly be doubted.

§ 543. Costs are recoverable by all plaintiffs who secure judgments for infringements of patents;[2] except where it appears on the trial that one or more of the claims of the letters patent are void for lack of being the subject of a patent, or for want of invention, or for want of novelty, and does not appear that the proper disclaimer was filed in the Patent Office before the commencement of the action;[3] and except where part of the patents sued upon are not recovered upon;[4] and except where only a small part of the infringement alleged by the plaintiff is found by the verdict.[5]

There is no United States statute which provides that defendants shall recover costs in any patent case. The common law of England allowed no costs to either party in any action at law;[6] and the statutes of Gloucester,[7] which

[1] Heckers *v.* Fowler, 2 Wallace, 132, 1864.

[2] Revised Statutes, Section 4919; Merchant *v.* Lewis, 1 Bond, 172, 1857.

[3] Revised Statutes, Sections 973 4917, and 4922.

[4] Adams *v.* Howard, 19 Fed. Rep. 319, 1884; Albany Steam Trap Co. *v.* Felthousen, 20 Fed. Rep. 640, 1884; Mann's Car Co. *v.* Monarch Car Co. 34 Fed. Rep. 130, 1888. Ligowski Clay Pigeon Co. *v.* Clay Bird Co. 34 Fed Rep. 328, 1888; National Machine Co. *v.* Brown, 36 Fed, Rep. 322, 1888; Schmid *v.* Mfg. Co. 37 Fed, Rep. 348, 1889.

[5] Marks Chair Co. *v.* Wilson, 43 Fed. Rep. 304, 1890.

[6] Day *v.* Woodworth, 13 Howard, 372, 1851.

[7] 6 Edward I. Chapter I. 1278.

supplied that defect as to plaintiffs, did not supply it as to defendants. The statute of 23 Henry VIII., Chapter 15, enacted, however, that where, in actions on the case, the plaintiff is nonsuited after the appearance of the defendant; or where the verdict happens to pass, by lawful trial, against the plaintiff, the defendant shall have judgment to recover his costs against the plaintiff, and shall have such process and execution for the recovery of the same, as the plaintiff might have had against the defendant, in case the judgment had been given for the plaintiff. This statute of Henry VIII. having been enacted before the founding of the English colonies in America, and being suited to the condition of society in the United States, is in force in the United States courts to the same extent that it would be if it were one of the rules of the common law.[1]

§ 544. All the items of costs which are taxable in the United States courts are specified in the United States statutes.[2] The province of a taxing officer is therefore limited to comparing suggested items with the particulars of those statutes, and to taxing those, and only those, which he finds enumerated therein.[3] And no expenses, other than taxable costs, can be lawfully inserted in any cost bill.[4] On most points, the statutes relevant to fees are so clear that they require no explanation; but in some particulars they needed and have received judicial construction. Several such cases may be conveniently explained in a few of the sections which immediately follow.

§ 545. One attorney's docket fee is taxable in each case against the defeated party.[5] There is no warrant for taxing the unsuccessful party with a separate docket fee for each

[1] Hathaway *v.* Roach, 2 Woodbury & Minot, 69, 1846; Bunker *v.* Stevens, 26 Fed. Rep, 249, 1885.

[2] Revised Statutes, 823, 983; The Baltimore, 8 Wallace, 392, 1869; Lyell *v.* Miller, 6 McLean, 422, 1855; Wooster *v.* Handy, 23 Fed. Rep. 60, 1885.

[3] Dedekam *v.* Vose, 3 Blatch. 153, 1853.

[4] Parks *v.* Booth, 102 U. S. 106, 1880.

[5] Dedekam *v.* Vose, 3 Blatch. 153, 1853; Troy Iron & Nail Factory *v.* Corning, 7 Blatch. 17, 1869; Parker *v.* Bigler, 1 Fisher, 285, 1857.

of his adversary's attorneys, nor with a separate docket fee for each term during which a case has been pending in court, nor for taxing any docket fee in favor of any attorney of the defeated party. Neither is there any warrant for taxing an attorney's deposition fee in favor of any attorney of the beaten party, or in favor of more than one attorney of the party which prevails in the action.[1] And taxable attorney's fees are taxed in favor of clients to help them pay their attorneys, and not in favor of attorneys as extra compensation.[2]

§ 546. The fees of the clerk of the court are in general taxable against the defeated party; but several of the items to which he is entitled are not so taxable, but are to be paid by the party for which he rendered the services to which they refer. Among those items, are copies of the record ordered by a party for his own use.[3] As the greater must include the less, this rule must apply also to copies of pleadings, depositions or other papers which form parts of the records of cases. The extent to which clerks may make records, and charge defeated parties therefor, depends upon the rules of each particular court. In some districts, those rules appear to be made with a view to giving the clerks as much scope in this respect as can be supported by any argument; while in other courts, the practice is to charge parties with no more recording than the reasonable requirement of each case seems to demand.

§ 547. The fees of a commissioner or other magistrate, who takes a deposition in a case, are generally taxable against the defeated party,[4] but if the deposition is not offered in evidence at the trial, those fees cannot be so taxed.[5] And reasoning by analogy from the taxation of attorneys' deposition fees, it should follow that magistrates' fees are not taxable on depositions which are offered in evidence, but are not admitted.[6]

[1] Revised Statutes, Section 824.

[2] Celluloid Mfg. Co. *v.* Chandler, 27 Fed. Rep. 9, 1886

[3] Caldwell *v.* Jackson, 7 Cranch, 277, 1812.

[4] Fry *v.* Yeaton, 1 Cranch's Circuit Court Reports, 550, 1809.

[5] Hathaway *v.* Roach, 2 Woodbury & Minot, 75, 1846.

[6] Revised Statutes, Section 824.

§ 548. Witness fees are generally taxable against the defeated party, whether the testimony was given orally in court or by deposition before a magistrate.[1] But they are not so taxable when the testimony is taken by deposition and the deposition is not offered,[2] or if offered, is not admitted in evidence.[3] Nor will a defeated party be taxed with the fees of more than three witnesses to one fact, unless the prevailing party satisfies the court by affidavit, that the additional witnesses were really necessary to adequately support his contention on that point.[4]

Whether any defeated party is taxable with the fees of any witness who testified on request and without a subpœna, is an unsettled question. It has been held in the affirmative by Judge WOODRUFF[5] and Judge HALL,[6] and in the negative by Justice MCLEAN,[7] Judge SAWYER,[8] and Judge LEAVITT.[9] The ablest arguments on the two sides of the issue are those of Judge WOODRUFF and Judge SAWYER; and there is probably nothing to be said on the subject that is not said in one or the other of the five cases cited. If it is necessary, in order to make witness fees taxable, that the witness should be served with a subpœna, it is not necessary that he should be so served by any officer. Service by a private person is sufficient.[10]

Witness fees are taxable in favor of a defendant, though his witnesses are not examined, because the action is not prosecuted; and where witnesses attend more than once at the same term, because of a stipulated postponement of the trial; their fees are to be taxed as for continuous attendance during the interim, and not as for repeated journeys

[1] Revised Statutes, Section 848.

[2] Hathaway *v.* Roach, 2 Woodbury & Minot, 63, 1846.

[3] Section 547 of this book.

[4] Bussard *v.* Catalino, 2 Cranch's Circuit Court Reports, 421, 1823.

[5] Dennis *v.* Eddy, 12 Blatch. 196, 1874.

[6] Cummings *v.* Plaster Co. 6 Blatch. 510, 1869.

[7] Dreskill *v.* Parish, 5 McLean, 213, 1851

[8] Spalding *v.* Tucker, 4 Fisher, 637, 1871.

[9] Woodruff *v.* Barney, 2 Fisher, 244, 1862.

[10] Power *v.* Semmes, 1 Cranch's Circuit Court Reports, 247, 1805.

from their homes.[1] Witnesses from a distance are entitled to fees for Sunday, where they are detained over that day.[2]

§ 549. The taxation of costs may properly be made at the time the judgment is entered, and that is the course which best secures the rights of the parties. But a blank may be left in the judgment for that purpose, and may be filled by a taxation made *nunc pro tunc*, after the judgment has been affirmed by the Circuit Court of Appeals.[3] Where the former practice is followed, the legality of the taxation may probably be reviewed by the Circuit Court of Appeals, if the case is taken to that forum by the defendant, to secure a reversal of a judgment against him for substantial damages as well as costs, and if the court affirms or modifies the judgment as to the damages.[4] But where only nominal damages and costs are adjudged against a defendant, he cannot take the case to the Circuit Court of Appeals for the purpose of securing a reversal of the judgment or a diminution of the costs.[5] Where a judgment for costs is entered against a plaintiff on the basis of a verdict for the defendant, the plaintiff may go to the Circuit Court of Appeals on a writ of error. If he secures a reversal of the judgment for errors on the trial, there will be no occasion for the court to consider the correctness of the taxation of costs. If, on the other hand, the court finds no error upon which to ground a reversal, it will seek for no error in the taxation.[6]

The clerks of the Circuit Courts are the primary taxing officers of those tribunals; but they perform that duty under the general or particular direction of the judges. The taxation of costs is ordinarily made by the clerk on his

[1] Hathaway *v.* Roach, 2 Woodbury & Minot, 63, 1846.

[2] Schott *v.* Benson, 1 Blatch. 564, 1850.

[3] Sizer *v.* Many, 16 Howard, 98, 1853.

[4] Parks *v.* Booth, 102 U. S. 106, 1880.

[5] Elastic Fabric Co. *v.* Smith, 100 U. S. 110, 1879; Paper-Bag Cases, 105 U. S. 772, 1881.

[6] Canter *v.* Insurance Companies, 3 Peters, 318, 1830.

own motion, or at the request of the prevailing party, and without notice to the defented party. If the latter is dissatisfied with the result, the court will hear his motion for a retaxation. If such a motion is accompanied with an explanation showing colorable ground for a claim of error in the taxation, the court will order the clerk to retax the costs, upon the mover giving the opposite party due notice of the time and place thereof, and paying the costs occasioned thereby.[1] Then, if either party is dissatisfied with the result of the retaxation, he may appeal to the court; but as a foundation for the hearing of such an appeal, he must secure from the clerk an itemized bill of the charges to which he objects;[2] and as a foundation for success on that hearing, must show that part or all of those items are unwarranted by the statute, or are untaxable because they refer to evidence which was immaterial to the case, and improperly taken therein.[3] All of these proceedings must take place at the term in which the judgment is entered;[4] except in cases where blanks for costs are left in judgments, pending writs of error from the Supreme Court.

§ 550. A writ of error properly taken out from the office of the clerk of the Circuit Court of Appeals,[5] will carry any action at law, for an infringement of a patent to that court for review, regardless of the amount of damages of controversy;[6] and whether the case was tried by a jury, by a referee, or by a judge alone.[7] But no writ of error can carry any question of fact to the Circuit Court of Appeals.[8]

The sole function of such a writ is to secure from that tribunal a review of the questions of law involved in a case,

[1] Collins *v.* Hathaway, Olcott's Reports, 182, 1845.

[2] Dedekam *v.* Vose, 3 Blatch. 153, 1853.

[3] Ecaubert *v.* Appleton, 67 Fed. Rep. 926, 1895.

[4] Biagrove *v.* Ringgold, 2 Cranch's Circuit Court Reports, 407, 1823.

[5] West *v.* Barns, 2 Dallas, 401, 1791.

[6] Revised Statutes, Section 699; 26 Statutes at Large, Chap. 517, Sec. 6.

[7] York & Cumberland Railroad Co. *v.* Myers, 18 Howard, 246, 1855; Heckers *v.* Fowler, 2 Wallace, 123, 1864.

[8] Heckers *v.* Fowler, 2 Wallace, 123, 1864.

or, where the finding below was made by a judge, and was special, to secure a review of the question whether the facts so found are sufficient to support the judgment based thereon.[1]

Any action at law for infringement of a patent which has been pending, and has been decided in the Supreme Court of the District of Columbia, may be taken by a writ of error to the Court of Appeals of the District of Columbia,[2] and if the validity of the patent is involved, the case may likewise be taken from that court to the Supreme Court of the United States.[3] But actions at law for infringements of patents cannot be taken from any Circuit Court of Appeals to the Supreme Court by a writ of error; though any Circuit Court of Appeals may certify to the Supreme Court any question of law upon which it desires the instruction of that court for its proper decision; and the Supreme Court may send a certiorari to any Circuit Court of Appeals, requiring any case for infringement of a patent to be sent to the Supreme Court for its review and determination.[4]

§ 551. Bills of exception, allowed and signed, or sealed by the judge, constitute the only mode by which the questions of law that arise on the trial of a case, can be prepared for transmission to the Supreme Court in pursuance of a writ of error.[5] But a paper which is incorporated in the record, and which has all the substantial characteristics of a bill of exceptions, will be treated as such, even though it is not so entitled.[6] Such a document should state no more of the case than is necessary to present the questions which are reviewable in the Circuit Court of Appeals, and which the plaintiff in error seeks to have reviewed there.[7] If those questions relate only to the pleadings, the

[1] Revised Statutes, Section 700.

[2] 27 Statutes at Large, Chap. 74, Sec. 7, p. 435.

[3] 27 Statutes at Large, Chap. 74, Sec. 8, p. 436.

[4] 26 Statutes at Large, Chap. 517, Sec. 6.

[5] Insurance Co. *v.* Lanier, 95 U. S. 171, 1877.

[6] Herbert *v.* Butler, 97 U. S. 319, 1877.

[7] Hausknecht *v.* Claypool, 1 Black. 431, 1861.

pleadings only should be inserted in the bill of exceptions. Where those questions relate only to the competency of a witness, the bill of exceptions need only show that the witness was offered, and was accepted or rejected, as the case may be, and that such admission or rejection was duly excepted to, and, in case of a rejection of a witness to want of novelty, that due notice of the fact, to be proved by him, was served on the opposite party;[1] and where particular answers of a competent witness were excluded by the court below, the bill of exceptions must contain those answers, and must show that they were material to the issues; and where particular questions were excluded, and therefore not answered, the bill of exceptions must show what facts the party offered to prove by means of those questions, and that such facts were material to the case.[2] And where a particular question was objected to, but was admitted and was answered, the bill of exceptions must show what the answer was, in order to enable the Circuit Court of Appeals to pass upon the propriety of the evidence.[3]

§ 552. Where the questions which are sought to be brought before the Circuit Court of Appeals, relate only to the instructions which the court below gave, or refused to give to the jury, the bill of exceptions should set forth the issues of the pleadings, and the substance of the charge or refusal to charge, as the case may be, together with whatever part of the evidence is necessary to enable the Circuit Court of Appeals to decide upon the propriety, or impropriety, of the action of the court below. The issues of the pleadings should be stated in the bill of exceptions, for otherwise the appelate tribunal cannot know whether the charge or refusal to charge, which was excepted to, was material to the case; and because the Circuit Court of Appeals will not sit to try moot issues of law, nor to estab-

[1] Philadelphia & Trenton Railroad Co. *v.* Stimpson, 14 Peters, 448, 1840; Blanchard *v.* Putnam, 8 Wallace, 420, 1869.

[2] Railroad Co. *v.* Smith, 21 Wallace, 255, 1874.

[3] Lovell *v.* Davis, 101 U. S. 542, 1879.

lish legal propositions in cases wherein those propositions are not involved.[1] The substance of the charge, rather than the charge *in extenso*, should be stated in the bill, because the Circuit Court of Appeals cannot afford to be occupied in listening to minute criticisms and observations upon expressions incidentally introduced into a charge for purposes of argument or illustration, and which, if they were the direct point in judgment, might need qualification, but which do not show, that upon the whole the relevant law was not justly expounded to the jury.[2] But the whole substance of the charge should be stated where nothing but charged matter is excepted to; because if part is omitted, the Circuit Court of Appeals cannot know that the omitted portion did not cure the faults of the parts inserted. So also, where the matter which is excepted to is a refusal to charge; not only the refused instruction, but also the whole substance of the given charge, should be inserted in the bill of exceptions; for otherwise the Circuit Court of Appeals cannot be informed whether the refused instruction was not substantially contained in the charge which was actually given; and because judges are never bound to instruct juries in the form requested, provided they substantially embody the whole of the relevant law in the charges which they give.[3] Where nothing but charged matter is excepted to, the bill of exceptions should not contain any part of the evidence; because the only question before the Circuit Court of Appeals in such a case is the correctness of the charge.[4] But where a refusal to charge is excepted to, the bill must contain the evidence to which the refused instruction relates, or must contain a statement of facts pertinent to that point, and a statement that evidence was introduced tending to prove those facts; because

[1] Jones *v.* Buckell, 104 U. S. 554, 1881.

[2] Evans *v.* Eaton, 7 Wharton, 356, 1822.

[3] Indianapolis & St. Louis Railroad Co. *v.* Horst, 93 U. S. 295, 1876.

[4] Pennock *v.* Dialogue, 2 Peters, 1, 1829.

no court is bound to give any charge which does not relate to the evidence, no matter how sound the proposed instruction may be, as a proposition of law.

§ 553. Specific exceptions must be made to instructions, in order to entitle the objector to a review of those instructions in the Circuit Court of Appeals. Where a requested instruction is refused, and the refusal is excepted to, that refusal will be sustained by the Circuit Court of Appeals, if the requested instruction was unsound in any particular.[1] Counsel ought therefore to carefully separate their propositions of law from each other when framing their requests for instructions, lest one erroneous proposition deprive them of the benefit of several sound ones.

§ 554. Exceptions to charges, or to refusals to charge, must be made and noted while the jury is at the bar.[2] But bills of exception may be drawn up, and signed or sealed by the judge at any time before the expiration of the term, unless the judge enforces some rule of his court which prescribes a shorter time for the preparation and presentation of such documents for his approval. And, if not otherwise too late, such bills may be prepared and signed after a writ of error has been sued out from the Circuit Court of Appeals to transfer the case to that tribunal.[3]

[1] Indianapolis & St. Louis Railroad Co. *v.* Horst, 93 U. S. 295, 1876.

[2] Phelps *v.* Mayer, 15 Howard, 160, 1853.

[3] Hunnicutt *v.* Peyton, 102 U. S. 353, 1880.

CHAPTER XIX.

DAMAGES.

555. The generic measure of damages.
556. Established royalties as specific measures of damages.
557. Tests applied to royalties on behalf of defendants.
558. Tests applied to royalties on behalf of plaintiffs.
559. Money paid for infringement already committed, is no measure of damages in another case.
560. Royalties reserved on sales of patents.
561. Royalties for licenses to make and use, and royalties for licenses to make and sell.
562. Proportion of licensed to unlicensed practice of an invention.
563. Measure of damages in the absence of an established royalty.
564. Damages for unlicensed making, without unlicensed selling or using.
565. Evidence of damages.
566. Indirect consequential damages.
567. Exemplary damages.
568. Increased damages.
569. Actual damages not affected by infringement being unintended.
570. Counsel fees and other expenses.
571. Interest on damages.
571*a*. Damages in design cases.

§ 555. THE pecuniary injury which a plaintiff incurs by reason of a defendant's infringement of his patent, is the generic measure of the damages which that plaintiff is entitled to recover on account of that infringement.[1] Such an injury is often called the plaintiff's loss,[2] and sometimes it is strictly that, but often it is a loss only in the sense that it is a failure to acquire a just and deserved gain.[3] Whether the injury caused to a plaintiff by an infringement

[1] Coupe *v.* Royer, 155 U. S. 582, 1895; Goodyear *v.* Bishop, 2 Fisher 158, 1861; Graham *v.* Mfg. Co. 24 Fed. Rep. 643, 1881; Brickill *v.* Baltimore, 60 Fed. Rep. 98, 1894.

[2] Suffolk Co. *v.* Hayden, 3 Wallace, 315, 1865; Cowing *v.* Rumsey, 8 Blatch. 36, 1870; McComb *v.* Brodie, 1 Woods, 161, 1871; La Baw *v.* Hawkins, 2 Bann. & Ard. 563, 1877.

[3] Hobbie *v.* Smith, 27 Fed. Rep. 662, 1886.

was a loss in one or the other of these senses, its magnitude must always be ascertained, in order to ascertain the amount of the damages which he is entitled to recover. The amount of the profits which the defendant derived from his infringement, has no direct relevancy to the question of the plaintiff's damages; because these profits are sometimes much larger than the plaintiff's pecuniary injury;[1] and where they are smaller, that fact is no defence to the plaintiff's right to recover full damages for the pecuniary injury which the infringement caused him to incur.[2] But where a patentee has elected to recover the infringers profits, instead of his own damages, in an action in equity; he cannot recover, for the same infringement, his damages in an action at law.[3]

To ascertain the extent of the pecuniary injury which a particular infringement caused a particular plaintiff, it is necessary to ascertain the difference between his pecuniary condition after that infringement, and what that condition would have been if that infringement had not occurred.[4] That difference depends upon the way in which the plaintiff availed himself of the exclusive right infringed, at the time the infringement took place. If he so availed himself, by granting licenses to others to do the things which the defendant did without a license, then that difference consists in his not having received the royalty which such a license would have brought him.[5] If he so availed himself, by keeping his patent right a close monopoly and granting licenses to no one, then that difference consists of the

[1] Seymour *v.* McCormick, 16 Howard, 480, 1853; New York *v.* Ransom, 23 Howard, 487, 1859; Packet Co. *v.* Sickles, 19 Wallace, 611, 1873.

[2] Emerson *v.* Simm, 6 Fisher, 281, 1873; Dental Vulcanite Co. *v.* Van Antwerp, 2 Bann. & Ard. 255, 1876.

[3] Child *v.* Iron Works, 19 Fed. Rep. 258, 1884.

[4] Yale Lock Co. *v.* Sargent, 117 U S. 552, 1885.

[5] Seymour *v.* McCormick, 16 Howard, 480, 1853; New York *v.* Ransom, 23 Howard. 487, 1859; Philip *v.* Nock, 17 Wallace, 462, 1873; Clark *v.* Wooster, 119 U. S. 326, 1886; Tilghman *v.* Proctor, 125 U. S. 143, 1887; Graham *v.* Mfg. Co. 24 Fed Rep. 643, 1881; Timken *v.* Olin, 41 Fed. Rep. 171, 1890.

money he would have realized from such a close monopoly if the defendant had not infringed, but which that infringement prevented him from receiving.[1] Therefore there are several methods of assessing damages for infringements of patents. The primary method consists in using the plaintiff's established royalty as the measure of those damages;[2] and the second consists in ascertaining those damages by ascertaining what the defendant's interference with the plaintiff's close monopoly prevented the latter from deriving therefrom.[3] It is convenient to consider these two criteria of damages separately, and in the order in which they have been stated.

§ 556. Royalties, as measures of damages, are sometimes objected to by defendants, and sometimes by plaintiffs. When invoked by a plaintiff, a royalty is liable to one class of tests, applied on behalf of the defendant; and when invoked by a defendant to limit the plaintiff's recovery, it is liable to another class of tests, applied on behalf of the plaintiff.

§ 557. A defendant may successfully object to a given royalty, as a measure of the plaintiff's damages, unless it was uniform, and was actually paid or secured before the defendant's infringement was committed, by a sufficient number of persons to show that people who have occasion to purchase a license under the patent, can afford to pay that royalty.[4] The sale of a single license is not sufficient to establish a royalty;[5] because one purchaser may give a larger sum for a license than he or any other can afford to pay; whereas such a business error is not likely to be made by a considerable number of persons when buying licenses

[1] Philip *v.* Nock, 17 Wallace, 462, 1873; Yale Lock Co. *v.* Sargent, 117 U. S. 552, 1885; McComb *v.* Brodie, 1 Woods, 153, 1871; Covert *v.* Sargent, 38 Fed. Rep. 238, 1889.

[2] Brickill *v.* Baltimore, 60 Fed. Rep. 98, 1894.

[3] Zane *v.* Peck, 13 Fed. Rep. 475, 1882.

[4] Rude *v.* Westcott, 130 U. S. 152, 1889; Adams *v.* Stamping Co. 28 Fed. Rep. 366, 1886; Hunt Bros. Fruit Packing Co. *v.* Cassidy, 53 Fed. Rep. 262, 1892.

[5] Judson *v.* Bradford, 3. Bann & Ard. 549, 1878; Vulcanite Paving Co. *v.* Pavement Co. 36 Fed. Rep. 378, 1888.

under the same patent. The unanimous opinion of twelve average men is thought, to be the most reliable criterion of guilt or innocence; but no reasonable person would hold that view of the opinion of any one of the twelve. In like manner, the unanimous acquiescence of a considerable number of men in a particular royalty, is evidence of its substantial justice, while the acquiescence of one only of the same men would have no convincing force.

The amount of the royalty relied upon must have been actually paid or secured by the licensees in order to make it a measure of damages against other infringers. Were the rule otherwise, there would be no safeguard against collusion between patentees and licensees for the purpose of imposing on infringers and other third parties. It follows that the mere production of a quantity of licenses, purporting to have been granted at a certain rate, cannot establish a royalty at that rate. Somebody must make oath that the ostensible price of the licenses was their true price, before they can have that effect. The oath and not the license being the best evidence of the royalty, the royalty may be proved by the oath without the production of the license, even where the license is in writing.[1]

A royalty, in order to be binding on a defendant who was a stranger to the licenses which established it, must be a uniform royalty.[2] This rule does not imply that a patentee may not change the rate of his royalty as often as he can get a sufficient number of licensees to acquiesce in such a change;[3] but it does exclude from consideration all such licenses as were given at variant rates, for no better reason than variant ability on the part of the licensees to negotiate for a license or to resist a suit for infringement.[4]

So, also, a particular royalty may be successfully objected to by a defendant, if it was not established till after the

[1] Wooster *v.* Simonson, 20 Fed. Rep. 316, 1884; Timken *v.* Olin, 41 Fed. Rep. 170, 1890.

[2] Westcott *v.* Rude, 19 Fed. Rep. 833, 1884.

[3] Asmus *v.* Freeman, 34 Fed. Rep. 902, 1888.

[4] Black *v.* Munson, 14 Blatch. 268, 1877; United Nickel Co. *v.* Railroad Co. 36 Fed. Rep. 190, 1888.

infringement sued upon was committed.[1] And it is probable that a defendant may avoid the application of a particular royalty by showing that a different rate was established in the particular city, county or State wherein he unlawfully availed himself of the patentee's invention.

§ 558. A plaintiff may successfully object to a particular royalty as a measure of his damages, where that royalty was established, and was intended to be established, within a particular territory only, or where it was changed or abandoned before the infringement in suit was committed. These two points rest upon obvious reasons. A patentee may wish to hold a close monopoly on his invention in Maine, while willing to grant licenses in Florida; or he may rightfully demand a much larger royalty in Minnesota than that which he is willing to accept in Texas or in Oregon. In such a case, it is clear that his Oregon royalty is not to be forced upon him for infringement committed in Minnesota; and that his business in Maine is not to be ruined by infringers who have nothing worse to fear at the end of the suit than the payment of a royalty like that established in Florida. So, also, it has often happened, and may happen again, that an inventor is forced by poverty, or other misfortune, to accept inadequate royalties during the earlier years of his exclusive right. In such a case, it is clear that he ought to be permitted to increase the rate whenever he can get licensees to consent thereto, or to abandon his royalty altogether and hold a close monopoly on his invention, as far as he can do so consistently with licenses outstanding.

§ 559. Money paid for infringement already committed does not establish nor tend to establish a royalty.[2] A price

[1] Emigh *v.* Railroad Co. 6 Fed. Rep 284, 1881.

[2] Rude *v.* Westcott, 130 U. S. 152, 1889; Cornely *v.* Marckwald, 131 U. S. 159. 1889; Black *v.* Munson, 14 Blatch. 268, 1877; Greenleaf *v.* Mfg. Co. 17 Blatch. 253, 1879; Matthews *v.* Spangenberg, 14 Fed. Rep. 350, 1882; National Car Brake Shoe Co. *v* Mfg. Co. 19 Fed. Rep 517, 1884; Westcott *v.* Rude, 19 Fed. Rep. 832, 1884; Gottfried *v.* Brewing Co. 22 Fed. Rep. 433, 1884; Cornely *v.* Marckwald, 32 Fed. Rep. 292 1885; United Nickel Co *v* Railroad Co. 36 Fed. Rep. 190. 1888; Keyes *v.* Refining Co. 43 Fed. Rep. 478. 1890.

paid to compromise a pending action, or an existing right of action, may sometimes be larger and sometimes be smaller than a proper royalty would be. It may be larger where the infringer is a person who is disinclined to litigation, or where he has some reason to fear a judgment for triple damages, or where the compromise releases him not only from damages, but also from all rights of action for infringer's profits. It may be smaller where the infringer is presumably insolvent, or where the amount involved is too small to justify the expense incident to its collection by an action at law.

§ 560. A royalty which is reserved as the whole or a part of the purchase price of a patent, is not a proper one to measure damages as against an infringer.[1] It may be too large, or it may be too small for that purpose. It will be too large when the patent is of such a nature that the buyer can afford to pay more for a close monopoly, than for a license to compete with other licensees.[2] It will be too small, where it is for the interest of the owners of the patent to subdivide the right to practice the invention. In the latter class of cases, the buyer, in order to get paid for introducing the invention and retailing the licenses, must sell them at a higher rate than that which he pays to the patentee.

§ 561. A royalty provided for in licenses to make and use, is no measure of damages for an infringement which consisted of making and selling the patented thing; nor is a royalty which was established by licenses to make and sell specimens of the invention covered by a patent, any criterion of the injury which may have been inflicted on the pecuniary interests of the owner by unlawfully making and using such specimens.[3] These rules rest upon undeniable reasons. The value of some patents resides almost entirely in the exclusive right to make and sell, while that of others

[1] La Baw *v.* Hawkins, 2 Bann. & Ard. 564, 1877.

[2] Colgate *v.* Mfg. Co. 28 Fed. Rep. 147, 1886.

[3] Colgate *v.* Mfg. Co. 28 Fed. Rep. 147, 1886.

consists almost wholly in the exclusive right to make and use the inventions which they respectively cover.

§ 562. In measuring damages with a royalty, due regard must be had to proportion. Where an infringement was smaller in extent or shorter in duration than the corresponding doings which were authorized by the licenses which established the royalty, it is but just that the damages should be assessed at a correspondingly smaller sum, unless there are special facts in the case which render the particular extent of the infringement immaterial to the plaintiff.[1] In like manner, damages will amount to a sum correspondingly larger than the royalty which constitutes their criterion, when the infringement in suit was larger or was longer than the doings authorized by the licenses which established the royalty. So, also, where only part of the inventions covered by a particular patent are unlawfully appropriated by an infringer, he is liable for only an equitable proportion of the royalty which has been established for all of those inventions jointly;[2] and where a royalty has been established for the joint employment of all of the inventions covered by several patents, damages for the infringement of part of those patents may be equitably assessed by dividing that royalty into portions proportionate to the value of the several inventions covered by those patents.[3] But the plaintiff must furnish data in his evidence, upon which to make this division.[4]

§ 563. Where no established royalty is applicable as a measure of the damages caused by a particular infringement, those damages may sometimes be ascertained by the second method; that is, by finding what the plaintiff would

[1] Birdsall *v.* Coolidge, 93 U. S. 70, 1876; Judson *v.* Bradford, 3 Ban. & Ard. 549, 1878; Wooster *v.* Simonson, 16 Fed. Rep. 680, 1883; Westcott *v.* Rude, 19 Fed. Rep. 834, 1884; Bates *v.* Railroad Co. 32 Fed. Rep. 628, 1887.

[2] Willimantic Thread Co. *v.* Clark Thread Co. 27 Fed. Rep. 865, 1886; Asmus *v.* Freeman, 34 Fed. Rep. 903, 1888.

[3] Porter Needle Co. *v.* Needle Co. 23 Fed. Rep. 829, 1885.

[4] Hunt Bros. Fruit Packing Co. *v.* Cassidy, 53 Fed. Rep. 262, 1892.

have derived from his monopoly if the defendant had not interfered, but which he failed to realize because of that interference with his rights. Where the owner of a patent is able to supply the whole demand for the thing it covers or produces, and where the whole demand would go to him if not diverted by some infringer, the hurtful competition of a particular infringer may reduce the amount of the patentee's sales, or may necessitate a reduction of his prices, or may operate in both these injurious ways. In such a case, the sum of the profits which the patentee would have derived from the sales made by the infringer, if the patentee had made those sales, and the sum of the reduction of prices which the infringer's competition compelled the patentee to make upon his own sales, will constitute the amount of the patentee's damages.[1] Or the patentee's damages may consist of one of these elements without the other, where the other is absent or cannot be proved.[2] Proof of the first of these elements includes evidence to show what profits the patentee would have derived from the infringer's sales, if he himself had made them without interference from the infringer;[3] and evidence to show that he could have supplied the articles which the infringer sold;[4] and evidence to show that the persons who purchased those articles from the infringer would have bought them from him, if no infringer had interfered.[5] But the last of these points may be sufficiently established without being demonstrated; because demonstration would generally be impossible, and because

[1] Fitch *v.* Bragg, 16 Fed Rep. 247, 1883; Hobbie *v* Smith, 27 Fed. Rep. 662, 1886; Creamer *v.* Bowers, 35 Fed. Rep. 207, 1888.

[2] Yale Lock Co. *v.* Sargent, 117 U. S. 552, 1885; Boesch *v.* Graff, 133 U. S. 705, 1891; Seabury *v.* Am Ende, 152 U. S. 569, 1894; Am Ende *v.* Seabury, 43 Fed. Rep. 673, 1890.

[3] Cornely *v.* Marckwald, 131 U. S. 161, 1889.

[4] Crosby Valve Co. *v.* Safety Valve Co. 141 U. S. 452, 1891.

[5] Dobson *v.* Dornan, 118 U. S. 18, 1885; Goodyear *v* Bishop, 2 Fisher 161, 1861; Magic Ruffle Co. *v.* Douglas, 2 Fisher, 340, 1863; Sargent *v.* Mfg. Co. 17 Blatch. 247, 1879; Hall *v.* Stern, 20 Fed. Rep. 788, 1884; Roemer *v.* Simon, 31 Fed. Rep. 41, 1887; Bell *v.* Stamping Co. 32 Fed. Rep. 551, 1887; Tatum *v.* Gregory, 51 Fed. Rep. 447, 1892.

every reasonable doubt relevant thereto is to be resolved in favor of the plaintiff.[1] Proof of the second element includes evidence to show that it was the defendant's infringement that caused, or at least helped to cause, the reduction of prices which the patentee was compelled to make,[2] and evidence of the extent of the reduction so caused ;[3] but it does not include evidence that the patentee would have been asked to supply the particular demand which was supplied by the defendant, if the defendant had not supplied it.

Where damages cannot be assessed on the basis of a royalty, nor on that of lost sales, nor on that of reduced prices; the proper method of assessing them is to ascertain what would have been a reasonable royalty for the infringer to have paid.[4] In determining this point, where the infringement consisted in making and selling, or in selling after a purchase, the profits of the defendant may be considered ;[5] and where the infringement consisted in using, the cost and the utility of the patented process or thing, as compared with other processes or things known at the time of the infringement, and capable of doing similar work, may be the leading guides.[6] But those profits or advantages do not alone show what a reasonable royalty would have been, because it would not be reasonable for a royalty to be as large as the entire benefit derived from the business by a licensee. Therefore an instruction to a jury, that the plaintiff was entitled to recover whatever value the defendant had received from his use of the plaintiff's invention, was an error.[7]

[1] Creamer *v.* Bowers, 35 Fed. Rep. 208, 1888.

[2] Ingersoll *v.* Musgrove, 3 Bann. & Ard 304, 1878; Holmes *v.* Truman, 67 Fed. Rep. 545, 1895

[3] Cornely *v.* Marckwald, 131 U. S. 161, 1889; Boesch *v.* Graff, 133 U. S. 703, 1890.

[4] Ross *v.* Montana Ry. Co. 45 Fed. Rep. 431, 1890; Hunt Bros. Fruit Packing Co. *v.* Cassidy, 53 Fed. Rep. 262, 1892; Hunt Bros. Fruit Packing Co. *v.* Cassidy, 64 Fed. Rep. 586, 1894.

[5] Hunt Bros. Fruit Packing Co. 64 Fed. Rep. 587, 1894.

[6] Suffolk Co. *v.* Hayden, 3 Wall. 315, 1865; Ross *v.* Montana Ry. Co. 45 Fed. Rep. 431, 1890; Lee *v.* Pillsbury, 49 Fed. Rep. 748, 1892; Brickill *v.* Baltimore, 60 Fed. Rep. 98, 1894.

[7] Coupe *v.* Royer, 155 U. S. 581, 1895.

§ 564. Damages for infringement by making, without unlawfully selling or using, specimens of a patented thing will be nominal only,[1] unless there is an established royalty for such making, or unless such making is followed by using or selling in a foreign country, or is followed by using or selling in this country after the expiration of the patent. Where an infringer made specimens of a thing covered by a patent, and afterward sold or used them in a foreign country, the measure of damages is whatever royalty has been established for a license to manufacture such specimens for such a purpose.[2] Where no royalty of the kind has been established, there is generally no way of assessing damages in such a case other than to determine what a reasonable royalty would have been. Damages can seldom be assessed in such a case on any theory that the infringer's doings interfered with the patentee's sales; because it will generally be impossible to prove that the foreign demand would otherwise have come to the patentee. These considerations seem also to apply to cases where the infringement consisted of making specimens of a patented thing shortly before the expiration of the patent, with a view to using or selling them shortly after that event. Such a scheme of proceeding is undoubtedly injurious to a patentee, for if persons wait till after the expiration of a patent before making the articles it covers, they will not be able to use or sell those articles till some time still later; and during the interval the patentee may nearly or quite maintain his former command of the market.

§ 565. The evidence of damages must be reasonably definite,[3] in order to justify a jury in finding a verdict for more than a nominal amount. Conjecture will not perform the office of proof, nor can imagination take the place of calculation in this behalf.[4] But this rule is not to be used to

[1] Whittemore *v.* Cutter, 1 Gallison, 483, 1813; Carter *v.* Baker, 4 Fisher, 419, 1871.

[2] Ketchum Harvester Co. *v.* Johnson Harvester Co. 8 Fed. Rep. 586, 1881.

[3] Creamer *v.* Bowers, 35 Fed. Rep. 208, 1888.

[4] New York *v.* Ransom, 23 Howard, 487, 1859.

defeat the ends of justice. It may happen that a plaintiff can prove the measure of his damages with precision, while unable to prove the real extent of the defendant's infringement. In such a case, the defendant usually can remove the uncertainty, because he is likely to know or be able to ascertain what and how much he has done. If by omitting to supply the information, a defendant could avert a verdict for proper damages, he could easily defeat a meritorious cause. But the law will not allow itself to be thus circumvented. On the contrary, it is the rule that where a plaintiff introduces evidence to show that the damages were large, and to show the amount of those damages as accurately as the nature of the case permits him to do, and where the defendant offers no evidence upon the subject, it becomes the function of the jury to estimate those damages as best they can, on the basis of the plaintiff's evidence.[1] In making such an estimate, a jury ought to resolve every point of uncertainty against the defendant, for he had it in his power to give them accurate data upon which to compute.[2]

§ 566. Remote consequential damages cannot be embodied in a verdict for an infringement of a patent.[3] The instances in which such damages have been claimed are but few, but they are likely to become more numerous hereafter. It is therefore proper to mention such injuries as will probably be held to fall within such a category.

Pecuniary injury may result to a patentee from a particular infringement, in that it caused him to lose sales on unpatented articles usually sold with the patented thing in question; or in that it so unexpectedly reduced the business of the patentee as to make it necessary for him to sell unpatented property at less than its real value, or to borrow money at more than a proper rate of interest, in order to meet his pecuniary engagements; or in that it encouraged

[1] Stephens *v.* Felt, 2 Blatch. 38, 1846.

[2] National Car Brake Shoe Co. *v.* Mfg. Co. 19 Fed. Rep. 520, 1884.

[3] Carter *v.* Baker, 4 Fisher, 421, 1871.

other persons to infringe, from whom, by reason of insolvency or other obstacle, no recovery can be obtained; or in that such infringement caused the patentee so much trouble and anxiety that he incurred loss from inability to attend to other business. But pecuniary injury of either of these kinds would be such an indirect consequential matter as not to furnish any part of a proper basis for recoverable damages.

§ 567. Exemplary damages cannot lawfully be given by a jury for *any* infringement of a patent.[1] The meaning of this rule is that juries are to base verdicts on plaintiff's injuries, and not on defendant's ill-deserts. Their function is to award compensation to the injured, not punishment to the injurer. The power to inflict punitive damages is committed by the statute to the judge. He may exercise that power by entering a judgment for any sum above the amount of the verdict, not exceeding three times that amount, together with costs,[2] or by declining to increase the damages beyond the amount found by the verdict; and in either case his judgment will not be overruled by the Circuit Court of Appeals, unless the evidence clearly demands it.[3] The costs are to be added to the increased verdict, and the judgment cannot be entered for a sum three times greater than the aggregate of the verdict and the costs; and if, for any reason, no costs are awarded to the plaintiff, that fact neither ousts the power of the court to enter a judgment for a sum larger than the verdict, nor constitutes a reason for exercising that power where no other reason exists.[4] But that power will be exercised where the defendant's infringement was deliberate and intentional, even though it may have been committed under an erroneous opinion of

[1] Wilbur *v.* Beecher, 2 Blatch. 143, 1850; Hall *v.* Wiles, 2 Blatch. 200, 1851; Parker *v.* Hulme, 1 Fisher, 56, 1849; Haselden *v.* Ogden, 3 Fisher, 378, 1868; Russell *v.* Place, 5 Fisher, 134, 1871.

[2] Revised Statutes, Section 4919; Seymour *v.* McCormick, 16 Howard, 489, 1853.

[3] Topliff *v.* Topliff, 145 U. S. 174, 1892.

[4] Guyon *v.* Serrell, 1 Blatch. 246, 1847.

the plaintiff's rights;[1] or where the defendant acted in bad faith, or has been stubbornly litigious, or has caused unnecessary trouble and expense to the plaintiff;[2] but not merely because the defendant's defence was so extensive as to require great expenditure to overcome it.[3]

§ 568. Increased damages may properly be awarded by a court, where it is necessary to award them in order to prevent a defendant infringer from profiting from his own wrong, whether that wrong was intentional or was unwitting. The power conferred by the statute is general. It is not confined to awarding punitive damages, but is to be exercised "according to the circumstances of the case."[4] Among the circumstances of patent cases is the fact that the profits which defendants derive from their infringements are often much larger than the actual damages which those infringements cause plaintiffs to sustain. If, in such a case, the defendant is forced to pay no more than the actual damages, it is clear that he will have derived advantage from his own wrong. It would be an imperfect system of law that would thus put a premium upon its own violation. Prior to 1882 it was understood that means of preventing such a result resided in an option, which it was said every patentee had, of suing at law for his damages, or in equity for the infringer's profits.[5] But in that year that doctrine was set aside by the Supreme Court, and the jurisdiction of equity was denied to a large class of cases which would be entitled to such a jurisdiction under such a rule.[6] In a case where no injunction happens to be proper, and wherein

[1] Russell *v.* Place, 9 Blatch. 175, 1871; Peck *v.* Frame, 9 Blatch. 194, 1871.

[2] Day *v.* Woodworth, 13 Howard, 372, 1851; Teese *v.* Huntingdon, 23 Howard, 2, 1859.

[3] Welling *v.* La Bau, 35 Fed. Rep. 303, 1888.

[4] Revised Statutes, Section 4919.

[5] Tucker *v.* Spalding, 13 Wallace, 453, 1871; Birdsall *v.* Coolidge, 93 U. S. 68, 1876; Perry *v.* Corning, 6 Blatch. 134, 1868; Howes *v.* Nute, 4 Cliff. 174, 1870; Cowing *v.* Rumsey, 8 Blatch. 36, 1870; Smith *v.* Baker's Administrators, 1 Bann. & Ard. 117, 1874.

[6] Root *v.* Railway Co. 105 U. S. 189, 1881.

the defendant's profits are larger than the plaintiff's damages, there is now no certain means of preventing the defendant from deriving advantage from his own wrong, other than that which resides in the power of the court to enter a judgment for a larger sum than the actual damages found in the verdict. That being the only certain means of making infringement unprofitable to infringers, it may well be freely used for that purpose by the Federal courts.[1] Exemplary or increased damages are not forfeitures, and liability to be compelled to pay such damages, does not give an infringer any right to withhold his testimony, as tending to criminate himself.[2]

§ 569. A verdict for actual damages cannot be averted by evidence that the defendant was ignorant of the existence of the patent at the time he infringed.[3] All infringers have constructive notice of all patents, because all letters patent are recorded in the Patent Office. There is no more hardship involved in the rule that infringers are bound to take notice of patents, than there is in the rule that buyers of land are bound to take notice of the real estate records, or in the rule that all citizens are bound to take notice of the laws of their country. The amount of pecuniary injury which an infringement causes a patentee, is not affected by the fact that the infringer did not know of the existence of the patent which he infringed; and where one man has obtained possession, through his own mistake, of the fruits of the property of another, it is better that he be compelled to relinquish them, than that the true owner be prevented from enjoying the proceeds of his own estate.

§ 570. Neither counsel fees nor any other expenses incident to litigation, can be included in a verdict for actual

[1] See Sections 419 and 420 of this book.

[2] Masseth *v.* Johnston, 59 Fed. Rep. 613, 1894.

[3] Emerson *v.* Simm, 6 Fisher, 281, 1873; Timken *v.* Olin, 41 Fed. Rep. 170, 1890.

damages in a patent case.[1] There is no more reason for allowing a successful plaintiff to recover such items than there is for giving a similar recovery to a successful defendant. Certain expended fees may be recovered as costs by either; but no expenditures or costs can be recovered as damages.

§ 571. Interest should be allowed on royalties, from the time those royalties ought to have been paid, in all cases where a royalty is the measure of the plaintiff's damages.[2] In such a case the damages are liquidated at such time as the royalty would have been due, if the defendant had elected to purchase instead of to infringe the right to use the invention in suit. No interest is due on damages measured otherwise than by a royalty, because such damages are unliquidated until they are ascertained by an action,[3] except where the method of measurement is as definite and conclusive as it is in the case of a royalty.[4]

§ 571*a*. Damages for infringement of a design patent are fixed by a special statute, at the minimum amount of two hundred and fifty dollars, and at a maximum amount enough larger than that to equal the total profit made by the infringer upon the infringing article or articles made or sold by him.[5] The statute does not clearly state whether the two hundred and fifty dollars is recoverable from an infringer for each of his infringements, or is recoverable only once for all of his infringements of a particular design patent; but the courts have uniformly administered it as having the latter signification. In order to recover under

[1] Day *v.* Woodworth, 13 Howard, 373, 1851; Teese *v.* Huntingdon, 23 Howard, 8, 1859; Philip *v.* Nock, 17 Wallace, 462, 1873; Whittemore *v.* Cutter, 1 Gallison, 429, 1813; Stimpson *v.* The Rail Roads, 1 Wallace, Circuit Court Reports, 164, 1847; Holbrook *v.* Small, 3 Bann. & Ard. 626, 1878.

[2] McCormick *v.* Seymour, 3 Blatch. 222, 1854; Goodyear *v.* Bishop, 2 Fisher, 162, 1861; Locomotive Safety Truck Co. *v.* Pennsylvania Railroad Co. 2 Fed. Rep. 682, 1880.

[3] Gilpin *v.* Consequa, 3 Washington, 194, 1813.

[4] Creamer *v.* Bowers, 35 Fed. Rep. 207, 1888.

[5] 24 Statutes at Large, Ch. 105, p. 387.

this statute, the plaintiff must show that the defendant knew of the plaintiff's design, and knew of the plaintiff's patent, or at least knew of facts which put him upon his inquiry for that patent ;[1] and that he knew that the design was applied to the infringing article, without the license of the owner of the patent.[2] The last point of knowledge will be presumed against the maker ; but as against a dealer whose infringement consisted in selling, or exposing for sale, articles manufactured by another, it must be proved.[3] The entire profits which resulted to the infringer from the infringing articles are recoverable under this statute as damages, and not merely such part of those profits as was due to the use of the patented design ; and the statute is constitutional, although it provides for recoveries which are in the nature of penalties, and provides that those recoveries may be obtained upon a bill in equity for an injunction, as well as by an action at law.[4] Where the complainant in a bill in equity, waives any recovery of more than two hundred and fifty dollars; a decree will be entered for that amount, without an inquiry into the particular extent of the defendant's infringement.[5] But where there is no such waiver, the case will be referred to a master to ascertain whether and how much the defendant's profits exceeded two hundred and fifty dollars.[6]

[1] Smith *v.* Stewart, 55 Fed. Rep. 484, 1893.

[2] Anderson *v.* Pittsburgh Lumber Co. 47 Fed. Rep. 68, 1891.

[3] Anderson *v.* Saint, 46 Fed. Rep. 765, 1891.

[4] Untermeyer *v.* Freund, 58 Fed. Rep. 211, 1893.

[5] Pirkl *v.* Smith, 42 Fed. Rep. 410, 1890.

[6] Ripley *v.* Elson Glass Co. 49 Fed. Rep. 927, 1892.

CHAPTER XX.

ACTIONS IN EQUITY.

572. Jurisdiction of equity in patent causes.
573. Jurisdiction of equity to assess and decree damages.
574. The complainant.
575. The defendant.
576. Original bills.
577. The title of the court.
578. The introductory part.
579. The stating part.
580. The prayer for relief.
581. The interrogating part.
582. The prayer for process.
583. The signature.
584. The oath.
585. Bills to perpetuate testimony.
586. Amendments to bills, when allowed.
587. Amendments to bills, when necessary.
588. Demurrers, pleas and answers.
589. Pleas in equity.
590. Arguments upon pleas, and replications to pleas.
591. Defences in equity cases.
592. Non-jurisdiction of equity.
593. The same subject continued.
594. Non-jurisdiction in equity, how set up as a defence.
595. Prior adjudication at law is not necessary to jurisdiction in equity.
596. Laches.
597. Laches, how set up.
598. The first of the twenty-seven defences.
599. The second defence.
600. The third defence.
601. The fourth defence.
602. The fifth and sixth defences.
603. The seventh defence.
604. The eighth defence.
605. The ninth and tenth defences.
606. The eleventh defence.
607. The twelfth defence.
608. The thirteenth defence.
609. The fourteenth defence.
610. The fifteenth defence.
611. The sixteenth defence.
612. The seventeenth defence.
613. The eighteenth defence.
614. The nineteenth defence.
615. The twentieth defence.
616. The twenty-first defence.
617. The twenty-second defence.
618. The twenty-third defence.
619. The twenty-fourth defence.
620. The twenty-fifth defence.
621. The twenty-sixth defence.
622. The twenty-seventh defence.
623. Replications.
624. Subordinate bills in aid of original bills.
625. Supplemental bills.
626. Bills in the nature of supplemental bills.
627. Bills of revivor.
628. Bills in the nature of bills of revivor
629. Bills of revivor and supplement.
630. Leave of court to file supplemental bills, and bills in the nature of supplemental bills.

631. Demurrers, pleas and answers to supplemental bills and to bills in the nature of supplemental bills.
632. Hearings.
633. Interlocutory hearings.
634. Questions of law arising on hearings.
635. Questions of fact arising on hearings.
636. Evidence in support of the bill.
637. Evidence in support of defences.
638. Testimony.
639. Depositions.
640. Depositions, taken in other cases.
641. Documentary evidence.
642. Trial by jury in equity cases.
643. Hearings by masters in chancery.
644. Interlocutory decrees.
644*a*. Appeals from interlocutory decrees.
645. Petitions for rehearings.
646. Rehearings for matter apparent on the record.
647. Rehearings on account of newly discovered evidence.
648. Supplemental bills in the nature of bills of review.
649. Final decrees.
650. Bills of review.
651. Bills of review to correct errors apparent on the pleadings or final decree.
652. Bills of review to introduce evidence discovered after the entry of the final decree.
653. Bills in the nature of bills of review.
654. Appeals
655. Hearings on appeals.
656. Decisions on appeals.
657. Certificates of division of opinion.

§ 572. JURISDICTION in equity, in patent litigation, is conferred upon the same courts that are authorized to exercise jurisdiction at law in that branch of jurisprudence.[1] The two kinds of jurisdiction are kept as distinct in those courts as if they were conferred upon different tribunals. Equitable relief cannot be had in any action at law; and legal relief cannot be had in any action in equity, except as incidental to some equitable relief granted, or at least rightfully prayed for, therein. The only function of actions at law in patent cases is to give damages for past infringements of patents. The principal function of actions in equity in such cases is to restrain future infringements of patents by means of the writ of injunction. In every case where an injunction is proper, a court of equity, in order to avoid a multiplicity of actions, will take an account of the profits which the defendant derived from infringing the

[1] Revised Statutes, Sections 629 and 4921; Section 379 of this book.

complainant's patent, and will compel the defendant to pay their amount to the complainant. And equity has jurisdiction, independent of any injunction or right to an injunction, to grant this relief relevant to profits, in all patent cases wherein some impediment prevents a resort to remedies purely legal, or wherein special circumstances render the remedy obtainable by an action at law difficult, inadequate, or incomplete.[1]

§ 573. Wherever equity has jurisdiction to decree an account of the defendant's profits, it also has jurisdiction to assess the damages which the complainant sustained on account of the defendant's infringement.[2] Having ascertained the amount of both, if the profits are found to exceed the damages, the court will enter a decree for their recovery, and will do nothing further about the damages.[3] Where the accounting shows no such profits, but does show such damages, the court will enter a decree for the amount of the latter.[4] Where the accounting shows both profits and damages, and shows the latter to equal or exceed the former, a decree will be entered for the amount of the damages,[5] or for any sum not exceeding three times that amount.[6]

In assessing damages, equity follows the law,[7] and is guided by the rules and principles which are set forth in Chapter XIX. of this book. But where damages are measured by a royalty, only the earned portion of the royalty should be assessed; for if the royalty assessed is one which covers the future life of the patent, its recovery would authorize a continuance of the defendant's doings, and thus

[1] Root *v.* Railway Co. 105 U. S. 189, 1881.

[2] Revised Statutes, Section 4921.

[3] Emigh *v.* Railroad Co. 6 Fed. Rep. 283. 1881.

[4] Marsh *v.* Seymour, 97 U. S. 348, 1877.

[5] Star Salt Caster Co. *v.* Crossman, 4 Bann. & Ard. 566, 1879; Child *v.* Iron Works, 19 Fed. Rep. 259, 1884; Simpson *v.* Davis, 22 Fed. Rep. 444, 1884.

[6] Revised Statutes, Section 4919: Covert *v.* Sargent, 42 Fed. Rep. 298 1890.

[7] Bancroft *v.* Acton, 7 Blatch. 506, 1870; Locomotive Safety Truck Co. *v.* Pennsylvania Railroad Co. 2 Fed. Rep. 682, 1880.

defeat an injunction, and perhaps oust the jurisdiction of equity, and so eventuate in a reversal of the decree by the Supreme Court.[1]

§ 574. The complainant in an action in equity for an infringement of a patent, may be the holder of the complete title to that patent in the territory where the infringement occurred. Where the legal title resides in one person and the equitable title in another, both should generally join in such an action.[2] But the holder of the legal title may be dispensed with as co-complainant, where the circumstances of the case are such that a decree against the equitable owner would clearly be pleadable against the holder of the legal title;[3] and the holder of an equitable title may be dispensed with, where his interest is confined to a share of the proceeds of the patent.[4] Where an equitable owner brings an action in equity in the name of the holder of the legal title alone, the defendant may, by means of a motion to the court, compel the equitable owner to become a co-complainant in his own name.[5] But where a defendant moves to make a stranger to a suit co-complainant therein, on the ground that he has an equitable interest in the matter involved, the motion will be overruled if the person, so sought to be brought in, files in the case a disclaimer of all interest in the subject of the litigation.[6]

§ 575. The defendant in an action in equity for an infringement of a patent, may generally be any person or private corporation connected with that infringement. Questions relevant to the liability of public corporations to such actions, and relevant to the respective liability of joint infringers when sued in equity, and indeed relevant to numerous points in the subject of parties, are explained

[1] Bragg *v.* City of Stockton, 27 Fed. Rep. 509, 1886.

[2] Stimpson *v.* Rogers, 4 Blatch. 336, 1859.

[3] Littlefield *v.* Perry, 21 Wallace, 222, 1874.

[4] Rude *v.* Westcott, 130 U. S. 152, 1889.

[5] Patterson *v.* Stapler, 7. Fed. Rep. 210, 1881.

[6] Graham *v.* Mfg. Co. 11 Fed. Rep. 148, 1880.

and answered in the chapter on courts, parties and causes: the seventeenth chapter in this book.

§ 576. An original bill in an action in equity, for an infringement of a patent, properly consists of six parts: 1. The title of the court. 2. The introduction. 3. The stating part. 4. The prayer for relief. 5. The interrogating part. 6. The prayer for process. Anciently it was the custom to insert in all original bills in equity, three additional parts: the confederacy part, the charging part, and the jurisdiction part. But these are no longer required in United States courts.[1] The confederacy part, if used when only one person has infringed and is sued, is entirely out of place; and even where the bill is filed against joint infringers, such a part is still entirely useless. The charging part is also unnecessary, because the complainant is entitled to amend his bill, if the answer renders it necessary for him to plead specially to any defence it contains.[2] And such a part is objectionable, because it notifies the defendant of the complainant's reply to the defendant's defence, and thus enables the latter to concert his answer with more craftiness than he otherwise could. And the jurisdiction part is useless, because, if the facts stated in the bill do not give equity jurisdiction, the fault cannot be cured by alleging that they do; and if those facts do lay a foundation for jurisdiction in equity, they will speak for themselves, and will require no label such as was anciently tacked to them in the form of a jurisdiction part. That part of an ancient bill in equity originated in England, when the chancellors were priests and not lawyers, and when they therefore required to be told that the common law could not give the relief prayed for in the bill. Some pleaders still insert one or all of these three ancient parts in a bill in equity, but neither of them can have any beneficial effect upon the cause, and all of them are better omited than used.

[1] Rules of Practice for the Courts of Equity of the United States, Rule 21.

[2] Equity Rule 45.

§ 577. The title of the court, at the beginning of a bill, should be in the same form as at the beginning of a declaration.[1] It is technically unscientific to entitle a bill in the name of the case, because until the bill is filed there is no such case pending. But such a title is convenient, in order to show at a glance who are the parties; and convenience may properly outweigh technical nicety. It is therefore exceptional to see a bill that is not entitled in the name of the case.

§ 578. The form of the introductory part is prescribed by the Supreme Court.[2] It contains a formal address to the judges of the court in which the bill is to be filed, together with the names and the citizenship of the parties.

§ 579. The stating part of a bill in equity, though differing in form from the statement of the cause of action in a declaration at law, agrees with the latter in substance, except in the following particulars: It may be based upon a fear of future infringement, where the fear is shown in the bill to be well founded.[3] It may state infringements which were committed before the complainant obtained his title, provided that title, when obtained, covered the right of action for those infringements. It need not aver that any damage was incurred by the complainant, if the action is brought for an injunction only, or for an injunction and an account of the defendant's profits. Where the bill prays for a preliminary injunction, its stating part must set forth one or more of the grounds for that relief, which are explained in the chapter on injunctions.[4] Where profits are sought to be recovered, it must plainly aver that profits were realized by the defendant on account of the stated infringement.[5] And where a former decree is invoked

[1] Section 423 of this book.

[2] Equity Rule 20.

[3] Canton Steel Roofing Co. *v.* Kanneberg, 51 Fed. Rep. 599, 1892.

[4] Parker *v.* Brant, 1 Fisher, 58, 1850; American Bell Telephone Co. *v.* Southern Telephone Co. 34 Fed. Rep. 803, 1888.

[5] Wirt *v.* Hicks, 46 Fed. Rep. 71, 1891.

against the defendant, it must be stated in the bill, according to the rule of equity pleading in that behalf.[1]

§ 580. The prayer for relief should be both special and general.[2] The special part should ask for a preliminary injunction, and for a permanent injunction, and for an account of the defendant's profits, and for an assessment of the complainant's damages, and for an increase of those damages, and for costs; or for as many of those kinds of relief as the complainant hopes to obtain in the action. The prayer for general relief should be in the ordinary form of prayers of that kind.

§ 581. The form of the interrogating part is prescribed by the Supreme Court.[3] That part is designed and adapted to secure from the defendant such admissions or statements as will obviate the necessity for evidence to support those allegations of the bill which relate to his doings.[4] The interrogatories must be divided from each other, and consecutively numbered, and a note must be put at the foot of the bill specifying which of those numbered interrogatories each defendant is required to answer.[5] Where the complainant in his bill waives the oath which otherwise the defendant is entitled to make to his answer, or if he requires such an oath to be made only to the answer of certain specified interrogatories; the answer of the defendant, though it is in fact under oath, is not evidence in his favor on any point not covered by such specified interrogatories; unless the case is heard on bill and answer only.[6]

§ 582. The prayer for process must contain the names of all the defendants who are mentioned in the introductory part of the bill,[7] and if any of them are known to be minors,

[1] Bradley Mfg. Co. *v.* Eagle Mfg. Co. 57 Fed. Rep. 985, 1893.

[2] Equity Rule 21.

[3] Equity Rule 43.

[4] Coop *v.* Physical Institute, 47 Fed. Rep. 899, 1891; 48 Fed. Rep. 239, 1891.

[5] Equity Rules 41 and 42.

[6] Equity Rule 41.

[7] Goebel *v.* Supply Co. 55 Fed. Rep. 827, 1893.

or otherwise under guardianship, that fact must be stated in the prayer for process.[1]

§ 583. The bill must be signed by counsel, and by a solicitor of the court in which it is filed.[2] But if the attorney of the complainant is not only counsel in Federal courts generally, but also is solicitor in the particular court in which the bill is filed, his signature will suffice in both capacities.

§ 584. An oath of the truth of the bill must be appended to such a document, if it prays for an injunction.[3] Such an oath is to be made by the complainant, unless he is in such a situation as to be unable to make it, in which case it may be made by his agent conversant with the facts.[4] Where the complainant is a corporation, the bill may be verified by any officer of the corporation who knows it to be true; or if no such officer possesses that knowledge, it may be sworn to by any agent or attorney who does.[5] Where there is a plurality of complainants, the bill may be sufficiently verified by the oath of one of them. If the bill prays for a preliminary injunction, and if its affiant can swear only on information and belief to the defendant's doings, and to their character as infringements, the application should be fortified by affidavits of persons who know what the defendant has done, and by affidavits of experts who can intelligently testify to the character of those doings, as compared with what appears to be covered by the complainant's patent. Where the complainant can positively swear to part of the allegations of his bill, and can swear to the residue only on information and belief, the bill should state the first class of facts positively, and the second class on information and belief alone; and the oath should clearly discriminate between the two classes in that behalf. It is not sufficient for the oath to state that the material averments of the bill

[1] Equity Rule 23.

[2] Equity Rule 24.

[3] Rogers *v.* Abbott, 4 Washington, 514, 1825.

[4] Woodworth *v.* Edwards, 3 Woodbury & Minot, 124, 1847.

[5] Bank of Orleans *v.* Skinner, 9 Paige (N. Y.), 305, 1841.

[6] Goodyear *v.* Allyn. 6 Blatch. 33, 1868.

are true;[1] nor to state that those allegations are true which render an injunction necessary and proper;[2] because such a form of oath leaves it uncertain which allegations the affiant had in mind. But positive oaths ought to be based on positive knowledge. It is much to be feared that many persons make affidavits to bills and other papers, without sufficient reflection upon the statements they contain, or upon the nature of an oath, or upon the pains and penalties of perjury. The fault is largely due to the attorneys who write the papers. The better lawyers will guard the conscience of the client at this point, while the inferior ones are sometimes more apt to mislead than to protect it. Affidavits to bills, and indeed all other affidavits to be used in any civil cause, in any circuit or district court of the United States, may be taken before a commissioner of the circuit court for the district;[3] or before any notary public of either of the States or Territories or of the District of Columbia.[4]

§ 585. A bill to perpetuate testimony tending to show a particular patent to be void, may be filed and prosecuted in any United States Circuit Court;[5] but a bill brought into court to establish non-infringement of a particular patent by the complainant will not be entertained.[6] Nor will a bill in equity lie to restrain an action at law brought, or to be brought, for infringement of a patent.[7]

Several bills have been filed, and other proceedings instituted in equity, to restrain patentees from publishing statements favorable to their patents, and unfavorable to alleged infringers thereof, and in other cases to restrain alleged

[1] Sauvinet *v.* Poupono, 14 Louisiana, 87, 1839.

[2] Hebert *v.* Joly, 5 Louisiana, 50, 1832.

[3] Revised Statutes, Section 945.

[4] 19 Statutes at Large, Ch. 304, p. 206.

[5] Revised Statutes, Section 866; New York & Baltimore Coffee Polishing Co. *v.* New York Coffee Polishing Co. 9 Fed. Rep. 578, 1881, 11 Fed. Rep. 813, 1882.

[6] Celluloid Mfg. Co. *v.* Vulcanite Co. 13 Blatch. 375, 1876; Strait *v.* Harrow Co. 51 Fed. Rep. 819, 1892.

[7] Germain *v.* Wilgus, 67 Fed. Rep. 601, 1895.

infringers of patents from publishing statements unfavorable to those patents, and favorable to such alleged infringers; and several inharmonious decisions have been made in such cases.[1] But any Federal court that issues an injunction to restrain a person from publishing such a statement, will be exercising, without statutory authority, a power which the constitution prohibits Congress to provide for by statute.[2] Such a law would plainly abridge the freedom of the press, and if Congress were to make such a law, the Federal courts would have no lawful power to administer it, because it would be clearly unconstitutional; and it is certain that those courts cannot lawfully exercise the double function of making and administering an unconstitutional law. And moreover equity has no jurisdiction to restrain citizens from publishing false statements about other citizens or their rights; because the persons thus injured have adequate remedies at law for their injuries.[3]

§ 586. Amendments to bills may be made as a matter of course, and without costs, at any time before a copy has been taken out of the clerk's office; and may be made as of course with costs, after a copy has been taken out, and before any plea answer, or demurrer has been filed.[4] After an answer or plea, or demurrer is put in, and before replication, the complainant may, upon motion without notice, obtain an order from any judge of the court to amend his bill on or before the next succeeding rule day, upon payment of costs, or without payment of costs, as the judge

[1] Chase *v.* Tuttle, 27 Fed. Rep. 110, 1886; Tuttle *v.* Matthews, 28 Fed. Rep. 98, 1886; Kidd *v.* Horry, 28 Fed. Rep. 773, 1886: Baltimore Car-Wheel Co. *v.* Bemis, 29 Fed. Rep. 95, 1886; Ide *v.* Engine Co. 31 Fed. Rep 901, 1887; Curran *v.* Car Co. 32 Fed. Rep. 835, 1887; Emack *v.* Kane, 34 Fed. Rep. 46, 1888; Flint *v.* Smoke Burner Co. 38 Fed. Rep. 546, 1889; Kelley *v.* Ypsilanti Mfg. Co. 44 Fed. Rep. 19, 1890; Fougeres *v.* Murbarger, 44 Fed. Rep. 292, 1890; International Tooth-Crown Co. *v.* Carmichael, 44 Fed. Rep. 350, 1890; New York Filter Co. *v.* Schwarzwalder, 58 Fed. Rep. 577, 1893.

[2] First Amendment to the Constitution.

[3] Francis *v.* Flinn, 118 U. S. 385, 1886.

[4] Equity Rule 28.

may in his discretion direct.[1] After a replication is filed, and before the hearing of the case, the bill cannot be amended except upon a special order of a judge of the court, upon motion or petition, after due notice to the other party, and upon proof by affidavit that the application is not made for the purpose of vexation or delay, and that the matter of the proposed amendment is material, and could not with reasonable diligence have sooner been introduced into the bill, and upon the plaintiff submitting to such other terms as may be imposed by the judge for speeding the cause.[2] Amendments applied for at or after the hearing of a case, are not regulated by the Equity Rules, but are allowed or refused, according to the sound discretion of the court.[3] But that discretion is governed by precedents, and those precedents indicate that amendments, at or after the hearing, will be allowed only where the bill is found to be defective in proper parties, or in its prayer for relief, or in the omission or misstatement of some fact or circumstance connected with the substance of the case, but not forming the substance itself, or where it is necessary for the complainant to take issue with new matter in the answer.[4] Where a litigation has been conducted precisely as it would have been if the proper amendment had been made before any plea, answer, or demurrer was filed; the court will allow that amendment to be filed even after the hearing, and thus make the pleadings conform to what the course of the litigation assumed them to be.[5]

§ 587. A bill needs amendment when the defendant's demurrer, plea, or answer points out a material fault therein, or when the complainant otherwise discovers a material error or omission which may be cured, or when the defend-

[1] Equity Rule 29.

[2] Equity Rule 29.

[3] Neale *v.* Neals, 9 Wallace, 9, 1869.

[4] Shields *v.* Barrow, 17 Howard, 144, 1854.

[5] The Tremolo Patent, 23 Wallace, 527, 1874; Vattier *v.* Hinde, 7 Peters, 273, 1833; Duponti *v.* Mussy, 4 Washington, 128, 1821; New York Sugar Co. *v.* Sugar Co. 20 Fed. Rep. 505, 1884; New Departure Bell Co. *v.* Bevin Mfg. Co. 64 Fed. Rep. 866, 1894.

ant's plea or answer contains statements to which it is necessary to plead by way of confession and avoidance.[1] No reply by way of confession and avoidance can be made in a replication in equity.[2] Where the plea or answer sets up new matter, to which the complainant wishes to reply by way of traverse, the general replication is the proper pleading to file for that purpose.[3]

§ 588. Defences may be made to a bill in equity for infringement of a patent, by a demurrer, or by a plea, or by an answer; or by a demurrer to part, and a plea to another part, and an answer to the residue;[4] or by a demurrer to part, and a plea to the residue; or by a demurrer to a part, and an answer to the residue; or by a plea to a part, and an answer to the residue.[5]

The nature and operation of demurrers and answers in equity practice, are so well understood by the profession, that nothing need be said about them in this book, further than to show the applicability of each of those forms of pleading to the various defences which belong to patent litigation. But defences by plea may bear a larger review because they have largely gone out of use in the Federal courts and their principles been partly forgotten by the members of the bar, since the Equity Rules authorized nearly every defence to be made in an answer, that formerly required a plea for its interposition.[6] But those rules do not authorize any defendant to make a particular defence in a plea, and if unsuccessful there, to make it over again in an answer.[7] Such a plan, if allowed, would enable a defendant whose plea is overruled as stating no defence at law, to argue that question again on the final hearing; and it would enable a defendant, whose plea is proved to be false in fact, to contest that issue again on new testimony taken in pursuance of an answer. Though pleas in bar are

[1] Wilson *v.* Stolley, 4 McLean, 275. 1847.

[2] Equity Rule 45.

[3] Equity Rule 66.

[4] Equity Rule 32.

[5] Story's Equity Pleading, Section 437.

[6] Equity Rule 39.

[7] Hubbell *v.* De Land, 14 Fed. Rep. 475, 1882.

not necessary in equity cases in the Federal courts, except under rare circumstances, they may sometimes be made useful in saving time, labor, costs, and expense. It is, on these accounts, expedient to remind the reader of the general nature and operation of those pleadings, before explaining their special application to actions in equity for infringements of patents.

§ 589. A plea in equity is a sworn [1] pleading, which alleges that some one fact, not stated in the bill, is true; or that some one statement of fact in the bill, is not true; or that some one fact, which the bill states is not a fact, is a fact nevertheless. A plea of the first kind sets up new matter by way of confession and avoidance, and is properly named an affirmative plea.[2] This is the only sort of plea in equity which was recognized in the time of Chancellor BACON.[3] A plea of the second kind traverses some one statement of fact in the bill, and is therefore properly called a negative plea.[4] This sort of plea was established by Chancellor THURLOW, and thereafter became a fully recognized part of equity pleading in England and in the United States.[5] A plea of the third kind states some fact to be true which the bill seeks to impeach.[6] It is similar to an affirmative plea in respect that it sets up matter outside of that upon which the bill is based; and it is similar to a negative plea, in that it contradicts some one statement of fact in the bill. It may therefore be properly named a composite plea. Where the single point of fact stated or denied in a plea, depends for its truth or error upon the comparative construction of two documents, the plea is bad and must be overruled; because such a question of construction is a question of law.[7]

[1] Equity Rule 31.

[2] Daniell's Chancery Practice, Vol. 1. Chap. XV, Section 1.

[3] Beame's General Orders of the High Court of Chancery, 26.

[4] Daniell's Chancery Practice, Vol. 1, Chap. XV, Section 1.

[5] Story's Equity Pleading, Section 668.

[6] Daniell's Chancery Practice, Vol. 1, Chap. XV, Section 1.

[7] Lowrey *v.* Aluminum Co. 56 Fed. Rep. 495, 1893.

§ 590. After a defendant files a plea to a bill in equity, the complainant should satisfy himself whether it states a good defence to the bill, or to that part of the bill to which it refers, and should ascertain whether it is true in point of fact. If he is sure that he can prove it to be false, he should take issue upon it[1] by filing a replication.[2] If he has any ground for fear that the plea is true in fact, and any ground for hope that it is bad in law, his true course is to set the plea down for argument;[3] which setting down is equivalent to a demurrer to the plea.[4] If, on the argument, the plea is held to state no fact which constitutes a defence to the bill, or to any part thereof, it will be overruled, and the defendant will be permitted to file an answer setting up whatever other defences he can.[5] But if the plea is held on the argument to state a good defence to the bill, or to that part of the bill to which it applies, it will be allowed, and thereupon the complainant may ask leave to amend his bill;[6] or if he cannot truly amend it so as to make it avoid the plea, he must file a replication.[7] Thereupon, if the plea is proved to be true, the fact thus established will avail the defendant, as far as, in law and equity, it ought to avail him;[8] and if the plea is proved to be false, the defendant must file an answer to the bill.[9] Only one defence can be made to a bill in a plea, unless the court, in order to avoid a special inconvenience, gives a special permission to a defendant to make a plurality of defences in that method

[1] Equity Rule 33.

[2] Daniell's Chancery Practice, Vol. 1, Ch. XV. Section V.

[3] Equity Rule 33.

[4] Davison's Ex'rs *v.* Johnson, 16 New Jersey Equity, 113, 1863; Korn *v.* Wiebusch, 33 Fed Rep. 51, 1887; Burrell *v.* Hackley, 35 Fed. Rep. 834, 1888.

[5] Equity Rule 34.

[6] Edison Electric Light Co. *v.* Equitable Life Co. 55 Fed. Rep. 481, 1893.

[7] Story's Equity Pleading, Section 697; Daniell's Chancery Practice, Vol. 1, Ch. XV. Section V.

[8] Pearce *v.* Rice, 142 U. S. 42, 1891; Horn *v.* Detroit Co. 150 U. S. 610, 1893; Green *v.* Bogue, 158 U. S. 500, 1895; Elgin Wind Power Co. *v.* Nichols, 65 Fed. Rep. 218, 1894; American Graphophone Co. *v.* Edison Phonograph Works, 72 Off. Gaz. 1350, 1895.

[9] Dalzell *v.* Dueber Mfg. Co. 149 U. S. 326, 1893.

of pleading.[1] With that exception, after any plea has been overruled, the defendant, if he has other defences to interpose, must interpose them in an answer.[2] This outline of the principles of pleas in equity should be kept in mind by the reader while perusing sundry of the sections which follow.

§ 591. The twenty-seven defences which may be made to actions at law for infringements of patents,[3] may all be made to actions in equity based on such causes; and the latter actions are also liable to two other defences, to which actions at law are not subject. These are non-jurisdiction of equity, and laches. It is convenient first to explain the facts which may support each of these two defences, and then state the various methods in which each may be interposed, and afterward to review the twenty-seven defences in their order, and to explain wherein any of them differ in their operation in equity, from their operation at law, and to state what forms of pleading are suitable to each, under the varying circumstances of patent litigation.

§ 592. Non-jurisdiction in equity is a defence which will succeed in any infringement case, unless an injunction is granted, or at least rightfully prayed for in that case, or unless some impediment prevents a resort to remedies purely legal, or unless the circumstances of the case render the remedy obtainable by an action at law, difficult, inadequate, or incomplete.[4] Equity jurisdiction is therefore absent where the patent expired before the bill is filed,[5] or where the complainant has no ownership in the patent at that time.[6]

[1] Story's Equity Pleading, Section 657; Wheeler *v.* McCormick, 8 Blatch. 267, 1871; Noyes *v.* Willard, 1 Woods, 187, 1871; Giant Powder Co. *v.* Nitro Powder Co. 19 Fed. Rep 510, 1884.

[2] Equity Rule 34.

[3] Section 440 of this book

[4] Root *v.* Railroad Co. 105 U. S. 189, 1881.

[5] Root *v.* Railroad Co. 105 U. S. 189, 1881.

[6] Waterman *v.* Mackenzie, 138 U. S. 257, 1891.

But where a bill is filed before the expiration of the patent upon which it is based, and where it truly states a proper case for an injunction, and contains a proper prayer for that relief, equity has jurisdiction, and should retain it to the end of the suit, even if, on account of the expiration of the patent before a hearing is had,[1] or on account of the sale of the patent by the complainant before a hearing is obtained,[2] or on account of public policy,[3] or on account of the complainant's delay to move,[4] no injunction is ever granted in the case.

But where a bill untruly states a proper case for an injunction, and contains a prayer for that relief, the jurisdiction of equity will lapse and the bill be dismissed, whenever it is shown to have been untrue in respect of those of its statements upon which the prayer for an injunction is based.[5] And where a bill states no proper case for an injunction, but contains a prayer for such a writ, the jurisdiction of equity will not attach at all, and the bill be dismissed whenever its character is brought to the attention of the court.[6] And where a bill is filed so shortly before the expiration of the patent upon which it is based, that no motion for an injunction can be regularly notified to the defendant and heard by the court till after that expiration, the bill will be dismissed whenever the court learns that no injunction can

[1] Clark *v.* Wooster, 119 U. S. 325, 1886; Beedle *v.* Bennett, 122 U. S. 75, 1886; Gottfried *v.* Brewing Co. 13 Fed. Rep. 479, 1882; Gottfried *v.* Moerlein, 14 Fed. Rep. 170, 1882; Forehand *v.* Porter, 15 Fed. Rep. 256, 1883; Reay *v.* Raynor, 19 Fed. Rep. 309, 1884; Adams *v.* Howard, 19 Fed. Rep. 317, 1884; Dick *v.* Struthers, 25 Fed. Rep. 103, 1885; Adams *v.* Iron Co. 26 Fed. Rep. 324, 1886; Kirk *v.* DuBois, 28 Fed. Rep. 460, 1886; Brooks *v.* Miller, 28 Fed. Rep. 615, 1886; Kittle *v.* De Graff, 30 Fed. Rep. 689, 1887; Kittle *v.* Rogers, 33 Fed. Rep. 49, 1887; Hohorst *v.* Howard, 37 Fed. Rep. 97, 1888; Singer Mfg. Co. *v.* Wilson Mach. Co. 38 Fed. Rep. 587, 1889.

[2] New York Belting Co. *v.* New Jersey Car-Spring Co. 47 Fed. Rep. 505, 1891; 48 Fed. Rep. 559, 1891.

[3] Bragg Mfg. Co. *v.* Hartford, 56 Fed. Rep. 293, 1893.

[4] Waite *v* Chair Co. 45 Fed. Rep. 259, 1891.

[5] Dowell *v.* Mitchell, 105 U. S. 430, 1881.

[6] Campbell *v.* Ward, 12 Fed. Rep. 150, 1882; Creamer *v.* Bowers, 30 Fed. Rep. 185, 1887.

be lawfully granted.[1] And if no injunction is granted, and if the Circuit Court does dismiss the bill for want of equity, in the absence of a right to an injunction at the time of the hearing, such dismissal will not be reversed on an appeal.[2]

§ 593. The case of Root *v.* Railway Co. omitted to clearly state what exceptional facts will give equity jurisdiction, independent of any injunction or prayer for injunction. What the court said on that subject was said in the following phraseology: "Grounds of equitable relief may arise, other than by way of injunction, as where 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 ground of exception from the general rule." Before this case was a year old, the same justice who delivered the opinion of the Supreme Court was called upon to deliver another in explanation thereof.[3] In the latter case it was held that grounds of equitable relief do not arise "where the title of the complainant is equitable merely," unless that fact constitutes an impediment to a resort to remedies purely legal, or constitutes a circumstance which renders the remedy obtainable by an action at law difficult, inadequate, or incomplete. And Judge COLT has decided that such an equity does not "arise

[1] Clark *v.* Wooster, 119 U. S. 324, 1886; Burdell *v.* Comstock, 15 Fed. Rep. 395, 1883; Davis *v.* Smith, 19 Fed. Rep. 823, 1884; Mershon *v.* Furnace Co. 24 Fed. Rep. 741, 1885; American Cable Ry. Co. *v.* Chicago City Ry. Co. 41 Fed. Rep. 522, 1890; Bragg Mfg. Co. *v.* Hartford, 56 Fed. Rep. 293, 1893.

[2] Keyes *v.* Mining Co. 158 U. S. 152, 1895; Russell *v.* Kern. 72 Off. Gaz. 590, 1895.

[3] Hayward *v.* Andrews, 106 U. S. 672, 1882.

out of, and inhere in, the nature of the account itself" merely because the *account* is intricate.[1]

§ 594. Want of jurisdiction in equity may be set up by a defendant in a demurrer or in an answer. But it cannot be interposed without any pleading to sustain it;[2] except where the bill shows that it was filed after the patent expired. In that case, non-jurisdiction may be invoked by a motion at any stage of the case in the circuit court.[3] There is an advantage in making this defence by demurrer instead of by answer, or by motion after an answer; for in the first case the bill may be dismissed with costs, while in either of the others no costs can be recovered, even if the defence is successful.[4]

§ 595. Prior adjudication in an action at law is not necessary to give jurisdiction to equity in cases of infringements of patents, nor is such an adjudication necessary to call equity into activity in that behalf.[5] A circuit court *may*, in its discretion, order a trial at law in such a case,[6] or order a trial by jury at its own bar,[7] in order to inform the conscience of the chancellor; but no such trial can be demanded by either or both of the parties as an absolute right, for courts of equity are not only really, but also technically, competent to judge of questions of facts.[8]

§ 596. Laches is a defence which is peculiar to courts of equity. "The cases are many in which this defence has been invoked and considered. It is true, that by reason of their differences of fact, no one case becomes an exact precedent for another, yet a uniform principle pervades them all. They proceed on the assumption that the party to whom

[1] Lord *v.* Machine Co. 24 Fed. Rep. 803, 1885; Adams *v.* Iron Co. 26 Fed. Rep. 325, 1886.

[2] Reynes *v.* Dumont, 130 U. S. 395, 1889; Tyler *v.* Savage, 143 U. S. 96, 1892; Dederick *v.* Fox, 56 Fed. Rep. 717, 1893.

[3] Spring *v.* Sewing Machine Co. 13 Fed. Rep. 446, 1882.

[4] Dawes *v.* Taylor, 14 Reporter, 180, 1882.

[5] McCoy *v.* Nelson, 121 U. S. 487, 1887.

[6] Wise *v.* Railway Co. 33 Fed. Rep. 277, 1888.

[7] 18 Statutes at Large, Part 3, Chap. 77, Section 2, p. 316.

[8] Cochrane *v.* Deener, 94 U. S. 780, 1876.

laches is imputed, has knowledge of his rights, and an ample opportunity to establish them in the proper forum; that by reason of his delay the adverse party has good reason to believe that the alleged rights are worthless, or have been abandoned; and that because of the change in condition or relations during this period of delay, it would be an injustice to the latter to permit the former to now assert them."[1] "The length of time during which the party neglects the assertion of his rights, which must pass in order to show laches, varies with the peculiar circumstances of each case, and is not, like the matter of limitations, subject to an arbitrary rule. It is an equitable defence, controlled by equitable considerations, and the lapse of time must be so great, and the relations of the defendant to the rights such, that it would be inequitable to permit the plaintiff to assert them now."[2] In pursuance of these principles, courts of equity sometimes dismiss bills for infringements of patents, because they were not filed with diligence,[3] or not prosecuted with diligence after they were filed;[4] and whether the complainant or his assignor is the party who is chargeable with laches.[5] But delay to sue is not always, laches, because it may have resulted from the fact that the complainant did not know of the infringement till long after it began; or from the fact that he was litigating a test case under his patent against another infringer during the time of the delay;[6] or it may have occurred after the

[1] Galliher *v.* Cadwell, 145 U. S. 372, 1892.

[2] Halstead *v.* Grinnan, 152 U. S. 416, 1894.

[3] Lane & Bodley Co. *v.* Lock, 150 U. S. 200, 1893; New York Grape Sugar Co. *v.* Buffalo Grape Sugar Co. 24 Fed. Rep. 604. 1885; Edison Electric Light Co. *v.* Equitable Life Co. 55 Fed. Rep. 479, 1893; Fosdick *v.* Lowell Machine Shop, 58 Fed. Rep. 817, 1893.

[4] Johnston *v.* Mining Co. 148 U. S. 370, 1892.

[5] Kittle *v.* Hall, 29 Fed. Rep. 511, 1887; Woodmanse & Hewitt Co. *v.* Williams, 68 Fed. Rep. 492, 1895.

[6] Van Hook *v.* Pendleton, 1 Blatch. 193, 1846; Green *v.* French, 4 Bann. & Ard. 171, 1879; Green *v.* Barney, 19 Fed. Rep. 421, 1884; American Bell Telephone Co. *v.* Southern Telephone Co. 34 Fed. Rep. 802, 1888; Edison Electric Light Co. *v.* Mt. Morris Electric Light Co. 57 Fed. Rep. 644, 1893; Norton *v.* Automatic Can Co. 57 Fed. Rep. 932, 1893

infringer was warned to infringe no more, and while the patentee was preparing for action.[1] The first of these circumstances excuses delay, because vigilance does not imply omniscience; and the second excuses delay because abstinence from vexatious litigation is worthy to be praised rather than punished by a court of equity; and the third excuses delay because it is neglect, and not patience, that constitutes laches.

§ 597. The defence of laches can be made in a demurrer,[2] or in a plea,[3] or in an answer, or in an argument on the hearing without any pleading to support it.[4]

To guard against a demurrer based on laches, in a case where long delay intervened between the infringement and the filing of the bill, the bill ought to state the existing excuses for that delay;[5] and to guard against such a defence being started on the hearing, the evidence ought to show whatever excuse the complainant can interpose.

§ 598. The first of the twenty-seven defences which are known both to actions at law and actions in equity for infringements of patents, can be made in a demurrer, where the letters patent appear on their face to have been granted for something other than a process, machine, manufacture, composition of matter, or design.[6] And indeed any defence which can be based upon the face of the patent can be made by demurrer.[7] But a plea is never applicable to the first defence, because its validity depends upon the construction of the letters patent, and not upon any matter of fact to which an oath would be pertinent, though an answer is always applicable thereto, and may join it with other defences to a patent.

[1] Seibert Oil Cup Co. *v.* Lubricator Co. 34 Fed. Rep. 34, 1888.

[2] Maxwell *v.* Kennedy, 8 Howard, 222, 1850.

[3] Edison Electric Light Co. *v.* Equitable Life Co. 55 Fed. Rep. 479, 1893.

[4] Sullivan *v.* Railroad Co. 94 U. S. 811, 1876; Woodmanse & Hewitt Mfg. Co. *v.* Williams, 68 Fed. Rep. 494, 1895.

[5] Edison Electric Light Co. *v.* Equitable Life Co 55 Fed. Rep. 481, 1893.

[6] Risdon Locomotive Works *v.* Medart, 158 U. S. 84, 1895.

[7] Richards *v.* Chase Elevator Co. 158 U. S. 301, 1895.

§ 599 The second defence may be made on the hearing, without any pleading or evidence, in all cases where the court will take judicial notice of the fact which shows want of invention;[1] and a demurrer will also be sustained in the same circumstances.[2] But courts will not take judicial notice of a fact, merely because it is stated in a book,[3] or in a prior patent;[4] nor of any fact which is not generally known,[5] even though known to the judges;[6] nor of any fact, the reality of which is subject to doubt.[7] And a demurrer for want of invention will be overruled except in a clear case.[8] Where the state of the prior art must be proved by evidence, in order to show that the advance covered by the patent did not amount to invention; it is necessary to set up the defence of want of invention in an answer.[9] A

[1] Hendy *v.* Iron Works, 127 U. S. 375, 1887; Brown *v.* Piper, 91 U. S. 41, 1875; Slawson *v.* Railroad Co. 107 U. S. 649, 1882; Ligowski Clay Pigeon Co. *v.* Clay Bird Co. 34 Fed. Rep. 332, 1888; Hunt Bros. Fruit Packing Co. *v.* Cassidy, 53 Fed. Rep. 260, 1892; Goebel *v.* Supply Co. 55 Fed. Rep. 826, 1893; Schreiber *v.* Grim, 65 Fed. Rep. 221, 1895

[2] Risdon Locomotive Works *v.* Medart, 158 U. S. 84, 1895; Dick *v.* Supply Co. 25 Fed. Rep. 105, 1885; Kaolatype Engraving Co. *v.* Hoke, 30 Fed Rep. 444, 1887; New York Belting Co. *v.* Rubber Co. 30 Fed. Rep. 785, 1887; West *v.* Rae, 33 Fed. Rep. 45, 1887; Richards *v.* Michigan Central Railroad Co. 40 Fed. Rep. 165, 1889; Studebaker Mfg. Co. *v.* Illinois Bolt Co. 42 Fed. Rep.52,1890; Fougeres *v* Murberger, 44 Fed. Rep. 293, 1890; Root *v.* Sontag, 47 Fed. Rep. 309, 1891; United States Credit System Co. *v.* Indemnity Co. 51 Fed. Rep. 751, 1892; United States Credit System Co. *v.* Credit Co. 53 Fed. Rep. 818, 1893; Wall *v.* Lock, 61 Fed. Rep. 291, 1894.

[3] Kaolatype Engraving Co. *v.* Hoke, 30 Fed. Rep. 444, 1887.

[4] Bottle Seal Co. *v.* De La Vergne Co. 47 Fed. Rep. 61, 1891.

[5] Eclipse Mfg Co. *v.* Adkins, 36 Fed. Rep. 554, 1888.

[6] New York Belting Co. *v.* New Jersey Rubber Co. 137 U. S. 449, 1890.

[7] Blessing *v.* Copper Works, 34 Fed. Rep. 753, 1888; LaLance & Grosjean Mfg. Co. *v.* Mosheim, 48 Fed. Rep. 452. 1891; Hanlon *v.* Primrose, 56 Fed. Rep. 600, 1893.

[8] Standard Oil Co. *v.* Southern Pacific Co. 42 Fed. Rep. 295, 1890, Krick *v.* Jansen, 52 Fed. Rep. 823, 1892; Drainage Construction Co. *v.* Engelwood Sewer Co. 67 Fed. Rep. 141, 1894.

[9] Bottle Seal Co. *v.* De LaVergne Co. 47 Fed Rep. 61, 1891; Brickill *v.* Hartford. 57 Fed. Rep. 217, 1893; Drainage Construction Co. *v* Englewood Sewer Co. 67 Fed. Rep. 141, 1894.

demurrer will not be sustained, in such a case, on the basis of what the patent may set forth as the state of the prior art; unless the patentee is some way estopped from showing the patent to be otherwise than accurate in its statements on that subject.[1] A plea is not applicable to such a case, because defendants can seldom swear to the state of the art, and even where they can, they cannot plead resulting want of invention, because that depends upon the construction of the patent, which is to be made by the court in the light of the state of the art. When interposing this defence in an answer, it is not necessary to state what facts are intended to be proved in its support; because those facts refer only to the state of the art, and not to novelty.[2] The function of an answer, in respect of this defence, is to notify the complainant that the evidence of the state of the art, which is taken by the defendant, will be invoked at the hearing to show want of invention, and not merely to narrow the patent and thus show non-infringement.

§ 600. The third defence cannot be set up in a plea, because the statute expressly provides that it shall be set up in an answer.[3] Nor can it be based on such a notice as will effect the purpose in an action at law.[4] It requires an answer for its embodiment;[5] and that answer must state the same things which a statutory notice of want of novelty in an action at law is required to contain.[6]

It has been held on the circuit, that evidence of want of novelty, taken without being properly pleaded in the answer, is not made admissible by being set up in a subsequent

[1] Indurated Fibre Co. *v.* Grace, 52 Fed. Rep. 128, 1892.

[2] Vance *v.* Campbell, 1 Black. 430, 1861; Hunt Bros. Fruit Packing Co. *v.* Cassidy, 53 Fed. Rep. 260, 1892; Dayton Crupper Co. *v.* Ruhl, 55 Fed. Rep. 651, 1893.

[3] Carnrick *v.* McKesson, 8 Fed. Rep. 807, 1881.

[4] Doughty *v.* West, 2 Fisher, 555, 1865.

[5] Seymour *v.* Osborne, 11 Wallace, 516, 1870; Roemer *v.* Simon, 95 U. S. 214, 1877.

[6] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868; Bates *v.* Coe, 98 U. S. 31, 1878; Planing-Machine Co *v.* Keith, 101 U. S. 493, 1879.

amendment of that pleading.[1] In another case it was held to rest in the discretion of the court to admit the evidence, so taken and subsequently pleaded, or to reject that evidence, but permit the defendant to take it anew under the amended answer.[2] These holdings are hardly consistent with each other, and neither of them seems consistent with an earlier Supreme Court decision on a similar point.[3] In that case it was held that evidence of want of novelty is admissible in an action at law, where it was taken without being properly set up in any notice, but where a proper notice was subsequently given, and given thirty days before the trial.

Where the answer states that the patent sued on is void for want of novelty, evidence to support that statement will be admitted on the hearing, though not specified in the answer, unless the complainant objects to that evidence for want of the statutory notice.[4]

§ 601. The fourth defence cannot rightly be made in a plea, for though a defendant may make an oath that he believes the patented thing to be without utility, he can hardly swear that it is certainly so. Others might succeed in using it where he had failed. An answer is therefore the only proper pleading for this defence, and without being set up in the answer, it cannot be made at the hearing.[5]

§ 602. The fifth and sixth defences both require to be interposed in answer, because they both rest on evidence of abandonment outside of the bill, and therefore cannot be interposed by a demurrer,[6] and because, being two of the

[1] Roberts *v.* Buck, 1 Holmes, 224, 1873.

[2] Allis *v.* Buckstaff, 13 Fed. Rep. 879, 1882.

[3] Teese *v.* Huntingdon, 23 Howard, 2, 1859.

[4] Roemer *v.* Simon, 95 U. S. 220, 1877; Brown *v.* Hall, 6 Blatch. 405, 1869; Barker *v.* Stowe, 15 Blatch. 49, 1878.

[5] Rubber Co. *v.* Goodyear, 9 Wallace, 793, 1869; Ames & Frost Co. *v.* Woven Wire Mach. Co. 59 Fed. Rep. 705, 1893.

[6] United States Electric Lighting Co. *v.* Consolidated Electric Light Co. 33 Fed. Rep. 869, 1888.

five defences provided for by Section 4920 of the Revised Statutes, neither of them can be set up in a plea.[1] And an answer must show what fact or facts constitute the abandonment which is invoked therein.[2]

§ 603. The seventh defence cannot be interposed in a plea because it involves the construction of the claims of the letters patent in suit. Letters patent are not void merely because they describe something not shown in the original application therefor. It is only when they claim something not indicated or described in the specification or drawings of the original application that they are obnoxious to the seventh defence. The question what letters patent claim is a question of law for the court, and is therefore not one which can be raised by a plea in an action in equity. Nor can this defence be raised by a demurrer, because, in order to decide upon its validity the court must not only construe the claims of the patent, but must also compare the claims so construed with the original application, and that application must be introduced for the purpose, as a matter of evidence. This defence must therefore be set up in the answer, except where the complainant takes the initiative upon the subject. In that case the complainant must maintain the validity of his patent against this defence, even where it is not specifically interposed in the answer.[3]

§ 604. The eighth defence cannot be set up in a plea, but must be interposed in an answer, because it is one of the five for which the statute prescribes that form of pleading in equity cases.[4]

§ 605. Either the ninth or the tenth defence may be interposed in a plea, where the defendant knows the fact of joint or of sole invention upon which they respectively stand. Each of these defences rests upon a single matter of fact, which if decided against the complainant is fatal to his

[1] Carnrick *v.* McKesson, 8 Fed. Rep. 807, 1881.

[2] Western Electric Co. *v.* Sperry Electric Co. 58 Fed. Rep. 192, 1893.

[3] Michigan Cent. R. R. Co. *v.* Car Heating Co. 67 Fed. Rep. 121, 1895.

[4] Revised Statutes, Section 4920; Carnrick *v.* McKesson, 8 Fed. Rep. 807, 1881; Ecaubert *v.* Appleton, 47 Fed. Rep. 893, 1891.

patent. But it is always unwise to make either of these defences in a plea, because the complainant will have no alternative but to file a replication, and because, by doing so, he may foreclose other defences, and because there is always a possibility that the court will, on the evidence, decide that the invention was joint, or was several, according as it may be necessary to do in order to sustain the patent.[1] An answer is therefore the best pleading in which to embody either of these two defences.

§ 606. The eleventh defence stands in the same category, in respect of equity pleading, with the third, fifth, sixth, and eighth, and must, like them, be made in an answer, and not in a plea.

§ 607. The twelfth defence cannot be made in a plea, because, though the defendant might be able to make oath that he is a person skilled in the art to which the invention covered by the patent appertains, and that the description contained in that patent is not full, clear, concise, and exact enough to enable him to make and use the same, he could not make oath that the same thing is true of other persons skilled in that art. An answer is, therefore, the proper pleading for this defence also.

§ 608. Nor can the thirteenth defence be set up in a plea, because it depends on the construction of the claims of the letters patent, and not upon any matter of fact to be sworn to in a plea or proved in a deposition. But this defence can be made by a demurrer, where profert has been made of the letters patent, or they have otherwise been made a part of the bill.[2] An answer is also a proper pleading in which to interpose this defence.

§ 609. The fourteenth defence also generally requires to be set up in an answer.[3] A plea is not ordinarily suitable for the purpose, because this defence depends primarily upon the necessity for a disclaimer, and because that neces-

[1] Pitts *v.* Hall, 2 Blatch. 229, 1851; Blandy *v.* Griffith, 3 Fisher, 616, 1869.

[2] Brickill *v.* Hartford, 49 Fed. Rep. 373, 1892.

[3] Burden *v.* Corning, 2 Fisher, 498, 1864.

sity depends upon the claim being obnoxious to one or more of the first three defences, and because the third defence always, and the first and second generally, require to be interposed in an answer, if interposed at all.

§ 610. The fifteenth defence can never be interposed in a plea, because it primarily depends, either upon the original patent not being inoperative or invalid by reason of a defective or insufficient specification, or upon its not being invalid in part, for want of novelty.[1] Where it primarily depends upon the first of these matters, it depends either upon the construction of the original letters patent, or upon proof that any person skilled in the art to which the invention belongs, could from the original specification make and use the same; and where it depends upon the second of these matters, it depends upon proof that everything claimed in the original letters patent was novel. None of these matters can ordinarily be put into a plea. Statements of the true construction of a patent cannot be, because they are statements of law. Statements that any person skilled in the art can make and use a particular invention, from a particular specification, are hardly proper in pleas, because a defendant ought seldom to attempt to swear what other persons can or cannot do. And statements that everything claimed in the patent of another was novel with him, should never go into a plea, because a defendant can never know that none of those things were previously known or used. Nor can this defence be raised by a demurrer, unless the original letters patent are incorporated in the bill for infringement of its reissue; and not even then can it be so raised, unless the question is solely one of construction of the original letters patent. An answer is always the most suitable place in which to interpose this defence, and generally it is the only possible pleading for the purpose.

§ 611. The sixteenth defence depends partly on the comparative construction of the original and reissue letters patent, and partly upon evidence that the delay in applying

[1] Revised Statutes, Section 4916.

for the reissue w unreasonable. Where both the original and the reissue c proffered or incorporated in the bill; this defence may e made by demurrer, because the court then has every necessary means of making the comparative construction,[1] and because long delay will be held to be unreasonable, unless it is excused in the bill. Where the bill omits to set out the original patent, this defence must be made in an answer; for such mixed questions of law and fact are wholly unsuitable to a plea.[2]

§ 612. The seventeenth defence depends upon the comparative construction of the original and reissue letters patent. It may be made on demurrer, where both those documents are proffered or otherwise incorporated in the bill. If the original letters patent are not so incorporated, this defence may be made in an answer; but it cannot be made in a plea, because the question involved is one of construction of documents, and not a question of fact to be sworn to by a defendant, or to be decided upon the replication of the complainant and the evidence of experts.

§ 613. The eighteenth defence may be made by a demurrer where the bill is based on the prior patent, as well as on its alleged double.[3] But a plea is not suitable to this defence, unless the disputed claim or claims in the subsequent patent can be plainly seen to be identical with a claim or claims in the prior patent; for if construction must be resorted to in order to determine identity, or want of identity, between the claims of the two patents, the question is one of law, and therefore improper to be raised by a plea in equity. And an answer is always a proper pleading in which to interpose this defence.

§ 614. The nineteenth defence may be set up in a plea, if the defendant has personal knowledge of the record which

[1] Powder Co. *v.* Powder Works, 98 U. S. 126, 1878; Wollensak *v.* Reiher, 115 U. S. 96, 1884; International Terra Cotta Lumber Co. *v.* Maurer, 44 Fed. Rep. 619, 1890.

[2] Maxwell *v.* Kennedy, 8 Howard, 222, 1850.

[3] Russell *v.* Kern, 64 Fed. Rep. 581, 1894.

he pleads, and can therefore make the required oath that there is in fact such a record. If he has no such knowledge, the defence must be made in an answer, for the ancient rule that records may be pleaded in equity, without an oath, is inconsistent with the United States equity rule upon the subject of pleas.[1]

§ 615. The twentieth defence can be made by a demurrer, where the bill shows the patent to have expired when the doings which constitute the alleged infringement were committed. But that will seldom be the fact, for the expiration relied upon in such cases is nearly always due to the expiration of some foreign patent for the same invention, and not to anything which appears on the face of the United States patent in suit. Where the defence depends upon the expiration of a foreign patent which is not mentioned in the bill, it cannot be set up in a demurrer. Nor can it often be set up in a plea, because it depends not only upon the existence of a foreign patent, but also upon that patent being for the the same invention as the patent in suit, and because this last question, except where the two patents are plainly identical, is one of construction for the court,[2] and because defences which depend upon the comparative construction of different documents cannot be interposed in a plea.[3] This defence must therefore generally be made in an answer.

§ 616. The twenty-first defence may be made in a plea, if the defendant knows that the complainant made or sold specimens of the patented thing during the life of the patent without marking them "patented," and if the defendant was not duly notified of his infringement, or, if notified, immediately discontinued to infringe.[4] This defence can also be made without any special statement relevant thereto in the answer, because the complainant must negative it in his bill and in his evidence in chief, or suffer the operation of the defence, whether the defendant has set it up in any plead-

[1] Equity Rule 31.

[2] De Florez *v.* Reynolds, 17Blatch. 436, 1880.

[3] Lowrey *v.* Aluminum Co. 56 Fed. Rep. 495, 1893.

[4] Revised Statutes, Section 4900.

ing or not.[1] But this defence is seldom a full defence to an action in equity. It is never a defence to a prayer for an injunction, though it is to a prayer for damages.[2] Whether it is a defence to a prayer for infringer's profits, is an unsettled question, the solution of which will involve the balancing of a number of considerations. In the affirmative, it can be argued that profits are but equitable substitutes for damages, and as equity follows the law in respect of other parts of the patent system, it ought also to follow it in this. But it can be replied in the negative, that equity does not altogether follow the law in the matter of pecuniary recoveries for infringements of patents, but primarily determines the amounts of such recoveries on quite different principles from those used in courts of law for that purpose. And it can also be argued in the negative, that though it would be wrong to force a defendant to pay damages, regardless of the amount of his profits, for infringements against which the complainant neglected to warn him, it would not be unjust to compel a defendant to return to the complainant whatever profits the former realized from even an unwitting infringement of the patent of the latter. To this last point it can be rejoined for the affirmative, that such a case is not merely a case of unwitting infringement, but is also an instance of a patentee leading others to infringe his patent, by unlawfully concealing the fact of its existence, and that, though a failure to mark "patented" would lack some of the elements of a technical estoppel, still it is such a violation of the statute as ought to cause a forfeiture of all remedies for infringement committed before the giving of actual notice of the patent.

§ 617. The twenty-second defence may be made by demurrer, where the bill sets forth copies of the complainant's title papers, either in the stating part or as exhibits attached to the bill and thus made parts thereof, or where the bill pleads those papers according to their legal effect,

[1] Dunlap *v.* Schofield, 152 U. S. 244, 1894.

[2] Goodyear *v.* Allyn, 6 Blatch. 33. 1868.

and in such a way that the title appears on the face of the bill to be defective. Where the bill shows a good *prima facie* title, but where the defendant knows that one of the papers which compose its chain was executed after the assignor had assigned his right to another, and that the prior assignment was recorded in the Patent Office within three months after its date; or knows that such assignor assigned his right to another for a valuable consideration more than three months after the making of the assignment set up in the bill, and before the latter was recorded in the Patent Office, and without the junior assignee having notice of the senior unrecorded assignment, the defendant may successfully set up those facts in a plea. The action of a complainant will be defeated by evidence of either of these two sorts of faults in his title.[1] Either of these sets of facts may also be set up in an answer, as also may any fact which derogates from the complainant's apparent title; but no defect of title due to an outstanding unrecorded document can be made available as a defence without being pleaded.[2]

§ 618. The twenty-third defence may be put into a plea; and that is the most appropriate pleading in which to interpose it, where the defendant is sure of the fact of a license. Otherwise this defence, where it exists, should be interposed in an answer. A plea of this defence must state the character of the license specifically;[3] and there appears to be no reason why an answer should not, on this point, be as specific as a plea.

§ 619. The twenty-fourth defence should be treated in respect of pleading in the same way as the twenty-third, and that whether the release pleaded was executed before or after the filing of the bill.

§ 620. The twenty-fifth defence may be interposed by a demurrer, where the bill sets forth the claims alleged to be infringed, and sets forth also the particular character of the

[1] Revised Statutes, Section 4898.

[2] California Electric Works *v.* Fink, 47 Fed. Rep. 588, 1891.

[3] Jones *v.* Berger, 58 Fed. Rep. 1007, 1893.

defendant's doings.[1] It has been held by several excellent judges that this defence of non-infringement cannot be set up in a plea.[2] It would be an economical practice to so prepare bills that this defence could be made by demurrer; but where a bill is not so prepared, an answer is the only pleading in which to interpose it. And where the prior art is a necessary part of the foundation of a defence, it cannot be made by demurrer.

§ 621. The twenty-sixth defence may be made in a plea, and it ought to be so made in every case where the defendant is certain that he can prove the facts which he is advised amount to a basis for an estoppel. If those facts are found, on an argument of the plea, not to constitute an estoppel, the defendant will be permitted to file an answer setting up other defences. Or the defence of estoppel can be set up in an answer in the first instance. And where that defence consists of *res judicata*, the former record can be introduced in evidence without being specially pleaded in the answer.[3]

§ 622. The twenty-seventh defence may be interposed by a demurrer, where the bill clearly states the time when the infringement was committed, or the space of time during which it was carried on.[4] Where the bill simply states that the infringement occurred during the life of the patent, and where any part of that life is remote enough in point of time to be barred by either the national or any State statute of limitation, if either is applicable thereto, then the applicable statute must be set up in a plea or in an answer, in order to avail the defendant. An answer is to be preferred to a plea for this purpose in all cases where the statute bars only a part of the right upon which the action is based; because an answer must generally be filed to the

[1] Collins Chemical Co. *v.* Capitol City Mfg. Co. 42 Fed. Rep. 64, 1890; Gerard *v.* Safe & Lock Co. 48 Fed. Rep. 380, 1891.

[2] Sharp *v.* Reissner, 9 Fed. Rep. 445, 1881; Korn *v.* Wiebusch, 33 Fed. Rep. 51, 1887; Jones *v* Berger, 58 Fed. Rep 1006, 1893.

[3] Bradley Mfg. Co. *v.* Eagle Mfg. Co. 58 Fed. Rep. 721, 1893.

[4] Brickill *v.* Hartford, 49 Fed. Rep. 374, 1892.

residue of the bill, and because the proceedings are simplified by putting all the defences into one pleading.

Statutes of limitation have the same effect upon actions in equity in the Federal courts, that they have upon corresponding actions at law.[1]

§ 623. A replication is required to be filed by the complainant, in order to put in issue those points wherein the answer disagrees with the bill. No special replication is permitted in equity in the United States courts.[2] The general replication is required to be filed on or before the rule day which next succeeds that upon which the answer is due and is filed;[3] but if filed after that time, it may, at the discretion of the court, be ordered to stand;[4] or it may, if offered after that time, be allowed by the court to be filed *nunc pro tunc* as of the day whereon it was due.[5]

§ 624. Before tracing further the common course of an action in equity for infringement of a patent, it is expedient to make a short excursion into the field of those subordinate bills which are sometimes required to be filed before decrees for infringements can properly be entered. Four kinds of such bills are known: 1. Supplemental bills. 2. Bills in the nature of supplemental bills. 3. Bills of revivor. 4. Bills in the nature of bills of revivor.

§ 625. A supplemental bill is required where the original bill was filed by a person as executor or administrator, or as assignee in bankruptcy or insolvency, whenever any other person succeeds to the title of the complainant to act in that representative capacity.[6] Such a bill is also necessary, in order to subject the estate of the defendant to a decree, where he is adjudged bankrupt or insolvent after the bill against him is filed.[7] His assignee in bankruptcy

[1] Elmendorf *v.* Taylor, 10 Wheaton, 168, 1825; Miller *v.* McIntyre, 6 Peters, 66, 1832; Bank of United States *v.* Daniel, 12 Peters, 56, 1838.

[2] Equity Rule 45.

[3] Equity Rule 66.

[4] Fisher *v.* Hayes, 6 Fed. Rep. 77, 1881.

[5] Pierce *v.* West's Executors, 1 Peters' Circuit Court Reports, 351, 1816.

[6] Story's Equity Pleading, Section 340.

[7] Mitford & Tyler's Equity Pleading, 166.

or insolvency is the proper person to be made the defendant to such a bill.[1] He will come before the court in the same plight as that of the bankrupt, and will be bound by all the prior proceedings in the case.[2] A supplemental bill is also a proper one to be filed against a stranger to the original bill, where he has conspired with the original defendant to infringe the patent in suit after the original defendant was enjoined from doing so himself.[3] And such a bill is proper, where a patent is extended after the filing of the original bill, if the defendant continues to infringe the patent after the extension is granted.[4] The same reasons which support the latter rule will also support a supplemental bill based on a new patent covering some feature of those doings of the defendant which also infringe the patent originally sued upon; and will also support such a bill where the defendant so changes the character of his doings *pendente lite* as to make them infringe some other patent of the complainant, as a part of the same acts that constitute infringements upon the patent upon which the original bill was based. But a good title, acquired after the filing of an original bill, cannot be brought into a case by a supplemental bill to take the place of the bad title stated in the original bill.[5]

§ 626. A bill in the nature of a supplemental bill is called for where the original bill was filed by a person in his own right, whenever that right passes to another person by voluntary assignment, or passes from the complainant to his assignee in bankruptcy or insolvency.[6] This rule applies not only to cases where the entire right of a sole complainant is thus transferred *pendente lite*, but also to cases where the right of one of several complainants is so transferred,

[1] Sedgwick *v.* Cleveland, 7 Paige (N. Y.), 290, 1838.

[2] Mitford & Tyler's Equity Pleading, 166.

[3] Parkhurst *v.* Kinsman, 2 Blatch. 72, 1848.

[4] Reedy *v.* Scott, 23 Wallace, 352, 1874.

[5] Emerson *v.* Hubbard, 34 Fed. Rep. 327, 1888.

[6] Story's Equity Pleading, Section 349; Ross *v.* Ft. Wayne, 63 Fed. Rep. 470, 1894; Ecaubert *v.* Appleton, 67 Fed. Rep. 924, 1895.

and to cases where a part only of the right of a sole complainant is made the subject of a voluntary assignment after the filing of the original bill.[1] And a bill in the nature of a supplemental bill, even if filed after the expiration of the patent, may be maintained in equity, if the original bill was filed before the expiration of the patent, and could have been thus maintained.[2]

§ 627. A bill of revivor is the proper means of reviving and continuing an action in equity for infringement of a patent, which has abated by reason of the death of one or more of the parties thereto.[3] It is to be brought by or against the executor or administrator of the deceased party, and not by or against his heirs.[4] When such a bill is filed, if the facts warrant him in so doing, the defendant may file a plea denying that the person who filed the bill was entitled to do so,[5] or interposing some statute of limitation applicable to bills of revivor.[6] There is no Federal statute of that kind, but the relevant statutes of the several States are applicable to bills of revivor in Federal courts.[7] Those State statutes are of many species. In some, the limitation begins to run from the death of the deceased complainant; and in others, from the time his death is suggested in the case; and in others, from the time when a *scire facias* to revive is served on the person entitled to revive. The length of the limitation also varies in the different States. Perhaps the shortest time is six months, and the longest eighteen.

Where a bill of revivor is filed by the proper person within the proper time, the action will stand revived without any pleading being filed by the defendant.[8] But where a

[1] Story's Equity Pleading, Section 346.

[2] Ross *v.* Ft. Wayne, 63 Fed. Rep. 466, 1894.

[3] Kirk *v.* Du Bois, 28 Fed. Rep. 460, 1886.

[4] Story's Equity Pleading, Section 354*a*.

[5] Story's Equity Pleading, Sections 829 and 830.

[6] Story's Equity Pleading, Section 831.

[7] Revised Statutes, Section 721; Campbell *v.* Haverhill, 155 U. S. 610, 1895.

[8] Equity Rule 56.

defendant dies without filing a sufficient answer to the original bill and the amendments thereto, the bill of revivor which is occasioned by his death ought to pray that the person against whom it seeks to revive the suit be compelled to answer the original bill and its amendments, or so much thereof as remains unanswered.[1] After an action in equity has been duly revived, it proceeds in the new form, unaffected by the change of name; and all the testimony theretofore taken may be thereafter used, precisely as if no abatement and revivor had occurred.[2]

§ 628. A bill in the nature of a bill of revivor is required where the complainant in the original bill assigned the right of action and the patent upon which it was based, and then died before the assignee took his place in the action, by means of a bill in the nature of a supplemental bill. A bill of the latter sort will not answer the purpose, unless it is filed before the death of the original complainant; because that death will cause an abatement of the suit, and because only bills of revivor, or bills in the nature of bills of revivor, can revive abated actions in equity.[3] Bills of revivor can be filed only by privies in law, such as executors and administrators; and not by privies in estate, such as devisees and assignees.[4] For the latter class of persons, bills in the nature of bills of revivor are available; and by means of such a bill, an assignee who did not file a bill in the nature of a supplemental bill before the death of the original complainant, may draw to himself the benefit of the original action, in whatever stage it may have been at the date of the abatement.[5] Such a bill is also the proper means of reviving an action which has abated at the death of the administrator or executor who was prosecuting it in his representative capacity, if the person entitled to revive represents the

[1] Story's Equity Pleading, Section 375; Mitford & Tyler's Equity Pleading. 174.

[2] Vattier *v.* Hinde, 7 Peters, 265, 1833.

[3] Equity Rule 56.

[4] Story's Equity Pleading, Sec. 379.

[5] Slack *v.* Walcott, 3 Mason, 511, 1825.

original testator or intestate, and not the deceased executor or administrator.[1]

§ 629. A bill of revivor and supplement is merely a compound of a supplemental bill, and of a bill of revivor.[2] It is therefore proper to be filed when either of the facts which justify a supplemental bill and either of the facts which require a bill of revivor, occur in one action. So also, any two or more of the four sorts of bills mentioned in the four last sections, may be united in one bill, whenever either of the facts which require either of those bills, occurs in the same action with any of the facts which require any of the others.

§ 630. Leave of court is a prerequisite to the filing of supplemental bills, and bills in the nature of supplemental bills; and it is to be obtained upon proper cause shown, and due notice to the opposite party.[3] But neither bills of revivor nor bills in the nature of bills of revivor, require any such order, for they may be filed in the clerk's office at any time.[4] The reason of this difference is that neither of the last two kinds of bills are useful except in cases of death. There can be no temptation to file such a bill as either, unless a death has occurred among the parties to the action; and where such a death has occurred, there can be no objection to the filing of one or the other. But the first two sorts of bills are based upon events about the true character of which counsel may be mistaken in any given case, and it is therefore necessary, in order to avoid an improper accumulation of pleadings, that the court should pass upon the propriety of such bills before they are filed.

§ 631. No demurrer, plea, or answer is ordinarily required to be filed to a bill of revivor, or to a bill in the nature of a bill of revivor.[5] But defendants are always required to demur, plead, or answer to supplemental bills, and to bills in the nature of supplemental bills.[6] Where a bill of either

[1] Story's Equity Pleading, Sec. 332.

[2] Mitford & Tyler's Equity Pleading, 177.

[3] Equity Rule 57.

[4] Equity Rule 56.

[5] Equity Rule 56.

[6] Equity Rule 57.

of those kinds shows on its face that the person who filed it was not a proper person to do so, the objection may be made by a demurrer,[1] and when that fault exists, but does not appear on the face of the bill, the defence grounded upon it may be made by a plea.[2] Other defences can be made to supplemental bills, or to bills in the nature of supplemental bills, in the same forms and in the same circumstances in which corresponding defences can be made to original bills for infringement.[3]

§ 632. The hearing of an action in equity for infringement of a patent, may take place before one of the judges of the court sitting alone, or before several judges sitting together, or before a judge and a jury,[4] or before a master in chancery.[5] Judges constitute the best tribunals for the purpose; but as either of the other methods of trial may be resorted to at the will of the court, it is expedient to outline the law relevant to all three.

§ 633. An interlocutory hearing by a judge, in a patent action in equity, is one which occurs after the evidence relevant to the validity of the patent and its infringement by the defendant, has been taken, and before the case is referred to a master to take and state an account of profits and damages. The final hearing, which occurs after the master has taken that account and filed his report, generally involves nothing but the correctness of that report, and it therefore may appropriately be treated in the chapter on profits. So also, the preliminary hearing, which occurs when a preliminary injunction is applied for, may properly be discussed in the chapter on injunctions. The interlocutory hearing is generally the pivotal point of a litigation. Where it results in the success of the defendant and consequent dismissal of the bill, it becomes a final hearing.

[1] Story's Equity Pleading, Sec. 612.

[2] Story's Equity Pleading, Sec. 827.

[3] Story's Equity Pleading, Sections 611 and 826.

[4] 18 Statutes at Large, Part 3, Ch. 77, Section 2, p. 316.

[5] Parker *v.* Hatfield, 4 McLean, 61, 1845.

§ 634. Questions of law, in equity patent cases, are to be decided according to the relevant rules of law and equity in force in the United States courts. The sources of those rules are the statutes of the United States, and the decisions of the United States Supreme Court and Courts of Appeals, and Circuit Courts, and those decisions of the chancellors of England which were made before the adoption of the Constitution of the United States. Later decisions of English courts sometimes indicate what the law is, but no such decision is of any binding authority in any United States court. Where such a decision is strictly relevant to a question at bar, and is supported by good reasoning, it may be followed by a United States judge; but if, as is frequently the case, it refers to a substantially different state of statute law from that to which United States patent cases are subject, or if it was fallaciously reasoned out by the judge who delivered it, such a decision may properly be disregarded in the Federal courts. The decisions of State courts fall in the same category in this respect with the modern English decisions, except in cases where the United States statutes direct the Federal courts to follow the laws of the several States. In those cases, the State laws are binding on the Federal judges, not because the States have any authority to prescribe rules to Federal courts, but because the national legislature has adopted those particular State laws, instead of framing and enacting corresponding regulations of its own.

. Where a question arises to which no direct answer can be found in the recognized sources of the law, it becomes the duty of the judge to deduce a proper answer, by means of just reasoning, from the general principles of law, of equity, and of justice. He will generally find assistance in that work by consulting the *obiter dicta* of courts and the commentaries of text-writers; but no *obiter dictum* and no text-book is of any binding authority. The points of law actually decided by the United States Supreme Court are generally binding on all other United States courts, regard-

less of the reasons which support them.[1] There is an exception to this rule, where the Supreme Court has decided the same question both ways. In such a case, the last decision governs, if it expressly overruled the first.[2] If it simply ignored the first, it may have resulted from the first decision not being called to the attention of the justices who rendered the second. In such a case it is probably the duty of a circuit court to follow the most reasonable of the two decisions, regardless of seniority. The points of law actually decided by the Circuit Court of Appeals of any circuit are binding upon all the circuit courts in that circuit;[3] and the same force was formerly ascribed, and may still be given, to the points of law actually decided by any circuit justice or circuit judge when holding circuit court in either of the nine circuits of the United States.[4] And the points of law actually decided by any judge, holding any United States Circuit Court, are followed by every other judge holding any United States Circuit Court, unless they have been reversed by a Circuit Court of Appeals, or by the Supreme Court, or are contrary to other decisions of equal or superior dignity, or clearly appear to be erroneous.[5] The points of law spoken of in this section include the construction given to letters patent, where the evidence of the prior art and other facts relevant to that construction remain unchanged,

[1] American Middlings Purifier Co. *v.* Christian, 3 Bann. & Ard. 44, 1877; Goodyear Dental Vulcanite Co. *v.* Davis, 3 Bann. & Ard. 116, 1877; Green *v.* City of Lynn, 55 Fed. Rep. 518, 1893.

[2] Tilghman *v.* Proctor, 125 U. S. 149, 1887.

[3] Edison Electric Light Co. *v.* Bloomingdale, 65 Fed. Rep. 214, 1894.

[4] Hawes *v.* Cook, 5 Off. Gaz. 493, 1874.

[5] Cary *v.* Lovell Mfg. Co. 31 Fed. Rep. 345, 1887; Rubber Trimming Co. *v.* Rubber Comb Co. 35 Fed. Rep. 500, 1888; Kidd *v.* Ransom, 35 Fed. Rep. 588, 1888; Eastern Paper Bag Co. *v.* Nixon, 35 Fed. Rep. 752, 1888; Consolidated Roller Mill Co. *v.* Barnard & Leas Mfg. Co. 43 Fed. Rep. 532, 1890; Zinsser *v.* Krueger, 45 Fed. Rep. 574, 1891; Enterprise Mfg. Co. *v.* Deisler, 46 Fed. Rep. 854, 1891; Campbell Mfg. Co. *v.* Manhattan Ry. Co. 49 Fed. Rep. 935, 1892; Macbeth *v.* Gillinder, 54 Fed. Rep. 170, 1889; Office Specialty Co. *v.* Winternight Mfg. Co. 67 Fed. Rep. 928, 1895.

as well as the rules of law in general.[1] But where a Circuit Court of Appeals, or circuit justice, or circuit judge, or any judge holding circuit court has decided the point both ways, the last of those decisions is the one which is to be regarded, if it expressly reversed the first.[2] If it simply ignored the first, the two decisions will respectively weigh according to the weight of the reasons which respectively support them.

Adjudicated cases are binding precedents in the law only where the questions of law involved in those cases were actually submitted for decision therein; and such a submission is not involved in raising those questions in the pleadings, nor in controverting them in the evidence, if one party or the other abandons those questions at the hearing.[3]

§ 635. Questions of fact depend upon the evidence in the particular cases in which they arise, except so far as they depend upon matters of which courts take judicial notice. Questions of fact in patent cases often require for their solution a severely logical process of reasoning from the testimony in the record. It sometimes occurs that the evidence in a number of cases, pending in a number of courts, is substantially the same. Where one such case has been carefully argued and deliberately decided in a circuit court, all the other circuit courts follow that decision, unless it has been reversed by a Circuit Court of Appeals or by the Supreme Court.[4] Many of the earlier

[1] National Box & Paper Co. *v.* American Paper Box Co. 48 Fed. Rep. 913, 1892; Sessions *v.* Gould, 60 Fed. Rep. 755, 1894.

[2] Brown Mfg. Co. *v.* Mast, 53 Fed. Rep. 582, 1892.

[3] Celluloid Mfg. Co. *v.* Tower, 26 Fed. Rep. 452, 1885.

[4] Goodyear Dental Vulcanite Co. *v.* Willis, 1 Bann. & Ard. 570, 1874; Putnam *v.* Yerrington, 2 Bann. & Ard. 241, 1876; Rumford Chemical Works *v.* Hecker, 2 Bann. & Ard. 360, 1876; Searls *v.* Worden, 11 Fed. Rep. 502, 1882; American Ballast Log Co. *v.* Cotter, 11 Fed. Rep. 728, 1882; Matthews *v.* Mfg. Co. 19 Fed. Rep. 321, 1884; Worswick Mfg. Co. *v.* Philadelphia, 30 Fed. Rep. 625, 1887; Cary *v.* Mfg. Co. 31 Fed. Rep. 344, 1887; Hancock Inspirator Co. *v.* Regester, 35 Fed. Rep. 61, 1888; Hammerschlag Mfg. Co. *v.* Spalding, 35 Fed. Rep. 67, 1888; Putnam *v.* Bottle Stopper Co. 38 Fed. Rep. 235, 1889; Simons Mach. Co. *v.* Knox, 39 Fed. Rep. 702, 1889; Thompson *v.* Donnell Mfg. Co. 40 Fed. Rep. 383, 1889; National Cash Register Co. *v.* American Cash Register Co. 47 Fed. Rep. 217, 1891; Dixon-Woods Co. *v.* Pfeifer, 51 Fed. Rep. 292, 1892; New Departure Bell Co. *v.* Hardware Specialty Co. 72 Off. Gaz. 1351, 1895.

decisions speak of this rule as the doctrine of comity. But Judge DALLAS has held that: "In patent causes conclusive effect is accorded by each of the circuit courts of the United States to a prior judgment of any other of them wherever the patent, the question, and the evidence are the same in both suits, not on the ground of comity alone, but with the practical and salutory object of avoiding repeated litigation and conflicting decrees in the courts of the several districts."[1] Where the evidence in a second case is substantially different from the evidence in the case first decided, the question will arise whether a new decision is required by that difference; and a new decision will be rendered where justice plainly requires that the difference in evidence should produce a different decision.[2] But the Circuit Courts of Appeals are not bound by circuit court decisions on questions of fact, even on the same evidence.[3] Where questions of fact in patent cases have been decided by the Supreme Court, that decision is conclusive in all other patent cases, so far as the evidence is substantially identical with that before the Supreme Court.[4] And where questions of fact in patent cases have been decided by a Circuit Court of Appeals, that decision is likewise conclusive in all other patent cases in the circuit courts.[5] But the evidence must be taken in the subsequent cases, and cannot be imported

[1] Office Specialty Co. *v.* Winternight Mfg. Co. 67 Fed. Rep. 929, 1895.

[2] Zinsser *v.* Krueger, 45 Fed. Rep. 575, 1891; Starling *v.* Weir Plow Co. 49 Fed. Rep. 639, 1891; Barnes Sprinkler Co. *v.* Walworth Mfg. Co. 51 Fed. Rep. 89, 1892; Starling *v.* Weir Plow Co. 53 Fed. Rep. 119, 1892; Pratt *v.* Sencenbaugh, 64 Fed. Rep. 781, 1893; Pratt *v.* Wright, 65 Fed. Rep. 99, 1890.

[3] National Cash Register Co. *v.* American Cash Register Co. 53 Fed. Rep. 370, 1892; Wanamaker *v.* Enterprise Mfg. Co. 53 Fed. Rep. 792, 1893.

[4] American Middlings Purifier Co. *v.* Christian, 3 Bann. & Ard. 44, 1877; American Bell Telephone Co. *v.* Southern Telephone Co. 34 Fed. Rep. 796, 1888; Green *v.* City of Lynn, 55 Fed. Rep. 518, 1893.

[5] Edison Electric Light Co. *v.* Philadelphia Trust Co. 60 Fed. Rep. 367, 1894.

from the record of the Supreme Court or of the Circuit Court of Appeals.[1]

§ 636. The evidence which a complainant is required to produce to support his bill in an action in equity, is the same as that which a plaintiff in an action at law is required to introduce in support of his declaration; except that in an action in equity the complainant must introduce evidence to excuse his delay in filing his bill, where a long delay to file it occurred after the infringement took place; and except that till after the interlocutory hearing, he need introduce no evidence relevant to profits or to damages; and except that the complainant's evidence of the doings of the defendant will have to be equal to the testimony of two witnesses, in order to meet the denial of the defendant's answer, where the bill required the answer to be made under oath, and where a denial was made under oath. When the complainant has some evidence tending to show the character of the defendant's doings, and that those doings infringe the complainant's patent, a court of equity has power to order the defendant to allow the complainant, or some expert or other person representing him, to inspect the defendant's doings for fuller accuracy of knowledge.[2] But this power will not be exercised, where a bill is filed upon a conjecture of infringement with the hope of obtaining evidence to that effect afterward.[3]

§ 637. The evidence which is required to support either of the twenty-seven defences which are common to actions at law and actions in equity, is the same in both those forms of proceeding. Of the two defences which are peculiar to equity, that of non-jurisdiction is one which seldom or never requires any evidence to support it; and laches is, *prima facie*, supported by the fact of the long lapse of time which

[1] Green *v.* City of Lynn, 55 Fed. Rep. 519, 1893.

[2] Diamond Match Co. *v.* Oshkosh Match Works, 63 Fed. Rep. 984, 1894; Wilson *v.* Keeley, 43 Off. Gaz. 511, 1888.

[3] Dobson *v.* Graham, 49 Fed. Rep. 17, 1889; Stokes Bros. Mfg. Co. *v.* Heller, 56 Fed. Rep. 298, 1893.

is deducible from the complainant's proofs, where such a defence has any foundation at all. Where the complainant introduces evidence to excuse the delay, it may be necessary for the defendant to negative that evidence by other proof, or to prove facts which show the complainant's excuse to be invalid or insufficient.

§ 638. Testimony in actions in equity for infringements of patents is taken wholly by depositions in writing, except in a few districts, where, in pursuance of local rules of court, it may, by the consent of both parties, be taken orally in open court. Where testimony is taken by depositions in writing, counsel have sometimes yielded to temptation to take immaterial or otherwise inadmissible evidence, and to prolong examinations beyond useful bounds. Indeed this practice has grown to be such a drain upon the pockets of parties, and such a burden upon the minds of judges, that one of the most experienced and distinguished of the latter has taken occasion to administer to the abuse a deserved condemnation, saying of a case not worse than many others: "This record is a sample of the expensive practice which now prevails in patent cases, of stuffing the record with prolix cross-examinations and irrelevant testimony."[1]

§ 639. Depositions may be taken by a commission, upon interrogatories filed by the party taking it out, and upon cross-interrogatories filed by the adverse party.[2] If either party so requires, all the depositions in a case must be taken orally, in writing, before an examiner, in the presence of the parties or their agents, by their counsel or solicitors, and in the method of examination and cross-examination used in common-law courts.[3] An examiner may take testimony in other districts than that wherein the case is pending; and the United States Circuit Court for any other district has power to issue a subpœna, commanding a person living in its district to appear and testify before the examiner who is discharging his duties therein; and such court

[1] Ecaubert *v.* Appleton, 67 Fed. Rep. 924, 1895.

[2] Equity Rule 67.

[3] Equity Rule 67.

also has power to punish such a person for refusing to obey such a subpœna; and such a subpœna may issue from the clerk's office without any special order of court.[1] Where depositions are taken orally in writing before an examiner, the court may, on motion of either party, assign a time within which the complainant shall take his evidence in support of the bill; and a time thereafter, within which the defendant shall take his evidence in defence; and a time thereafter, within which the complainant shall take his evidence in reply.[2] Depositions may also be taken in equity cases, in the method heretofore explained for taking depositions in actions at law, whenever the same facts exist to justify that mode of practice.[3] And depositions may also be taken in the mode prescribed by the laws of the State in which the court is held wherein those depositions are to be used.[4]

It is to be observed, relevant to all methods of taking depositions, that each item of the procedure which is prescribed by rule or by statute, must be strictly followed in every case, except where it is varied or waived by a written stipulation of the parties. Stipulations may also provide for an enlargement of time for taking depositions;[5] which time, unless enlarged by a stipulation or by an order of court, covers three calendar months and no more.[6] But depositions taken out of proper time will be considered on the hearing, unless there is a prior successful motion to suppress them.[7]

§ 640. Depositions taken in any other case may be used in any action in equity, if each party therein was a party to the action in which they were taken, or is in privity with a

[1] Johnson Street Rail. Co. *v.* North Branch Steel Co. 48 Fed. Rep. 192, 1892.

[2] Equity Rule 67.

[3] Stegner *v.* Blake, 36 Fed. Rep. 184, 1888; Arnold *v.* Chesebrough, 35 Fed. Rep. 16, 1888; Equity Rule 68; Section 535 of this book.

[4] 27 Statutes at Large, Chap. 14, p. 7.

[5] Equity Rule 67.

[6] Equity Rule 69; Guaranty Trust Co. *v.* Green Cove Railroad, 139 U. S. 145, 1891.

[7] Matthews *v.* Spangenberg, 19 Fed. Rep. 824, 1882.

party to that action, and if the court grants a motion to use them.[1] But where either party in the new action was not a party to the former one, and is not in privity with any party thereto, no deposition taken in the former suit can be used in the new one; for no deposition can be read against a party, who could not read it in his favor if it were favorable to him.[2]

§ 641. Documentary evidence is generally introduced before the examiner, within the same time that the oral testimony is required to be taken; and that is the necessary course where documents require to be proved by oral testimony. But documents which prove themselves, may be introduced on the hearing without having been put in evidence before the examiner, unless such a practice, in a particular case, would operate as a surprise upon the opposite party.[3] And documents which require to be proved may be introduced on or even after the hearing, with the consent of the court.[4] Where a document thought by a party to be material to his case, is known to be in the possession of the opposite party, its production in court may be compelled by a subpœna *duces tecum*.[5]

§ 642. A jury of not less than five and not more than twelve persons may be empannelled by any United States Circuit Court, when sitting in equity for the trial of a patent cause, for the purpose of submitting to them such questions of fact in the case as the court shall deem it expedient to submit; and the verdict of such a jury is treated in the same manner and with the same effect as in the case of issues sent from chancery to a court of law and

[1] Clow *v.* Barker, 36 Fed. Rep. 692, 1888.

[2] Dale *v.* Rosevelt, 1 Paige (N.Y.) 35, 1828; Paynes *v.* Coles, 1 Munford (Va.), 394, 1810; Barker *v.* Shoots, 18 Fed. Rep. 652, 1884.

[3] Knapp *v.* Shaw, 15 Fed. Rep. 115, 1883.

[4] Mast, Foos & Co. *v.* Windmill & Pump Co. 68 Fed. Rep. 224, 1895.

[5] Edison Electric Light Co. *v.* United States Electric Lighting Co. 45 Fed. Rep. 55, 1891.

returned with such findings.[1] Therefore such a verdict is only advisory, and never conclusive upon the court. If the judge disagrees in opinion with the jury relevant to the questions of fact covered by the verdict, he may enter a decree contrary thereto.[2] But the regular course of proceeding in such a case is to enter a decree in accordance with the verdict, unless the party against whom it was found moves the court for a new trial. A new trial in such a case is granted or refused according as the judge thinks the verdict was right or was wrong; and without special regard to any errors, or freedom from errors, which characterized the admission or rejection of evidence on the trial, or the instructions which were given or those which were refused by the judge. Where a new trial is refused, and a decree is entered in accordance with the verdict, if the defeated party would take the case to the Circuit Court of Appeals for review, he must do so on appeal from the decree, and not upon a writ of error as from a judgment entered upon a verdict in an action at law. In a properly prepared case, the Circuit Court of Appeals will decide whether, on the whole, the decree was right or was wrong; but it will not pass upon the correctness or incorrectness of the rulings of the judge at the jury trial. Therefore the evidence taken at the jury trial should be preserved, if there is any intention to take the case to the Circuit Court of Appeals, but no bill of exceptions in the case is necessary or is proper.[3]

§ 643. A master in chancery may be deputed by a Circuit Court to try any question of fact in a patent case, and to report his conclusion thereon.[4] But such a report is advisory only, and no decree will be entered upon it, if either party can convince the judge that it was wrong. Exceptions to the master's report are the proper means of

[1] 18 Statutes at Large. Part 3. Chap. 77, Section 2, p. 316; Gray *v.* Halkyard, 28 Fed. Rep. 854, 1886.

[2] Silsby *v.* Foote, 1 Blatch. 545, and 20 Howard, 290, 1857.

[3] Watt *v.* Starke, 101 U. S. 247, 1879.

[4] Parker *v.* Hatfield, 4 McLean, 61, 1845.

appeal from his conclusion. If on such exceptions, the judge concludes that the master was wrong in any respect, he may send the case back to him, with directions to make a new report, and with prescriptions of new criteria by which to make it;[1] or he may proceed to try the questions of fact himself, if that course appears to be more convenient. The rules of practice which regulate the taking of evidence by masters in chancery, and regulate the hearings before them, and the filing of exceptions to their reports, are the same, when they are directed to ascertain the truth relevant to such questions of fact as novelty or infringement, that they are in the more common cases wherein they are directed to take and state an account of profits and damages.

§ 644. An interlocutory decree, in an equity patent case, is a decree which adjudges that the patent sued upon is valid; and that the defendant has infringed it; and that a master in chancery be directed to take and report an account of the profits which the defendant realized from that infringement, and of the damages which the complainant sustained by reason thereof; and sometimes that the defendant be permanently enjoined from further infringement.[2]

Where only part of the claims in suit are found valid and infringed, such a decree is confined to that part;[3] and such a decree is not entered in a case where the infringement is below the dignity of the court, but bills in such cases are dismissed without costs.[4] Judicial destruction of infringing articles, is a feature of the patent laws of England, but is not justified by any existing law of the United States; though that severe measure has been

[1] Cawood Patent, 94 U. S. 708, 1876.

[2] Dudley E. Jones Co. *v.* Munger Mfg. Co. 50 Fed. Rep. 785, 1892; Richmond *v.* Atwood, 52 Fed. Rep. 21, 1892.

[3] Shute *v.* Morley Co. 64 Fed. Rep. 368, 1894.

[4] Wickwire *v.* Wire Fabric Co. 41 Fed. Rep. 36, 1889.

approved in one *obiter dictum*,[1] and unsuccessfully invoked in one adjudicated case.[2]

§ 644*a*. An appeal from an interlocutory decree which grants, continues, refuses, dissolves or refuses to dissolve an injunction, may be taken to the Circuit Court of Appeals, for the circuit in which that decree was rendered, at any time within thirty days from the entry of the decree.[3] Such an appeal will secure a review of that part of the decree which refers to an injunction; and to that end, the Circuit Court of Appeals will decide the questions of validity and infringement, and whatever other questions underlie the question of the justice of an injunction.[4] If the decision on either of these two fundamental questions is adverse to the complainant, it will practically vacate any part of an interlocutory decree which directs an accounting of profits and damages. But no appeal can be taken by a defendant from an interlocutory decree which directs an accounting of profits and damages, but does not order an injunction. And where an interlocutory decree directs an accounting of profits and damages, and orders an injunction on only part of the claims in suit, and where the defendant thereupon appeals, the court will not consider that part of the decree which was favorable to him.[5]

§ 645. A petition for a rehearing may be filed at any time before the end of the term at which the final decree in the case is entered and recorded.[6] Such a petition may be based upon an apparent error of the judge in deciding upon the case as it was presented to him in the record; or it may

[1] Birdsell *v.* Shaliol, 112 U. S. 487, 1884.

[2] American Bell Telephone Co. *v.* Kitsell, 35 Fed. Rep. 521, 1888.

[3] 28 Statutes at Large, Chap. 96, p. 666.

[4] Dudley E. Jones Co. *v.* Munger, Mfg. Co. 50 Fed. Rep. 785, 1892; Richmond *v.* Atwood, 52 Fed. Rep. 28, 1892; Consolidated Cable Co. *v.* Pacific Ry. Co. 58 Fed. Rep. 226, 1893; Columbus Watch Co. *v.* Robbins, 64 Fed. Rep. 397, 1894; Kilmer Mfg. Co. *v.* Griswold, 67 Fed. Rep. 1017, 1895.

[5] Eagle Lock Co. *v.* Corbin Lock Co. 64 Fed. Rep. 789, 1894.

[6] Equity Rule 88.

be based on facts which were discovered after the entry of the decree which the petition asks to have reconsidered. These two kinds of rehearing are quite different from each other, not only in respect of the grounds upon which they are based, but also in respect of the methods by which they are obtained.

§ 646. A rehearing for matter apparent on the face of the record may be applied for by a petition signed by counsel, and stating the ground upon which the rehearing is prayed.[1] That ground must be sufficient to convince the judge that the decree was perhaps erroneous.[2] In order to do that, it is necessary to point out some particular misapprehension of the law, or some particular mistake in respect of the evidence, into which the judge was unfortunate enough to fall.[3] Such a misapprehension may be established by showing that since the case sought to be reheard was decided, the Appellate Court has settled or clarified the law so as to give it a different character from that which it was then understood to have ;[4] but such a mistake cannot be established by showing that the judge omitted, in his opinion, to review all the evidence in the case.[5] It is useless to ask for a rehearing of this kind on the general ground that the decision is thought by counsel to be wrong.[6] But a rehearing may be spontaneously ordered by the court when the judge begins to doubt his decision.[7]

§ 647. A rehearing on account of newly discovered evidence must be applied for as soon as possible after its

[1] Equity Rule 88.

[2] American Diamond Rock Boring Co. *v.* Sheldon, 18 Blatch. 50 1880.

[3] Everest *v.* Oil Co. 22 Fed. Rep. 252, 1884; Railway Mfg. Co. *v.* Railroad Co. 26 Fed. Rep. 411, 1886; Coupe *v.* Weatherhead, 37 Fed. Rep. 16, 1888; Detwiller *v.* Bosler, 58 Fed. Rep. 250, 1893.

[4] Wooster *v.* Handy, 21 Fed. Rep. 51, 1884; Spill *v.* Celluloid Mfg. Co. 21 Fed. Rep. 640, 1884; Campbell *v.* New York, 35 Fed. Rep. 504, 1888.

[5] Timken *v.* Olin. 37 Fed. Rep. 207, 1888.

[6] Tufts *v.* Tufts, 3 Woodbury & Minot, 429, 1847; Gage *v.* Kellogg, 26 Fed. Rep. 243, 1886.

[7] Brown Mfg. Co. *v.* Deere, 51 Fed. Rep. 229, 1892.

discovery[1] by a petition, verified by the oath of the applicant or of some other person,[2] and stating the nature of the alleged newly discovered evidence, and that it was not known to the petitioner till after the decree was rendered,[3] and also what diligence was exercised in searching therefor prior to that time,[4] and praying for leave to file a supplemental bill in the nature of a bill of review, and for a rehearing of the cause at the time when the issues raised by that bill shall be ready for hearing.[5] The function of such a bill is to furnish a foundation in the pleadings for evidence on both sides of the new issues of fact to determine which, the rehearing is granted. When such a petition is filed, it must be supported by affidavits of the witnesses who are expected to testify to the newly discovered facts which are sought to be brought into the case,[6] and also by affidavits showing that those facts were not discovered by the petitioner till after the former hearing,[7] and could not, with reasonable diligence, have been discovered sooner than they were.[8] Such a petition may be answered by counter affidavits tending to show that part or all of the statements in the petitioner's affidavits are untrue.[9] To grant the prayer of the petition, the court must be satisfied that the applicant's affidavits are probably true,[10] and clearly material,[11] and that the facts they set forth were not known to the petitioner at the time of the former hearing, and could not with reason-

[1] Blandy *v.* Griffith, 6 Fisher, 435, 1873.

[2] Equity Rule 88.

[3] Foote *v.* Stein, 35 Fed. Rep. 205, 1888.

[4] Allis *v.* Stowell, 5 Bann & Ard. 459, 1880; New York Filter Co. *v.* Filter Co. 62 Fed. Rep. 582, 1894.

[5] Dexter *v.* Arnold, 5 Mason, 310, 1829; Daniell's Chancery Practice, 1537.

[6] Reeves *v.* Keystone Bridge Co. 2 Bann. & Ard. 259, 1876.

[7] Reeves *v.* Keystone Bridge Co. 2 Bann. & Ard. 256, 1876.

[8] India Rubber Comb Co. *v.* Phelps, 4 Fisher, 317, 1870; Hitchcock *v.* Tremaine, 9 Blatch. 551, 1872; Barker *v.* Stowe, 4 Bann. & Ard. 405, 1878; Willimantic Linen Co. *v.* Clark Thread Co. 24 Fed. Rep. 799, 1885.

[9] Blandy *v.* Griffith, 6 Fisher, 435, 1873.

[10] Munson *v.* New York, 11 Fed. Rep. 72, 1882; New York Sugar Co. *v.* Sugar Co. 35 Fed. Rep. 217, 1888.

[11] Reeves *v.* Keystone Bridge Co. 2 Bann. & Ard. 259, 1876.

able diligence have been discovered prior to that event;[1] except that the last of these four points is not required to be shown, where it is shown that the other party knew, at the time of the decree, of the fact which is sought to be brought into the case on a rehearing.[2]

Rehearings will not be granted to enable parties to search for further evidence,[3] nor to strengthen their expert testimony,[4] nor to amend their pleadings so as to make certain evidence admissible, which was taken before the former hearing, and was disregarded thereon, because not supported by any pleading;[5] nor to produce cumulative evidence on questions of fact which were in issue at the former hearing;[6] nor to correct errors of management committed by the petitioner's counsel.[7] And no appeal lies from a decision of a Circuit Court granting or refusing any rehearing.[8]

§ 648. A supplemental bill in the nature of a bill of review should state the newly discovered facts upon which it is based, and should pray that the cause may be heard with respect to the new matter, at the same time that it is reheard upon the original bill, and that the party who files the subordinate bill may have such relief as the nature of his case requires. The proceedings upon a bill of this description are the same as those upon original bills in general.[9] No order for a rehearing, made after an interlocutory decree, and while an account of profits and damages is being taken by a master in chancery, will stop the taking of that account; unless the court enters a special order directing the master

[1] Prevost *v.* Gratz, 1 Peters' Circuit Court Reports, 364, 1816; Baker *v.* Whiting, 1 Story, 234, 1810; Reeves *v.* Keystone Bridge Co. 2 Bann. & Ard. 258, 1876; Page *v.* Telegraph Co. 18 Blatch. 122, 1880.

[2] Jonathan Mills Mfg. Co. *v.* Whitehurst, 60 Fed. Rep. 81, 1894.

[3] Munson *v.* New York, 11 Fed. Rep. 72, 1882.

[4] Hitchcock *v.* Tremaine, 5 Fisher, 538, 1872.

[5] American Saddle Co. *v.* Hogg, 6 Fisher, 67, 1872.

[6] Blandy *v.* Griffith, 6 Fisher, 435, 1373; Pfanschmidt *v.* Mercantile Co. 32 Fed. Rep. 667, 1887.

[7] Ruggles *v.* Eddy, 11 Blatch. 524, 1874; Colgate *v.* Telegraph Co. 19 Fed. Rep. 828, 1884; Pittsburg Reduction Co. *v.* Aluminum Co. 64 Fed. Rep. 128, 1894.

[8] Roemer *v.* Bernheim, 132 U. S. 106, 1889.

[9] Daniell's Chancery Practice, 1537.

to suspend proceedings therein.[1] And where a rehearing results in a reversal of an interlocutory decree, which has been entered in favor of a complainant, and results also in a dismissal of the complainant's bill; that dismissal will be without prejudice to the use, in any subsequent accounting, of the evidence which may have been taken by the master.[2] And the decree ordering that dismissal will give costs to the complainant for the litigation prior to the granting of the rehearing; and will give costs to the defendant for the litigation which occurred after that event.[3]

§ 649. A final decree will be entered in favor of the defendant, where a demurrer to the whole bill is sustained on a point which is not cured by amendment; or where a plea to the whole bill is sustained on an argument, and is thereupon replied to, and is found to be true on the trial; or where either of the numerous defences which may be made in an answer, and which apply to the whole bill, are established at an interlocutory hearing.[4] And final decrees will be entered in favor of complainants, when their bills have successfully run the gauntlet of demurrers, pleas, answers, interlocutory hearings, petitions for rehearings, supplemental bills in the nature of bills of review, accounting before a master, exceptions to the master's report, and final hearings, through which original bills in patent cases may regularly be caused to pass. The last three parts of this series of proceedings are explained in the chapter on profits, and the others have already been outlined in this. Assuming therefore, that a final decree has already been entered for the complainant or the defendant, and that the costs have been adjusted and taxed according to law,[5] it is now

[1] Daniell's Chancery Practice, 1467.

[2] Campbell *v.* New York, 35 Fed. Rep. 504, 1888.

[3] Hake *v.* Brown, 44 Fed. Rep. 283, 1890.

[4] Richmond *v.* Atwood, 52 Fed. Rep. 21, 1892.

[5] Sections 543 to 549 of this book; Wooster *v.* Handy, 23 Fed. Rep. 49, 1885; Spill *v.* Mfg. Co. 28 Fed. Rep. 870, 1886; Hill *v.* Smith, 32 Fed. Rep. 753, 1887; Ryan *v.* Gould, 32 Fed. Rep. 754, 1887; New York Belting Co. *v.* Rubber Co. 32 Fed. Rep. 755, 1887.

convenient to delineate the further proceedings to which the defeated party may resort. These are of two kinds: bills of review, and appeals.

§ 650. A bill of review is the proper means of securing a reconsideration of a final decree, after the expiration of the term at which it was entered.[1] Such bills are of two sorts: those filed to correct errors apparent on the face of the pleadings or decree;[2] and those filed to introduce evidence of facts which occurred or were discovered after the decree was entered.[3] In order to secure favorable action on such a bill, the petitioner must first pay to the opposite party, the amount of the decrees which he seeks to have reversed or modified, unless the court releases him from that necessity. But the court will release him if he is unable to pay;[4] and will probably do so where the opposite party is insolvent, if the petitioner will give good security for the money decreed, or will deposit that money in court.[5]

§ 651. A bill of review, to correct errors apparent on the pleadings or decree, may be filed without leave of court,[6] but no such bill will be considered or acted upon by the court, unless it is filed within the same time after the entry of the decree, as that provided for by statute relevant to appeals;[7] which latter time is at present six months.[8] Nor will such a bill be entertained, if the decree which it was filed to correct, was entered by the circuit court, after an appeal to a higher court, and in pursuance of directions contained in the mandate of the latter tribunal.[9] In considering a bill of review of this sort, the court will confine its examination to the pleadings and decree in the

[1] Story's Equity Pleading, Sec. 403.

[2] Whiting *v.* The Bank of the United States, 13 Peters, 14, 1839.

[3] Story's Equity Pleading, Sec. 404.

[4] Story's Equity Pleading, Sec. 406.

[5] Griggs *v.* Gear, 3 Gilman (Illinois), 17, 1845.

[6] Ross *v.* Prentiss, 4 McLean, 106, 1846; Story's Equity Pleading, Sec. 405.

[7] Thomas *v.* Harvie's Heirs, 10 Wheaton, 149, 1825; McDonald *v.* Whitney, 39 Fed. Rep. 467, 1889.

[8] 26 Statutes at Large, Chap. 517, Section 11,

[9] Southard *v.* Russell, 16 Howard, 570, 1853.

original action; for no bill lies to correct any errors of fact which were made in examining or weighing the evidence upon which the decree was based.[1]

§ 652. A bill of review, filed to introduce evidence of new facts or of newly discovered facts, cannot be filed without leave of court.[2] Where the case sought to be reviewed has not been appealed, the application for leave is made to the court which rendered the decree; but where the case has been appealed to the Circuit Court of Appeals, the application must be presented in that tribunal.[3] If that court decides that the leave ought to be granted, it will return the case to the court below, with directions to receive and adjudicate the bill of review;[4] and thereafter the case will proceed in the lower tribunal much as it would have done if no appeal had been taken. After the bill of review has been litigated and a new decree entered, an appeal will lie to the Circuit Court of Appeals on the whole case. The mode of application for leave to file such a bill, is by a petition stating the original proceedings and the new facts or newly discovered facts on the strength of which reversal of the decree is prayed.[5] The petition must be supported by affidavits stating the exact nature of those facts, in order that the court may judge of their materiality and sufficiency, and showing that they occurred after the final decree was entered, or if they occurred before that time, that they were not discovered, and could not with reasonable diligence have been discovered till afterward.[6] Bills of review of this sort may be filed even more than six months after the entry of the decree, provided they are filed within a reasonable time after the discovery is made, upon

[1] Whiting *v.* Bank of the United States, 13 Peters, 14. 1839; Story's Equity Pleading, Section 407.

[2] Ross *v.* Prentiss, 4 McLean, 106, 1846.

[3] Roemer *v.* Simon, 2 Bann. & Ard. 72, 1875.

[4] Revised Statutes, Section 701; Ballard *v.* Searles, 130 U. S. 50, 1888.

[5] Massie's Heirs *v.* Graham's Adm'rs, 3 McLean, 43, 1842.

[6] Story's Equity Pleading, Sections, 412, 413 and 414.

which they are based.[1] Leave to file such a bill will be granted, in a proper case, whether those facts relate to issues in the original action, or relate to defences which were not in issue therein;[2] but it will not be granted where the facts stated in the petition are not adapted, or are not sufficient, to have altered the decree if they had been before the court on the hearing;[3] nor where those facts could, with reasonable diligence, have been discovered before the decree was entered;[4] nor to enable the petitioner to introduce evidence to impeach the character of the witnesses upon whose testimony the decree was based; nor to introduce cumulative testimony on a point litigated and decided at the hearing; but newly discovered corroberating evidence in writing, may furnish a foundation for such leave.[5] After a bill of review to introduce new facts, or newly discovered facts, has been duly filed, the opposite party may plead or answer thereto, and thus put the party who filed it, to the proof of its allegations.[6] A demurrer to a bill of this sort is not appropriate, because its sufficiency in point of law must be passed upon before it can be filed.

§ 653. A bill in the nature of a bill of review, differs from a bill of review only in respect of the legal character of the complainant. The latter bill can be filed by either of the parties to the decree which is sought to be reviewed, or by their respective privies in representation, such as heirs, executors, or administrators; but the former is required to be filed, where privies in estate, such as devisees or assignees of an original party, seek to secure the reversal or modification of a final decree after the expiration of the term at which it was entered.[7] Neither of these sorts

[1] United States *v.* Samperyac, Hemstead's Circuit Court Reports, 131, 1831.

[2] Dexter *v.* Arnold, 5 Mason, 313, 1829; United States *v.* Samperyac, Hemstead's Circuit Court Reports, 131, 1833; Story's Equity Pleading, Sections 415 and 416.

[3] Dexter *v.* Arnold, 5 Mason, 313, 1829.

[4] Rubber Co. *v.* Goodyear, 9 Wallace, 806, 1869.

[5] Southard *v.* Russell, 16 Howard, 569. 1853.

[6] Dexter *v.* Arnold, 5 Mason 309, 1829.

[7] Story's Equity Pleading, Section 409.

of bills is to be confounded with a supplemental bill in the nature of a bill of review. That is still another variety, and its character and operation have already been outlined.[1]

§ 654. An appeal to the Circuit Court of Appeals is demandable from the final decree of any United States Circuit Court, in any case arising under the patent laws, provided it is taken within six months after the entry of the decree;[2] unless the decree is only for costs.[3] But in order to operate as a supersedeas, and thus stay execution, an appeal must be taken within sixty days after the rendition of the decree; and indeed an execution may be issued, if an appeal is not taken within ten days after such rendition.[4] But in the latter case, a supersedeas afterward obtained will prevent further proceedings under the execution, though it will not interfere with what has already been done.[5] The time within which appeals may be taken, may properly be held to begin, either when the case is finally decided, or when the formal decree is signed by the judge, and filed with the clerk of the court.[6] When an appeal operates as a supersedeas, is so operates only as against the money recovery provided for in the decree, and not as against that part of the decree which directs the payment of the master's fees,[7] nor as against that part which directs an injunction to issue;[8] but the judge who enters a decree granting an injunction, has discretionary power to suspend or modify the same pending an appeal.[9]

And a final decision of a United States Circuit Court, of a collateral question arising in a patent case, may also be appealable to the Circuit Court of Appeals, even while the other questions in the case are still pending and undecided

[1] Sections 647 and 648 of this book.

[2] 26 Statutes at Large, Sections 6 and 11.

[3] DuBois *v.* Kirk, 158 U. S. 67, 1895.

[4] Revised Statutes, Sections 1012, and 1007.

[5] Board of Commissioners *v.* Gorman, 19 Wallace, 663, 1873.

[6] Silsby *v.* Foote, 20 Howard, 290, 1857.

[7] Myers *v.* Dunbar, 1 Bann. & Ard. 565, 1874.

[8] Whitney *v.* Mowry, 3 Fisher, 175, 1867.

[9] Equity Rule 93.

in the Circuit Court; and the decision of the Circuit Court not to dismiss a bill for infringement of a patent, upon the motion of a nominal complainant, against the opposition of those equitably entitled to sue in the name of the nominal complainant, is an example of such a final decision.[1]

No appeal lies from any Circuit Court of Appeals to the Supreme Court in any patent case, except actions brought by the United States to repeal patents;[2] though any Circuit Court of Appeals may certify to the Supreme Court any question of law upon which it desires the instruction of that court for its proper decision; and the Supreme Court may send a certiorari to any Circuit Court of Appeals, requiring any action in equity for infringement of a patent to be sent to the Supreme Court for its review and determination, with the same power and authority as if the case had been carried by an appeal to the Supreme Court.[3] Where a Circuit Court of Appeals sends such a certificate to the Supreme Court, that certificate must clearly and distinctly state whatever question of law is involved therein, and must show that the Circuit Court of Appeals desires to receive instruction from the Supreme Court how to decide that question; and where two Circuit Courts of Appeals have rendered inconsistent judgments upon an important question of law, the proper practice is to apply to the Supreme Court for a certiorari directing one of the cases to be sent to that tribunal for review, so as to obtain a final decision of that question.[4]

And an appeal to the Court of Appeals of the District of Columbia, is demandable from the final decree of the Supreme Court of the District of Columbia, in any case arising under the patent laws.[5] And an appeal is also demandable from the final judgment of that Court of Appeals, to the Supreme Court of the United States without

[1] Brush Electric Co. *v.* Electric Co. of San Jose, 51 Fed. Rep. 557, 1892.

[2] United States *v.* Bell Telephone Co. 159 U. S. 548, 1895.

[3] 26 Statutes at Large, Chap. 517, Sec. 6.

[4] Columbus Watch Co. *v.* Robbins, 148 U. S. 267, 1893.

[5] 27 Statutes at Large, Chap. 74, Sec. 7, p. 435.

regard to the sum or value in dispute, in any case wherein is involved the validity of any patent.[1]

§ 655. On the hearing of an appeal in the Circuit Court of Appeals, the decree may generally be attacked by the appellant, upon any ground upon which it was resisted in the court below; and may be supported by the appellee upon any ground in the record, whether the Circuit Court based its decree upon that ground or some other.[2] But the decree cannot be assailed on the ground that the court below refused to set aside a decree *pro confesso*,[3] or refused to allow the appellant to retract an admission which he had made in his pleadings;[4] or granted or refused a rehearing;[5] or rendered any other decision which belonged to the judicial discretion of the court to make. Nor can a decree be attacked in the Circuit Court of Appeals, on account of any error made by a master in chancery in taking an account of profits or damages, unless that error was brought before the court below for correction, by means of a proper exception to the master's report;[6] and not even then, where the alleged error is one of quantity or computation, and is not obvious.[7] Where a decree is reversed and remanded for further proceedings, and a second decree is entered by the court below after those proceedings are taken, and an appeal is taken from the second decree, that decree cannot be assailed on account of any errors that occurred prior to the former decree.[8] No decree can be attacked by the appellee, on the appellant's appeal. Where either party to a decree intends to ask the Circuit Court of

[1] 27 Statutes at Large, Chap. 74, Sec. 8, p. 436.

[2] Electric Gas Lighting Co. *v.* Fuller, 59 Fed. Rep. 1003, 1894.

[3] Dean *v.* Mason, 20 Howard, 198, 1857.

[4] Jones *v.* Morehead, 1 Wallace, 155, 1863.

[5] Roemer *v.* Bernheim, 132 U. S. 106, 1889; Boesch *v.* Graff, 133 U. S. 699, 1890.

[6] Kinsman *v.* Parkhurst, 18 Howard 289, 1855.

[7] Warren *v.* Keep, 155 U. S. 267, 1894.

[8] Himely *v.* Rose, 5 Cranch, 313, 1809; The Santa Maria, 10 Wheaton, 431, 1825; American Insurance Co. *v.* Canter, 1 Peters, 511, 1828; Corning *v.* Troy Iron & Nail Factory, 15 Howard, 451, 1853.

Appeals to direct it to be altered, he must appeal to that tribunal, whether the other party appeals or not.[1] Where both parties appeal, both appeals are heard together in the Circuit Court of Appeals, and the complainant in the court below is entitled to open and to close the argument. A decree may also be attacked by an appellant on several grounds upon which it may not have been resisted in the court below. Non-jurisdiction of equity falls in this category,[2] where the patent expired before the bill was filed; and so does want of invention, when that want results from facts of which the court will take judicial notice.[3] Where a defendant interposed several defences in the court below, and where that court held them all to be bad, except one which it held to be good, and therefore dismissed the bill; and where the Circuit Court of Appeals on an appeal finds the latter defence to be bad, it will thereupon decide whether either of the others are good, and if it finds either of them to be so, it will affirm the decree.[4] Or the Circuit Court of Appeals may find a defence to be good, which the court below did not so find, and may thereupon omit to decide upon the defence which the court below found to be good.[5] And a decree for a complainant may be sustained on a different ground from that upon which it was based in the court below.[6]

§ 656. After the Circuit Court of Appeals has heard an appeal, it may affirm the decree, or may reverse it, or may modify it, or may remand the case to the court below for further proceedings.[7] Where it affirms the decree, it ends the litigation, leaving the court below to enforce its adjudication, if any enforcement is required. Where it reverses

[1] Corning *v.* Troy Iron & Nail Factory, 15 Howard, 451, 1853.

[2] Hipp *v.* Babin, 19 Howard, 271, 1856.

[3] Brown *v.* Piper, 91 U. S. 41, 1875.

[4] Troy Iron & Nail Factory *v.* Corning, 15 Howard, 451, 1853.

[5] Patent Clothing Co. *v.* Glover, 141 U. S. 560, 1891.

[6] Woodward *v.* Boston Lasting Mach. Co. 63 Fed. Rep. 609, 1894.

[7] Revised Statutes, Section 701.

the decree, it generally does so at the appellee's costs, so that the court below, when it receives the mandate, will have nothing to do but to tax those costs, and enter a decree therefor; and from such a decree there is no appeal.[1] When it modifies the decree, it may do so in either of several respects. For example, it may change a decree which was entered for the appellant with costs, to one without costs, and in that event it will require the appellee to pay his own costs in the Circuit Court of Appeals.[2] It may also change the amount of the decree, instead of remanding the case to the court below for a recomputation.[3] Where it remands a case for further proceedings, the proceedings prescribed may even extend to a trial at law, or by a jury in equity, of the questions of fact involved in the case.[4] Where both parties appeal from the decree, and the decree is affirmed, no costs incurred in the Circuit Court of Appeals are allowed to either party.[5]

§ 657. A certificate of division of opinion is a means of taking questions of law to the Circuit Court of Appeals, where those questions arise in a case heard by two judges in the court below, and where those judges disagree about their proper solution.[6] No question of infringement or other question of fact can be taken to the Circuit Court of Appeals in this method;[7] and such a certificate must state the precise points of law which are involved, or the case will be remanded without an answer.[8]

[1] Elastic Fabrics Co. *v.* Smith, 100 U. S. 111, 1879.

[2] O'Reilly *v.* Morse, 15 Howard, 121, 1853.

[3] Parks *v.* Booth, 102 U. S. 106, 1880.

[4] Cochrane *v.* Deener, 94 U. S. 784, 1876.

[5] Edison Electric Light Co. *v.* Electric Supply Co. 66 Fed. Rep. 312, 1895.

[6] Revised Statutes, Section 693; 26 Statutes at Large, Chap. 517, Sec. 11.

[7] California Paving Co. *v.* Molitor, 113 U. S. 616, 1884.

[8] Wilson *v.* Barnum, 8 Howard, 258, 1850.

CHAPTER XXI.

INJUNCTIONS.

658. Jurisdiction to grant injunctions.
659. Preliminary injunctions.
660. Bills for preliminary injunctions.
661. Notices of motions for preliminary injunctions.
662. Motions for preliminary injunctions.
663. Suspensions of motions for preliminary injunctions.
664. Temporary restraining orders.
665. Elements of *prima facie* rights to preliminary injunctions.
666. Prior adjudication.
667. Public acquiescence.
668. Duration of public acquiescence in a strict monopoly,
669. Duration of public acquiescence in a licensed monopoly.
670. Public acquiescence need not be universal to be efficacious.
671. Decrees *pro confesso*.
672. Consent decrees.
673. Defendant's admission of validity.
674. Interference decision.
675. The complainant's title.
676. Infringements.
677. Defences to motions for preliminary injunctions; and first by way of traverse.
678. Defences by way of confession and avoidance.
679. Averting effect of prior adjudication.
680. Averting effect of public acquiescence.
681. Averting preliminary injunction by proving repeal or expiration of patent, or fault in title thereto.
682. Averting preliminary injunction by proving license.
683. By proving estoppel.
684. By showing laches.
685. Preliminary injunction must generally follow a cause and an application therefor.
686. Bonds instead of injunctions, where complainant grants licenses.
687. Where infringing machinery embodies non-infringing features, also in some other cases.
688. Bonds required from complainants in certain cases.
689. Injunctions not averted by the existence of a remedy at law.
690. Injunctions *pro confesso* on withdrawal of opposition to a motion for an injunction.
691. Discretion of the court in granting or refusing injunctions.
692. Motions to dissolve preliminary injunctions.
693. Motions to dissolve for errors in point of law.
694. Motions to dissolve on account of newly discovered evidence.

695. Reinstatement of dissolved injunctions.
696. Consequences of obedience or disobedience to injunctions which are subsequently dissolved.
696*a*. Appeals from preliminary injunctions.
697. Permanent injunctions.
698. Refusal of permanent injunction, because the patent has expired.
699. Because the complainant has assigned the patent.
700. Because the defendant is dead, or, if a corporation, is dissolved.
701. Cessation of infringement no ground for refusal to enjoin.
702. Postponement of permanent injunctions.
703. Suspension of permanent injunctions pending appeals therefrom.
704. Dissolution of permanent injunctions.
705. Injunctions granted independent of other relief, and against complainants in certain cases
706. The duration of injunctions generally limited by the term of the patent.
707. The duration of injunctions granted by district judges in vacation.
708. Attachments for contempt.
709. Improper defences to motions for attachments.
710. Penalties for violations of injunctions.

§ 658. JURISDICTION to grant injunctions to prevent the violation of patent rights, is conferred by statute upon the same courts that are vested with common-law jurisdiction in patent cases.[1] The statute provides that the jurisdiction shall be exercised according to the course and principles of courts of equity, and upon such terms as the court may deem reasonable. This twofold provision indicates the sources from which the existing rules applicable to such cases were drawn. They were drawn from the ordinary course and principles of courts of equity, and from a reasonable contemplation of the peculiar circumstances which attend patent rights and patent litigation. Some of those rules relate only to preliminary injunctions, and others relate to permanent injunctions alone; and the residue are equally applicable to both. It is the plan of this chapter to explain those three classes of rules, and to show how all of them combined make up a system which may guide the judicial discretion in nearly every variety of circumstances.

[1] Revised Statutes, Section 4921.

§ 659. A preliminary injunction is one which is granted after the filing of the bill, and before the case is ready for an interlocutory hearing. When granted, it is commonly granted before the filing of the answer; but it is sometimes issued after that stage of the case, and sometimes even after the complainant has introduced all his *prima facie* evidence.[1] Such an injunction may be dissolved at any time; and a motion to dissolve it may be made whenever an apparent cause for its dissolution becomes known to the party enjoined. If not sooner terminated by dissolution, or by a certain statutory limitation hereafter explained, such an injunction continues till the interlocutory decree; and then it is dissolved or is made permanent, according to the equities of the case as they appear on the interlocutory hearing.

§ 660. A bill of complaint, in order to lay a foundation for a preliminary injunction, must state the particular prior adjudication or acquiescence upon which the presumption of validity of the patent is based,[2] and must contain a specific prayer for that relief, and for the proper writ by means of which that relief may be enforced,[3] and must conform to those requisites of bills in equity which are set forth in the twentieth chapter of this book.

§ 661. Due notice of a motion for a preliminary injunction must be served on the party sought to be enjoined from infringing a patent, before that motion will be heard by the court. This rule formerly had a sufficient foundation in a statute of 1793, which provided that no writ of injunction should be granted in any case without reasonable previous notice to the adverse party, or his attorney, of the time and place of moving for the same.[4] Portions of the section

[1] Union Paper Bag Machine Co. *v.* Newell, 11 Blatch. 550, 1874.

[2] Parker *v.* Brant, 1 Fisher, 59, 1850; Wirt *v.* Hicks, 46 Fed. Rep. 71, 1891.

[3] Lewiston Falls Mfg. Co. *v.* Franklin Co. 54 Maine, 402, 1867; Union Bank *v.* Kerr, 2 Maryland Chancery, 460, 1849.

[4] 1 Statutes at Large, Ch. 22, Section 5, p. 334.

which contained that provision are embraced in the Revised Statutes,[1] but that provision was omitted from those statutes, and was thereby repealed.[2] But there is still a foundation for the rule, which is stated at the head of this section; a foundation not so direct, but quite as certain, as the other was while it existed. The Revised Statutes provide that the Supreme Court shall have power to prescribe from time to time, and in any manner not inconsistent with any law of the United States, the modes of proceeding to obtain relief in suits in equity in the circuit and district courts.[3] In pursuance of this authority, the Supreme Court has prescribed an elaborate code of rules of practice for the courts of equity of the United States. Rule 55 of that series provides that special injunctions shall be grantable only upon due notice to the other party. And it is certain that all injunctions to restrain infringements of patents are special as distinguished from common injunctions.[4] A different line of argument on this subject, and one followed by a contrary conclusion, is to be found in one reported case,[5] but the reasoning in that case does not appear to be convincing.

§ 662. A motion for a preliminary injunction is heard in a summary way on *ex-parte* affidavits.[6] The complainant's affidavits in chief must show all the facts which are necessary to *prima facie* entitle him to such an injunction.[7] The defendant's affidavits must state all the facts upon which he bases his defence to the motion, and if those statements are by way of traverse, no further affidavits are admitted on the hearing; but if they are by way of confession and avoidance, the complainant is permitted to read affidavits in reply,

[1] Revised Statutes, Sections 716 and 720.

[2] Revised Statutes, Section 5596.

[3] Revised Statutes, Section 917; Orr *v.* Littlefield, 1 Woodbury & Minot, 19, 1845.

[4] High on Injunctions, Section 6; Purnell *v.* Daniel, 8 Iredell's Equity Reports (N. C.), 11, 1851.

[5] Yuengling *v.* Johnson, 1 Hughes, 607, 1877.

[6] Grover & Baker Sewing Machine Co. *v.* Williams, 2 Fisher, 133, 1860.

[7] Union Paper Bag Machine Co. *v.* Binney, 5 Fisher, 167, 1871.

but to that reply no rejoinder from the defendant is ever allowed.[1]

The complainant's bill may be used as an affidavit,[2] and so also may the defendant's answer, if it is on file when the motion for a preliminary injunction is heard.[3] But answers are commonly and properly drawn in such general terms that they are often of minor importance as defences to such motions, even where they are well concerted as pleadings. For example, where the answer says, on the question of infringement, that the defendant never made, used or sold any specimen of the patented thing; and where the affidavits of the complainant contain a description of what the defendant has done, and contain proper expert testimony showing that those doings constitute infringement of the patent, the general denial of the answer will go for nought on the hearing of a preliminary injunction.[4] The statements of the complainant's affidavits in chief are taken on the hearing to be true, so far as they are uncontradicted by the affidavits of the defendant;[5] and the affidavits of the defendant are taken to be true, so far as they are consistent with the complainant's affidavits in chief, and are not contradicted by his affidavits in reply.[6]

All affidavits to be used to support or to oppose a motion for a preliminary injunction ought to be served on the opposite counsel a reasonable time before the motion is argued. Where that is not done, the court may reject the affidavits, or, at its discretion, may allow them to be read, giving the opposite party the option to proceed with the hearing, or to take time to examine the affidavits, and where they admit of reply, to take other affidavits for that purpose.[7]

[1] Day *v.* Car-Spring Co. 3 Blatch. 154, 1854; Rogers *v.* Abbot, 4 Washington, 514, 1825.

[2] Young *v.* Lippman, 9 Blatch. 277, 1872.

[3] Parker *v.* Brant, 1 Fisher, 58, 1850.

[4] Ely *v.* Mfg. Co. 4 Fisher, 64, 1860.

[5] Wells *v.* Gill, 6 Fisher, 89, 1872.

[6] Cooper *v.* Mattheys, 3 Penn. Law Journal Reports, 40, 1842.

[7] Sterrick *v.* Pugsley, 1 Central Law Journal, 106, 1874.

§ 663. Where, on the hearing of a motion for a preliminary injunction, the complainant's moving papers are found to lack a necessary point which is presumably capable of being supplied, the court may suspend the motion to enable the complainant to supply it.[1] Such a lack and consequent suspension are not injurious to a defendant, because they merely operate to postpone that which he desires to be postponed as long as possible. No similar rule can, however, be invoked in favor of a defendant who has had reasonable notice of the motion, for if he could invoke such a rule, he could delay justice by his own neglect.

If a demurrer is on file in the case when a motion for a preliminary injunction comes on to be heard, the demurrer will be first heard and disposed of, even though that proceeding necessitates a postponement of the hearing of the motion. But if the demurrer is overruled, the defendant, in order to secure leave to contest the motion further, must file an affidavit that the demurrer was not filed for the purpose of delay, and must give security to pay the complainant the amount of any money decree to which the delay consequent upon the demurrer may afterward be found to entitle him.[2]

§ 664. A temporary restraining order may be made by the court, where there appears to be danger of irreparable injury from delay, whenever notice is given of a motion for a preliminary injunction; and such an order may be granted with or without security, in the discretion of the court, or judge, and will continue in force till the motion is decided.[3] The object of this provision appears to be to give the judge time to consider whether to grant a preliminary injunction, instead of deciding the question immediately upon the close of the argument of a motion for such a writ. It does not appear to warrant a restraining order

[1] Hodge *v.* Railroad Co. 6 Blatch. 85, 1868.

[2] Woodworth *v.* Edwards, 3 Woodbury & Minot, 131, 1847.

[3] Revised Statutes, Section 718.

before notice is actually served upon the defendant, nor indeed before the motion has been heard by the court, though the last member of this statement is less clearly true than the first. Even the first has been denied by one district judge; but in order to deny it, he had to hold that a notice is "given" when a rule to show cause against a motion is entered in court.[1] But the statute does not provide for any rule to show cause. It provides for a notice which is given; and no notice can be said to be given until it is served.

§ 665. In deciding whether a complainant at bar has made out a *prima facie* case for a preliminary injunction to restrain infringement of a patent, the judge is guided by the presence or absence of two presumptions and one certainty. Those presumptions relate to the validity of the patent and to the defendant's infringement thereof, and that certainty relates to the complainant's title thereto. If that certainty or either of those presumptions are absent in a given case, no preliminary injunction will be granted; but such a writ will be granted where they are all present, unless the defendant interposes some good defence to the motion, or unless the court takes a bond from the defendant instead of subjecting him to an injunction. A special presumption that the patent is void, lies at the foundation of a patentee's right to a preliminary injunction.[2] That presumption does not arise out of the unattended letters patent,[3] but will always exist where the patent has been suitably adjudicated in a Federal court, and there held to be valid;[4] or where the validity of the patent has been suitably acquiesced in

[1] Yuengling *v.* Johnson, 1 Hughes, 607, 1877.

[2] Edward Barr Co. *v.* Sprinkler Co. 32 Fed. Rep. 80, 1887.

[3] Foster *v.* Crossin, 23 Fed. Rep. 401, 1885; Dickerson *v.* Machine Co. 35 Fed. Rep. 145, 1888; Standard Elevator Co. *v.* Crane Elevator Co. 56 Fed Rep. 719, 1893.

[4] Orr *v.* Littlefield, 1 Woodbury & Minot, 13, 1845; Edison Electric Light Co. *v.* Beacon Electrical Co. 54 Fed. Rep. 679, 1893.

by the public ;[1] or where the defendant at bar has allowed a decree *pro confesso* to be taken against him ;[2] or where the defendant does not deny the validity of the patent ;[3] or where he is estopped from doing so ;[4] and that presumption will sometimes exist where the patent has successfully undergone an interference or other contested proceeding in the Patent Office.[5]

§ 666. An adjudication in another case, in order to furnish a suitable foundation for a right to a preliminary injunction, must have resulted in favor of the patent in a regular hearing in equity, or on the trial of an action at law.[6] Of these, the former raises the stronger presumption,[7] but most of the considerations which apply to it, apply also to the latter. An interlocutory decree in another case is as good a foundation for a right to an injunction as a final decree would be ;[8] because an interlocutory decree settles all pending questions of validity, and a final decree merely reiterates its conclusions on that point. An adjudication of a prior suit based on the first term of a patent, may be made the foundation of a right to a preliminary injunction to restrain infringement of the extended term of the same patent.[9] But no adjudication of a suit based on an original

[1] Goodyear *v.* Railroad Co. 1 Fisher, 626, 1853; American Middlings Purifier Co. *v.* Christian, 3 Bann. & Ard. 48, 1877; White *v.* Surdam, 41 Fed. Rep. 791, 1890; White *v.* Hunter, 47 Fed. Rep. 819, 1891; Sessions *v.* Gould, 49 Fed. Rep. 856, 1892; Palmer *v.* Mill. 57 Fed. Rep. 222, 1893; Corser *v.* Overall Co. 59 Fed. Rep. 781, 1893.

[2] Schneider *v.* Bassett, 13 Fed. Rep. 351, 1882.

[3] Sickels *v.* Mitchell, 3 Blatch. 548, 1857; New York Grape Sugar Co. *v.* American Grape Sugar Co. 10 Fed. Rep. 835, 1882.

[4] Time Telegraph Co *v.* Himmer, 19 Fed. Rep. 322, 1884.

[5] Pentlarge *v.* Beeston, 14 Blatch. 354, 1877; Smith *v.* Halkyard, 16 Fed. Rep. 414, 1883; Consolidated Apparatus Co. *v.* Brewing Co. 28 Fed. Rep. 428, 1886; Minneapolis Harvester Works *v.* Machine Co. 28 Fed. Rep. 565, 1886; Dickerson *v.* Machine Co. 35 Fed. Rep. 147, 1888.

[6] Doughty *v.* West, 2 Fisher, 559, 1865.

[7] Goodyear *v.* Mullee, 3 Fisher, 420, 1868.

[8] Potter *v.* Fuller, 2 Fisher, 251 1862.

[9] Clum *v.* Brewer, 2 Curtis, 507, 1855; Tilghman *v.* Mitchell, 4 Fisher, 615, 1871.

patent, can be invoked as a basis for a preliminary injunction to restrain infringement of any new claim contained in a reissue thereof.[1] Though an injunction in favor of one claim of a patent is a basis for a preliminary injunction on another claim, specifying the same invention in narrower terms.[2] Where the prior adjudication was that of the Supreme Court or of a Circuit Court of Appeals, it is conclusive of the questions it covered;[3] and where the prior adjudication was that of a Circuit Court, it will be followed unless it is inconsistent with some other decision of equal or higher rank;[4] and a verdict of a jury, which is supplemented by a refusal to grant a new trial, and by the entry of a judgment thereon, has the same weight as an adjudication in equity.[5] But a prior adjudication of a court of some foreign nation or dominion, is in no manner controlling, though entitled to consideration as embodying the opinion of a judicial tribunal.[6] And where the prior adjudication was based upon an estoppel,[7] or upon some other ground than recognized validity of the patent,[8] it does not constitute any ground for a preliminary injunction against another defendant.

§ 667. Public acquiescence sufficient to create a presumption of validity, and therefore sufficient to furnish a foundation for a right to a preliminary injunction, may arise out of either of two classes of facts. It may arise where the patentees made and sold specimens of the patented article for many years, during which no other person assumed to

[1] Poppenhusen *v.* Falke, 2 Fisher, 181, 1861.

[2] Sawyer Spindle Co. *v.* Taylor, 56 Fed Rep. 110, 1893.

[3] American Bell Telephone Co. *v.* McKeesport Tel. Co. 57 Fed. Rep. 361, 1893; Edison Electric Light Co. *v.* Philadelphia Trust Co. 60 Fed. Rep. 397, 1894.

[4] Pullman Palace Car Co. *v.* Wagner Palace Car Co. 44 Fed. Rep. 765, 1891.

[5] Woodard *v.* Gas-Stove Co. 68 Fed. Rep. 717, 1895.

[6] Carter *v.* Wollschlaeger, 53 Fed. Rep. 575, 1892.

[7] Ney Mfg. Co. *v.* Drill Co. 56 Fed. Rep. 153, 1893.

[8] Empire State Nail Co. *v.* Button Co. 61 Fed. Rep. 650, 1894.

make any such specimens ;[1] or it may arise where the patentee long licensed others to make, use, or sell such specimens, while nobody assumed to do either without such a license from him ; and the acquiescence is quite as positive in this case as in the other.[2] But acquiescence in exclusive use of a thing which contains several patented inventions, does not raise a special presumption of validity in favor of any particular one of the patents involved ;[3] and when acquiescence stops for good reasons, the special presumption of validity which rested upon it comes also to an end ;[4] and mere manufacture and sale of a patented article does not constitute acquiescence in the patent which claims it.[5]

§ 668. The length of time necessary to make exclusive possession, of the first sort, available on a motion for a preliminary injunction, depends upon the nature of the invention, and on the extent to which a good invention of the sort would naturally be used if it were free to the public ; and upon the popularity of that particular invention with that part of the public likely to want an article of the kind.[6] Where nobody but the patentee had any use for the article during the time of the alleged acquiescence, or where its merits were prized so low that nobody else cared to adopt it ; no lapse of time has any tendency to raise a presumption that the patent is valid.[7] Acquiescence in claims which nobody cared to dispute when the acquiescence occurred, has no tendency to show that those claims are valid.[8] But where all persons, other than the owner of the patent, refrain from making, using, or selling specimens of the

[1] Sargent *v.* Seagrave, 2 Curtis, 557, 1855; Covert *v.* Curtis, 25 Fed. Rep. 43, 1885; National Typographic Co. *v.* New York Typograph Co. 46 Fed. Rep. 116, 1891; Blount *v.* Societe, 53 Fed. Rep. 102, 1892.

[2] Thomson Electric Welding Co. *v.* Two Rivers Mfg. Co. 63 Fed. Rep. 121, 1894.

[3] Upton *v.* Wayland, 36 Fed. Rep. 691, 1888; Geo. Ertel Co. *v.* Stahl, 65 Fed. Rep. 521, 1895.

[4] Wollensak *v* Sargent, 33 Fed. Rep. 843, 1888.

[5] Geo. Ertel Co. *v* Stahl, 65 Fed. Rep. 521, 1895.

[6] Doughty *v.* West, 2 Fisher, 559, 1865.

[7] Raymond *v.* Woven Hose Co. 39 Fed. Rep. 366, 1889.

[8] Geo. Ertel Co. *v.* Stahl, 65 Fed. Rep. 521, 1895.

patented article merely because it is patented, and notwithstanding it would otherwise be for their interest to adopt it, their acquiescence shows their conviction that the patent is valid;[1] a conviction presumably based on inquiry, because persons are not likely to acquiesce in adverse rights without any investigation of their soundness.[2] In a case of the latter sort, any acquiescence which is shown by lapse of time to be general and to be genuine, will be sufficient to sustain a preliminary injunction.[3] Two years have been found to be ample in a case where the patentee made and sold 105,000 specimens of his patented apple-paring machine during that time,[4] and in another case, eight years, in which the patentee made and sold 150 specimens of his patented machine for cutting leather for shoe soles, were held to be sufficient.[5]

§ 669. The length of time necessary to make exclusive possession, of the second sort, available on a motion for a preliminary injunction will depend largely upon whether the licenses granted, were granted in consideration of the payment of substantial royalties, or for such an insignificant price as indicates that they were issued for the sole purpose of raising a presumption of public acquiescence. In the former case, it is safe to assume that sales of licenses will be quite as rapidly efficacious in the desired direction as sales of specimens of the patented invention;[6] while in the latter case, a long and genuine payment of royalties will be necessary to give the licenses any importance in respect of preliminary injunctions against third parties.

§ 670. Public acquiescence is strengthened rather than weakened, as a foundation to a right to a preliminary injunction, by the fact that some persons for a while refused

[1] National Typographic Co. *v.* New York Typograph Co. 46 Fed. Rep. 116, 1891.

[2] Grover & Baker Sewing Machine Co. *v.* Williams, 2 Fisher, 134, 1860.

[3] Orr *v.* Littlefield, 1 Woodbury & Minot, 17, 1845.

[4] Sargent *v.* Seagrave, 2 Curtis, 557, 1855.

[5] Foster *v.* Moore, 1 Curtis, 279, 1852.

[6] Grover & Baker Sewing Machine Co. *v.* Williams, 2 Fisher, 138, 1860.

to join in it, but on receiving further information, submitted to the exclusive right claimed by the patentee. Such a submission is generally the most persuasive degree of acquiescence,[1] and is certainly so where the submission was costly to him who submitted.[2] Nor is universal acquiescence necessary to be shown as existing at the time of the motion; for if it were necessary and were shown, it would prove that the defendant himself is not infringing the patent, and thus negative that part of the foundation of the case.[3] But a preliminary injunction will not be granted on any basis of acquiescence, where the defendant has been long in possession and use of the invention, adverse to the claim of the complainant, and under a claim and color of right.[4] No acquiescence in an original patent can be made the basis of a right to a preliminary injunction to restrain infringement of any claim in a reissue of that patent, unless that claim was also contained in the original.[5] But where some applicable acquiescence is proved, it would be strengthened as a foundation for a preliminary injunction by the fact that it has been tried as such a foundation in another case by basing a preliminary injunction upon it.[6]

§ 671. A decree *pro confesso* entered in a case raises a sufficient presumption of the validity of the patent to support a right to a preliminary injunction in that case,[7] but there is no ground for giving such a decree such an operation in any case against another defendant.[8]

[1] Sargent *v.* Seagrave, 2 Curtis, 556, 1855; Carter *v.* Wollschlaeger, 53 Fed. Rep. 576, 1892.

[2] Corbin Lock Co. *v.* Yale & Towne Mfg. Co. 58 Fed. Rep. 565, 1893.

[3] McComb *v.* Ernest, 1 Woods, 206, 1871.

[4] Isaacs *v.* Cooper, 4 Washington, 259, 1821.

[5] Grover & Baker Sewing Machine Co. *v.* Williams, 2 Fisher, 144, 1860.

[6] Blount *v.* Societe, 53 Fed. Rep. 102 1893; Carter *v.* Woolschlaeger, 53 Fed. Rep. 575, 1892; Carter-Crume Co. *v.* Ashley, 68 Fed. Rep. 379, 1895.

[7] Schneider *v.* Bassett, 13 Fed. Rep. 351, 1882.

[8] Everett *v.* Thatcher, 3 Bann. & Ard. 437, 1878.

§ 672. A consent decree is one which is entered by the consent of the defendant, at some stage of the case after the filing of the answer, and before the judge has decided the case on its merits. In some branches of jurisprudence such a decree may raise as strong a presumption of the validity of the complainant's case as could be raised by a decree based on a decision of the court. That may be the fact where the nature of the case shows that it would have been distinctly more advantageous for the defendant to win the suit than to be defeated. But in patent cases, it would often be pecuniarily better for the defendant to consent to a decree against him than to win the suit, if by doing the former, he could enable the complainant to secure preliminary injunctions against third parties. If he wins, he secures a right to continue his doings, but he also practically secures the same right for other persons, and thus throws the business open to general competition. If by consenting to a decree against himself, a defendant could secure a license on favorable terms, and could enable the complainant to prevent all competition by means of preliminary injunctions, it would frequently happen that the defendant's net profits would be larger than they would have been if he had won the suit. To win the suit would often operate to reduce prices and profits to an amount in excess of the aggregate of the decree to which he might consent, and the royalties he might promise to pay. In such a case a defendant could better afford to pay the decree and the royalties than to have had complete success in his defence. For these reasons, a consent decree in a patent case can never be a proper foundation for a right to a preliminary injunction against third persons; unless it appears from the nature of the patented thing, or from convincing evidence, that the defendant consented to the decree because his defence had become hopeless, and not because it had become inexpedient regardless of its strength. This fact can never appear from the nature of the patented thing, where that thing is an article of commerce; because the making and selling of articles of commerce is subject to

those laws of trade which are sure to diminish profits whenever monopoly is replaced by competition. The considerations stated in this paragraph are doubtless those which have caused Federal judges to disregard consent decrees when deciding upon applications for preliminary injunctions in patent cases.[1] It is true that the same judge who made the third of the decisions just cited, once based a preliminary injunction partly on a consent decree in another case,[2] but he did so on the ground that the circumstances under which the decree was entered convinced him that it was consented to because the defendant was unable to make a successful defence.

§ 673. Where a defendant admits or does not deny in his pleadings, the validity of the patent upon which a preliminary injunction is sought against him, there seems to be no reason why such an admission or lack of denial should not raise a sufficient presumption of that validity to furnish a foundation to a right to a preliminary injunction in that case.[3] As between the parties to a motion, the court may properly assume every statement of fact to be true which is made by the complainant, and expressly or tacitly admitted by the defendant. And where the validity of a patent is disputed on no ground, except one which is susceptible of an immediate and correct decision, such a decision may be made on a motion for a preliminary injunction, and may result in the granting of the injunction, if the decision is favorable to the patent.[4]

§ 674. An interference decision of the Patent Office raises a sufficient presumption of validity to furnish a foundation for a preliminary injunction, where the defendant is the

[1] Spring *v.* Domestic Sewing Machine Co. 4 Bann. & Ard. 427, 1879; Hayes *v.* Leton, 5 Fed. Rep. 521, 1881; De Ver Warner *v.* Bassett, 7 Fed. Rep. 468, 1881; Keyes *v.* Refining Co. 31 Fed. Rep. 561, 1887; Wollensak *v.* Sargent, 33 Fed. Rep. 843, 1888; Tibbe Mfg. Co. *v.* Heineken, 37 Fed. Rep. 686, 1889.

[2] Steam Gauge & Lantern Co. *v.* Miller, 8 Fed. Rep. 314, 1881.

[3] New York Grape Sugar Co. *v.* American Grape Sugar Co. 10 Fed. Rep. 835, 1882.

[4] Foster *v.* Crossin, 23 Fed. Rep. 400, 1885.

person, or the legal representative or assignee of the person who was defeated in the interference, and where he denies the validity of the patent on no other ground than that the decision of the Patent Office on the question of priority in the interference was wrong.[1] But such an interference decision cannot be invoked against third parties, because it does not rise to the dignity and force of an adjudication of a court.[2] And it cannot be invoked as against any defence not involved in it, because it has no relevancy to any such defence.[3] And where the defeated party in the interference, contended in the Patent Office that the patent should not issue to the other party, because the invention was in public use or on sale in this country, more than two years before that party filed his application, the decision of the Patent Office to the contrary, does not raise a sufficient presumption of validity to furnish a foundation for a preliminary injunction against any one.[4]

§ 675. The complainant's title to the patent upon which a preliminary injunction is asked must be clear, or the injunction will be refused.[5] The best evidence of that title is found in the patent, if the complainant is the patentee; but if he is an assignee or grantee, he must produce and prove the original assignments or grants which constitute his title, or otherwise prove his ownership.[6] Where the complainant's title papers require judicial construction, in order to determine their legal effect, it is the duty of the court to give them that construction upon a motion for a preliminary injunction, rather than to postpone the question to a final hearing, unless it is made to appear that evidence *aliunde* is necessary to their proper interpretation.[7]

[1] Pentlarge *v.* Beeston, 14 Blatch. 354, 1877; Holliday *v.* Pickhardt, 12 Fed. Rep. 147, 1882.

[2] Edward Barr Co. *v.* Sprinkler Co. 32 Fed. Rep. 80, 1887.

[3] Greenwood *v.* Bracher, 1 Fed. Rep. 856, 1880.

[4] Empire State Nail Co. *v.* American Button Co. 61 Fed. Rep. 650, 1894.

[5] Mowry *v.* Railroad Co. 5 Fisher, 587, 1872.

[6] Section 495 of this book.

[7] Clum *v.* Brewer, 2 Curtis, 507, 1855; Dodge *v.* Card, 2 Fisher, 116 1860.

§ 676. Infringement or danger of infringement by the defendant must be clearly proved by a complainant, in order to entitle him to a preliminary injunction.[1] Precisely what facts will give rise to such a probability of future infringement, as will justify a preliminary injunction without proof of past infringement, cannot specifically be stated. Courts will never insist on absolute proof of what the defendant will do if not enjoined; for such proof can never be produced, and because it cannot harm a person to enjoin him from doing a thing which he would not do any way.[2] A moderate probability that a defendant intends to do something which would clearly infringe the complainant's patent, will therefore be sufficient to entitle the latter to a preliminary injunction in an otherwise proper case.[3]

Proof of infringement cannot be made by affidavits which merely state that conclusion of fact. The complainant must prove the specific character of the defendant's doings.[4] Upon that evidence the court will examine and decide the question of infringement in the light of whatever expert testimony the case may contain,[5] and in the light of whatever construction of the patent it finds on examination to be just,[6] and that construction will generally be guided and governed by the construction which was given to the patent in the adjudicated case upon which the special presumption

[1] Pullman *v.* Railroad Co. 5 Fed. Rep. 72, 1880; California Electrical Works *v.* Henzel, 48 Fed. Rep. 377, 1891; Standard Elevator Co. *v.* Crane Elevator Co. 56 Fed. Rep. 719, 1893; Brush Electric Co. *v.* Storage Battery Co. 64 Fed. Rep. 776, 1894; Geo. Ertel Co. *v.* Stahl, 65 Fed. Rep. 518, 1895; Western Telephone Construction Co. *v.* Stromberg, 66 Fed. Rep. 551, 1895.

[2] California Electrical Works *v.* Henzel, 48 Fed. Rep. 377, 1891; New York Belting Co. *v.* Gutta Percha Mfg. Co. 56 Fed. Rep. 264, 1892.

[3] Sherman *v.* Nutt, 35 Fed. Rep. 149, 1888; Sessions *v.* Gould, 49 Fed. Rep. 856, 1892.

[4] Kirby Bung Mfg. Co. *v.* White, 1 McCreary, 160, 1880.

[5] Blanchard *v.* Reeves, 1 Fisher, 105, 1850.

[6] Many *v.* Sizer, 1 Fisher, 33, 1849; Clum *v.* Brewer, 2 Curtis, 507, 1855; Coburn *v.* Clark, 15 Fed. Rep. 807, 1883.

of validity is based,[1] and where the facts are substantially the same in the two cases, the former decision will be followed.[2] But if the court is unable to arrive at a conclusion without the aid of further evidence, it will decline to grant the injunction till that evidence is supplied;[3] though it may require the defendant to give bonds and to keep an account of his doings which are alleged to infringe;[4] and the court will not grant a preliminary injunction where the question whether the defendant's doings constitute an infringement of the complainant's patent is a doubtful question.[5]

In order to entitle the complainant to a preliminary injunction, it is not necessary for him to prove any infringement to have been committed or threatened within the particular district in which the court exercises jurisdiction;[6] nor that the defendant's infringement has not ceased before the motion is heard.[7] Indeed no injunction can be averted by affirmative evidence that the defendant has ceased to infringe, even though coupled with a promise that he will infringe no more.[8]

[1] Mallory Mfg. Co. *v.* Hickok, 20 Fed. Rep. 116, 1884; Carter-Crume Co. *v.* Ashley, 68 Fed. Rep. 379, 1895.

[2] S. S. White Dental Mfg. Co. *v.* Johnson, 56 Fed. Rep. 263, 1893.

[3] United States Annunciator Co. *v.* Sanderson, 3 Blatch. 186, 1854; Howe *v* Morton, 1 Fisher. 600, 1860; Boyd *v.* McAlpin, 3 McLean, 430, 1844; Carey *v.* Miller, 34 Fed. Rep. 392, 1888.

[4] Macbeth *v.* Lippencott Glass Co. 54 Fed. Rep. 167, 1893.

[5] Jenkins *v.* Ruberg, 39 Fed. Rep. 611, 1889; Russell *v.* Hyde, 39 Fed. Rep. 614, 1889; Boston Electric Co. *v.* Holtzer, 41 Fed. Rep. 390, 1890; Judson L. Thomson Mfg. Co. *v.* Hatheway, 41 Fed. Rep. 520, 1890; Culluloid Mfg. Co. *v.* Eastman Dry Plate Co. 42 Fed. Rep. 159, 1890; Hammond Buckle Co. *v.* Goodyear Rubber Co. 49 Fed. Rep. 274, 1892; Williams *v.* McNeely 56 Fed. Rep. 265, 1893; Brush Electric Co. *v.* Storage Battery Co. 64 Fed. Rep. 775, 1894

[6] Wilson *v.* Sherman, 1 Blatch. 541, 1850; Wheeler *v.* McCormick, 4 Fisher, 433, 1871; Thompson *v.* Mendelsohn, 5 Fisher, 188, 1871; Macauley *v.* Machine Co. 9 Fed. Rep. 698, 1881.

[7] Jenkins *v.* Greenwald, 2 Fisher, 37, 1857; Potter *v* Crowell, 3 Fisher, 112, 1866; Goodyear *v.* Berry, 3 Fisher, 439, 1868.

[8] Rumford Chemical Works *v.* Vice, 14 Blatch. 179, 1877; Celluloid Mfg. Co. *v.* Mfg. Co. 34 Fed. Rep. 324, 1888; Gilmore *v.* Anderson, 38 Fed. Rep. 847, 1889; White *v.* Walbridge, 46 Fed. Rep. 526, 1891.

§ 677. The defences which a defendant may make to a motion for a preliminary injunction may be by way of traverse, or by way of confession and avoidance. A defence of the former sort consists in denying, and attempting to disprove, one or more of the facts which constitute the complainant's *prima facie* case. A denial alone is useless, even where it is embodied in an answer.[1] Where the denial is supported by affidavits which contradict those of the complainant, the judge will refuse the injunction if he believes the defendant's affidavits to be the true ones, or if he is unable to decide which set of deponents tell the truth.[2] No remedy invoked in patent cases is so summary in operation, or so dangerous to justice as a preliminary injunction, and the courts will not apply that remedy to cases where the complainant's *prima facie* evidence of a right thereto, is overthrown or seriously damaged by the evidence of the defendant.

§ 678. Defences by way of confession and avoidance to motions for preliminary injunctions, may confess and avoid the adjudication or acquiescence upon which the plaintiff bases the presumption of the validity of his patent; or may interpose any one of several facts entirely outside of the complainant's *prima facie* case.

§ 679. The effect of an adjudication may be averted by evidence of some good defence to the patent, together with evidence showing that defence not to have been interposed in the prior adjudicated case.[3] Several Circuit Courts and

[1] Clum *v.* Brewer, 2 Curtis, 507, 1855.

[2] Cooper *v.* Mattheys, 3 Penn. Law Journal Reports, 40, 1842.

[3] Parker *v.* Brant, 1 Fisher, 58, 1850; Union Paper Bag Machine Co. *v.* Binney, 5 Fisher, 168, 1871; American Nicolson Pavement Co. *v.* Elizabeth, 4 Fisher, 189, 1870; Bailey Wringing Machine Co. *v.* Adams, 3 Bann. & Ard. 97, 1877; Goodyear *v.* Allyn, 6 Blatch. 35, 1868; Robinson *v.* Randolph, 4 Bann. & Ard. 163, 1879; Page *v.* Telegraph Co. 18 Blatch. 125, 1880; Ladd *v.* Cameron, 25 Fed. Rep. 37, 1885; Fraim *v.* Iron Co 27 Fed. Rep. 457, 1886; National Machine Co *v.* Hedden, 29 Fed. Rep. 149, 1886; Glaenzer *v.* Wiederer, 33 Fed. Rep. 583, 1887; Holmes Protective Co. *v.* Alarm Co. 31 Fed. Rep. 562, 1887; Travers *v.* Spreader Co. 35 Fed. Rep. 133, 1888; Stuart *v.* Thorman, 37 Fed. Rep. 90, 1888; Jacobson *v.* Alpi, 46 Fed. Rep. 767, 1891; Carter *v.* Fry, 54 Fed. Rep. 883, 1892.

two Circuit Courts of Appeals have held that such a new defence must be established beyond a reasonable doubt;[1] and a new defence, which cannot endure the application of what was decided in the adjudicated case, must fail to avert a preliminary injunction.[2] But the effect of a prior adjudication may sometimes be averted by showing that it is inconsistent with a former decision of the court wherein the adjudged case is invoked,[3] or by showing that the adjudged case involved questions of nicety and importance, and has been taken to a higher court for review,[4] or has gone no further than a verdict of a jury which is still pending on a motion for a new trial.[5] But courts will not always disregard adjudications which are thus suspended. They are a good foundation for preliminary injunctions, unless the defendant can convince the judge that they were wrong.[6] The effect of a prior adjudication can sometimes be averted by showing that there has been an adjudication against the validity of the patent,[7] but not where it appears that the lost cause was decided on a part only of the material evidence,[8] nor can such an effect be averted by showing that the validity of the patent is in question in some other case, which has long been pending and still awaits adjudication.[9] Where the patent sued upon is a reissue of the one adjudicated, a substantial doubt of the validity of the reissue as

[1] Accumulator Co. *v.* Storage Co. 53 Fed. Rep. 800, 1893; Edison Electric Light Co. *v.* Beacon Electric Co. 54 Fed. Rep. 679, 1893; Edison Electric Light Co. *v.* Electric Mfg Co. 57 Fed. Rep. 616, 1893; Electric Mfg. Co. *v.* Edison Electric Light Co. 61 Fed. Rep. 834, 1894; Philadelphia Trust Co. *v.* Edison Electric Light Co. 65 Fed. Rep. 553, 1895.

[2] Sawyer Spindle Co. *v.* Taylor, 56 Fed. Rep. 110, 1892.

[3] Pullman Palace Car Co. *v.* Wagner Palace Car Co. 44 Fed. Rep. 765, 1891.

[4] Morris *v.* Mfg. Co. 3 Fisher, 70, 1866.

[5] Day *v.* Hartshorn, 3 Fisher, 34, 1855.

[6] Forbush *v.* Bradford, 1 Fisher, 317, 1858; Day *v.* Hartshorn, 3 Fisher, 32, 1855; Morris *v.* Mfg. Co. 3 Fisher, 70, 1866; Wells *v.* Gill, 6 Fisher, 89, 1872.

[7] Keyes *v.* Refining Co. 31 Fed. Rep. 560, 1887.

[8] United States Stamping Co. *v.* King, 4 Bann. & Ard. 469, 1879.

[9] Atlantic Giant Powder Co. *v.* Goodyear, 3 Bann. &. Ard. 161, 1877.

a reissue, must be solved against a motion for a preliminary injunction.[1]

§ 680. The effect of acquiescence, as a foundation for a preliminary injunction, may be averted by evidence that it was not general, or was not genuine; by proof that while some acquiesced in the patent, many others did not; or by proof that those who did acquiesce, did so collusively and not because they believed the patent to be invulnerable. And the effect of acquiescence may also be averted by evidence or arguments which clearly show that the patent is really invalid.[2]

§ 681. While the fact that the patent in suit will soon expire, is a reason for granting an injunction rather than a reason for refusing that remedy;[3] the fact that the patent sued upon has been repealed, or that it has expired by its own limitation, or because of the expiration of some foreign patent for the same invention, is of course a good defence to a motion for a preliminary injunction; as also is any fact which overthrows the title of the complainant; or any fact which shows the conduct of the complainant or his privies to be unjustifiable in the eye of equity.[4]

§ 682. A license is a good defence to a motion for a preliminary injunction; and where the affidavits leave the existence of a valid license in doubt, a preliminary injunction will be refused.[5] Where the question of license depends upon the construction of documents, the court will construe them on a motion for a preliminary injunction, unless it is made to appear that evidence exists which is proper and necessary to be produced in order to enable

[1] Poppenhusen *v.* Falke, 2 Fisher, 181, 1861.

[2] Bradley & Hubbard Mfg. Co. *v.* The Charles Parker Co. 17 Fed. Rep. 240, 1883; Hat-Sweat Mfg. Co. *v.* Sewing Machine Co. 32 Fed. Rep. 403, 1887.

[3] American Bell Telephone Co. *v.* Brown Tel. Co. 58 Fed. Rep. 409, 1893; Carter-Crume Co. *v.* Ashley, 68 Fed. Rep. 379, 1895; Woodard *v.* Gas-Stove Co. 68 Rep. Rep. 717, 1895.

[4] Western Union Telegraph Co. *v.* Telegraph Co. 25 Fed. Rep. 30, 1885.

[5] Beane *v.* Orr, 2 Bann. & Ard. 176, 1875.

the judge to arrive at the intention of the parties to an ambiguous instrument.[1] Where the license set up has been forfeited for non-payment of the royalty, a preliminary injunction will be granted, in an otherwise proper case, unless the defendant pays that royalty within some reasonable time to be fixed by the court;[2] and where it has been forfeited by a forbidden use of the patented thing, a preliminary injunction may be granted as to that use, but not as to the kind of use authorized by the license.[3] The principle of these precedents appears to be that a preliminary injunction will not be used to enforce a forfeiture, when the doings which caused the forfeiture can be otherwise compensated. So, also, a preliminary injunction will be refused where the defendant had a license which he forfeited by omission to pay the royalty, if that omission was necessitated by bad faith on the part of the complainant.[4]

§ 683. Estoppel is also a good defence to a motion for a preliminary injunction, and will prevail against a motion for that relief, upon the same facts that would make it prevail in an action at law.[5]

§ 684. Laches is a good defence to a motion for a preliminary injunction;[6] and delay works laches, unless it is excused by some fact which renders it reasonable.[7] The delay which, if unexcused, works laches in respect of an application for a preliminary injunction, is that which occurs after the infringement sued upon was committed,[8] and not

[1] Hodge *v.* Railroad Co. 6 Blatch. 165. 1868.

[2] Woodworth *v.* Weed, 1 Blatch. 165, 1846; Goodyear *v.* Rubber Co. 3 Blatch. 455, 1856.

[3] Wilson *v.* Sherman, 1 Blatch. 536, 1850.

[4] Crowell *v.* Parmeter, 3 Bann. & Ard. 480, 1878; Washburn & Moen Mfg. Co. *v.* Barbed Wire Fence Co. 22 Fed. Rep. 712, 1884; Washburn & Moen Mfg. Co. *v.* Scutt Co. 22 Fed. Rep. 710, 1884.

[5] Sections 467 to 469 of this book.

[6] Hockholzer *v.* Eager, 2 Sawyer, 363, 1873; Keyes *v.* Refining Co. 31 Fed. Rep. 560, 1887; Brush Electric Co. *v.* Storage Battery Co. 64 Fed. Rep. 777, 1894

[7] Wortendyke *v.* White, 2 Bann. & Ard. 26, 1875; Green *v.* French, 4 Bann. & Ard. 169, 1879; Colligno *v.* Hayes, 8 Fed. Rep. 912, 1881.

[8] American Middlings Purifier Co. *v.* Christian, 3 Bann. & Ard. 50, 1877.

any delay which occurred before that time. Delay after the infringement, may occur before the suit is brought, or it may occur after that event, and before any motion is made for a preliminary injunction.

Three months' delay of the first kind, for which there was no particular excuse, and which caused no injury to the defendant, has been held not to constitute laches;[1] and in another case the delay of one year was likewise condoned.[2] In another case, eighteen months',[3] and in another two years',[4] and in another three years'[5] delay after the known beginning of infringement, and before the beginning of a suit, was held to constitute such laches as must defeat a motion for a preliminary injunction; and in still another case a delay of two years by the then owners of the patent, was held to preclude their assignees from obtaining a preliminary injunction.[6] Two years' delay to sue was excused in one case on the ground that the complainant was much occupied with other business during the time, and that he repeatedly notified the defendant to cease his infringing;[7] and in another case a delay of twenty-eight months was excused on the ground that during most of that time the infringement was so small, as to be harmless, and was likely to continue so;[8] but in another case four years' delay was held to be too long to be excused on that ground.[9] The pendency of a test case under a patent is also a good excuse for delay in bringing actions against other infringers, when those other infringers interpose the defence

[1] Union Paper Bag Machine Co. *v.* Binney. 5 Fisher, 167, 1871.

[2] Loring *v.* Booth, 52 Fed. Rep. 151, 1892.

[3] Hockholzer *v.* Eager, 2 Sawyer, 363, 1873.

[4] Sperry *v.* Ribbans, 3 Bann. & Ard. 261, 1878.

[5] Pope Mfg. Co. *v.* Johnson, 40 Fed. Rep. 584, 1889.

[6] Spring *v.* Machine Co. 4 Bann. & Ard. 428, 1879.

[7] Collignon *v.* Hayes, 8 Fed. Rep. 912, 1881.

[8] Accumulator Co. *v.* Edison Illuminating Co. 63 Fed. Rep. 979, 1894.

[9] Brush Electric Co. *v.* Storage Battery Co. 64 Fed. Rep. 777, 1894.

of laches to a motion for a preliminary injunction.[1]

Two months' unexcused delay after a suit is begun, before a motion for a preliminary injunction is made, is fatal to such a motion, where the delay seriously misleads the defendant;[2] and delay after a suit is begun will constitute such laches as will defeat an application for a preliminary injunction, if that delay continues till the defendant has closed his evidence for the interlocutory hearing of the case;[3] and still more strongly, when it continues till the case is about to be argued on the interlocutory hearing.[4]

§ 685. Where the complainant has made out a *prima facie* case for a preliminary injunction, and where the defendant has not overthrown that case, the court is generally bound to grant such an injunction,[5] upon all or upon part of the claims of the patent, according to the merits of the case.[6] The effect of the injunction upon others than the parties to the suit, cannot commonly be considered on such a motion; and while the judges fully appreciate the harsh and arbitrary character of a preliminary injunction in a patent case, they also know the innumerable obstacles which beset a recovery of damages or profits, and that there is generally no adequate remedy for infringement *pendente lite*, other than a preliminary injunction.[7] Under some

[1] VanHook *v.* Pendleton, 1 Blatch. 187, 1846; Rumford Chemical Works *v.* Vice, 14 Blatch. 181, 1877; Green *v.* French, 4 Bann & Ard. 169, 1879; Colgate *v.* Gold & Stock Telegraph Co. 4 Bann & Ard. 425, 1879; Edison Electric Light Co. *v.* Sawyer-Man Electric Co. 53 Fed. Rep. 597, 1892; Edison Electric Light Co. *v.* Mt. Morris Electric Light Co. 58 Fed. Rep. 572, 1893.

[2] Ney Mfg. Co. *v.* Drill Co. 56 Fed. Rep. 154, 1893.

[3] Wooster *v.* Machine Co. 4 Bann. & Ard. 319, 1879.

[4] Andrews *v.* Spear, 3 Bann. & Ard. 80, 1877.

[5] Gibson *v.* Van Dresar, 1 Blatch. 535, 1850; Sickels *v.* Mitchell, 3 Blatch. 548, 1857; Sickels *v.* Tileston, 4 Blatch. 109, 1857; Potter *v.* Fuller, 2 Fisher, 251, 1862; Conover *v.* Mers, 3 Fisher, 386, 1868; Ely *v.* Mfg. Co. 4 Fisher, 64, 1860; Rumford Chemical Works, *v.* Vice, 14 Blatch. 181, 1877; American Middlings Purifier Co. *v.* Christian, 3 Bann. & Ard. 54, 1857; Green *v.* French, 4 Bann. & Ard. 169, 1879.

[6] Colt *v.* Young, 2 Blatch. 471, 1852; Potter *v* Holland, 1 Fisher, 382, 1858.

[7] Carter *v.* Wollschlaeger, 53 Fed. Rep. 576, 1892.

circumstances, however, the court can give the defendant the option to submit to such an injunction, or to give a bond to secure any decree for profits or damages which may ultimately be awarded against him; but a bond can be required only in a case where an injunction must issue if the bond is not given.[1] The circumstances under which it is proper to give the defendant that option include the following.

§ 686. Bonds may be taken, instead of preliminary injunctions being imposed, if the complainant habitually avails himself of his exclusive right by receiving royalties for licenses, rather than by making and selling, or making and using the patented article himself while permitting no other to do so;[2] but this course of business of the complainant is not otherwise a defence to a motion for a preliminary injunction.[3] And where the complainant is able and willing to supply the market for that article, the fact that the defendant is willing to take a license, and able to pay for one, does not entitle him to the option of giving bonds, if the complainant declines to give him a license.[4]

§ 687. So, also, a defendant may sometimes be entitled to the option of giving bonds instead of being enjoined, where his infringing machinery contains costly parts which are not covered by the complainant's patent;[5] but he is not

[1] Forbush *v.* Bradford, 1 Fisher, 317, 1858; American Middlings Purifier Co. *v.* Atlantic Milling Co. 3 Bann. & Ard. 173, 1877.

[2] Howe *v.* Morton, 1 Fisher, 601, 1860; Hodge *v.* Railroad Co. 6 Blatch. 166, 1868; Dorsey Harvester Rake Co. *v.* Marsh, 6 Fisher, 387, 1873; Colgate *v.* Gold & Stock Telegraph Co. 16 Blatch. 503, 1879, Kirby Bung Mfg. Co. *v.* White, 1 McCrary, 155, 1880; New York Grape Sugar Co. *v.* American Grape Sugar Co. 10 Fed. Rep. 837, 1882; McMillan *v.* Conrad, 16 Fed. Rep. 128, 1883; Eastern Paper Bag Co. *v.* Nixon, 35 Fed. Rep. 752, 1888; Palmer *v.* Mills, 57 Fed. Rep, 222, 1893.

[3] Kennedy *v.* Penn. Iron & Coal Co. 67 Fed. Rep. 340, 1895.

[4] Baldwin *v.* Bernard, 5 Fisher, 447, 1872; Westinghouse Air Brake Co. *v.* Carpenter, 32 Fed. Rep. 545, 1887.

[5] Howe *v.* Morton, 1 Fisher, 587, 1860; Stainthorp *v.* Humiston, 2 Fisher, 311, 1862; Eagle Mfg. Co. *v.* Plow Co. 36 Fed. Rep. 907, 1888.

thus entitled in all such cases.[1] And a defendant may be entitled to that option where the infringing article was purchased in good faith, having been constructed in conformity to a junior patent;[2] or where it was so constructed by the defendant himself; or where the defendant is only a seller of specimens of the patented article, a suit being pending against the manufacturer from whom he received those specimens;[3] or where the prior adjudication upon which the right to a preliminary injunction is based has been appealed to a higher court, and is still pending there;[4] or where new evidence is to be taken for the interlocutory hearing;[5] or where the injunction, if granted, would be very damaging to the interests of the defendant, and not particularly beneficial to the legitimate rights of the complainant;[6] or where public policy forbids a discontinuance of the defendant's use of the patented invention;[7] or where the complainant does not himself employ the invention;[8] or where, for any reason, a preliminary injunction would operate unjustly.[9] It is no part of the legitimate office of a preliminary injunction to force the defendant to compromise a disputed claim,[10] nor to compel him to give the complain-

[1] Edison Electric Light Co. *v.* Sawyer-Man Electric Co. 53 Fed. Rep. 597, 1892.

[2] United States Annunciator Co. *v.* Sanderson, 3 Blatch. 184, 1854.

[3] Irwin *v.* McRoberts, 4 Bann. & Ard 414, 1879.

[4] Wells *v.* Gill, 6 Fisher, 93, 1872.

[5] Norton *v.* Automatic Can Co. 61 Fed. Rep. 296, 1894.

[6] Morris *v.* Mfg. Co. 3 Fisher, 68, 1866; Morris *v.* Shelbourne, 4 Fisher, 377, 1871; Dorsey Harvester Rake Co. *v.* Marsh, 6 Fisher, 387, 1873; Kirby Bung Mfg. Co. *v.* White, 1 McCrary, 155, 1880; Hoe *v.* Boston Daily Advertiser, 14 Fed. Rep. 914, 1883. Consolidated Roller Mill Co. *v* Richmond Mill Works, 40 Fed. Rep. 474, 1889; Edison Electric Light Co. *v.* Mt. Morris Electric Light Co. 58 Fed. Rep. 575, 1893.

[7] Guidet *v.* Palmer, 10 Blatch. 220, 1872.

[8] Hoe *v.* Knap, 27 Fed. Rep. 212, 1886.

[9] Union Paper Bag Machine Co. *v.* Binney, 5 Fisher, 169, 1871; National Cable Ry. Co. *v.* Sioux City Cable Ry. Co. 42 Fed. Rep. 685, 1890.

[10] Morris *v.* Mfg. Co. 3 Fisher, 70, 1866.

ant a contract to purchase specimens of the patented thing.[1]

But in the absence of every special reason for giving the defendant the option of giving bonds, instead of submitting to an injunction, that option cannot be demanded by him,[2] nor ought it to be granted by the court.[3] Where the defendant is entitled to the option of giving bonds or being enjoined, and chooses the former alternative, but is unable to furnish the bonds promptly, an injunction may issue against him, coupled with an order for its dissolution whenever the proper bonds are approved and filed.[4]

§ 688. Bonds may be required from a complainant, under some circumstances, before a preliminary injunction will be granted.[5] Such bonds are conditioned on the ultimate success of the complainant in sustaining his claim, and may be required in a case where the injunction, if granted, will cause serious injury to the defendant.[6] If that is also a case where the defendant is entitled to avert the injunction by giving a bond, that option will first be given to him. If he chooses to file a bond, of course none will be required from the other side, but if he prefers to submit to an injunction, the injunction will be granted only upon the filing of a proper indemnity bond by the complainant.

§ 689. A preliminary injunction cannot be averted on the sole ground that an action at law for the damages to be

[1] American Nicolson Pavement Co. *v.* Elizabeth, 4 Fisher, 197, 1870.

[2] Consolidated Fruit-Jar Co. *v.* Whitney, 1 Bann. & Ard. 361, 1874.

[3] Gibson *v.* Van Dresar, 1 Blatch. 532, 1850; Tracy *v.* Torrey, 2 Blatch. 275, 1851; Tilghman *v.* Mitchell, 4 Fisher, 615, 1871; McWilliams Mfg. Co. *v.* Blundell, 11 Fed. Rep. 419, 1882.

[4] Brooks *v.* Bicknell, 3 McLean, 250 1843; Foster *v.* Moore, 1 Curtis, 279, 1852; Howe *v.* Morton, 1 Fisher, 586, 1860; Stainthorp *v.* Humiston, 2 Fisher, 311, 1862; Goodyear *v.* Hills, 3 Fisher, 134, 1866, Sykes *v.* Manhattan Co. 6 Blatch. 496, 1869; Gilbert & Barker Mfg. Co. *v.* Bussing, 12 Blatch. 426, 1875.

[5] Tobey Furniture Co. *v.* Colby, 35 Fed. Rep. 594, 1888; Brush Electric Co. *v.* Accumulator Co. 50 Fed. Rep. 833, 1892; Accumulator Co. *v.* Storage Co. 53 Fed. Rep. 800, 1893.

[6] Orr *v.* Littlefield, 1 Woodbury & Minot, 20, 1845; Brammer *v.* Jones, 3 Fisher, 340, 1867; Shelly *v.* Brannan, 4 Fisher, 198, 1870; Consolidated Fruit-Jar Co. *v.* Whitney, 1 Bann. & Ard. 361, 1874.

caused by the infringement would be a plain, adequate and complete remedy therefor. In many cases that would not be true, and the court cannot determine on affidavits whether it would be true in a particular case or not. A motion for a preliminary injunction is not to be defeated on a possibility that the complainant might be able to obtain damages for the wrong which he seeks to prevent. But even where it is plain that the damages recoverable in an action at law would be as beneficial to the complainant as an injunction would be, that fact does not oust the right of the complainant to the latter relief. The case is analogous to actions in equity for the specific performance of contracts to sell real property. The bills in such cases seldom show, and never are required to show, that an action at law for damages would not be a plain, adequate and complete remedy for the failure to perform. "Ordinarily a vendor, in the recovery of pecuniary damages, has an adequate remedy at law, but he has a choice of remedies. He may resort either to a court of law or a court of equity."[1] Bills for preliminary injunctions in patent cases are never obnoxious to Section 723 of the Revised Statutes, because the word "case" in that section is to be interpreted specifically and not generically. "Suits in equity shall not be sustained in either of the courts of the United States in any case where a plain, adequate and complete remedy may be had at law."[2] This statute regards an action in equity to restrain infringement of a patent as a case for an injunction, and not merely as a patent case. It therefore opposes no obstacle to the jurisdiction of equity in such a case.

§ 690. Where the defendant withdraws his opposition to a motion for a preliminary injunction before the motion is decided, the injunction will be granted *pro confesso*, and the court will decline to render a decision.[3] That is to say: a

[1] Crary *v.* Smith, 2 Comstock (N. Y.), 62, 1848.

[2] Revised Statutes, Section 723.

[3] American Middlings Purifier Co. *v.* Vail, 15 Blatch. 315, 1878.

consent decree will be entered as a consent decree, and not as one based on a conclusion of the judicial mind. If this rule were otherwise, parties between whom there continued to be no real contest might manage to secure decisions from courts which would operate to their mutual advantage, and to the serious disadvantage of strangers to the litigation.

§ 691. The discretion of the court was said in some of the older cases to be the real criterion of judgment when deciding motions for preliminary injunctions in patent cases. The doctrine was a necessity in the beginning of the evolution of the patent laws, because the judges could then find but few precedents to guide or to warn. At present the fact is otherwise. Approved precedents can now be found on nearly every point that can arise.

There was recently a sense in which the granting or refusing such a writ could truly be said to rest in the discretion of the judge. It so rested, in the sense that no appeal could be taken from his decision. But that fact was not a reason why a judge should have been asked to disregard precedents when making up his judicial opinion. And it is now the law that an appeal may be taken from any order granting, continuing, refusing, dissolving or refusing to dissolve a preliminary injunction.[1] This liberal allowance of appeals, may be thought to justify or excuse less careful consideration of motions for preliminary injunctions, than was formerly expected from the circuit courts; but the delays and expenses incident to such appeals, will doubtless deter the judges from taking that view.

§ 692. A motion to dissolve a preliminary injunction may be made at any time,[2] upon reasonable notice to the complainant's solicitor;[3] and it will be promptly granted where the judge becomes convinced that the granting of the

[1] 28 Statutes at Large, Chap. 96, p. 666.

[2] Minturn *v.* Seymour, 4 Johnson's Chancery (N. Y.), 173, 1819; Cammack *v.* Johnson, 2 New Jersey Equity, 163, 1839; Jones *v.* Bank, 5 How. (Miss.), 43, 1840.

[3] Wilkins *v.* Jordan, 3 Washington, 226, 1813; Caldwell *v.* Waters, 4 Cranch's Circuit Court Reports, 577, 1835.

injunction was erroneous in point of law,[1] or where the defendant positively proves any fact which would have been fatal to the motion for the preliminary injunction, if presented at the time that motion was heard, and shows that the evidence could not with reasonable diligence have been presented at that hearing.[2] So, also, a dissolution of a preliminary injunction may be based on a fact which arose after the injunction was granted: for example, on the fact that the complainant, after that event, assigned all his interest in the future duration of the patent to another;[3] or on the fact that he omitted to prosecute his case toward an interlocutory hearing with the speed which the rules of court require.[4] And power to dissolve or suspend a preliminary injunction resides in a Circuit Court, even after the injunction has been affirmed by the Circuit Court of Appeals.[5]

§ 693. A motion to dissolve an injunction for error in point of law, must be based on a point which was established after the injunction was granted, or which was obviously overlooked or misweighed by the judge at that time. It would be unprofessional as well as unavailing for counsel to move a dissolution, on the ground that the judge wrongly reasoned out his conclusion from the premises from which he proceeded. Courts ought not to be asked to change their judgments on points of law, unless the law has changed or been newly formulated in the mean time, or unless some special error can be pointed out. Few things are more trying to the patience of judges, or more useless to the

[1] Steam Gauge & Lantern Co. *v.* Miller, 11 Fed. Rep. 719, 1882.

[2] Woodworth *v.* Rogers, 3 Woodbury & Minot. 135, 1847; Hussey *v.* Whiteley, 2 Fisher, 125, 1860; Young *v.* Lippman, 5 Fisher, 230, 1872: Carey *v.* Spring Bed Co. 26 Fed. Rep. 38, 1886; Huntington *v.* Heel Plate Co. 33 Fed. Rep. 838, 1888; Electrical Accumulator Co. *v.* Julien Electric Co. 47 Fed. Rep. 892, 1891.

[3] Parkhurst *v.* Kinsman, 1 Blatch. 489, 1849; Edison Electric Light Co. *v* Buckeye Electric Co. 59 Fed Rep. 699, 1894.

[4] Robinson *v.* Randolph; 4 Bann. & Ard. 318, 1879.

[5] Edison Electric Light Co. *v.* U. S. Electric Lighting Co. 59 Fed. Rep. 501, 1892.

interests of clients, than the repetition of old and well-understood arguments.

§ 694. Motions to dissolve an injunction on account of newly discovered facts, require the mover to assume the burden of establishing those facts, because when an injunction is once granted, it is presumed to have been granted rightfully, until the contrary is made to appear.[1] The contrary can seldom or never be made to appear in a patent case, by means of the defendant's answer; because the answer, as far as it refers to the validity of the patent and of the complainant's title thereto, is generally made on information and belief only, and as far as it refers to the defendant's infringement, it amounts only to a general denial. Where an answer is on file at the time the motion to dissolve is heard, the injunction will not be dissolved on the strength of any facts which are not set up in the answer;[2] but whether an answer is on file at that time or not, the facts upon which the motion is based must be shown by affidavits or by other admissible evidence; though, if an answer is on file, it may be used as an affidavit as far as its statements are made on the knowledge of the defendant, and not merely on information and belief.

Affidavits and other evidence to disprove the statements of fact, contained in the moving papers of the defendant, may be introduced by the complainant; and counter evidence from the defendant is then admissible to disprove the complainant's answering allegations. After this, it becomes the duty of the judge to balance the documents and ascertain where the weight of them is;[3] and he will decide the motion against the mover, unless his papers preponderate.[4] Service on the opposite party, before the motion is heard, of the affidavits upon which a motion to dissolve an injunction is made or is resisted, seems to be called for by the

[1] Woodworth *v.* Rogers, 3 Woodbury & Minot, 143, 1847.

[2] Union Paper Bag Machine Co. *v.* Newell, 11 Blatch. 550, 1874.

[3] Woodworth *v.* Rogers, 3 Woodbury & Minot, 144, 1847.

[4] Sparkman *v.* Higgins, 1 Blatch. 207, 1849.

same reasons which call for similar service of the affidavits upon which motions for preliminary injunctions are based or are withstood.[1]

§ 695. A motion to reinstate a dissolved injunction may be made at any time; but it will not be granted on the same state of the case as that which existed when the injunction was dissolved. So, also, a reinstated preliminary injunction may be again dissolved on any new state of facts which show that its continuation would be unjust.[2] In patent cases, however, it will seldom occur that the alternate process of issuing and dissolving preliminary injunctions can be carried further than the first dissolution. After that, the court will let the matter rest till the interlocutory hearing, unless a case of great clearness and pressing necessity is presented for further preliminary action.

§ 696. While an injunction is in force, it must be obeyed, even though it ought never to have been granted.[3] But an injunction is not in force if it was issued against a defendant over whom the court had no jurisdiction. No court has any authority to issue an injunction against such a person. And where courts act without authority, their orders are nullities. They are not voidable, but simply void.[4] It follows from these rules, that if a Federal court were to issue an injunction against a defendant before he is served with a *subpœna ad respondendum* in the case, that injunction would be void and could safely be disregerded;[5] but where an injunction is granted after such service, and upon due notice of the motion therefor, it must be obeyed, no matter how obviously unjust and unwarrantable its granting may have been. And an injunction is binding upon all persons

[1] Section 662 of this book.

[2] Tucker *v.* Carpenter, 1 Hempstead, 441, 1841.

[3] Moat *v.* Holbeln, 2 Edwards' Chancery (N. Y.), 188, 1834: Sullivan *v.* Judah, 4 Paige (N. Y.), 444, 1834; Richards *v.* West, 2 Green's Chancery (N. Y.), 456, 1836; People *v.* Sturtevant, 5 Seldon (N. Y.), 263, 1853; Erie Railway Co. *v.* Ramsay, 45 New York, 637, 1871.

[4] Elliot *v.* Pelrsol, 1 Peters, 340, 1828; Wilcox *v.* Jackson, 13 Peters, 511, 1839

[5] Sickles *v.* Borden, 4 Blatch. 14, 1857; Section 661 of this book.

who have any legal or equitable interest with the defendant in the litigation, and who are informed of the granting of the injunction; even though they were not defendants in the suit, nor served with an injunction writ.[1] And when an injunction is dissolved which ought not to have been granted, the enjoined party is without redress for the injury or inconvenience he may have suffered, unless the court when granting the injunction, made an order that the complainant should pay the defendant such resulting damages as he might sustain in case it be finally decided that the injunction ought not to have been granted; or required the complainant to file a bond to secure those damages, as a condition precedent to the issuing of the injunction.[2]

§ 696*a*. An appeal is demandable to the Circuit Court of Appeals, from any order of a Circuit Court which grants, continues, refuses, dissolves or refuses to dissolve a preliminary injunction forbidding the infringement of a patent, *pendente lite*, at any time within thirty days from the entry of such order; and such appeals take precedence in the appellate court; but they do not stay the other proceedings in the case in the court below, during the pendency of the appeal, unless that court so orders.[3] Nor does such an appeal give the appellant a right to a supersedeas of the injunction pending the appeal; and the suspension of the injunction during that time, may be granted or refused at his discretion, by the judge who granted the injunction.[4] The decision of an appeal from an order granting a preliminary injunction, primarily depends upon the question of the providence of the injunction; and that question may or may not depend, according to circumstances, upon the ultimate

[1] Stahl *v.* Ertel, 62 Fed. Rep. 922, 1893.

[2] Lexington & Ohio Railroad Co. *v.* Applegate, 8 Dana (Ken.) 289, 1839; Sturgis *v.* Knapp, 33 Vermont, 486, 1860; McKay *v.* Jackman, 16 Reporter, 164, 1883.

[3] 28 Statutes at Large, Ch. 96, p. 666.

[4] *In re* Haberman Mfg. Co. 147 U. S. 529, 1893.

merits of the case.[1] In deciding the question of the providence of the injunction, the adjudication or acquiescence upon which the injunction was based in the Circuit Court, will generally have the same strength in the Circuit Court of Appeals, that it ought to have had in the court below;[2] but where it was plainly wrong or insufficient, it will not be followed.[3] And an appeal from a preliminary injunction will be dismissed without adjudication, in the Circuit Court of Appeals, when the patent has expired since the injunction was granted, because the injunction will have terminated at the same time.[4]

§ 697. A permanent injunction follows a decision in favor of the complainant, on the interlocutory hearing of a patent case, unless some special reason exists for its being refused, or being postponed till after the master's report, or being suspended pending an appeal.[5]

§ 698. A refusal of a permanent injunction will generally follow from the fact that the patent has expired at the time of the interlocutory decree.[6] If there is an exception to this rule, it is only where the defendant may be enjoined from using or selling, after the expiration of the patent, those specimens of the patented thing which he unlawfully made before that expiration.[7] But Justice MILLER wisely decided that there is no such exception; because such an exception would practically prolong many patents beyond

[1] Blount *v.* Societe, 53 Fed. Rep. 98, 1892; Consolidated Electric Storage Co. *v.* Accumulator Co. 55 Fed. Rep. 485, 1893.

[2] American Paper Pail Co. *v.* National Folding Box Co. 51 Fed. Rep. 232, 1892.

[3] Curtis *v.* Overman Wheel Co. 58 Fed. Rep. 784, 1893.

[4] Gamewell Fire Alarm Telegraph Co. *v.* Municipal Signal Co. 61 Fed. Rep. 208, 1894.

[5] Potter *v.* Mack, 3 Fisher, 430, 1868; Rumford Chemical Works *v.* Hecker, 2 Bann. & Ard. 388, 1876.

[6] Jordan *v.* Dobson, 2 Abbott's U. S. Reports, 415, 1870; Bignal *v.* Harvey, 18 Blatch. 356, 1880.

[7] Parker *v.* Sears, 1 Fisher, 102, 1850; American Diamond Rock Boring Co. *v.* Sheldon, 1 Fed. Rep. 870, 1880; American Diamond Rock Boring Co. *v.* Marble Co. 2 Fed. Rep. 353, 355, 356, 1880; Reay *v.* Raynor, 19 Fed. Rep. 308, 1884; Toledo Reaper Co *v.* Harvester Co. 24 Fed. Rep. 739, 1885; New York Packing Co. *v.* Magowan, 27 Fed. Rep. 111, 1886.

the statutory term thereof; and because damages are a sufficient remedy for such unlawful making.[1] And no injunction will issue to prevent preparation, during the life of a patent, for making, selling, or using the patented matter after the patent expires.[2]

§ 699. A refusal of a permanent injunction will also occur where the complainant is shown to have assigned, prior to the interlocutory decree, all his interest in the future duration of the patent right infringed by the defendant.[3] But no such refusal will be based on the fact that the complainant is not employing his invention in competition with the defendant,[4] or upon the fact that the defendant can accomplish his result by non-infringing means.[5]

§ 700. So, also, a refusal of an injunction will be necessary, where the infringing defendant is dead at the time of the interlocutory decree, even though the suit may have been revived against his legal representative.[6] In such a case no injunction will lie against the dead defendant, because he is no longer within the jurisdiction of the court; and none will lie against the legal representative, because he never infringed the patent. For reasons of similar legal import, an injunction will be refused where the defendant is a corporation and undergoes legal dissolution before the interlocutory decree. This point of law is based on the doctrine that a court will not direct a writ against a dead corporation;[7] and also upon the rule that it will not enjoin an act which, from the nature of the case, cannot be committed.[8]

[1] Westinghouse *v.* Carpenter, 43 Fed. Rep. 894, 1888.

[2] White *v.* Walbridge, 46 Fed. Rep. 526, 1891.

[3] Wheeler *v.* McCormick, 11 Blatch. 345, 1873; Boomer *v.* Powder Press Co. 13 Blatch. 107, 1875.

[4] American Bell Telephone Co. *v.* Cushman Telephone Co. 36 Fed. Rep. 488, 1888; Wirt *v.* Hicks, 46 Fed. Rep. 71, 1891.

[5] Du Bois *v* Kirk, 158 U. S. 66 1895.

[6] Draper *v.* Hudson, 1 Holmes, 208, 1873.

[7] Mumma *v.* Potomac Co. 8 Peters, 286, 1834.

[8] Potter *v.* Crowell, 3 Fisher, 115, 1866.

§ 701. But the fact that the defendant has ceased to infringe the patent, and says that he will not infringe it in the future, is no reason for refusing an injunction against him.[1] Whatever tort a man has once committed, he is likely to commit again, unless restrained from so doing.

§ 702. A permanent injunction will be postponed till a final decree, when such a postponement is necessary to save the defendant from special hardship, and is not injurious to the just rights of the complainant;[2] or where an immediate discontinuance of the defendant's use of the patented article is contrary to public policy.[3] But where such a postponement would be injurious to the just rights of the complainant, it will not be granted to avert from the defendant the consequences of his infringement, even where those consequences may be hard to bear.[4] And where such a postponement is allowed, the defendant should be required to give a bond for the security of the complainant.[5]

§ 703. A permanent injunction may be suspended, pending an appeal from the interlocutory decree which granted it, at the discretion of the judge who decided the case, upon such terms as to bond or otherwise as he may consider proper for the security of the rights of the opposite party.[6] Such a bond should be conditioned upon the result of the

[1] Jenkins *v.* Greenwald, 2 Fisher, 42, 1857; Potter *v.* Crowell, 3 Fisher, 115, 1866; Rumford Chemical Works *v.* Vice, 14 Blatch. 180, 1877; Bullock Printing Press Co. *v.* Jones, 3 Bann. & Ard. 195, 1878; Facer *v.* Midvale Steel-Work Co. 38 Fed. Rep. 231, 1888; Norton *v.* Automatic Can Co. 45 Fed. Rep. 638, 1891; California Electrical Works *v.* Henzel, 48 Fed. Rep. 377, 1891; Henzel *v.* California Electrical Works, 51 Fed. Rep. 754, 1892; Winchester Arms Co. *v.* American Buckle Co. 54 Fed. Rep. 711, 1893.

[2] Barnard *v.* Gibson, 7 Howard, 657, 1849; Yale & Greenleaf Mfg. Co. *v.* North, 5 Blatch. 462, 1867; Potter *v.* Mack, 3 Fisher, 428, 1868; Dorsey Harvester Rake Co. *v.* Marsh, 6 Fisher, 401, 1873; West Publishing Co. *v.* Co-operative Publishing Co. 53 Fed. Rep. 269, 1893.

[3] Ballard *v.* Pittsburg, 12 Fed. Rep. 783, 1882.

[4] Brown *v.* Deere, 6 Fed. Rep. 487, 1880.

[5] American Middlings Purifier Co. *v.* Christian, 3 Bann. & Ard. 53, 1877.

[6] *In re* Haberman Mfg. Co. 147 U. S. 525, 1893; Section 644*a* of this book.

appeal, and should secure the profits and damages to accrue after the interlocutory decree, and before the decision of the Circuit Court of Appeals thereon, and also those which may possibly accrue after that decision, and before its reviewal in the Supreme Court, in the event that the case should go to that tribunal.

And a permanent injunction may be suspended, for an extraordinary cause, pending an appeal from a final decree to the Circuit Court of Appeals, at the discretion of the judge who decided the case and allowed the appeal, upon such terms as will secure the rights of the complainant.[1] Those rights include the right to recover the profits and damages which may accrue after the final decree, and before the end of the suspension of the injunction; and therefore the security of those rights will require a bond to cover those profits and damages, in addition to the supersedeas bond which must be filed to cover the profits and damages which accrued prior to the final decree.

Where no money recovery could indemnify the complainant for the defendant's unrestrained doings pending an appeal, it will be reasonable not to suspend the permanent injunction, because the presumption and the probability are that the decree of the circuit court is right, and because of two evils it is better to incur the risk of that which is least to be expected.

§ 704. A permanent injunction may be dissolved at any time within six months after the expiration of the term of court at which the final decree in the case was entered; and such a dissolution will be had where the defendant, by means of a supplemental bill in the nature of a bill of review, or by a bill of review, secures a cancellation of that decree.[2] And such a dissolution must, of course, occur whenever the decree which granted the injunction, is reversed by a higher court.

[1] Munson *v.* New York, 19 Fed. Rep. 313, 1884; Equity Rule 93.

[2] Sections 647 to 653 of this book.

§ 705. Injunctions to restrain infringements of patents may be granted independent of all other relief;[1] and an injunction may also be granted to restrain a complainant from bringing actions against persons who are using or are selling those articles, for the making of which the action at bar was brought against the defendant;[2] or to restrain the complainant from bringing an action at law against the defendant, for the same infringements as any of those covered by the action in equity.[3] But no injunction will be issued on account of an infringement which is so trivial as to be below the dignity of the court;[4] nor to restrain a junior patentee from bringing actions on his patent, while that patent is still free from an adjudication of invalidity.[5]

§ 706. The duration of injunctions in patent cases depends upon a variety of circumstances. Unless such a writ is expressly made to apply to the use or sale, after the expiration of the patent, of specimens of the patented thing which were made before that time, such injunction cannot continue after that expiration; and surely no such writ will be made to apply to such use or sale of unpatented parts of an infringing combination.[6] Indeed, no injunction ought in any case to continue after the expiration of the patent.[7] Permanent injunctions are sometimes called perpetual injunctions; but in patent cases that would be a misnomer, for no injunction can stand longer than the right upon which it is based, and patent rights are never perpetual.

§ 707. And the duration of an injunction sometimes depends upon whether it was issued by a circuit court in

[1] American Cotton Tie Supply Co. *v.* McCready, 17 Blatch. 291, 1879.

[2] Birdsall *v.* Mfg. Co. 1 Hughes, 64, 1877; Allis *v.* Stowell, 16 Fed. Rep. 788, 1883; Ide *v.* Engine Co. 31 Fed. Rep. 901, 1887; National Cash Register Co. *v.* Boston Cash Recorder Co. 41 Fed. Rep. 51, 1889.

[3] Morss *v.* Knapp, 35 Fed. Rep. 218, 1888.

[4] Lowell Mfg. Co. *v.* Hartford Crapet Co. 2 Fisher, 472, 1864; Wickwire *v.* Wire Fabric Co. 41 Fed. Rep. 36, 1889.

[5] Asbestos Felting Co. *v.* Salamander Felting Co. 13 Blatch. 453, 1876.

[6] Johnson *v.* Brooklyn Co. 37 Fed. Rep. 147, 1888.

[7] Westinghouse *v.* Carpenter, 43 Fed. Rep. 894, 1888.

term time, or by one of the judges in vacation. The statutes draw a plain distinction between a circuit court and a judge thereof. When a circuit court is in session during one of its terms, its jurisdiction is the same whether it is held by the circuit justice allotted to the circuit, or by a circuit judge of the circuit, or by the district judge of the district, or by any two or more of them sitting together, or by a circuit judge of some other circuit, or by the district judge of some other district, holding the court in a special emergency.[1] As to the duration of injunctions issued by circuit courts so held, the rules stated in the last section uniformly apply. But it often happens that injunctions become necessary during the time which elapses after the adjournment of one term of the circuit court in a particular district, and before the beginning of the next term of the same court. In such a case, an injunction may be granted by the circuit justice allotted to that circuit, or by a circuit judge of that circuit, or by the district judge of that district, under the following circumstances respectively, and with the respective durations about to be mentioned. The circuit justice or a circuit judge may sit at any time at any place within his circuit to grant an injunction in any proper case pending in the circuit court of any district in that circuit; and the circuit justice may so sit, at any other place in the United States, whenever the motion cannot be heard by a circuit judge of the circuit, or by the district judge of the district, whether the inability of the local judges arose from absence from their respective jurisdictions, or from any other cause;[2] and an injunction, when so granted, will have the same duration as if granted by the circuit court for the district.[3] The district judge of any district may sit at any time, at any place within his district, to grant an injunction

[1] Revised Statutes, Sections 609, 617, 618, 591, 592, 593, 594, 595, 596, and 611; Goodyear Dental Vulcanite Co. *v.* Folsom, 5 Bann. & Ard. 591, 1880.

[2] Revised Statutes, Section 719; Searls *v.* Railroad Co. 2 Woods, 622, 1873.

[3] Gray *v.* Railroad Co. 1 Woolworth, 68, 1864.

in any proper case pending in the circuit court of that district, provided the mover did not have a reasonable time to apply to the circuit court for the writ; but such an injunction will not continue in force after the beginning of the next term of the circuit court unless the court, when it sits, makes an order to that effect.[1] If the next term of the circuit court is held by some other judge than the district judge who granted the injunction, the approval of the injunction, by the judge so holding court, will therefore be necessary to its continued vitality; but if the next term happens to be held by the district judge who issued the writ, his order continuing it in force will be equally efficacious. In either event, orders to continue injunctions issued by district judges in vacation, have become so much a matter of form, that they are seldom actually asked for or entered. But the formality ought to be revived and followed, because in its absence, no attachment can lie against one who disregards such an injunction after the beginning of the ensuing term of the circuit court.[2]

§ 708. An attachment will issue to bring an enjoined defendant before the court for punishment,[3] whenever the complainant institutes proper proceedings therefor, and proves that the defendant was promptly[4] served with a writ of injunction, and that the writ contained a concise description of the particular thing, all specimens of which it forbade the defendant to make, use, or sell,[5] and that the defendant did make, or use, or sell, or did cause to be made, used, or sold a specimen of that thing, or of a thing clearly the same, after having been served with that writ.[6] And an attach-

[1] Revised Statutes, Section 719.

[2] Parker *v.* The Judges, 12 Wheaton, 564, 1827; Gray *v.* Railroad Co. 1 Woolworth, 63, 1864.

[3] Bate Refrigerating Co. *v.* Gillett, 30 Fed. Rep. 684, 1887.

[4] McCormick *v.* Jerome, 3 Blatch. 486, 1856.

[5] Whipple *v.* Hutchinson, 4 Blatch. 191, 1875; Bate Refrigerating Co. *v.* Gillett, 24 Fed. Rep. 696, 1885.

[6] Birdsall *v.* Mfg. Co. 2 Bann. & Ard. 519, 1877; Allis *v.* Stowell, 19 Off. Gaz. 727, 1881; Atlantic Giant Powder Co. *v.* Dittmar Powder Mfg. Co. 9 Fed. Rep. 316, 1881; Mundy *v.* Mfg. Co. 34 Fed. Rep. 541, 1888.

ment will likewise issue for a similar infringement, against any person who had an interest in the litigation with the defendant, and who was informed of the injunction, even though not a nominal defendant, nor served with an injunction writ.[1]

But an attachment will not issue against a stranger to the suit, merely because he has succeeded to the business in the conduct of which the defendant incidentally infringed the complainant's patent, even where that successor has likewise infringed.[2] Where the defendant is a corporation, and where the officer of that corporation upon whom the writ was served, was privy to its violation, an attachment will issue against him in person ;[3] and indeed an injunction duly served on a corporation is binding on all persons acting for that corporation, and who have notice of the writ and of its contents, whether they were actually served or not.[4]

Where the thing proved to have been done by the enjoined defendant, consists in sending to some foreign country, and selling there, articles which were made in the United States, in infringement of the patent, before the injunction was granted, an attachment will not issue ; because such a transaction is not a violation of an injunction against the infringement of a patent.[5] And an attachment will not issue where the character of the defendant's doings, after the injunction, is doubtful.[6] Where the thing proved to have been made, used, or sold by the enjoined defendant, differs from the article described in the writ of injunction, a question of infringement may arise, which may require to be brought before the court on a motion for another and a specific writ

[1] Stahl *v.* Ertel, 62 Fed. Rep. 922, 1893.

[2] Bate Refrigerating Co. *v.* Gillett, 30 Fed. Rep. 684, 1887.

[3] Wetherill *v.* Zinc Co. 1 Bann. & Ard. 150, 1874.

[4] Phillips *v.* Detroit, 3 Bann. & Ard. 150, 1877.

[5] Gould *v.* Sessions, 67 Fed. Rep 163, 1895.

[6] Accumulator Co. *v.* Storage Co. 53 Fed. Rep. 793, 1892.

of injunction, rather than on a motion for an attachment.[1] If that question is a doubtful one, an attachment, if moved for, will not issue;[2] because doubtful questions will not be decided on summary proceedings to commit persons for contempt of court. But not every question is doubtful which is difficult, or which is complex, or about which the evidence is conflicting. It is therefore the duty of the court, on a hearing of a motion for an attachment, to examine what the defendant is proved to have done, and to issue an attachment if his doings satisfactorily appear in the eye of the law to constitute infringement of a claim covered by the writ of injunction.[3] A motion for an attachment cannot be anticipated and outflanked by a motion to expressly limit the injunction, so as to exclude the doings of the defendant.[4] And where a motion for an attachment is denied, on the ground of infringement being too doubtful to be decided on such a motion, that denial does not prevent a decision finding infringement, in a new suit between the same parties on the same facts.[5]

A motion for an attachment for contempt of court for violating an injunction is an independent criminal case,

[1] Gold & Stock Telegraph Co. *v.* 31 Fed. Rep. 292, 1887; Howard *v.* Pearce, 19 Fed. Rep. 419, 1884; Truax *v.* Detweiler, 46 Fed. Rep. 118, 1891; Bonsack Machine Co. *v.* Cigarette Co. 64 Fed. Rep. 858, 1894.

[2] California Paving Co. *v.* Molitor, 113 U. S. 617, 1884; Liddle *v.* Cory, 7 Blatch. 1, 1866; Welling *v.* Trimming Co. 2 Bann. & Ard. 1, 1875; Buerk *v.* Imhaeuser, 2 Bann. & Ard. 465, 1876; Onderdonk *v.* Fanning, 5 Bann. & Ard. 431, 1880; Bate Refrigerating Co. *v.* Eastman, 11 Fed. Rep. 902, 1881; Higby *v.* Rubber Co. 18 Fed. Rep. 601, 1883; Smith *v.* Halkyard, 19 Fed. Rep. 602, 1884; Wirt *v.* Brown, 30 Fed. Rep. 187, 1887; Temple Pump Co. *v.* Mfg. Co. Mast, 33 Fed. Rep. 867, 1888; Mundy *v.* Mfg. Co. 34 Fed. Rep. 541, 1888; Pennsylvania Drill Co. *v.* Simpson, 39 Fed. Rep. 284, 1889; Enterprise Mfg. Co. *v.* Sargent, 48 Fed. Rep. 453, 1891; Mack *v.* Levy, 49 Fed. Rep. 857, 1892.

[3] Wetherill *v.* Zinc Co. 1 Bann. & Ard. 105, 1874; Schillinger *v.* Gunther, 2 Bann & Ard. 545, 1877; Morss *v.* Knapp, 37 Fed. Rep. 353, 1889.

[4] Edison Electric Light Co. *v.* Westinghouse Electric Co. 54 Fed. Rep. 504, 1893.

[5] Mack *v.* Levy, 59 Fed. Rep. 468, 1894.

which can be taken to the Circuit Court of Appeals for review on a writ of error, while the action in equity out of which it arose, is still pending and progressing in the Circuit Court.[1]

§ 709. It is no defence to a motion for an attachment to show that the decision in pursuance of which the injunction was granted was wrong;[2] or that new evidence has since been discovered which, if it had been known at the hearing, would have caused a contrary decision;[3] or that the defendant was advised by counsel that his doings did not violate the injunction;[4] or that what the defendant did was done as the employee of another;[5] or that the writ of injunction was for a while suspended in its operation, by the consent of the complainant without any order of court;[6] or that the writ of injunction was inadvertently made broader than the decision of the court would warrant.[7] In such a case as the last of these, the defendant may apply to the court to correct the writ, but he must not disobey it while it remains unchanged. But where an injunction was based on a consent decree, which decree was entered in pursuance of a compromise of the parties, an attachment will not issue for a disregard of that injunction, if that compromise has been set aside by a court of competent jurisdiction, or if such a court has enjoined the complainant from enforcing the contract of compromise.[8]

§ 710. The penalty for a violation of an injunction depends upon the circumstances of the particular case at bar. Where

[1] Sessions *v.* Gould, 63 Fed. Rep. 1002, 1894; Gould *v.* Sessions, 67 Fed. Rep. 163, 1895.

[2] Woodworth *v.* Rogers, 3 Woodbury & Minot, 135, 1847; Liddle *v.* Cory, 7 Blatch. 1, 1865.

[3] Whipple *v.* Hutchinson, 4 Blatch. 190, 1858; Phillips *v.* Detroit, 3 Bann. & Ard. 150, 1877.

[4] Hamilton *v.* Simons, 5 Bissell, 77, 1869.

[5] Sickles *v.* Borden, 4 Blatch. 15 1857; Goodyear *v.* Mullee, 5 Blatch. 437, 1867; Potter *v.* Muller, 1 Bond. 601, 1865; Iowa Barb Steel Wire Co. *v.* Barbed Wire Co. 30 Fed. Rep. 123, 1887.

[6] Pentlarge *v.* Beeston, 1 Fed. Rep. 862, 1880.

[7] Sickles *v.* Borden, 4 Blatch. 15, 1857.

[8] Pentlarge *v.* Beeston, 1 Fed. Rep. 862, 1880.

it appears that the defendant had no intention to disobey the writ, the penalty may be confined to an enforced payment of the costs of the motion for an attachment.[1] Where the defendant had no intention to disobey the writ, but imprudently did so, the penalty may include the costs and a small fine.[2] Where the disobedience is less excusable, the defendant may be compelled to pay all the expenses and counsel fees incurred by the complainant in relation to the motion.[3] And where disobedience of an injunction is excuseless and defiant, the penalty may be a reasonable fine and a reasonable imprisonment.

[1] Carstoadt *v.* Corset Co. 13 Blatch. 371, 1876; Strowbridge *v.* Lindsay, 6 Fed. Rep. 510, 1881; Macbeth *v.* Gillinder, 54 Fed. Rep. 172, 1891; Macbeth *v* Braddock Glass Co. 54 Fed. Rep. 173, 1890; Braddock Glass Co. *v.* Macbeth, 64 Fed. Rep. 120, 1894.

[2] Norton *v.* Automatic Can Co. 59 Fed. Rep. 137, 1893.

[3] Doubleday *v.* Sherman, 4 Fisher. 253, 1870; Schillinger *v.* Gunther, 2 Bann. & Ard. 545, 1877; Stahl *v.* Ertel, 62 Fed. Rep. 922, 1893.

CHAPTER XXII.

PROFITS.

711. The infringer's profits recoverable in equity.
712. In cases of joint infringement.
713. In cases of infringement partly unprofitable.
714. What spaces of time an account of profits may cover.
715. The generic rule for ascertaining infringer's profits.
716. Complainant's damages no criterion of defendant's profits.
717. Defendant's profits in cases of unlawfully making and selling articles covered by the complainant's patent.
718. Method of ascertaining cost of making and selling infringing articles.
719. Burden of proof when it is necessary to separate profits due to patented features, from profits due to other features of an infringing article.
720. Method of making the separation where defendant made and sold the patented invention separately, as well as in connection with other things.
721. Method where defendant pays royalty for right to make and sell the features not covered by the patent in suit.
722. Cases where no separation is required or allowed.
723. Method of making the separation by the criterion of comparative cost.
723*a*. Defendant's profits in design cases.
724. Defendant's profits in cases of unlawfully selling articles partly or wholly covered by complainant's patent.
725. Defendant's profits in cases of unlawful using of patented processes or things.
729. Affirmative gain.
730. Saving from loss.
731. Affirmative gain and saving from loss.
732. Standard of comparison need not have been used by the infringer.
734. Method of selecting the proper standard of comparison.
735. The rule as to using has only a limited application to cases of infringement by making or by selling.
736. Interest on infringer's profits.
739. Proceedings before masters.
740. Evidence before masters.
741. Objections to evidence before masters.
742. Questions of the extent of the defendant's infringement.
743. Questions relevant to different sorts of defendant's alleged infringement.
744. Master's Reports.
745. Exceptions to master's report.

746. Defendants' exceptions to master's reports.
747. Defendants' affirmative exceptions to master's reports.
748. Defendants' negative exceptions to master's reports.
749. Complainants' exceptions to master's reports.
750. Outline of practice relevant to master's findings.

§ 711. THE profits which are recoverable in equity for the infringement of a patent, are those which the defendant made from that infringement.[1] They are the profits which he actually made; not those which with worse,[2] or better,[3] management he would or might have made.

Where a particular infringer realized no profit from his infringement, none can be recovered from him; but where he did make such a profit, it can be recovered, whether the general business, of which the infringement formed a part, was profitable to him or not,[4] and whether or not the complainant was employing, at the time, the invention which was covered by the patent infringed.[5]

The recoverable profits are those which resulted directly, and do not include any which resulted indirectly, from the infringement.[6] The case of Piper *v.* Brown is cited as an example of this distinction. The difference between the amount of money for which the defendants sold their preserved fish, and the aggregate cost of that fish and of preserving it by the patented apparatus, was there held to be direct profit. But it appeared that the defendants were also dealers in fresh fish, and that they sold a large amount of such fish at higher prices than they could have done, had they not reduced the supply in the market by means of

[1] Rubber Co. *v.* Goodyear, 9 Wallace, 801, 1869; Tilghman *v.* Proctor, 125 U. S. 144, 1888.

[2] Lawther *v.* Hamilton, 64 Fed. Rep. 224, 1892.

[3] Livingston *v.* Woodworth, 15 Howard, 546, 1853; Dean *v.* Mason, 20 Howard, 203, 1857; Keystone Mfg. Co. *v.* Adams, 151 U. S. 147, 1894; Coupe *v.* Royer, 155 U. S. 565, 1895.

[4] Elizabeth *v.* Pavement Co. 97 U. S. 138, 1877; Tilghman *v.* Proctor, 125 U. S. 146, 1888.

[5] Crosby Steam Gauge & Valve Co. *v.* Safety Valve Co. 141 U. S. 452, 1891.

[6] Piper *v.* Brown, 1 Holmes, 198, 1873; Heaton Button Fastener Co. *v.* Macdonald, 57 Fed. Rep. 649, 1893.

preserving fish by the patented apparatus. The increase in the price of fresh fish, which was thus caused by the defendants' infringement, was one and one-half cents per pound; and the consequent profits made by the defendants, amounted to more than six thousand dollars. But the court held that those profits could not be recovered by the patentee, because they did not directly result from the infringement of his patent.

§ 712. Where several defendants were joint infringers of a patent, but where all the resulting profits were received by part of the wrong-doers, the decree for profits will be rendered only against those defendants who realized them.[1] Where all of the defendants realized profits during a portion of the time covered by the infringement in suit, and where a part of them realized profits during the residue of that time, the respective profits may be recovered accordingly, and a decree be entered against all of the defendants for the profits in which all participated, and against a part of the defendants for the profits which that part alone realized.[2] And where one part of the profits of joint infringement was realized by one of the joint infringers, and the residue by another; the decree will go against each, for his own share only.[3]

§ 713. Where a part of the infringement of a defendant resulted in profits, and the residue resulted in losses, the complainant is entitled to recover those profits without any deduction on account of those losses.[4] Each infringement is treated by itself. If it resulted in profit, that profit belongs to the patentee. If it resulted in loss, that loss must be borne by the infringer. It cannot be set off against

[1] Elizabeth *v.* Pavement Co. 97 U. S. 140, 1877,

[2] Tatham *v.* Lowber, 4 Blatch. 87, 1857; Herring *v.* Gage, 3 Bann. & Ard. 402, 1878; New York Grape Sugar Co. *v.* American Grape Sugar Co. 42 Fed. Rep. 456; 1890.

[3] Covert *v.* Sargent, 38 Fed. Rep. 238, 1889.

[4] Callaghan *v.* Myers, 128 U. S. 664, 1888; Crosby Valve Co. *v.* Safety Valve Co. 141 U. S. 453, 1891; Graham *v.* Mason, 1 Holmes, 90, 1872; Steam Stone Cutter Co. *v.* Mfg. Co. 17 Blatch. 27, 1879.

the patentee's right of action for the profitable infringement, any more than it could be made the basis of a right of action against the patentee if no infringement had been profitable.

§ 714. An account of profits cannot be had where none arose before the action was begun,[1] but such an account is not confined to those profits, nor indeed to those which accrued before the interlocutory decree was entered, but may be made to include all profits realized by the defendant from infringing the complainant's right, at any time prior to the closing of the account.[2] And such an account will be taken in conformity with the statutes relevant thereto, as they existed at the respective dates when the infringement occurred.[3]

§ 715. The generic rule for ascertaining the amount of the profits recoverable in equity for the infringement of a patent, is that of treating the infringer as though he were a trustee for the patentee in respect of the profits which he realized from his infringement.[4] The specific rules by means of which this generic rule is administered, are somewhat numerous and somewhat elastic. They are adapted to the varying natures of patented inventions, and to the varying circumstances under which the patents for those inventions are respectively infringed.[5] They all require the best evidence, of which the nature of each particular case to which they may be respectively applied, will reasonably admit,[6] and that evidence must be reasonably definite[7] and convincing.[8]

[1] Marsh *v.* Nichols, 128 U. S. 616, 1888.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 806, 1869; Knox *v.* Quicksilver Mining Co. 6 Sawyer, 435, 1878; Creamer *v.* Bowers, 35 Fed. Rep. 209, 1888.

[3] Untermeyer *v.* Freund, 58 Fed. Rep. 212, 1893.

[4] Root *v.* Railway Co. 105 U. S. 214, 1881; Tilghman *v.* Proctor, 125 U. S. 148, 1888.

[5] Wetherill *v.* Zinc Co. 1 Bann. & Ard. 486, 1874.

[6] Herring *v.* Gage, 3 Bann. & Ard. 399, 1878; Emigh *v.* Railroad Co. 6 Fed. Rep. 283, 1881.

[7] Fischer *v.* Hayes, 39 Fed. Rep. 613, 1889.

[8] Locomotive Safety Truck Co. *v.* Railroad Co. 2 Fed. Rep. 681, 1880.

§ 716. The patentee's royalty is no measure of the defendant's profits,[1] even in a case where the patentee habitually exercised his exclusive right by granting licenses to others.[2] Nor are any other facts which relate to the measure of the complainant's damages, material to inquiries touching the amount of the defendant's profits.[3]

§ 717. The difference between the amount it cost the defendant to make and sell his specimens of the patented thing, and the amount which he received for those specimens, is in many cases the amount of his profits.[4] That is the fact where the only infringement consisted of such making and selling, and where no part of ascertainable cost or value, other than those covered by the patent in suit, entered into the composition of the specimens which were made and sold.[5] In the first case just cited, it appears that the patent did not cover all the elements of the articles of merchandise which were made and sold by the defendant. But those unpatented elements were disregarded in that case, because the conduct of the defendant had rendered impossible a separate account of the profits due to the patented, and those due to the unpatented features of those articles. In the second of the cited cases, it appeared that the pavement which was made by the New Jersey Wood Paving Co. for the city of Elizabeth, contained the entire invention of the complainant, and contained an addition thereto, which addition might or might not have contributed to the profit which resulted to the Paving Co. from its contract. Under those circumstances, the Supreme Court held that the entire profit should go to the patentee, because it

[1] Knox *v.* Quicksilver Mining Co. 6 Sawyer, 430, 1878.

[2] Tilghman *v.* Proctor, 125 U. S. 143, 1888; Wooster *v.* Taylor, 14 Blatch. 403, 1878.

[3] Elizabeth *v.* Pavement Co. 97 U. S. 143, 1877.

[4] Simpson *v.* Davis, 22 Fed. Rep. 444, 1884; Shannon *v.* Bruner, 33 Fed. Rep. 872, 1888; Am Ende *v.* Seabury, 43 Fed. Rep. 672, 1890.

[5] Rubber Co. *v.* Goodyear, 9 Wallace, 803, 1869; Elizabeth *v.* Pavement Co. 97 U. S. 141, 1877; Warren *v.* Keep, 155 U. S. 268, 1894; Jenkins *v.* Greenwald, 1 Bond, 141, 1857; Sayre *v.* Scott, 55 Fed. Rep. 676, 1893.

was not ascertainable how much was due to the additional element. The principle of both these precedents on this point appears to be, that where a defendant mingled profits which he made as an infringer, with those he made otherwise, and where there is no criterion by means of which they can be separated, he must submit to the recovery of the whole. In the third case, the infringement consisted in making and selling a particular kind of stove grates, which was admitted to infringe all the claims of the complainant's patent thereon. The Supreme Court affirmed a decree for the difference between the complainant's evidence of the cost of making the grates, and the amount for which the defendant sold them.

§ 718. When taking an account of profits in the method indicated in the last section, it is generally easy to ascertain the amount which the defendant realized for the articles which he made and sold; but it is generally difficult to determine how much it cost him to make and sell them. One such inquiry occupied ex-Chancellor WALWORTH, as master, more than ten years, and occupied the judge who passed upon the exceptions to his report at least as many weeks.[1] When such accounts are taken, the elements which are allowed to enter into that cost are the following:

1. The market value of materials on hand at the time the infringement began, and the actual cost of materials subsequently purchased, but not the market value of the latter at the time they were used in infringing.[2]

2. Money paid in good faith to employees engaged in making and selling the infringing articles, even where those employees were officers or stockholders of the infringing corporation.[3]

3. Proper remuneration for the labor of the infringer in conducting the infringement. This element has been disal-

[1] Troy Iron & Nail Factory *v.* Corning, 6 Blatch. 328, 1869.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 803, 1869.

[3] Rubber Co. *v.* Goodyear, 9 Wallace, 803, 1869; American Nicholson Pavement Co. *v.* Elizabeth, 1 Bann. & Ard. 442, 1874; Steam Stone Cutter Co. *v.* Mfg. Co. 17 Blatch. 29, 1879.

lowed in one case;[1] but the same reasoning which justified the Supreme Court in allowing the members of a defendant corporation for their personal services, calls for the same allowance where the men who infringe, do so as partners or as individuals. Where a number of men form a corporation and, as such, infringe a patent by making and selling specimens of a patented thing, the Supreme Court approves a proper allowance for their labor, being made an element in the cost of those specimens, when those men are forced to pay over those profits to the patentee. There is the same reason for making the same allowance, where two such men make and sell such specimens as partners, or where one man does so alone. But it is the labor of the infringer in making or selling infringing articles, or in performing an infringing process, that is contemplated in this paragraph. Salaries which are received by partners in the place of partnership profits, or which are paid for a general oversight of partnership business, do not come in this category.[2]

4. Interest on borrowed money;[3] but not interest on capital stock, except where the property represented by the capital stock was used only in conducting the infringing business, or where the defendant clearly proves what portion of the value of that property was thus used, so as to enable an apportionment of interest to be made between the infringing business, and the other business contemporaneously conducted by the defendant.[4]

5. Expenses of selling, including advertising.[5]

6. Miscellaneous expenses equitably chargeable to the infringing business.[6]

§ 719. Where the thing made and sold by the defendant contained not only the invention of the complainant, but

[1] Williams *v.* Leonard, 9 Blatch. 476, 1872.

[2] Callaghan *v.* Myers, 128 U. S. 663, 1888.

[3] Rubber Co. *v.* Goodyear, 9 Wall. 804, 1869.

[4] Seabury *v.* Am Ende, 152 U. S. 564, 1894.

[5] Rubber Co. *v.* Goodyear, 9 Wallace, 804, 1869; Manufacturing Co. *v.* Cowing, 105 U. S. 257, 1884; La Baw *v.* Hawkins, 2 Bann. & Ard. 566, 1877.

[6] Winchester Arms Co. *v.* American Cartridge Co. 62 Fed. Rep. 278, 1894.

contained also some other invention or feature of ascertainable cost and provable value, the complainant, except in design cases, can recover only that part of the defendant's profit which was due to the infringing parts or features of the thing made and sold by the defendant, and the burden is on the complainant to prove the amount of that part.[1] In doing that work, a complainant should proceed in view of the following rules; but his evidence needs not to be severely accurate, and may be sufficient where it furnishes foundation for just inferences, rather than certain knowledge.[2]

§ 720. Where the defendant made and sold the complainant's invention separately, as well as in connection with other inventions, the profit which he made on the separate sales, is the measure of that part which is to be credited to the complainant's invention, of the profit which the defendant made on the joint sales.[3] This is a fairer method of division in such a case, than would be a division of the gross profits in proportion of the comparative cost of the elements covered by the patent in suit, and those not so covered; because the comparative cost is not always the best evidence of the comparative utility of two devices, nor of the comparative profit at which they can be made and sold.[4]

§ 721. Where the defendant has paid or contracted to pay other patentees a royalty for that part of the thing made and sold by him, which is not covered by the complainant's patent, that royalty may be taken as the measure of that part of the gross profits due to that part of the article in suit.[5] But it seems that this rule is not to be applied in any case where the division of the profits can be made

[1] Blake *v.* Robertson, 94 U. S. 733, 1876; Garretson *v.* Clark, 111 U. S. 120, 1884; Dobson *v.* Carpet Co. 114 U. S. 445, 1884; Dobson *v.* Dornan, 118 U. S. 17, 1885; Keystone Mfg. Co. *v.* Adams, 151 U. S. 147, 1894.

[2] Adams *v.* Keystone Mfg. Co. 41 Fed. Rep. 597, 1890.

[3] Mason *v.* Graham, 23 Wallace, 276, 1874.

[4] Graham *v.* Mason, 1 Holmes, 89, 1872.

[5] Elizabeth *v.* Pavement Co. 97 U. S. 141, 1877; La Baw *v.* Hawkins, 2 Bann. & Ard. 565, 1877.

under the rule of the last section; because it may sometimes be that the profits due to that part of the infringing thing which is not covered by the complainant's patent, are larger than the royalty which the defendant had to pay for the right to make and sell that part.

§ 722. Where the thing made and sold by the defendant would be useless for its special purpose without the part covered by the complainant's patent, or where no other known article would answer that purpose well enough to find purchasers; all the profits which the infringer derived from making and selling the entire thing are clearly due to the patented part, and are therefore recoverable by the complainant.[1]

§ 723. Where the profits due to the infringing, and those due to the non-infringing, elements of a defendant's article of manufacture and sale cannot be separated by any other rule, then the apportionment may be made by dividing the aggregate profits in proportion of the respective cost of the different parts. This method of making the division is based on the presumption that similar articles of merchandise are sold at a like percentage of profit on the cost of producing them. But this is not likely to be the fact where one of those articles is covered by a patent while the others are not so covered, because monopolies tend to enhance prices. This method of making the required division will therefore always be more favorable to the defendant than to the complainant; where no part of the article made and sold by the former is covered by a patent, except the part which is covered by the patent of the latter. The principle of this method was approved in Rubber Co. *v.* Goodyear,[2] though in that case it was applied to the work of dividing profits between things covered and other things not covered by the complainant's patent, instead of between parts of

[1] Manufacturing Co. *v.* Cowing, 105 U. S. 256, 1881; Hurlbut *v.* Schillinger, 130 U. S. 456, 1889; Crosby Valve Co. *v.* Safety Valve Co. 141 U. S. 453, 1891.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 802, 1869.

the same thing so covered, and other parts not so covered.

§ 723*a*. In cases for infringement of design patents, a special statute provides that the total profits made from the manufacture or sale of the article or articles, to which the design, or a colorable imitation thereof, has been applied, shall be recoverable.[1] But in order to recover under this statute, the complainant must show that the defendant knew of the complainant's design, and knew of the complainant's patent, or at least knew of facts which put him upon his inquiry for that patent,[2] and knew that the design was applied to the infringing article, without the license of the owner of the patent.[3]

§ 724. Where the infringement consisted only in selling specimens of the article covered by the complainant's patent, the profits may be readily ascertained by deducting the cost of purchasing and selling the articles, from the amount received for them when sold. Where the subject-matter of the patent is a part of a larger article, and where a separate price is paid, and a separate price is obtained for it, the gross profit on the thing covered by the patent may be ascertained by deducting the former from the latter. But in such a case, the complainant is not entitled to recover the whole of that gross profit. It must be charged with such a proportion of the expenses incurred in selling the entire article, as the aggregate money received from the infringing device bears to the aggregate received for the entire apparatus or machine.[4] The principle of this rule is also applicable where the infringer made the articles he sold instead of buying them; and the rules applicable to the latter class of cases, and heretofore set forth, are applicable, with some reasonable modifications, to cases where the infringer bought the infringing articles which he sold, instead of making them himself.

[1] 24 Statutes at Large, Chap. 105, p. 387; Untermeyer *v.* Freund, 58 Fed. Rep. 211, 1893; Ripley *v.* Elson Glass Co. 49 Fed. Rep. 927, 1892.

[2] Smith *v.* Stewart, 55 Fed. Rep. 484, 1893.

[3] Anderson *v.* Pittsburgh Lumber Co. 47 Fed. Rep. 68, 1891.

[4] The Tremolo Patent, 23 Wallace, 528, 1874.

§ 725. Where unlawful using of a patented article or process constitutes the infringement involved in an action in equity, the infringer's profits are ascertained by a rule quite different from either of the foregoing. That rule, in its generic character, may be formulated as follows: The advantage which the defendant derived from using the complainant's invention, over what he could have derived from using any other process or thing, which was known prior to that invention, constitutes the profits which the complainant is entitled to recover. The other process or thing mentioned in the rule, is called the standard of comparison in the case. While that standard of comparison must have been known prior to the complainant's invention,[1] it needs not to have been open to the public at any time, except in the sense that it must be open to the public so far as the complainant's patent in suit is concerned.[2] The advantage which is contemplated by the general rule, is the result of some superiority of the complainant's invention over the standard of comparison; and that superiority may consist in the fact that the complainant's invention performs the function common to both, with equal cheapness and greater excellence, or with greater cheapness and equal excellence, or with greater cheapness and greater excellence; and therefore the advantage may consist either in affirmative gain or in saving from loss, or in both of those elements.

§ 729. The advantage consists in an affirmative gain, in cases wherein the patented process or thing produces a valuable article from materials which otherwise would be useless, or, if useful at all, useful only for purposes of inferior value. The Goodyear process patent,[3] if it had been valid, would have been a patent of this sort, and would have been entitled to an account of profits ascertained according

[1] Turrill *v.* Illinois Central R. R. Co. 20 Fed. Rep. 912; following Cawood Patent, 94 U. S. 710; and affirmed by Illinois Central R. R. Co. *v.* Turrill, 110 U. S. 302, 1884; Sessions *v.* Romadka, 145 U. S. 45, 1892; Lawther *v.* Hamilton, 64 Fed. Rep. 224, 1892.

[2] McCreary *v.* Pennsylvania Canal Co. 141 U. S. 464, 1891.

[3] Rubber Co. *v.* Goodyear, 9 Wallace, 794, 1869.

to the rule of Section 725. But as the only patent sustained in the Goodyear case was the patent for the product, and inasmuch as that patent was infringed by the defendant only in making and selling specimens of the invention it covered, the profits were ascertained on an entirely different plan.

§ 730. But the advantage consisted in saving from loss, in most of the cases which have been adjudicated under the general rule.

In Mowry *v.* Whitney,[1] the advantage was a saving of materials and labor, realized from the use of the complainant's process in manufacturing car-wheels, as compared with what it would have been necessary to expend in producing similar car-wheels, salable at the same price, without the use of that process. In the case of the Cawood Patent[2] the advantage was a saving of labor and of fuel, realized from the use of the complainant's swage-block in mending the exfoliated ends of railroad rails, as compared with the labor and fuel it would have been necessary to expend in mending those rails upon a common anvil.

In Mevs *v.* Conover,[3] the advantage was a saving of labor in splitting kindling-wood by means of the patented machine of the complainant, as compared with the labor which would have been required to split the same quantity of wood by hand, or by any other machine. The justice of the decision last cited has sometimes been questioned; on the ground that there was no actual profit made by the infringer in splitting the wood, and on the contention that he would not have split the wood at all if he had been obliged to do so otherwise than by the patented machine, and that to save a man from a loss which he would not have incurred in any event, is not to confer a profit upon him, and therefore that savings ought not to be accounted as profits except where they result in actual gains. But the case as reported from

[1] Mowry *v.* Whitney, 14 Wallace, 651, 1871.

[2] Cawood Patent, 94 U. S. 709, 1876.

[3] Mevs *v.* Conover, 125 U. S. 144, 1876.

the circuit court,[1] shows that the defendant did continue to split kindling-wood after the bringing of the suit caused him to discontinue the use of the complainant's invention for that purpose. It was probably necessary for him to do so, in order to hold his customers for other kinds of fuel. Therefore the case is not a precedent for the proposition that savings are profits, where there was no actual profit in the particular business in which the complainant's invention was used, and where there was no reason why the defendant should have pursued that business, if obliged to do so at a positive loss. It is entirely consistent with the principle of the general rule to hold that savings are profits, only so far as they result in affirmative gains from the particular business in which the infringer used the patented invention; unless that particular business was so necessary to the general business of the infringer, that he could have afforded to conduct it at an additional loss, at least equal to the saving he made from the use of the complainant's invention, and therefore presumably would have conducted it at that loss, if he had not used that invention.[2]

In Webster Loom Co. *v.* Higgins,[3] the advantage was a saving of machinery for weaving carpets, it appearing, in the aspect of the proofs most favorable to the complainant that the defendants could have made all the carpeting they did make, if instead of using their sixty-one infringing looms, they had used twice that number of non-infringing looms. On this basis, the complainant contended that it was entitled to recover all the profits which were made by the defendants, on those yards of carpeting which they made on the sixty-one infringing looms, over and above the much smaller number of yards which they could have made on sixty-one non-infringing looms. But that contention was overruled by the court, on the ground that nothing hindered the defendants from using one hundred and twenty-two non-

[1] Conover *v.* Mevs, 11 Blatch, 198, 1873.

[2] Celluloid Mfg. Co. *v.* Cellonite Mfg. Co. 40 Fed. Rep. 477, 1889; Tuttle *v.* Claflin, 62 Fed. Rep. 455, 1894.

[3] Webster Loom Co. *v.* Higgins, 43 Fed. Rep. 675, 1890.

infringing looms, instead of sixty-one infringing looms, and that the cost of the use of whatever number of non-infringing looms would have been necessary to make the carpeting which was made on the sixty-one infringing looms, was the proper standard of comparison in the case.

In Sessions *v.* Romadka,[1] the saving consisted in the difference between the cost of the patented trunk fasteners, which the defendant used in manufacturing trunks, and the greater cost of the straps, buckles, and dowels previously in use, in the place of those trunk fasteners.

§ 731. The advantage referred to, consisted both in affirmative gains and in savings from loss, in a number of important cases. In Tilghman *v.* Proctor,[2] it consisted in savings of lime and sulphuric acid; and in gain on account of the increased value of the glycerine obtainable by means of the complainant's invention, as compared with that obtainable by other processes. In Wetherill *v.* Zinc Co.[3] the advantage consisted in savings of coal and labor, in reducing zinc ores; and in gain on account of the increased proportion of zinc obtained by the complainant's process, as compared with other processes used for that purpose.

§ 732. The standard of comparison set up by a defendant needs not to have been used by him at any time,[4] and where it never was so used, the evidence of its utility, as compared with the invention in suit, may be drawn from persons who have used the two under the same conditions;[5] or from any other source which is capable of furnishing convincing evidence upon the point. And even where the defendants have used the standard of comparison, they may show that it was used with better results by others, and may have the benefit of that superiority on the accounting.[6]

[1] Sessions *v.* Romadka, 145 U. S. 45, 1892.

[2] Tilghman *v.* Proctor, 125 U. S. 142, 1888.

[3] Wetherill *v.* Zinc Co. 1 Bann. & Ard. 486, 1874.

[4] Locomotive Safety Truck Co. *v.* Railroad Co. 2 Fed. Rep. 679, 1880.

[5] Emigh *v.* Railroad Co. 6 Fed. Rep 283, 1881.

[6] Tilghman *v.* Proctor, 125 U. S. 150, 1888.

§ 734. To determine what is the proper standard of comparison in a particular case, it is not necessary for the complainant to affirmatively prove that a particular thing was absolutely the next best thing to his invention at the time of the infringement. Such a requirement would not be reasonable, because it could never be performed. It would involve evidence enough to negative the existence of a better thing than the one fixed upon; and to prove that no better thing existed anywhere, would obviously be impossible. The regular course of practice on the point is for the complainant to select what appears to him to be the proper standard of comparison, and to produce evidence to prove what advantage the defendant derived from using the complainant's invention over what he could have derived from using the thing so selected. Where the defendant knows of no standard of comparison more favorable to himself than the one selected by the complainant, the only remaining issue relates to the utility and cheapness of that thing, as compared with the complainant's invention.[1] Where the defendant is not satisfied that the complainant has made the proper selection of a standard of comparison, he may select another, and may produce evidence to show its utility and cheapness as compared with that of the invention covered by the patent in suit; and when the case comes to a hearing before the master, the first question to be decided by him will be as to which of the parties has made the proper selection, and that standard will be used in the accounting, whether it was selected by the complainant or by the defendant; and all evidence about the merits of the other proposed standard will become and remain immaterial to the case.[2]

The true standard of comparison in a particular case is that prior thing which, next to the complainant's invention, could have been most advantageously used by the defendant

[1] Emigh *v.* Railroad Co. 6 Fed. Rep. 285, 1881.

[2] Webster Loom Co. *v.* Higgins, 39 Fed. Rep. 465, 1889.

in place of that invention at the time he used the latter. To determine this point, comparative utility is one guide, but regard must also be had to cheapness, for the advantage contemplated by the general rule of Section 725 is the equalized result of these two elements.

§ 735. The rule of Section 725 has no application to those cases of infringement which consist in making and selling a patented article, or in the latter of those acts alone; except where a patented article is used as a component part of a much larger article which is made and sold by the infringer.[1] In Elizabeth *v.* Pavement Co. the infringement consisted only in making the patented pavement to order; that is to say, it consisted in making and selling the patented article. The defendants sought to have the profits determined, under the rule of Section 725, by setting up other pavements as standards of comparison, but the Supreme Court held their position on the point to be without foundation.[2] The same rule was also unsuccessfully invoked in the case of Burdett *v.* Estey, though the argument in favor of its application was supported by evidence that the defendant might have made and sold a different device, at nearly or quite the same profit that he derived from making and selling the device covered by the complainant's patent.[3]

§ 736. Interest on infringer's profits is allowed from the date of the master's report, which ascertains the amount of those profits.[4]

§ 739. After an interlocutory decree is entered directing a master commissioner of the court to take and report an account of the defendant's profits, or appointing a master *pro hac vice* for that purpose, it becomes the business of the complainant to introduce evidence before such master to

[1] Sessions *v.* Romadka, 145 U. S. 48, 1892.

[2] Elizabeth *v.* Pavement Co. 97 U. S. 141, 1877.

[3] Burdett *v.* Estey, 3 Fed. Rep. 569, 1880.

[4] Tilghman *v.* Proctor, 125 U. S. 160, 1887; Crosby Valve Co. *v.* Safety Valve Co. 141 U. S. 457, 1891.

prove the amount of those profits. The complainant must take the initiative. It is not the province of the master to suggest any specific line of proof or theory of accounting. His function is to pass upon whatever evidence the complainant produces, in the light of whatever is produced by the defendant.[1] And his fees must be paid by the defendant when they accrue, and must be borne by him in the final taxation of costs, if he is finally defeated,[2] but must be borne by the complainant if the bill is finally dismissed.[3]

§ 740. The evidence upon which the master may base his report, may consist of any evidence taken in the case prior to the interlocutory decree,[4] and of documents introduced and depositions taken by the parties for the express purpose of the accounting, and of testimony taken *viva voce* in the presence of the master,[5] anywhere in the world,[6] and of personal examination by him of the structures or processes which are involved in the questions before him.[7] If the required documents are not produced voluntarily, the master may require their production; and any necessary depositions may be taken upon commissions to be issued upon his certificate, from the clerk's office, or they may be taken according to the acts of Congress.[8] When testimony is taken *viva voce* before a master, either party may require that it be taken down in writing, in order that, if necessary, it may be used by the court.[9] In the course of an accounting before a master, that officer has full authority to do all acts and to direct all proceedings which he may deem necessary and proper to the justice and merits of the case.[10] If, for example, an account to be transcribed or deduced from the defendant's books, is necessary to a just decision

[1] Garretson *v.* Clark, 4 Bann. & Ard. 537, 1879.

[2] Urner *v.* Kayton, 17 Fed. Rep. 539, 845, 1883.

[3] American Diamond Drill Co. *v.* Machine Co. 32 Fed. Rep. 552, 1885.

[4] Equity Rule 80; Bell *v.* Stamping Co. 32 Fed. Rep. 549, 1887.

[5] Equity Rule 77.

[6] Bate Refrigerating Co. *v.* Gillette, 28 Fed. Rep. 673, 1886.

[7] Piper *v.* Brown, 1 Holmes, 198, 1873.

[8] Equity Rule 77; Revised Statutes, Sections 863, 864, and 865; Section 535 of this book.

[9] Equity Rule 81.

[10] Equity Rule 77.

of the cause, the master may make an order that the defendant furnish such an account by a certain day; and such an order, when served on the defendant by any disinterested person, must be obeyed, or the defendant will be guilty of contempt of court for not obeying it.[1]

§ 741. Objections to evidence, in order to be availing, must be made when the objectionable piece of evidence is offered, or the objectionable question is put, or the objectionable answer is given. If the master is present at the time, he ought to rule upon the objection at once, and if either party would appeal from that ruling, he must enter an immediate objection thereto. If the ruling is against the evidence objected to, it is necessary for the party who offers the evidence, if he would appeal from the ruling, to do so by an immediate motion to the court to direct the master to reverse his decision upon the point.[2] The reason for this practice is that if such an appeal could be taken in an exception to the master's report, it would, when taken successfully, necessitate a recommittal of the case to the master, in order to enable him to admit the evidence which he erroneously rejected. If the master's ruling is in favor of the evidence objected to, that evidence will of course be admitted subject to the objection, and that ruling may be reviewed by the court on exceptions to the report of the master, as well as by means of an immediate motion. It may be reviewed on exceptions, because, if it is reversed, that reversal will not necessitate any addition to the evidence before the court, but will merely cause the court to eliminate the objectionable evidence from among the factors of the problems before it.

If the master is not present when the cause of an objection arises, the practice is for the notary or other magistrate who is taking the deposition, to note the objections thereon, and to take down the evidence objected to; for he has no authority to make any ruling. In such cases the objections

[1] Kerosene Lamp Heater Co. *v.* Fisher, 5 Bann. & Ard. 79, 1880.

[2] Celluloid Mfg. Co. *v.* Cellonite Mfg. Co. 40 Fed. Rep. 477, 1889.

which are noted upon the depositions, may be brought to the attention of the master on the argument before him, and his specific rulings thereon may be required, and those rulings may be reviewed by the court, on exceptions to the report of the master, as far as they have affected that report. Most of the points stated in this section are contained in an excellent decision of Judge W. D. SHIPMAN,[1] and the residue are deducible from that decision, or from plain principles of practice.

§ 742. The extent of the defendant's infringement must be determined by the master in order to enable him to ascertain the amount of the profits which the defendant derived from that infringement. Where the infringement was all alike, or where the interlocutory decree specifies the particular doings of the defendant which are to be accounted for as infringements, the only question for the master to decide on this point is a question of quantity. But where the interlocutory decree merely directs the master to take and report an account of the profits which the defendant derived from infringing the complainant's patent, and where the complainant claims that certain doings of the defendant which were not proved prior to the interlocutory decree, constitute such an infringement, it becomes the duty of the master to decide the question of infringement involved.[2] Nor would it be unprecedented for a court, when directing a master to take and report an account of infringers' profits, to direct him also to decide and report which of various machines used by the defendant were infringements of the complainant's patent, and to make up his account accordingly,[3] or for the master to spontaneously report upon a form of infringement which was not previously before the court.[4] But the most convenient

[1] Troy Iron and Nail Factory *v.* Corning, 6 Blatch. 333, 1869.

[2] Knox *v.* Quicksilver Mining Co. 6 Sawyer, 436, 1878; Ball Glove Fastening Co. *v.* Socket Fastener Co. 53 Fed. Rep. 245, 1892.

[3] Cawood Patent, 94 U. S. 708, 1876.

[4] Adams *v.* Keystone Mfg. Co. 41 Fed. Rep. 596, 1890.

and least expensive practice is for the court to decide all questions of infringement, before entering an interlocutory decree.

§ 743. Where the alleged infringements involved in a suit, are of several sorts, the master generally ought to report in a separate item the profits due to each kind; so that the Circuit Court on exceptions, or a higher court on an appeal, may render a decree for part or for all of those items, according to its decision upon the questions of infringement involved. This is but a rule of convenience, and may be departed from when convenience would thus be better served. Where the defendant used two different sorts of machines, both of which the complainant claims infringe his patent, if the points upon which those questions of infringement depend are apparently the same in both cases, and if the two sorts of machines were so used by the defendant, that it would be difficult to separate the profits derived from the use of one from those flowing from the use of the other, it will be most convenient not to attempt to do so. In such a case there is but little probability that the courts will hold one of the two sorts of machines to infringe, while holding that the other does not, and there is correspondingly little probability that a necessity will arise for a division of the profits due to the use of the two kinds.

§ 744. A draft report of a mastery in chancery, is one which the master draws up after the testimony has all been taken, and the parties have been heard in argument on that testimony, and the master has formed an opinion on the questions involved in the reference before him. Such a report is requisite to enable the parties to correct any misapprehension into which the master may have fallen, without the alternative necessity of presenting the point to the court. When completed, such a report is either filed in the case, or served on the parties or their solicitors; and it thereupon devolves upon any party who is dissatisfied with the master's finding, to file such exceptions to his draft report, as will call his attention to each alleged error of

which the dissatisfied party proposes to complain.[1] It then becomes the duty of the master to consider or reconsider the questions involved in those exceptions, and thereupon to prepare and file his final report in the case. The latter will be identical with the draft report, if the consideration of the exceptions to the earlier document fails to convince the master that it was wrong; but if he is so convinced, he will concert his final report in such a manner as to make it embody his changed opinion.[2] No new evidence can be introduced before a master after he has made his draft report;[3] the proceedings upon exceptions thereto, being merely in the nature of a rehearing for errors apparent on the face of the record. According to strict equity practice, it is necessary to give a master this opportunity to correct his findings, in order to save time and labor of the judge.[4] But this strict practice has often been omitted by counsel in patent cases, and its omission been condoned by opposing counsel or by the court.[5] But it is not safe to omit the filing of such exceptions with the master, for the rule which requires them, is always liable to be enforced, and the enforcement consists in the court disregarding every exception to a master's final report, which was not taken before the master himself, by way of exceptions to his draft report.[6] A final report of a master is merely advisory to the court;[7] and though its conclusions of fact will not be reviewed otherwise than on exceptions thereto,[8] its conclusions of

[1] Fischer *v.* Hayes, 16 Fed. Rep. 469, 1883.

[2] Sugar Refinery Co. *v.* Mathiesson, 3 Cliff. 149, 1868; Troy Iron & Nail Factory *v.* Corning, 6 Blatch. 332, 1869.

[3] Piper *v.* Brown, 1 Holmes, 196, 1873.

[4] Story *v.* Livingston. 13 Peters, 366, 1839; Topliff *v.* Topliff, 145 U. S. 172, 1892.

[5] Fischer *v.* Hayes, 16 Fed. Rep. 469, 1883; Jennings *v.* Dolan, 29 Fed. Rep. 861, 1887.

[6] McMickin *v.* Perin, 18 Howard, 510, 1855; Troy Iron & Nail Factory *v.* Corning, 6 Blatch. 333, 1869; Celluloid Mfg. Co. *v.* Cellonite Mfg. Co. 40 Fed. Rep. 476, 1889.

[7] Boesch *v.* Graff, 133 U. S. 705, 1890.

[8] Topliff *v.* Topliff, 145 U. S. 172, 1892.

law will be verified or corrected by the court, before any final decree is based thereon.[1]

§ 745. Exceptions to masters' reports ought to be aimed with precision at the errors which such reports are alleged to contain.[2] Such exceptions may be filed by the complainant, if he thinks that the master has erred in not finding any profits, or in not finding any damages, or in finding either of those foundations of recovery to have been smaller than the evidence would warrant; and such exceptions may be filed by the defendant, if he thinks that the master erred in finding profits or in finding damages to an amount in excess of what the evidence can sustain.

§ 746. Defendants' exceptions to masters' reports are divisible into four classes. 1. Exceptions which state that there is evidence in the case, proving that the defendant derived no profit, and that the complainant sustained no damage, on account of the infringement. 2. Exceptions which state that there is evidence in the case proving that the master's finding of profits or of damages, is too large in amount. 3. Exceptions which deny that there is any admissible evidence in the case proving that the defendant derived profit, or that the complainant sustained damage, on account of the infringement. 4. Exceptions which deny that there is any admissible evidence in the case proving that the defendant derived profit, or that the complainant sustained damage, on account of the infringement, to so great an amount as the master reported.

The first two of these classes of exceptions rely upon affirmations, and the last two rely upon negations, of definite points of fact. For the purposes of the present explanation, the four classes may be treated in two groups: those which are affirmative requiring one sort of management in practice, and those which are negative requiring another.

§ 747. Defendants' affirmative exceptions to a draft report, must specify the particular evidence upon which they are

[1] Celluloid Mfg. Co. *v.* Cellonite Mfg. Co. 40 Fed. Rep. 477, 1889.

[2] Sheffield Ry. Co. *v.* Gordon, 151 U. S. 290, 1894.

respectively based. If this rule were otherwise, such an exception would not point out error, and would therefore fail to perform its only function. Defendants' affirmative exceptions to a final report, must be supported by reference to the particular evidence upon which the exceptor relies; or by such special statements of the master, as justify the exceptor in affirming the existence of the particular facts upon which he relies to support such exceptions. Were the court required to wander at large into the evidence which was before the master, the reference to him would be of little value. Indeed that evidence need not be reported, further than it is relied upon to support, explain, or oppose a particular exception; [1] and there is no presumption in any case, in the absence of a certificate, that the master reported to the court all the evidence which was before him.[2]

§ 748. Defendants' negative exceptions are those which call in question the admissibility of the evidence upon which the master based his finding, and those which deny the presence in the record of any evidence sufficient to support that conclusion. An exception of the first of these sorts, so far partakes of the nature of an affirmative exception, that it ought to specify the particular evidence objected to, so that the master, on exceptions to his draft report, or the court, on exceptions to the final report of the master, may have a precise issue in the law of evidence presented for decision. But an exception of the second of these kinds cannot be expected to specify any particular evidence, because it assumes that there is none in the record. In such a case, the proper practice is for the exceptor to require the master to make a special statement, in his final report, of the particular evidence which convinced his judgment, and to transmit that evidence with his report into court.[3]

[1] Harding *v.* Handy, 11 Wheaton, 126, 1826.

[2] Sheffield Ry. Co. *v.* Gordon, 151 U. S. 293, 1894.

[3] *In re* Hemiup, 3 Paige (N. Y.), 307, 1832; Greene *v.* Bishop, 1 Cliff. 195, 1858; The Commander-in-Chief. 1 Wallace, 50, 1863.

§ 749. Complainant's exceptions to a master's report may be of two classes. 1. Exceptions which state that there is evidence in the case proving that the defendant derived larger profits, or that the complainant sustained larger damages than the master reported. 2. Exceptions which state that the master erred in admitting inadmissible evidence. Both of these sorts are affirmative in their nature, and when made to a draft report, must therefore be supported by references to the particular evidence upon which the exceptor relies, or by reference to the particular evidence which he claims was improperly admitted against his objection, as the case may happen to require. When made to a final report, a complainant's exceptions, like the affirmative exceptions of a defendant, must be supported either by references to the particular evidence involved, or be based upon such special statements of the master as will obviate that necessity.

§ 750. The system of practice relevant to a master's finding appears to present the following outlines when reviewed as a whole. It is a master's function to investigate the questions which are referred to him by the court, and to investigate no others. To that end, he takes testimony and receives other evidence, and decides what conclusions are justified thereby; and those conclusions will stand unless they are clearly erroneous.[1] Unless the court otherwise directs, the master's draft report should contain those conclusions alone; and his final report should contain only his final conclusions, together with such statements of fact and statements and pieces of evidence as the parties lawfully require him to attach thereto. Where the exceptions to the draft report involve no issues save such as pertain to the admissibility of particular evidence, nothing need accompany the final report except the evidence objected to, and a statement of the ground upon which it was admitted. Where those exceptions merely affirm the presence of evi-

[1] Tilghman *v.* Proctor, 125 U. S. 149, 1887; Callaghan *v.* Myers, 128 U. S. 666, 1888; Kimberly *v.* Arms, 129 U. S. 512, 1889.

dence requiring a different conclusion from that of the master, nothing need accompany the final report save the particular evidence which those exceptions specify in that behalf. Where those exceptions merely deny the presence of evidence to justify the draft report, nothing need accompany the final report save the evidence which carried the master to the conclusion at which he arrived. Where a master receives no direction from the court, and no request from either of the parties, to report any evidence; his report contains nothing but his finding, and his finding is conclusive.[1]

[1] Harding *v.* Handy, 11 Wheaton, 126, 1826; The Commander-in-Chief, 1 Wallace, 50, 1863; *In re* Hemiup, 3 Paige (N. Y.), 307, 1832; Dexter *v.* Arnold, 2 Sumner, 131, 1834; Donnell *v.* Insurance Co. 2 Sumner, 371, 1836; Boston Iron Co. *v.* King, 2 Cushing (Mass.), 405, 1848; Adams *v.* Brown, 7 Cushing (Mass.), 222, 1851; Howe *v.* Russell, 36 Maine, 127, 1853; Sparhawk *v.* Wills, 5 Gray (Mass.), 431, 1855; Greene *v.* Bishop, 1 Cliff. 195, 1858; Mason *v.* Railroad Co. 52 Maine, 115, 1861; Piper *v.* Brown, 1 Holmes, 198, 1873; Hammacher *v.* Wilson, 32 Fed. Rep. 797, 1887; Keep *v.* Fuller, 42 Fed. Rep. 896, 1890.

APPENDIX.

THE PATENT STATUTES.

PATENT ACT OF 1790.

1 STATUTES AT LARGE, 109.

An Act to promote the progress of useful Arts.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That upon the petition of any person or persons to the Secretary of State, the Secretary for the Department of War, and the Attorney-General of the United States, setting forth that he, she, or they hath or have invented or discovered any useful art, manufacture, engine, machine, or device, or any improvement therein not before known or used, and praying that a patent may be granted therefor, it shall and may be lawful to and for the said Secretary of State, the Secretary for the Department of War, and the Attorney-General, or any two of them, if they shall deem the invention or discovery sufficiently useful and important, to cause letters-patent to be made out in the name of the United States, to bear teste by the President of the United States, reciting the allegations and suggestions of the said petition, and describing the said invention or discovery, clearly, truly, and fully, and thereupon granting to such petitioner or petitioners, his, her, or their heirs, administrators, or assigns, for any term not exceeding fourteen years, the sole and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said invention or discovery; which letters-patent shall be delivered to the Attorney-General of the United States to be examined,

who shall, within fifteen days next after the delivery to him, if he shall find the same conformable to this act, certify it to be so at the foot thereof, and present the letters-patent so certified to the President, who shall cause the seal of the United States to be thereto affixed, and the same shall be good and available to the grantee or grantees by force of this act, to all and every intent and purpose herein contained, and shall be recorded in a book to be kept for that purpose in the office of the Secretary of State, and delivered to the patentee or his agent, and the delivery thereof shall be entered on the record and indorsed on the patent by the said Secretary at the time of granting the same.

SECTION 2. *And be it further enacted*, That the grantee or grantees of each patent shall, at the time of granting the same, deliver to the Secretary of State a specification in writing, containing a description, accompanied with drafts or models, and explanations and models (if the nature of the invention or discovery will admit of a model), of the thing or things by him or them invented or discovered, and described as aforesaid, in the said patents; which specification shall be so particular, and said models so exact, as not only to distinguish the invention or discovery from other things before known and used, but also to enable a workman or other person skilled in the art of manufacture, whereof it is a branch, or wherewith it may be nearest connected, to make, construct, or use the same, to the end that the public may have the full benefit thereof, after the expiration of the patent term; which specifications shall be filed in the office of the said Secretary, and certified copies thereof shall be competent evidence in all courts and before all jurisdictions, where any matter or thing, touching or concerning such patent, right, or privilege shall come in question.

SECTION 3. *And be it further enacted*, That upon the application of any person to the Secretary of State, for a copy of any such specification, and for permission to have similar model or models made, it shall be the duty of the Secretary to give such a copy, and to permit the person so applying for a similar model or models, to take, or make, or cause the same to be taken or made, at the expense of such applicant.

SECTION 4. *And be it further enacted*, That if any person or persons shall devise, make, construct, use, employ, or vend, within these United States, any art, manufacture, engine, machine, or device, or any invention or improvement upon, or in any art, manufacture, engine, machine, or device, the sole and exclusive right of which shall be so as aforesaid granted by patent to any person or persons, by virtue and in pursuance of this act, without the consent of the patentee or patentees, their executors, administrators, or assigns, first had and obtained in writing, every person so offending shall forfeit and pay to the said patentee or patentees, his, her, or their executors, administrators, or assigns, such damages as shall be assessed by a jury, and moreover shall forfeit to the person aggrieved, the thing or things so devised, made, constructed, used, employed, or vended, contrary to the true intent of this act, which may be recovered in an action on the case founded on this act.

SECTION 5. *And be it further enacted*, That upon oath or affirmation made before the judge of the district court where the defendant resides, that any patent which shall be issued in pursuance of this act, was obtained surreptitiously by, or upon false suggestion, and motion made to the said court, within one year after issuing the said patent, but not afterwards, it shall and may be lawful to and for the judge of the said district court, if the matter alleged shall appear to him to be sufficient, to grant a rule that the patentee or patentees, his, her, or their executors, administrators, or assigns, show cause why process should not issue against him, her, or them, to repeal such patents; and if sufficient cause shall not be shown to the contrary, the rule shall be made absolute, and thereupon the said judge shall order process to be issued as aforesaid, against such patentee or patentees, his, her, or their executors, administrators, or assigns. And in case no sufficient cause shall be shown to the contrary, or if it shall appear that the patentee was not the first and true inventor or discoverer, judgment shall be rendered by such court for the repeal of such patent or patents; and if the party at whose complaint the process issued shall have judgment given against him, he shall pay all such costs

as the defendant shall be put to in defending the suit, to be taxed by the court, and recovered in such manner as costs expended by defendants shall be recovered in due course of law.

SECTION 6. *And be it further enacted*, That in all actions to be brought by such patentee or patentees, his, her, or their executors, administrators, or assigns, for any penalty incurred by virtue of this act, the said patents or specifications shall be *primâ facie* evidence that the said patentee or patentees was or were the first and true inventor or inventors, discoverer or discoverers, of the things so specified, and that the same is truly specified; but that nevertheless the defendant or defendants may plead the general issue, and give this act, and any special matter whereof notice in writing shall have been given to the plaintiff, or his attorney, thirty days before the trial, in evidence tending to prove that the specification filed by the plaintiff does not contain the whole of the truth concerning his invention or discovery; or that it contains more than is necessary to produce the effect described; and if the concealment of part, or the addition of more than is necessary, shall appear to have been intended to mislead, or shall actually mislead the public, so as the effect described cannot be produced by the means specified, then, and in such cases, the verdict and judgment shall be for the defendant.

SECTION 7. *And be it further enacted*, That such patentee as aforesaid shall, before he receives his patent, pay the following fees to the several officers employed in making out and perfecting the same, to wit: For receiving and filing the petition, fifty cents; for filing specifications, per copy-sheet containing one hundred words, ten cents; for making out patent, two dollars; for affixing great seal, one dollar; for indorsing the day of delivering the same to the patentee, including all intermediate services, twenty cents.

APPROVED April 10, 1790.

Repealed February 21, 1793. 1 Statutes at Large, Chap. 11, Section 12, p. 323.

PATENT ACT OF 1793.

1 STATUTES AT LARGE, 318.

An Act to promote the progress of useful Arts; and to repeal the act heretofore made for that purpose.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That when any person or persons, being a citizen or citizens of the United States, shall allege that he or they have invented any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement on any art, machine, manufacture, or composition of matter, not known or used before the application, and shall present a petition to the Secretary of State, signifying a desire of obtaining an exclusive property in the same, and praying that a patent may be granted therefor, it shall and may be lawful for the said Secretary of State to cause letters-patent to be made out in the name of the United States, bearing teste by the President of the United States, reciting the allegations and suggestions of the said petition, and giving a short description of the said invention or discovery, and thereupon granting to such petitioner or petitioners, his, her, or their heirs, administrators, or assigns, for a term not exceeding fourteen years, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said invention or discovery, which letters-patent shall be delivered to the Attorney-General of the United States, to be examined; who, within fifteen days after such delivery, if he finds the same conformable to this act, shall certify accordingly, at the foot thereof, and return the same to the Secretary of State, who shall present the letters-patent, thus certified, to be signed, and shall cause the seal of the United States to be thereto affixed; and the same shall be good and available to the grantee or grantees, by force of this act, and shall be recorded in a book, to be kept for that purpose, in the office of the Secretary of State, and delivered to the patentee or his order.

SECTION 2. *Provided always, and be it further enacted*, That any person who shall have discovered an improvement in the

principle of any machine, or in the process of any composition of matter, which shall have been patented, and shall have obtained a patent for such improvement, he shall not be at liberty to make, use, or vend the original discovery, nor shall the first inventor be at liberty to use the improvement : And it is hereby enacted and declared, that simply changing the form or the proportions of any machine, or composition of matter, in any degree, shall not be deemed a discovery.

SECTION 3. *And be it further enacted*, That every inventor, before he can receive a patent, shall swear or affirm, that he does verily believe that he is the true inventor or discoverer of the art, machine, or improvement for which he solicits a patent, which oath or affirmation may be made before any person authorized to administer oaths, and shall deliver a written description of his invention, and of the manner of using, or process of compounding the same, in such full, clear, and exact terms, as to distinguish the same from all other things before known, and to enable any person skilled in the art or science of which it is a branch, or with which it is most nearly connected, to make, compound, and use the same. And in the case of any machine, he shall fully explain the principle, and the several modes in which he has contemplated the application of that principle or character, by which it may be distinguished from other inventions ; and he shall accompany the whole with drawings and written references, where the nature of the case admits of drawings, or with specimens of the ingredients, and of the composition of matter, sufficient in quantity for the purpose of experiment, where the invention is of a composition of matter ; which description, signed by himself, and attested by two witnesses, shall be filed in the office of the Secretary of State, and certified copies thereof shall be competent evidence in all courts, where any matter or thing, touching such patent right shall come in question. And such inventor shall, moreover, deliver a model of his machine, provided the Secretary shall deem such model to be necessary.

SECTION 4. *And be it further enacted*, That it shall be lawful for any inventor, his executor or administrator, to assign the title and interest in the said invention, at any time, and

the assignee, having recorded the said assignment in the office of the Secretary of State, shall thereafter stand in the place of the original inventor, both as to right and responsibility, and so the assignees of assigns, to any degree.

SECTION 5. *And be it further enacted*, That if any person shall make, devise, and use, or sell the thing so invented, the exclusive right of which shall, as aforesaid, have been secured to any person by patent, without the consent of the patentee, his executors, administrators, or assigns, first obtained in writing, every person so offending shall forfeit and pay to the patentee a sum that shall be at least equal to three times the price for which the patentee has usually sold or licensed, to other persons, the use of the said invention, which may be recovered in an action on the case founded on this act, in the circuit court of the United States, or any other court having competent jurisdiction.

SECTION 6. *Provided always, and be it further enacted*, That the defendant in such action shall be permitted to plead the general issue, and give this act, and any special matter, of which notice in writing may have been given to the plaintiff or his attorney, thirty days before trial, in evidence, tending to prove that the specification filed by the plaintiff does not contain the whole truth relative to his discovery, or that it contains more than is necessary to produce the described effect, which concealment or addition shall fully appear to have been made for the purpose of deceiving the public, or that the thing thus secured by patent was not originally discovered by the patentee, but had been in use, or had been described in some public work anterior to the supposed discovery of the patentee, or that he had surreptitiously obtained a patent for the discovery of another person; in either of which cases judgment shall be rendered for the defendant, with costs, and the patent shall be declared void.

SECTION 7. *And be it further enacted*, That where any State, before its adoption of the present form of government, shall have granted an exclusive right to any invention, the party claiming that right shall not be capable of obtaining an exclusive right under this act, but on relinquishing his right

under such particular State, and of such relinquishment, his obtaining an exclusive right under this act shall be sufficient evidence.

SECTION 8. *And be it further enacted*, That the persons whose applications for patents were, at the time of passing this act, depending before the Secretary of State, Secretary at War, and Attorney-General, according to the act passed the second session of the first Congress, entituled "An act to promote the progress of useful arts," on complying with the conditions of this act, and paying the fees herein required, may pursue their respective claims to a patent under the same.

SECTION 9. *And be it further enacted*, That in case of interfering applications, the same shall be submitted to the arbitration of three persons, one of whom shall be chosen by each of the applicants, and the third person shall be appointed by the Secretary of State; and the decision or award of such arbitrators, delivered to the Secretary of State in writing, and subscribed by them, or any two of them, shall be final, as far as respects the granting of the patent. And if either of the applicants shall refuse or fail to chuse an arbitrator, the patent shall issue to the opposite party. And where there shall be more than two interfering applications, and the parties applying shall not all unite in appointing three arbitrators, it shall be in the power of the Secretary of State to appoint three arbitrators for the purpose.

SECTION 10. *And be it further enacted*, That upon oath or affirmation being made before the judge of the district court where the patentee, his executors, administrators, or assigns, reside, that any patent, which shall be issued in pursuance of this act, was obtained surreptitiously, or upon false suggestion, and motion made to the said court, within three years after issuing the said patent, but not afterward, it shall and may be lawful for the judge of the said district court, if the matter alleged shall appear to him to be sufficient, to grant a rule, that the patentee, or his executor, administrator, or assign show cause why process should not issue against him to repeal such patent. And if sufficient cause shall not be shown to the con-

trary, the rule shall be made absolute, and thereupon the said judge shall order process to be issued against such patentee, or his executors, administrators, or assigns, with costs of suit. And in case no sufficient cause shall be shown to the contrary, or if it shall appear that the patentee was not the true inventor or discoverer, judgment shall be rendered by such court for the repeal of such patent; and if the party, at whose complaint the process issued, shall have judgment given against him, he shall pay all such costs as the defendant shall be put to in defending the suit, to be taxed by the court, and recovered in due course of law.

SECTION 11. *And be it further enacted*, That every inventor, before he presents his petition to the Secretary of State, signifying his desire of obtaining a patent, shall pay into the treasury thirty dollars, for which he shall take duplicate receipts; one of which receipts he shall deliver to the Secretary of State, when he presents his petition; and the money thus paid shall be in full for the sundry services to be performed in the office of the Secretary of State, consequent on such petition, and shall pass to the account of clerk-hire in that office: *Provided nevertheless*, That for every copy, which may be required at the said office, of any paper respecting any patent that has been granted, the person obtaining such copy shall pay, at the rate of twenty cents, for every copy-sheet of one hundred words, and for every copy of a drawing, the party obtaining the same, shall pay two dollars, of which payments an account shall be rendered, annually, to the treasury of the United States, and they shall also pass to the account of clerk-hire in the office of the Secretary of State.

SECTION 12. *And be it further enacted*, That the act passed the tenth day of April, in the year one thousand seven hundred and ninety, intitnled "An act to promote the progress of useful arts," be, and the same is hereby, repealed: *Provided always*, That nothing contained in this act shall be construed to invalidate any patent that may have been granted under the authority of the said act; and all patentees under the said act, their executors, administrators, and assigns, shall be considered

within the purview of this act, in respect to the violation of their rights: provided such violations shall be committed after the passing of this act.

APPROVED February 21, 1793.

Repealed July 4, 1836. 5 Statutes at Large, Chap. 357, Section 21, p. 125.

PATENT ACT OF 1794.

1 STATUTES AT LARGE, 393.

An Act supplementary to the act intituled "An act to promote the progress of Useful Arts."

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all suits, actions, process and proceedings, heretofore had in any District Court of the United States, under an act passed the tenth day of April, in the year one thousand seven hundred and ninety, intituled "An act to promote the progress of useful arts," which may have been set aside, suspended or abated, by reason of the repeal of the said act, may be restored, at the instance of the plaintiff or defendant, within one year from and after the passing of this act, in the said court, to the same situation, in which they may have been when they were so set aside, suspended, or abated; and that the parties to the said suits, actions, process or proceedings be, and are hereby, entitled to proceed in such cases, as if no such repeal of the act aforesaid had taken place: *Provided always*, That before any order or proceeding, other than that for continuing the same suits, after the reinstating thereof, shall be entered or had, the defendant or plaintiff, as the case may be, against whom the same may have been reinstated, shall be brought into court by summons, attachment, or such other proceeding as is used in other cases for compelling the appearance of a party.

APPROVED June 7, 1794.

Repealed July 4, 1836. 5 Statutes at Large, Chap. 357, Section 21, p. 125.

PATENT ACT OF 1800.

2 STATUTES AT LARGE, 37.

AN Act to extend the privilege of obtaining patents for useful discoveries and inventions, to certain persons therein mentioned, and to enlarge and define the penalties for violating the rights of patentees.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That all and singular the rights and privileges given, intended or provided to citizens of the United States, respecting patents for new inventions, discoveries, and improvements, by the act intituled "An act to promote the progress of useful arts, and to repeal the act heretofore made for that purpose," shall be, and hereby are, extended and given to all aliens who at the time of petitioning in the manner prescribed by the said act, shall have resided for two years within the United States, which privileges shall be obtained, used, and enjoyed by such persons, in as full and ample manner, and under the same conditions, limitations, and restrictions, as by the said act is provided and directed in the case of citizens of the United States: *Provided always*, That every person petitioning for a patent for any invention, art, or discovery, pursuant to this act, shall make oath or affirmation before some person duly authorized to administer oaths before such patent shall be granted, that such invention, art, or discovery hath not, to the best of his or her knowledge or belief, been known or used either in this or any foreign country, and that every patent which shall be obtained pursuant to this act, for any invention, art, or discovery, which it shall afterwards appear had been known or used previous to such application for a patent, shall be utterly void.

SECTION 2. *And be it further enacted*, That where any person hath made, or shall have made, any new invention, discovery, or improvement, on account of which a patent might, by virtue of this or the above-mentioned act, be granted to such person, and shall die before any patent shall be granted therefor, the right of applying for and obtaining such

patent, shall devolve on the legal representatives of such person in trust for the heirs at law of the deceased, in case he shall have died intestate; but if otherwise, then in trust for his devisees, in as full and ample manner, and under the same conditions, limitations, and restrictions as the same was held, or might have been claimed or enjoyed by such person, in his or her lifetime; and when application for a patent shall be made by such legal representatives, the oath or affirmation, provided in the third section of the before-mentioned act, shall be so varied as to be applicable to them.

SECTION 3. *And be it further enacted*, That where any patent shall be or shall have been granted pursuant to this or the above-mentioned act, and any person without the consent of the patentee, his or her executors, administrators, or assigns, first obtained in writing, shall make, devise, use, or sell the thing whereof the exclusive right is secured to the said patentee by such patent, such person so offending shall forfeit and pay to the said patentee, his executors, administrators, or assigns, a sum equal to three times the actual damage sustained by such patentee, his executors, administrators, or assigns, from or by reason of such offence, which sum shall and may be recovered by action on the case founded on this and the above-mentioned act, in the circuit court of the United States, having jurisdiction thereon.

SECTION 4. *And be it further enacted*, That the fifth section of the above-mentioned act, intituled "An act to promote the progress of useful arts, and to repeal the act heretofore made for that purpose," shall be, and hereby is, repealed.

APPROVED April 17, 1800.

Repealed July 4, 1836. 5 Statutes at Large, Chap. 357, Section 21, p. 125.

PATENT ACT OF 1819.

3 STATUTES AT LARGE, 481.

An Act to extend the jurisdiction of the circuit courts of the United States to cases arising under the law relating to patents.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the circuit courts of the United States shall have original cognizance, as well in equity as at law, of all actions, suits, controversies, and cases arising under any law of the United States, granting or confirming to authors or inventors the exclusive right to their respective writings, inventions, and discoveries; and upon any bill in equity, filed by any party aggrieved in any such cases, shall have authority to grant injunctions, according to the course and principles of courts of equity, to prevent the violation of the rights of any authors or inventors, secured to them by any laws of the United States, on such terms and conditions as the said courts may deem fit and reasonable: *Provided however*, That from all judgments and decrees of any circuit courts rendered in the premises, a writ of error or appeal, as the case may require, shall lie to the Supreme Court of the United States, in the same manner, and under the same circumstances, as is now provided by law in other judgments and decrees of such circuit courts.

APPROVED February 15, 1819.

Repealed July 4, 1836. 5 Statutes at Large, Chap. 357, Section 21, p. 125.

PATENT ACT OF JULY 3, 1832.

4 STATUTES AT LARGE, 559.

An Act concerning patents for useful inventions.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That it shall be the duty of the Secretary of State, annually, in the month of January, to report to Congress, and to publish in two of the newspapers printed in the city of Washington, a list of all the patents for discoveries, inventions, and improvements, which shall have expired within the year immediately preceding, with the names of the patentees, alphabetically arranged.

SECTION 2. *And be it further enacted*, That application to Congress to prolong or renew the term of a patent shall be made

before its expiration, and shall be notified at least once a month, for three months before its presentation, in two newspapers printed in the city of Washington, and in one of the newspapers in which the laws of the United States shall be published in the State or Territory in which the patentee shall reside. The petition shall set forth particularly the grounds of the application. It shall be verified by oath; the evidence in its support may be taken before any judge or justice of the peace; it shall be accompanied by a statement of the ascertained value of the discovery, invention, or improvement, and of the receipts and expenditures of the patentee, so as to exhibit the profit or loss arising therefrom.

SECTION 3. *And be it further enacted*, That wherever any patent which has been heretofore, or shall be hereafter, granted to any inventor in pursuance of the act of Congress, entitled "An act to promote the progress of useful arts, and to repeal the act heretofore made for that purpose," passed on the twenty-first day of February, in the year of our Lord, one thousand seven hundred and ninety-three, or of any of the acts supplementary thereto, shall be invalid or inoperative, by reason that any of the terms or conditions prescribed in the third section of the said first-mentioned act, have not, by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, been complied with on the part of the said inventor, it shall be lawful for the Secretary of State, upon the surrender to him of such patent, to cause a new patent to be granted to the said inventor for the same invention for the residue of the period then unexpired, for which the original patent was granted, upon his compliance with the terms and conditions prescribed in the said third section of the said act. And, in case of his death, or any assignment by him made of the same patent, the like right shall vest in his executors and administrators, or assignee or assignees: *Provided however*, That such new patent so granted shall, in all respects, be liable to the same matters of objection and defence as any original patent granted under the said first-mentioned act. But no public use or privilege of the invention so patented, derived from or after the grant of the original patent, either under any special license of the inventor,

or without the consent of the patentee that there shall be a free public use thereof, shall, in any manner, prejudice his right of recovery for any use or violation of his invention after the grant of such new patent as aforesaid.

APPROVED July 3, 1832.

Repealed July 4, 1836. 5 Statutes at Large, Chap. 357, Section 21, p. 125.

PATENT ACT OF JULY 13, 1832.

4 STATUTES AT LARGE, 577.

An Act concerning the issuing of patents to aliens, for useful discoveries and inventions.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the privileges granted to the aliens described in the first section of the act, to extend the privilege of obtaining patents for useful discoveries and inventions to certain persons therein mentioned, and to enlarge and define the penalties for violating the rights of patentees, approved April seventeenth, eighteen hundred, be extended in like manner to every alien who, at the time of petitioning for a patent, shall be resident in the United States, and shall have declared his intention, according to law, to become a citizen thereof: *Provided*, That every patent granted by virtue of this act and the privileges thereto appertaining, shall cease and determine and become absolutely void without resort to any legal process to annul or cancel the same in case of a failure on the part of any patentee, for the space of one year from the issuing thereof, to introduce into public use in the United States the invention or improvement for which the patent shall be issued; or in case the same for any period of six months after such introduction shall not continue to be publicly used and applied in the United States, or in case of failure to become a citizen of the United States, agreeably to notice given at the earliest period within which he shall be entitled to become a citizen of the United States.

APPROVED July 13, 1832.

Repealed July 4, 1836. 5 Statutes at Large, Chap. 357, Section 21, p. 125.

PATENT ACT OF 1836.

5 STATUTES AT LARGE, 117.

An Act to promote the progress of the useful arts, and to repeal all acts and parts of acts heretofore made for that purpose.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That there shall be established and attached to the Department of State an office to be denominated the Patent Office; the chief officer of which shall be called the Commissioner of Patents, to be appointed by the President, by and with the advice and consent of the Senate, whose duty it shall be, under the direction of the Secretary of State, to superintend, execute, and perform all such acts and things touching and respecting the granting and issuing of patents for new and useful discoveries, inventions, and improvements, as are herein provided for, or shall hereafter be, by law, directed to be done and performed, and shall have the charge and custody of all the books, records, papers, models, machines, and all other things belonging to said office. And said Commissioner shall receive the same compensation as is allowed by law to the Commissioner of the Indian Department, and shall be entitled to send and receive letters and packages by mail, relating to the business of the office, free of postage.

SECTION 2. *And be it further enacted*, That there shall be in said office an inferior officer, to be appointed by the said principal officer, with the approval of the Secretary of State, to receive an annual salary of seventeen hundred dollars, and to be called the Chief Clerk of the Patent Office; who in all cases during the necessary absence of the Commissioner, or when then said principal office shall become vacant, shall have the charge and custody of the seal, and of the records, books, papers, machines, models, and all other things belonging to the said office, and shall perform the duties of Commissioner

during such vacancy. And the said Commissioner may also, with like approval, appoint an examining clerk, at an annual salary of fifteen hundred dollars; two other clerks at twelve hundred dollars each, one of whom shall be a competent draughtsman; one other clerk at one thousand dollars; a machinist at twelve hundred and fifty dollars; and a messenger at seven hundred dollars. And said Commissioner, clerks, and every other person appointed and employed in said office, shall be disqualified and interdicted from acquiring or taking, except by inheritance, during the period for which they shall hold their appointments, respectively, any right or interest, directly or indirectly, in any patent for an invention or discovery which has been, or may hereafter be granted.

SECTION 3. *And be it further enacted*, That the said principal officer, and every other person to be appointed in the said office, shall, before he enters upon the duties of his office or appointment, make oath or affirmation truly and faithfully to execute the trust committed to him. And the said Commissioner and the chief clerk shall also, before entering upon their duties, severally give bonds, 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, with condition to render a true and faithful account to him or his successor in office, quarterly, of all moneys which shall be by them respectively received for duties on patents, and for copies of records and drawings, and all other moneys received by virtue of said office.

SECTION 4. *And be it further enacted*, That the said Commissioner shall cause a seal to be made and provided for the said office, with such device as the President of the United States shall approve; and copies of any records, books, papers, or drawings belonging to the said office, under the signature of the said Commissioner, or, when the office shall be vacant under the signature of the chief clerk, with the said seal affixed, shall be competent evidence in all cases in which the original records, books, papers, or drawings could be evidence. And any person making application therefor may have certified copies of the records, drawings, and other papers deposited in said office, on

paying for the written copies the sum of ten cents for every page of one hundred words; and for copies of drawings the reasonable expense of making the same.

SECTION 5. *And be it further enacted*, That all patents issued from said office shall be issued in the name of the United States, and under the seal of said office, and be signed by the Secretary of State, and countersigned by the Commissioner of the said office, and shall be recorded, together with the descriptions, specifications, and drawings, in the said office, in books to be kept for that purpose. Every such patent shall contain a short description or title of the invention or discovery, correctly indicating its nature and design, and in its terms grant to the applicant or applicants, his or their heirs, administrators, executors, or assigns, for a term not exceeding fourteen years, the full and exclusive right and liberty of making, using, and vending to others to be used, the said invention or discovery, referring to the specifications for the particulars thereof, a copy of which shall be annexed to the patent, specifying what the patentee claims as his invention or discovery.

SECTION 6. *And be it further enacted*, That any person or persons, having discovered or invented any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement on any art, machine, manufacture, or composition of matter, not known or used by others before his or their discovery or invention thereof, and not, at the time of his application for a patent, in public use or on sale, with his consent or allowance, as the inventor or discoverer; and shall desire to obtain an exclusive property therein, may make application, in writing, to the Commissioner of Patents, expressing such desire, and the Commissioner, on due proceedings had, may grant a patent therefor. But before any inventor shall receive a patent for any such new invention or discovery, he shall deliver a written description of his invention or discovery, and of the manner and process of making, constructing, using, and compounding the same, in such full, clear, and exact terms, avoiding unnecessary prolixity, 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 any machine, he shall fully explain the principle, and the several modes in which he has contemplated the application of that principle or character by which it may be distinguished from other inventions; and shall particularly specify and point out the part, improvement, or combination, which he claims as his own invention or discovery. He shall, furthermore, accompany the whole with a drawing or drawings, and written references, where the nature of the case admits of drawings, or with specimens of ingredients, and of the composition of matter, sufficient in quantity for the purpose of experiment, where the invention or discovery is of a composition of matter; which descriptions and drawings, signed by the inventor and attested by two witnesses, shall be filed in the Patent Office; and he shall moreover furnish a model of his invention, in all cases which admit of a representation by model, of a convenient size to exhibit advantageously its several parts. The applicant shall also make oath or affirmation that he does verily believe that he is the original and first inventor or discoverer of the art, machine, composition, or improvement, for which he solicits a patent, and that he does not know or believe that the same was ever before known or used; and also of what country he is a citizen; which oath or affirmation may be made before any person authorized by law to administer oaths.

SECTION 7. *And be it further enacted*, That on the filing of any such application, description, and specification, and the payment of the duty hereinafter provided, the Commissioner shall make, or cause to be made, an examination of the alleged new invention or discovery; and if, on any such examination, it shall not appear to the Commissioner that the same had been invented or discovered by any other person in this country prior to the alleged invention or discovery thereof by the applicant, or that it had been patented or described in any printed publication in this or any foreign country, or had been in public use or on sale with the applicant's consent or allowance prior to the application, if the Commissioner shall deem it to be sufficiently useful and important, it shall be his duty to issue a patent therefor. But whenever, on such examination, it shall appear

to the Commissioner that the applicant was not the original and first inventor, or discoverer thereof, or that any part of that which is claimed as new had before been invented or discovered, or patented, or described in any printed publication in this or any foreign country, as aforesaid, or that the description is defective and insufficient, he shall notify the applicant thereof, giving him, briefly, such information and references as may be useful in judging of the propriety of renewing his application, or of altering his specification, to embrace only that part of the invention or discovery which is new. In every such case, if the applicant shall elect to withdraw his application, relinquishing his claim to the model, he shall be entitled to receive back twenty dollars, part of the duty required by this act, on filing a notice in writing of such election in the Patent Office, a copy of which, certified by the Commissioner, shall be a sufficient warrant to the treasurer for paying back to the said applicant the said sum of twenty dollars. But if the applicant in such case shall persist in his claims for a patent, with or without any alteration in his specification, he shall be required to make oath or affirmation anew, in manner as aforesaid. And if the specification and claim shall not have been so modified as, in the opinion of the Commissioner, shall entitle the applicant to a patent, he may, on appeal, and upon request in writing, have the decision of a board of examiners, to be composed of three disinterested persons, who shall be appointed for that purpose by the Secretary of State, one of whom at least, to be selected, if practicable and convenient, for his knowledge and skill in the particular art, manufacture, or branch of science to which the alleged invention appertains; who shall be under oath or affirmation for the faithful and impartial performance of the duty imposed upon them by said appointment. Said board shall be furnished with a certificate in writing of the opinion and decision of the Commissioner, stating the particular grounds of his objection, and the part or parts of the invention which he considers as not entitled to be patented. And the said board shall give reasonable notice to the applicant, as well as to the Commissioner, of the time and place of their meeting, that they may have an opportunity of furnishing them

with such facts and evidence as they may deem necessary to a just decision; and it shall be the duty of the Commissioner to furnish to the board of examiners such information as he may possess relative to the matter under their consideration. And on an examination and consideration of the matter by such board, it shall be in their power, or of a majority of them, to reverse the decision of the Commissioner, either in whole or in part, and their opinion being certified to the Commissioner, he shall be governed thereby in the further proceedings to be had on such application: *Provided however*, That before a board shall be instituted in any such case, the applicant shall pay to the credit of the treasury, as provided in the ninth section of this act, the sum of twenty-five dollars, and each of said persons so appointed shall be entitled to receive for his services in each case a sum not exceeding ten dollars, to be determined and paid by the Commissioner out of any moneys in his hands, which shall be in full compensation to the persons who may be so appointed, for their examination and certificate as aforesaid.

SECTION 8. *And be it further enacted*, That whenever an application shall be made for a patent which, in the opinion of the Commissioner, would interfere with any other patent for which an application may be pending, or with any unexpired patent which shall have been granted, it shall be the duty of the Commissioner to give notice thereof to such applicants, or patentees, as the case may be; and if either shall be dissatisfied with the decision of the Commissioner on the question of priority of right or invention, on a hearing thereof, he may appeal from such decision, on the like terms and conditions as are provided in the preceding section of this act; and the like proceedings shall be had, to determine which or whether either of the applicants is entitled to receive a patent as prayed for. But nothing in this act contained shall be construed to deprive an original and true inventor of the right to a patent for his invention, by reason of his having previously taken out letters-patent therefor in a foreign country, and the same having been published, at any time within six months next preceding the filing of his specification and drawings. And whenever the applicant shall request it, the patent shall take date from the time

of the filing of the specification and drawings, not however exceeding six months prior to the actual issuing of the patent; and on like request, and the payment of the duty herein required, by any applicant, his specification and drawings shall be filed in the secret archives of the office until he shall furnish the model and the patent to be issued, not exceeding the term of one year, the applicant being entitled to notice of interfering applications.

SECTION 9. *And be it further enacted*, That before any application for a patent shall be considered by the Commissioner as aforesaid, the applicant shall pay into the treasury of the United States, or into the Patent Office, or into any of the deposit banks, to the credit of the treasury, if he be a citizen of the United States, or an alien, and shall have been resident in the United States for one year next preceding, and shall have made oath of his intention to become a citizen thereof, the sum of thirty dollars; if a subject of the king of Great Britain, the sum of five hundred dollars; and all other persons the sum of three hundred dollars; for which payment duplicate receipts shall be taken, one of which to be filed in the office of the Treasurer. And the moneys received into the treasury under this act shall constitute a fund for the payment of the salaries of the officers and clerks herein provided for, and all other expenses of the Patent Office, and to be called the patent fund.

SECTION 10. *And be it further enacted*, That where any person hath made, or shall have made, any new invention, discovery, or improvement, on account of which a patent might by virtue of this act be granted, and such person shall die before any patent shall be granted therefor, the right of applying for and obtaining such patent shall devolve on the executor or administrator of such person, in trust for the heirs at law of the deceased, in case he shall have died intestate: but if otherwise, then in trust for his devisees, in as full and ample manner, and under the same conditions, limitations, and restrictions as the same was held, or might have been claimed or enjoyed by such person in his or her lifetime; and when application for a patent shall be made by such legal representatives, the oath

or affirmation provided in the sixth section of this act shall be so varied as to be applicable to them.

SECTION 11. *And be it further enacted*, That every patent shall be assignable in law, either as to the whole interest, or any undivided part thereof, by any instrument in writing; which assignment, and also every grant and conveyance of the exclusive right, under any patent, to make and use, and to grant to others to make and use the thing patented within and throughout any specified part or portion of the United States, shall be recorded in the Patent Office within three months from the execution thereof, for which the assignee or grantee shall pay to the Commissioner the sum of three dollars.

SECTION 12. *And be it further enacted*, That any citizen of the United States, or alien, who shall have been a resident of the United States one year next preceding, and shall have made oath of his intention to become a citizen thereof, who shall have invented any new art, machine, or improvement thereof, and shall desire further time to make the same, may, on paying to the credit of the treasury, in manner as provided in the ninth section of this act, the sum of twenty dollars, file in the Patent Office a caveat, setting forth the design and purpose thereof, and its principal and distinguishing characteristics, and praying protection of his right till he shall have matured his invention; which sum of twenty dollars, in case the person filing such caveat shall afterwards take out a patent for the invention therein mentioned, shall be considered a part of the sum herein required for the same. And such caveat shall be filed in the confidential archives of the office, and preserved in secrecy. And if application shall be made by any other person within one year from the time of filing such caveat, for a patent of any invention with which it may in any respect interfere, it shall be the duty of the Commissioner to deposit the description, specifications, drawings, and model, in the confidential archives of the office, and to give notice, by mail, to the person filing the caveat, of such application, who shall, within three months after receiving the notice, if he would avail himself of the benefit of his caveat, file his description, specifications, drawings, and model; and if, in the opinion of

the Commissioner, the specifications of claim interfere with each other, like proceedings may be had in all respects as are in this act provided in the case of interfering applications: *Provided however*, That no opinion or decision of any board of examiners, under the provisions of this act, shall preclude any person, interested in favor of or against the validity of any patent which has been or may hereafter be granted, from the right to contest the same in any judicial court in any action in which its validity may come in question.

SECTION 13. *And be it further enacted*, That whenever any patent which has heretofore been granted, or which shall hereafter be granted, shall be 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 or shall have a right to claim as new; if the error has or shall have arisen by inadvertency, accident, or mistake, and without any fraudulent or deceptive intention, it shall be lawful for the Commissioner, upon the surrender to him of such patent, and the payment of the further duty of fifteen dollars, to cause a new patent to be issued to the said inventor, for the same invention, for the residue of the period then unexpired for which the original patent was granted, in accordance with the patentee's corrected description and specification. And in case of his death, or any assignment by him made of the original patent, a similar right shall vest in his executors, administrators, or assignees. And the patent, so reissued, together with the corrected description and specification, shall have the same effect and operation in law, on the trial of all actions hereafter commenced for causes subsequently accruing, as though the same had been originally filed in such corrected form, before the issuing out of the original patent. And whenever the original patentee shall be desirous of adding the description and specification of any new improvement of the original invention or discovery which shall have been invented or discovered by him subsequent to the date of his patent, he may, like proceedings being had in all respects as in the case of original applications, and on the payment of fifteen dollars as hereinbefore provided, have the same annexed to the

original description and specification; and the Commissioner shall certify, on the margin of such annexed description and specification, the time of its being annexed and recorded; and the same shall thereafter have the same effect in law, to all intents and purposes, as though it had been embraced in the original description and specification.

SECTION 14. *And be it further enacted*, That whenever, in any action for damages for making, using, or selling the thing whereof the exclusive right is secured by any patent heretofore granted, or by any patent which may hereafter be granted, a verdict shall be rendered for the plaintiff in such action, it shall be in the power of the court to render judgment for any sum above the amount found by such verdict as the actual damages sustained by the plaintiff, not exceeding three times the amount thereof, according to the circumstances of the case, with costs; and such damages may be recovered by action on the case, in any court of competent jurisdiction, to be brought in the name or names of the person or persons interested, whether as patentees, assignees, or as grantees of the exclusive right within and throughout a specified part of the United States.

SECTION 15. *And be it further enacted*, That the defendant in any such action shall be permitted to plead the general issue, and to give this act and any special matter in evidence, of which notice in writing may have been given to the plaintiff or his attorney, thirty days before trial, tending to prove that the description and specification filed by the plaintiff does not contain the whole truth relative to his invention or discovery, or that it contains more than is necessary to produce the described effect; which concealment or addition shall fully appear to have been made for the purpose of deceiving the public, or that the patentee was not the original and first inventor or discoverer of the thing patented, or of a substantial and material part thereof claimed as new, or that it had been described in some public work anterior to the supposed discovery thereof by the patentee, or had been in public use or on sale with the consent and allowance of the patentee before his application for a patent, or that he had surreptitiously or

unjustly obtained the patent for that which was in fact invented or discovered by another, who was using reasonable diligence in adapting and perfecting the same; or that the patentee, if an alien at the time the patent was granted, had failed and neglected, for the space of eighteen months from the date of the patent, to put and continue on sale to the public, on reasonable terms, the invention or discovery for which the patent issued; in either of which cases judgment shall be rendered for the defendant with costs. And whenever the defendant relies in his defence on the fact of a previous invention, knowledge, or use of the thing patented, he shall state, in his notice of special matter, the names and places of residence of those whom he intends to prove to have possessed a prior knowledge of the thing, and where the same had been used: *Provided however*, That whenever it shall satisfactorily appear that the patentee, at the time of making his application for the patent, believed himself to be the 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 before known or used in any foreign country, it not appearing that the same or any substantial part thereof had before been patented or described in any printed publication. *And provided also*, That whenever the plaintiff shall fail to sustain his action on the ground that in his specification of claim is embraced more than that of which he was the first inventor, if it shall appear that the defendant had used or violated any part of the invention justly and truly specified and claimed as new, it shall be in the power of the court to adjudge and award as to costs, as may appear to be just and equitable.

SECTION 16. *And be it further enacted*, That whenever there shall be two interfering patents, or whenever a patent on application shall have been refused on an adverse decision of a board of examiners, on the ground that the patent applied for would interfere with an unexpired patent previously granted, any person interested in any such patent, either by assignment or otherwise, in the one case, and any such applicant in the other case, 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 and declare either the patents void in the whole or in part, or inoperative or invalid in any particular part or portion of the United States, according to the interest which the parties to such suit may possess in the patent or the inventions patented, and may also adjudge that such applicant is entitled, according to the principles and provisions of this act, to have and receive a patent for his invention, as specified in his claim, or for any part thereof, as the fact of priority of right or invention shall in any such case be made to appear. And such adjudication, if it be in favor of the right of such applicant, shall authorize the Commissioner to issue such patent, on his filing a copy of the adjudication, and otherwise complying with the requisitions of this act. *Provided however*, That no such judgment or adjudication shall affect the rights of any person except the parties to the action and those deriving title from or under them subsequent to the rendition of such judgment.

SECTION 17. *And be it further enacted*, That all actions, suits, controversies, and cases arising under any law of the United States, granting or confirming to inventors the exclusive right to their inventions or discoveries, shall be originally cognizable, as well in equity as at law, by the circuit courts of the United States, or any district court having the power and jurisdiction of a circuit court; which courts shall have power, upon a bill in equity filed by any party aggrieved, in any such case, to grant injunctions, according to the course and principles of courts of equity, to prevent the violation of the rights of any inventor as secured to him by any law of the United States, on such terms and conditions as said courts may deem reasonable: *Provided however*, That from all judgments and decrees from any such court rendered in the premises, a writ of error or appeal, as the case may require, shall lie to the Supreme Court of the United States, in the same manner and under the same circumstances as is now provided by law in other judgments and decrees of circuit courts, and in all other cases in which the court shall deem it reasonable to allow the same.

SECTION 18. *And be it further enacted*, That whenever any patentee of an invention or discovery shall desire an extension of his patent beyond the term of its limitation, he may make application therefor, in writing, to the Commissioner of the Patent Office, setting forth the grounds thereof; and the Commissioner shall, on the applicant's paying the sum of forty dollars to the credit of the treasury, as in the case of an original application for a patent, cause to be published in one or more of the principal newspapers in the city of Washington, and in such other paper or papers as he may deem proper, published in the section of country most interested adversely to the extension of the patent, a notice of such application and of the time and place when and where the same will be considered, that any person may appear and show cause why the extension should not be granted. And the Secretary of State, the Commissioner of the Patent Office, and the Solicitor of the Treasury shall constitute a board to hear and decide upon the evidence produced before them both for and against the extension, and shall sit for that purpose at the time and place designated in the published notice thereof. The patentee shall furnish to said board a statement, in writing, under oath, of the ascertained value of the invention, and of his receipts and expenditures, sufficiently in detail to exhibit a true and faithful account of loss and profit in any manner accruing to him from and by reason of said invention. And if, upon a hearing of the matter, it shall appear to the full and entire satisfaction of said board, having due regard to the public interest therein, that it is just and proper that the term of the patent should be extended, by reason of the patentee, without neglect or fault on his part, having failed to obtain, from the use and sale of his invention, a reasonable remuneration for the time, ingenuity, and expense bestowed upon the same, and the introduction thereof into use, it shall be the duty of the Commissioner to renew and extend the patent, by making a certificate thereon of such extension, for the term of seven years from and after the expiration of the first term; which certificate, with a certificate of said board of their judgment

and opinion as aforesaid, shall be entered on record in the Patent Office; and thereupon the said patent shall have the same effect in law as though it had been originally granted for the term of twenty-one years. And the benefit of such renewal shall extend to assignees and grantees of the right to use the thing patented, to the extent of their respective interests therein: *Provided however*, That no extension of a patent shall be granted after the expiration of the term for which it was originally issued.

SECTION 19. *And be it further enacted*, That there shall be provided for the use of said office, a library of scientific works and periodical publications, both foreign and American, calculated to facilitate the discharge of the duties hereby required of the chief officers therein, to be purchased under the direction of the Committee of the Library of Congress. And the sum of fifteen hundred dollars is hereby appropriated for that purpose, to be paid out of the patent fund.

SECTION 20. *And be it further enacted*, That it shall be the duty of the Commissioner to cause to be classified and arranged, in such rooms or galleries as may be provided for that purpose, in suitable cases, when necessary for their preservation, and in such manner as shall be conducive to a beneficial and favorable display thereof, the models and specimens of compositions and of fabrics and other manufactures and works of art, patented or unpatented, which have been, or shall hereafter be, deposited in said office. And said rooms or galleries shall be kept open during suitable hours for public inspection.

SECTION 21. *And be it further enacted*, That all acts and parts of acts heretofore passed on this subject be, and the same are hereby repealed: *Provided however*, That all actions and processes in law or equity sued out prior to the passage of this act may be prosecuted to final judgment and execution, in the same manner as though this act had not been passed, excepting and saving the application to any such action of the provisions of the fourteenth and fifteenth sections of this act, so far as they may be applicable thereto; *And provided also*, That all applications or petitions for patents, pending at the time of the

passage of this act, in cases where the duty has been paid, shall be proceeded with and acted on in the same manner as though filed after the passage hereof.

Approved July 4, 1836.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1837.

5 Statutes at Large, 191.

An Act in addition to the act to promote the progress of science and useful arts.

Section 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That any person who may be in possession of, or in any way interested in, any patent for an invention, discovery, or improvement, issued prior to the fifteenth day of December, in the year of our Lord one thousand eight hundred and thirty-six, or in an assignment of any patent, or interest therein, executed and recorded prior to the said fifteenth day of December, may, without charge, or presentation or transmission thereof to the Commissioner of Patents, have the same recorded anew in the Patent Office, together with the descriptions, specifications of claim and drawings annexed or belonging to the same; and it shall be the duty of the Commissioner to cause the same, or any authenticated copy of the original record, specification, or drawing which he may obtain, to be transcribed and copied into books of record to be kept for that purpose; and wherever a drawing was not originally annexed to the patent and referred to in the specification, any drawing produced as a delineation of the invention, being verified by oath in such manner as the Commissioner shall require, may be transmitted and placed on file, or copied as aforesaid, together with certificate of the oath; or such drawings may be made in the office, under the direction of the Commissioner, in conformity with the specification. And it shall be the duty of the Commissioner to take such measures as may be advised and determined by the Board of Commissioners provided for in the

fourth section of this act, to obtain the patents, specifications, and copies aforesaid, for the purpose of being so transcribed and recorded. And it shall be the duty of each of the several clerks of the judicial courts of the United States, to transmit as soon as may be, to the Commissioner of the Patent Office, a statement of all the authenticated copies of patents, descriptions, specifications, and drawings of inventions and discoveries made and executed prior to the aforesaid fifteenth day of December, which may be found on the files of his office; and also to make out and transmit to said Commissioner, for record as aforesaid, a certified copy of every such patent, description, specification, or drawing, which shall be specially required by said Commissioner.

SECTION 2. *And be it further enacted*, That copies of such record and drawings, certified by the Commissioner, or, in his absence, by the chief clerk, shall be *primâ facie* evidence of the particulars of the invention and of the patent granted therefor in any judicial court of the United States, in all cases where copies of the original record or specification and drawings would be evidence, without proof of the loss of such originals; and no patent issued prior to the aforesaid fifteenth day of December shall, after the first day of June next, be received in evidence in any of the said courts in behalf of the patentee or other person who shall be in possession of the same, unless it shall have been so recorded anew, and a drawing of the invention, if separate from the patent, verified as aforesaid, deposited in the Patent Office; nor shall any written assignment of any such patent, executed and recorded prior to the said fifteenth day of December, be received in evidence in any of the said courts in behalf of the assignee or other person in possession thereof, until it shall have been so recorded anew.

SECTION 3. *And be it further enacted*, That whenever it shall appear to the Commissioner that any patent was destroyed by the burning of the Patent Office building on the aforesaid fifteenth day of December, or was otherwise lost prior thereto, it shall be his duty, on application therefor by the patentee or other person interested therein, to issue a new patent for the same invention or discovery, bearing the date of the original

patent, with his certificate thereon that it was made and issued pursuant to the provisions of the third section of this act, and shall enter the same of record: *Provided however*, That before such patent shall be issued the applicant therefor shall deposit in the Patent Office a duplicate, as near as may be, of the original model, drawings, and description, with specification of the invention or discovery, verified by oath, as shall be required by the Commissioner; and such patent, and copies of such drawings and descriptions, duly certified, shall be admissible as evidence in any judicial court of the United States, and shall protect the rights of the patentee, his administrators, heirs, and assigns, to the extent only in which they would have been protected by the original patent and specification.

SECTION 4. *And be it further enacted*, That it shall be the duty of the Commissioner to procure a duplicate of such of the models, destroyed by fire on the aforesaid fifteenth day of December, as were most valuable and interesting, and whose preservation would be important to the public; and such as would be necessary to facilitate the just discharge of the duties imposed by law on the Commissioner in issuing patents, and to protect the rights of the public and of patentees in patented inventions and improvements: *Provided*, That a duplicate of such models may be obtained at a reasonable expense: *And provided also*, That the whole amount of expenditure for this purpose shall not exceed the sum of one hundred thousand dollars. And there shall be a temporary board of Commissioners, to be composed of the Commissioner of the Patent Office and two other persons to be appointed by the President, whose duty it shall be to consider and determine upon the best and most judicious mode of obtaining models of suitable construction; and also to consider and determine what models may be procured in pursuance of, and in accordance with, the provisions and limitations in this section contained. And said commissioners may make and establish all such regulations, terms, and conditions, not inconsistent with law, as in their opinion may be proper and necessary to carry the provisions of this section into effect, according to its true intent.

SECTION 5. *And be it further enacted*, That, whenever a patent shall be returned for correction and reissue under the thirteenth section of the act to which this is additional, and the patentee shall desire several patents to be issued for distinct and separate parts of the thing patented, he shall first pay, in manner and in addition to the sum provided by that act, the sum of thirty dollars for each additional patent so to be issued: *Provided however*, That no patent made prior to the aforesaid fifteenth day of December shall be corrected and reissued until a duplicate of the model and drawing of the thing as originally invented, verified by oath as shall be required by the Commissioner, shall be deposited in the Patent Office:

Nor shall any addition of an improvement be made to any patent heretofore granted, nor any new patent be issued for an improvement made in any machine, manufacture, or process, to the original inventor, assignee, or possessor of a patent therefor, nor any disclaimer be admitted to record, until a duplicate model and drawing of the thing originally intended, verified as aforesaid, shall have been deposited in the Patent Office, if the Commissioner shall require the same; nor shall any patent be granted for an invention, improvement, or discovery, the model or drawing of which shall have been lost, until another model and drawing, if required by the Commissioner, shall, in like manner, be deposited in the Patent Office.

And in all such cases, as well as in those which may arise under the third section of this act, the question of compensation for such models and drawings shall be subject to the judgment and decision of the Commissioners, provided for in the fourth section, under the same limitations and restrictions as are therein prescribed.

SECTION 6. *And be it further enacted*, That any patent hereafter to be issued may be made and issued to the assignee or assignees of the inventor or discoverer, the assignment thereof being first entered of record, and the application therefor being duly made, and the specification duly sworn to by the inventor. And in all cases hereafter, the applicant for a patent shall be held to furnish duplicate drawings, when-

ever the case admits of drawings, one of which to be deposited in the office, and the other to be annexed to the patent, and considered a part of the specification.

SECTION 7. *And be it further enacted*, That, whenever any patentee shall have, through inadvertence, accident, or mistake, made his specification of claim too broad, claiming more than that of which he was the original or first inventor, some material or substantial part of the thing patented being truly and justly his own, any such patentee, his administrators, executors, and assigns, whether of the whole or of a sectional interest therein, may make disclaimer of such parts of the thing patented as the disclaimant shall not claim to hold by virtue of the patent or assignment, stating therein the extent of his interest in such patent; which disclaimer shall be in writing, attested by one or more witnesses, and recorded in the Patent Office, on payment by the person disclaiming in manner as other patent duties are required by law to be paid, of the sum of ten dollars. And such disclaimer shall thereafter be taken and considered as part of the original specification, to the extent of the interest which shall be possessed in the patent or right secured thereby, by the disclaimant, and by those claiming by or under him subsequent to 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 the same.

SECTION 8. *And be it further enacted*, That, whenever application shall be made to the Commissioner for any addition of a newly discovered improvement to be made to an existing patent, or whenever a patent shall be returned for correction and reissue, the specification of claim annexed to every such patent shall be subject to revision and restriction, in the same manner as are original applications for patents; the Commissioner shall not add any such improvement to the patent in the one case, nor grant the reissue in the other case, until the applicant shall have entered a disclaimer, or altered his specification of claim in accordance with the decision of the Commissioner; and in all such cases, the applicant, if dissatisfied with such decision, shall have the same remedy, and be entitled to

the benefit of the same privileges and proceedings as are provided by law in the case of original applications for patents.

SECTION 9. *And be it further enacted*, any thing in the fifteenth section of the act to which this is additional to the contrary notwithstanding, That, whenever by mistake, accident, or inadvertence, and without any wilful default or intent to defraud or mislead the public, any patentee shall have 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 first and original inventor, and shall have no legal or just right to claim the same, in every such case the patent shall be deemed good and valid for so much of the invention or discovery as shall be truly and *bonâ fide* his own ; *Provided*, It shall be a material and substantial part of the thing patented, and be definitely distinguishable from the other parts so claimed without right as aforesaid. And every such patentee, his executors, administrators, and assigns, whether of the whole, or of a sectional interest therein, shall be entitled to maintain a suit at law or in equity on such patent for any infringement of such part of the invention or discovery as shall be *bonâ fide* his own as aforesaid, notwithstanding the specification may embrace more than he shall have any legal right to claim. But, in every such case in which a judgment or verdict shall be rendered for the plaintiff, he shall not be entitled to recover costs against the defendant, unless he shall have entered at the Patent Office, prior to the commencement of the suit, a disclaimer of all that part of the thing patented which was so claimed without right. *Provided however*, That no person bringing any such suit shall be entitled to the benefits of the provisions contained in this section, who shall have unreasonably neglected or delayed to enter at the Patent Office a disclaimer as aforesaid.

SECTION 10. *And be it further enacted*, That the Commissioner is hereby authorized and empowered to appoint agents, in not exceeding twenty of the principal cities or towns in the United States as may best accommodate the different sections of the country, for the purpose of receiving and forwarding to the Patent Office all such models, specimens of ingredients

and manufactures, as shall be intended to be patented or deposited therein, the transportation of the same to be chargeable to the patent fund.

SECTION 11. *And be it further enacted*, That, instead of one examining clerk, as provided by the second section of the act to which this is additional, there shall be appointed, in manner therein provided, two examining clerks, each to receive an annual salary of fifteen hundred dollars; and also, an additional copying clerk, at an annual salary of eight hundred dollars. And the Commissioner is also authorized to employ, from time to time, as many temporary clerks as may be necessary to execute the copying and draughting required by the first section of this act, and to examine and compare the records with the originals, who shall receive not exceeding seven cents for every page of one hundred words, and for drawings and comparison of records with originals, such reasonable compensation as shall be agreed upon or prescribed by the Commissioner.

SECTION 12. *And be it further enacted*, That, wherever the application of any foreigner for a patent shall be rejected and withdrawn for want of novelty in the invention, pursuant to the seventh section of the act to which this is additional, the certificate thereof of the Commissioner shall be a sufficient warrant to the treasurer to pay back to such applicant two thirds of the duty he shall have paid into the treasury on account of such application.

SECTION 13. *And be it further enacted*, That in all cases in which an oath is required by this act, or by the act to which this is additional, if the person of whom it is required shall be conscientiously scrupulous of taking an oath, affirmation may be substituted therefor.

SECTION 14. *And be it further enacted*, That all moneys paid into the treasury of the United States for patents and for fees for copies furnished by the Superintendent of the Patent Office prior to the passage of the act to which this is additional, shall be carried to the credit of the patent fund created by said act; and the moneys constituting said fund shall be, and the same are hereby, appropriated for the payment of the salaries

of the officers and clerks provided for by said act, and all other expenses of the Patent Office, including all the expenditures provided for by this act; and also for such other purposes as are or may be hereafter specially provided for by law. And the Commissioner is hereby authorized to draw upon said fund, from time to time, for such sums as shall be necessary to carry into effect the provisions of this act, *governed*, however, by the several limitations herein contained. And it shall be his duty to lay before Congress, in the month of January, annually, a detailed statement of the expenditures and payments by him made from said fund; And it shall also be his duty to lay before Congress, in the month of January, annually, a list of all patents which shall have been granted during the preceding year, designating, under proper heads, the subjects of such patents, and furnishing an alphabetical list of the patentees, with their places of residence; and he shall also furnish a list of all patents which shall have become public property during the same period; together with such other information of the state and condition of the Patent Office as may be useful to Congress or the public.

APPROVED March 3, 1837.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1839.

5 STATUTES AT LARGE, 353.

An Act in addition to "An act to promote the progress of the useful arts."

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That there shall be appointed, in manner provided in the second section of the act to which this is additional, two assistant examiners, each to receive an annual salary of twelve hundred and fifty dollars.

SECTION 2. *And be it further enacted*, That the Commissioner be authorized to employ temporary clerks to do any necessary transcribing, whenever the current business of the office requires

it; *Provided however*, That instead of salary, a compensation shall be allowed, at a rate not greater than is charged for copies now furnished by the office.

SECTION 3. *And be it further enacted*, That the Commissioner is hereby authorized to publish a classified and alphabetical list of all patents granted by the Patent Office previous to said publication, and retain one hundred copies for the Patent Office and nine hundred copies to be deposited in the library of Congress, for such distribution as may be hereafter directed; and that one thousand dollars, if necessary, be appropriated, out of the patent fund, to defray the expense of the same.

SECTION 4. *And be it further enacted*, That the sum of three thousand six hundred and fifty-nine dollars and twenty-two cents be, and is hereby, appropriated from the patent fund, to pay for the use and occupation of rooms in the City Hall by the Patent Office.

SECTION 5. *And be it further enacted*, That the sum of one thousand dollars be appropriated from the patent fund, to be expended under the direction of the Commissioner, for the purchase of necessary books for the library of the Patent Office.

SECTION 6. *And be it further enacted*, That no person shall be debarred from receiving a patent for any invention or discovery, as provided in the act approved on the fourth day of July, one thousand eight hundred and thirty-six, to which this is additional, by reason of the same having been patented in a foreign country more than six months prior to his application: *Provided*, That the same shall not have been introduced into public and common use in the United States, prior to the application for such patent: *And provided also*, That in all cases every such patent shall be limited to the term of fourteen years from the date or publication of such foreign letters-patent.

SECTION 7. *And be it further enacted*, 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 or discoverer 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.

SECTION 8. *And be it further enacted*, That so much of the eleventh section of the above recited act as requires the payment of three dollars to the Commissioner of Patents for recording any assignment, grant, or conveyance of the whole or any part of the interest or right under any patent, be, and the same is hereby, repealed; and all such assignments, grants, and conveyances shall, in future, be recorded, without any charge whatever.

SECTION 10. *And be it further enacted*, That the provisions of the sixteenth section of the before-recited act shall extend to all cases where patents are refused for any reason whatever, either by the Commissioner of Patents or by the Chief Justice of the District of Columbia, upon appeals from the decision of said Commissioner, as well as where the same shall have been refused on account of, or by reason of, interference with a previously existing patent; and in all cases where there is no opposing party, a copy of the bill shall be served upon the Commissioner of Patents, when the whole of the expenses of the proceeding shall be paid by the applicant, whether the final decision shall be in his favor or otherwise.

SECTION 11. *And be it further enacted*, That in all cases where an appeal is now allowed by law from the decision of the Commissioner of Patents to a board of examiners, provided for in the seventh section of the act to which this is additional, the party, instead thereof, shall have a right to appeal to the Chief Justice of the district court of the United States for the District of Columbia, by giving notice thereof to the Commissioner, and filing in the Patent Office, within such time as the Commissioner shall appoint, his reasons of appeal specifically set forth in writing, and also paying into the Patent Office, to

the credit of the patent fund, the sum of twenty-five dollars. And it shall be the duty of said Chief Justice, on petition, to hear and determine all such appeals, and to revise such decisions in a summary way, on the evidence produced before the Commissioner, at such early and convenient time as he may appoint, first notifying the Commissioner of the time and place of hearing, whose duty it shall be to give notice thereof to all parties who appear to be interested therein, in such manner as said judge shall prescribe. The Commissioner shall also lay before the said judge all the original papers and evidence in the case, together with the grounds of his decision, fully set forth in writing, touching all the points involved by the reasons of appeal, to which the revision shall be confined. And at the request of any party interested, or at the desire of the judge, the Commissioner and the examiners in the Patent Office may be examined under oath, in explanation of the principles of the machine or other thing for which a patent, in such case is prayed for. And it shall be the duty of said judge, after a hearing of any such case, to return all the papers to the Commissioner, with a certificate of his proceedings and decision, which shall be entered of record in the Patent Office; and such decision, so certified, shall govern the further proceedings of the Commissioner in such case: *Provided however*, That no opinion or decision of the judge in any such case shall preclude any person interested in favor or against the validity of any patent which has been or may, hereafter be granted from the right to contest the same in any judicial court, in any action in which its validity may come in question.

SECTION 12. *And be it further enacted*, That the Commissioner of Patents shall have power to make all such regulations, in respect to the taking of evidence to be used in contested cases before him, as may be just and reasonable. And so much of the act to which this is additional, as provides for a board of examiners, is hereby repealed.

SECTION 13. *And be it further enacted*, That there be paid annually, out of the patent fund, to the said Chief Justice, in consideration of the duties herein imposed, the sum of one hundred dollars.

APPROVED March 3, 1839.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1842.

5 STATUTES AT LARGE, 543.

An Act in addition to an act to promote the progress of the useful arts, and to repeal all acts and parts of acts heretofore made for that purpose.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the Treasurer of the United States be, and he hereby is, authorized to pay back, out of the patent fund, any sum or sums of money, to any person who shall have paid the same into the Treasury, or to any receiver or depositary to the credit of the Treasurer, as for fees accruing at the Patent Office through mistake, and which are not provided to be paid by existing laws, certificate thereof being made to the said Treasurer by the Commissioner of Patents.

SECTION 2. *And be it further enacted*, That the third section of the act of March, eighteen hundred and thirty-seven, which authorizes the renewing of patents lost prior to the fifteenth of December, eighteen hundred and thirty-six, is extended to patents granted prior to said fifteenth day of December, though they may have been lost subsequently: *Provided however*, The same shall not have been recorded anew under the provisions of said act.

SECTION 3. *And be it further enacted*, That any citizen or citizens, or alien or aliens, having resided one year in the United States, and taken the oath of his or their intention to become a citizen or citizens, who by his, her, or their own industry, genius, efforts, and expense, may have invented or produced any new and original design for a manufacture, whether of metal or other material or materials, or any new and original design for the printing of woollen, silk, cotton, or other fabrics, or any new and original design for a bust, statue, or bas-relief or composition in alto or basso relievo, or any new

and original impression or ornament, or to be placed on any article of manufacture, the same being formed in marble or other material, or any new and useful pattern, or print, or picture, to be either worked into or worked on, or printed or painted or cast or otherwise fixed on, any article of manufacture, or any new and original shape or configuration of any article of manufacture not known or used by others before his, her, or their invention or production thereof, and prior to the time of his, her, or their application for a patent therefor, and who shall desire to obtain an exclusive property or right therein to make, use, and sell and vend the same, or copies of the same, to others, by them to be made, used, and sold, may make application in writing to the Commissioner of Patents expressing such desire, and the Commissioner, on due proceedings had, may grant a patent therefor, as in the case now of application for a patent: *Provided*, That the fee in such cases, which by the now existing laws would be required of the particular applicant, shall be one half the sum, and that the duration of said patent shall be seven years, and that all the regulations and provisions which now apply to the obtaining or protection of patents not inconsistent with the provisions of this act shall apply to applications under this section.

SECTION 4. *And be it further enacted*, That the oath required for applicants for patents may be taken, when the applicant is not, for the time being, residing in the United States, before any minister, plenipotentiary, *chargé d'affaires*, consul, or commercial agent holding commission under the government of the United States, or before any notary public of the foreign country in which such applicant may be.

SECTION 5. *And be it further enacted*, That if any person or persons shall paint or print or mould, cast, carve, or engrave, or stamp, upon anything made, used, or sold, by him, for the sole making or selling which he hath not or shall not have obtained letters-patent, the name or any imitation of the name of any other person who hath or shall have obtained letters-patent for the sole making and vending of such thing, without consent of such patentee, or his assigns or legal representatives; or if any person, upon any such thing not having

been purchased from the patentee, or some person who purchased it from or under such patentee, or not having the license or consent of such patentee, or his assigns or legal representatives, shall write, paint, print, mould, cast, carve, engrave, stamp, or otherwise make or affix the word "patent," or the words "letters-patent," or the word "patentee," or any word or words of like kind, meaning, or import, with the view or intent of imitating or counterfeiting the stamp, mark, or other device, of the patentee, or shall affix the same, or any word, stamp, or device, of like import, on any unpatented article, for the purpose of deceiving the public, he, she, or they, so offending, shall be liable for such offence to a penalty of not less than one hundred dollars, with costs, to be recovered by action in any of the circuit courts of the United States, or in any of the district courts of the United States having the powers and jurisdiction of a circuit court; one half of which penalty, as recovered, shall be paid to the patent fund, and the other half to any person or persons who shall sue for the same.

SECTION 6. *And be it further enacted*, That all patentees and assignees of patents hereafter granted are hereby required to stamp, engrave, or cause to be stamped or engraved, on each article vended, or offered for sale, the date of the patent; and if any person or persons, patentees, or assignees, shall neglect to do so, he, she, or they shall be liable to the same penalty, to be recovered and disposed of in the manner specified in the foregoing fifth section of this act.

APPROVED August 29, 1842.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1848.

9 STATUTES AT LARGE, 231.

An Act to provide additional Examiners in the Patent Office, and for other Purposes.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress as-*

sembled, That there shall be appointed, in the manner provided in the second section of the act entitled "An Act to promote the progress of useful arts, and to repeal all acts and parts of acts heretofore made for that purpose," approved July fourth, eighteen hundred and thirty-six, two principal examiners, and two assistant examiners, in addition to the number of examiners now employed in the Patent Office; and that hereafter each of the principal examiners employed in the Patent Office shall receive an annual salary of twenty-five hundred dollars, and each of the assistant examiners an annual salary of fifteen hundred dollars: *Provided*, That the power to extend patents, now vested in the board composed of the Secretary of State, Commissioner of Patents, and Solicitor of the Treasury, by the eighteenth section of the act approved July fourth, eighteen hundred and thirty-six, respecting the Patent Office, shall hereafter be vested solely in the Commissioner of Patents; and when an application is made to him for the extension of a patent according to said eighteenth section, and sixty days' notice given thereof, he shall refer the case to the principal examiner having charge of the class of inventions to which said case belongs, who shall make full report to said Commissioner of the said case, and particularly whether the invention or improvement secured in the patent was new and patentable when patented; and thereupon the said Commissioner shall grant or refuse the extension of said patent, upon the same principles and rules that have governed said board; but no patent shall be extended for a longer term than seven years.

SECTION 2. *And be it further enacted*, That hereafter the Commissioner of Patents shall require a fee of one dollar for recording any assignment, grant, or conveyance of the whole or any part of the interest in letters-patent, or power of attorney, or license to make or use the thing patented, when such instrument shall not exceed three hundred words; the sum of two dollars when it shall exceed three hundred and shall not exceed one thousand words; and the sum of three dollars when it shall exceed one thousand words; which fees shall in all cases be paid in advance.

SECTION 3. *And be it further enacted*, That there shall be

appointed in manner aforesaid, two clerks, to be employed in copying and recording, and in other services in the Patent Office, who shall each be paid a salary of one thousand two hundred dollars per annum.

SECTION 4. *And be it further enacted*, That the Commissioner of Patents is hereby authorized to send by mail, free of postage, the annual reports of the Patent Office, in the same manner in which he is empowered to send letters and packages relating to the business of the Patent Office.

APPROVED May 27, 1848.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1849.

9 STATUTES AT LARGE, 395.

Section 2 of the Act entitled "An Act to establish the Home Department, and to provide for the Treasury Department an Assistant Secretary of the Treasury and a Commissioner of the Customs."

SECTION 2. *And be it further enacted*, That the Secretary of the Interior shall exercise and perform all the acts of supervision and appeal in regard to the office of Commissioner of Patents, now exercised by the Secretary of State; and the said Secretary of the Interior shall sign all requisitions for the advance or payment of money out of the Treasury on estimates or accounts, subject to the same adjustment or control now exercised on similar estimates or accounts by the First or Fifth Auditor and First Comptroller of the Treasury.

APPROVED March 3, 1849.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1852.

10 STATUTES AT LARGE, 75.

An Act in addition to "An Act to Promote the Progress of the Useful Arts."

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That appeals provided for in the eleventh section of the act entitled An Act in addition to an act to promote the progress of the useful arts, approved March the third, eighteen hundred and thirty-nine, may also be made to either of the assistant judges of the Circuit Court of the District of Columbia, and all the powers, duties, and responsibilities imposed by the aforesaid act, and conferred upon the chief judge, are hereby imposed and conferred upon each of the said assistant judges.

SECTION 2. *And be it further enacted*, That in case appeals shall be made to the said chief judge, or to either of the said assistant judges, the Commissioner of Patents shall pay to such chief judge or assistant judge the sum of twenty-five dollars, required to be paid by the appellant into the Patent Office by the eleventh section of said act, on said appeal.

SECTION 3. *And be it further enacted*, That section thirteen of the aforesaid act, approved March the third, eighteen hundred and thirty-nine, is hereby repealed.

APPROVED August 30, 1852.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF FEBRUARY 18, 1861.

12 STATUTES AT LARGE, 130.

An Act to extend the right of appeal from the decisions of Circuit Courts to the Supreme Court of the United States.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That from all judgments and decrees of any Circuit Court rendered in any action, suit, controversy, or case, at law or in equity, arising under any law of the United States granting or confirming to authors the exclusive right to their respective writings, or to inventors the exclusive right to their inventions or discoveries, a writ of error or appeal, as the case may require, shall lie, at the instance of either party, to the Supreme Court of the United States, in the same manner and

under the same circumstances as is now provided by law in other judgments and decrees of such circuit courts, without regard to the sum or value in controversy in the action.

Approved February 18, 1861.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF MARCH 2, 1861.

12 Statutes at Large, 246.

An Act in Addition to "An Act to promote the Progress of the useful Arts."

Section 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That 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 justice of the peace, or other officer authorized by law to take depositions to be used in the courts of the United States, or in the State courts of any State where such officer shall reside; and in any contested case pending in the Patent Office it shall be lawful for the clerk of any court of the United States for any district or Territory, and he is hereby required, upon the application of any party to such contested case, or the agent or attorney of such party, to issue subpœnas for any witnesses residing or being within the said district or Territory, *commanding* such witnesses to appear and testify before any justice of the peace, or other officer as aforesaid, residing within the said district or Territory, at any time and place *in* the subpœna to be stated; and if any witness, after being duly served with such subpœna, shall refuse or neglect to appear, or, after appearing, shall refuse to testify (not being privileged from giving testimony), such refusal or neglect being proved to the satisfaction of any judge of the court whose clerk shall have issued such subpœna, said judge may thereupon proceed to enforce obedience to the process, or to punish the disobedience in like manner as any court of the United States may do in case of disobedience to process of subpœna ad testifican-

dum issued by such court; and witnesses in such cases shall be allowed the same compensation as is allowed to witnesses attending the courts of the United States: *Provided*, That no witness shall be required to attend at any place more than forty miles from the place where the subpœna shall be served upon him to give a deposition under this law: *Provided also*, That no witness shall be deemed guilty of contempt for refusing to disclose any secret invention made or owned by him: *And provided further*, That no witness shall be deemed guilty of contempt for disobeying any subpœna directed to him by virtue of this act, unless his fees for going to, returning from, and one day's attendance at the place of examination, shall be paid or tendered to him at the time of the service of the subpœna.

SECTION 2. *And be it further enacted*, That for the purposes of securing greater uniformity of action in the grant and refusal of letters-patent, there shall be appointed by the President, by and with the advice and consent of the Senate, three examiners in chief, at an annual salary of three thousand dollars each, to be composed of persons of competent legal knowledge and scientific ability, whose duty it shall be, on the written petition of the applicant for that purpose being filed, to revise and determine upon the validity of decisions made by examiners when adverse to the grant of letters-patent; and also to revise and determine in like manner upon the validity of the decisions of examiners in interference cases, and when required by the Commissioner in applications for the extension of patents, and to perform such other duties as may be assigned to them by the Commissioner; that from their decisions appeals may be taken to the Commissioner of Patents in person, upon payment of the fee hereinafter prescribed; that the said examiners in chief shall be governed in their action by the rules to be prescribed by the Commissioner of Patents.

SECTION 3. *And be it further enacted*, That no appeal shall be allowed to the examiners in chief from the decisions of the primary examiners, except in interference cases, until after the application shall have been twice rejected; and the second examination of the application by the primary examiner shall

not be had until the applicant, in view of the references given on the first rejection, shall have renewed the oath of invention, as provided for in the seventh section of the act entitled "An act to promote the progress of the useful arts, and to repeal all acts and parts of acts heretofore made for that purpose," approved July fourth, eighteen hundred and thirty-six.

SECTION 4. *And be it further enacted*, That the salary of the Commissioner of Patents, from and after the passage of this act, shall be four thousand five hundred dollars per annum, and the salary of the chief clerk of the Patent Office shall be two thousand five hundred dollars, and the salary of the librarian of the Patent Office shall be eighteen hundred dollars.

SECTION 5. *And be it further enacted*, That the Commissioner of Patents is authorized to restore to the respective applicants, or when not removed by them, to otherwise dispose of such of the models belonging to rejected applications as he shall not think necessary to be preserved. The same authority is also given in relation to all models accompanying applications for designs. He is further authorized to dispense in future with models of designs when the design can be sufficiently represented by a drawing.

SECTION 6. *And be it further enacted*, That the tenth section of the act approved the third of March, eighteen hundred and thirty-seven, authorizing the appointment of agents for the transportation of models and specimens to the Patent Office, is hereby repealed.

SECTION 7. *And be it further enacted*, That the Commissioner is further authorized, from time to time, to appoint, in the manner already provided for by law, such an additional number of principal examiners, first assistant examiners, and second assistant examiners as may be required to transact the current business of the office with despatch, provided the whole number of additional examiners shall not exceed four of each class, and that the total annual expenses of the Patent Office shall not exceed the annual receipts.

SECTION 8. *And be it further enacted*, That the Commissioner may require all papers filed in the Patent Office, if not correctly, legibly, and clearly written, to be printed at the cost of

the parties filing such papers; and for gross misconduct he may refuse to recognize any person as a patent agent, either generally or in any particular case; but the reasons of the Commissioner for such refusal shall be duly recorded, and be subject to the approval of the President of the United States.

SECTION 9. *And be it further enacted*, That no money paid as a fee, on any application for a patent after the passage of this act, shall be withdrawn or refunded, nor shall the fee paid on filing a caveat be considered as part of the sum required to be paid on filing a subsequent application for a patent for the same invention. That the three months' notice given to any caveator, in pursuance of the requirements of the twelfth section of the act of July fourth, eighteen hundred and thirty-six, shall be computed from the day on which such notice is deposited in the post-office at Washington, with the regular time for the transmission of the same added thereto, which time shall be indorsed on the notice; and that so much of the thirteenth section of the act of Congress, approved July fourth, eighteen hundred and thirty-six, as authorizes the annexing to letters-patent of the description and specification of additional improvements is hereby repealed, and in all cases where additional improvements would now be admissible, independent patents must be applied for.

SECTION 10. *And be it further enacted*, That all laws now in force fixing the rates of the Patent Office fees to be paid, and discriminating between the inhabitants of the United States and those of other countries, which shall not discriminate against the inhabitants of the United States, are hereby repealed, and in their stead the following rates are established:—

On filing each caveat, ten dollars.

On filing each original application for a patent, except for a design, fifteen dollars.

On issuing each original patent, twenty dollars.

On every appeal from the examiner in chief to the Commissioner, twenty dollars.

On every application for the reissue of a patent, thirty dollars.

On every application for the extension of a patent, fifty

dollars; and fifty dollars in addition, on the granting of every extension.

On filing each disclaimer, ten dollars.

For certified copies of patents and other papers, ten cents per hundred words.

For recording every assignment, agreement, power of attorney, and other papers, of three hundred words or under, one dollar.

For recording every assignment, and other papers, over three hundred and under one thousand words, two dollars.

For recording every assignment or other writing, if over one thousand words, three dollars.

For copies of drawings, the reasonable cost of making the same.

SECTION 11. *And be it further enacted*, That any citizen or citizens, or alien or aliens, having resided one year in the United States, and taken the oath of his or their intention to become a citizen or citizens, who, by his, her, or their own industry, genius, efforts, and expense may have invented or produced any new and original design, or a manufacture, whether of metal or other material or materials, and original design for a bust, statue, or bas-relief, or composition in alto or basso relievo, or any new and original impression or ornament, or to be placed on any article of manufacture, the same being formed in marble or other material, or any new and useful pattern, or print, or picture, to be either worked into or worked on, or printed, or painted, or cast, or otherwise fixed on any article of manufacture, or any new and original shape or configuration of any article of manufacture, not known or used by others before his, her, or their invention or production thereof, and prior to the time of his, her, or their application for a patent therefor, and who shall desire to obtain an exclusive property or right therein to make, use, and sell, and vend the same, or copies of the same, to others, by them to be made, used, and sold, may make application, in writing, to the Commissioner of Patents, expressing such desire; and the Commissioner, on due proceedings had, may grant a patent therefor, as in the case now of application for a patent, for the term of

three and one half years, or for the term of seven years, or for the term of fourteen years, as the said applicant may elect in his application: *Provided*, That the fee to be paid in such application shall be for the term of three years and six months, ten dollars, for seven years, fifteen dollars, and for fourteen years, thirty dollars: *And provided*, That the patentees of designs under this act shall be entitled to the extension of their respective patents for the term of seven years, from the day on which said patent shall expire, upon the same terms and restrictions as are now provided for the extension of letters-patent.

SECTION 12. *And be it further enacted*, That all applications for patents shall be completed and prepared for examination within two years after the filing of the petition, and in default thereof 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; and all applications now pending shall be treated as if filed after the passage of this act, and all applications for the extension of patents shall be filed at least ninety days before the expiration thereof; and notice of the day set for the hearing of the case shall be published, as now required by law, for at least sixty days.

SECTION 13. *And be it further enacted*, That in all cases where an article is made or vended by any person under the protection of letters-patent, it shall be the duty of such person to give sufficient notice to the public that said article is so 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 patented, that may be impracticable, by enveloping one or more of the said articles, and affixing a label to the package, or otherwise attaching thereto a label on which the notice, with the date, is printed; on failure of which, in any suit for the infringement of letters-patent by the party failing so to mark the article the right to which is infringed upon, no damage 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

or vend the article patented. And the sixth section of the act entitled "An act in addition to an act to promote the progress of the useful arts," and so forth, approved the twenty-ninth day of August, eighteen hundred and forty-two, be, and the same is hereby, repealed.

SECTION 14. *And be it further enacted*, That the Commissioner of Patents be, and he is hereby, authorized to print, or in his discretion to cause to be printed, ten copies of the description and claims of all patents which may hereafter be granted, and ten copies of the drawings of the same, when drawings shall accompany the patents: *Provided*, The cost of printing the text of said descriptions and claims shall not exceed, exclusive of stationery, the sum of two cents per hundred words for each of said copies, and the cost of the drawing shall not exceed fifty cents per copy; one copy of the above number shall be printed on parchment to be affixed to the letters-patent; the work shall be under the direction, and subject to the approval, of the Commissioner of Patents, and the expense of the said copies shall be paid for out of the patent fund.

SECTION 15. *And be it further enacted*, That printed copies of the letters-patent of the United States, with the seal of the Patent Office affixed thereto and certified and signed by the Commissioner of Patents, shall be legal evidence of the contents of said letters-patent in all cases.

SECTION 16. *And be it further enacted*, That all patents hereafter granted shall remain in force for the term of seventeen years from the date of issue; and all extension of such patents is hereby prohibited.

SECTION 17. *And be it further enacted*, That all acts and parts of acts heretofore passed, which are inconsistent with the provisions of this act, be, and the same are hereby, repealed.

APPROVED March 2, 1861.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1862.

12 STATUTES AT LARGE, 583.

Section 4 of an Act making supplemental appropriations for sundry civil expenses, &c.

SECTION 4. For the fund of the Patent Office, fifty thousand eight hundred and fifty-five dollars and forty-nine cents, to supply a deficiency existing under the act of March second, eighteen hundred and sixty-one, entitled "An act in addition to an act to promote the progress of the useful arts": *Provided*, That the fourteenth section of said act be, and the same is hereby, repealed.

APPROVED July 16, 1862.

PATENT ACT OF 1863.

12 STATUTES AT LARGE, 796.

An Act to amend an Act entitled "An Act to promote the Progress of the useful Arts."

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That so much of section seven of the act entitled "An act to promote the progress of the useful arts," approved July fourth, eighteen hundred and thirty-six, as requires a renewal of the oath, be, and the same is hereby, repealed.

SECTION 2. *And be it further enacted*, That, whereas the falling off of the revenue of the Patent Office required a reduction of the compensation of the examiners and clerks, or other employees in the office, after the thirty-first day of August, eighteen hundred and sixty-one, that the Commissioner of Patents be, and he is hereby, authorized, whenever the revenue of the office will justify him in so doing, to pay them such sums, in addition to what they shall already have received, as will make their compensation the same as it was at that time.

SECTION 3. *And be it further enacted*, That every patent shall be dated as of a day not later than six months after the time at which it was passed and allowed, and notice thereof sent to the applicant or his agent. And if the final fee for

such patent be not paid within the said six months, the patent shall be withheld, and the invention therein described shall become public property as against the applicant therefor: *Provided*, That in all cases where patents have been allowed previous to the passage of this act, the said six months shall be reckoned from the date of such passage.

APPROVED March 3, 1863.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1864.

13 STATUTES AT LARGE, 194.

An Act amendatory of an Act to amend an Act entitled "An Act to promote the Progress of the Useful Arts," approved March three, eighteen hundred and sixty-three.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That any person having an interest in an invention, whether as the inventor or assignee, for which a patent was ordered to issue upon the payment of the final fee, as provided in section three of an act approved March three, eighteen hnndred and sixty-three, but who has failed to make payment of the final fee, as provided by said act, shall have the right to make the payment of such fee, and receive the patent withheld on account of the non-payment of said fee, provided such payment be made within six months from the date of the passage of this act: *Provided*, That nothing herein shall be so construed as to hold responsible in damages any persons who have manufactured or used any article or thing for which a patent, as aforesaid, was ordered to be issued.

APPROVED June 25, 1864.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1865.

13 STATUTES AT LARGE, 533.

An Act amendatory of "An Act to amend an Act entitled 'An Act to promote the Progress of the useful Arts,' approved March three, eighteen hundred and sixty-three."

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That any persons having an interest in an invention, whether as inventor or assignee, for which a patent was ordered to issue upon the payment of the final fee, as provided in section three of an act approved March three, eighteen hundred and sixty-three, but who has failed to make payment of the final fee as provided in said act, shall have the right to make an application for a patent for his invention, the same as in the case of an original application, provided such application be made within two years after the date of the allowance of the original application: *Provided*, That nothing herein shall be so construed as to hold responsible in damages any persons who have manufactured or used any article or thing for which a patent aforesaid was ordered to issue. This act shall apply to all cases now in the Patent Office, and also to such as shall hereafter be filed. And all acts or parts of acts inconsistent with this act are hereby repealed.

APPROVED March 3, 1865.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT STATUTE OF 1866.

14 STATUTES AT LARGE, 76.

An Act in Amendment of an Act to promote the Progress of the Useful Arts, and the Acts in Amendment of an Addition thereto.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That upon appealing for the first time from the decision of the primary examiner to the examiners-in-chief in the Patent

Office, the appellant shall pay a fee of ten dollars into the Patent Office, to the credit of the patent fund : and no appeal from the primary examiner to the examiners-in-chief shall hereafter be allowed until the appellant shall pay said fee.

Approved June 27, 1866.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

CONSOLIDATED PATENT ACT OF 1870.

16 Statutes at Large, 198.

An Act to revise, consolidate, and amend the Statutes, relating to Patents and Copyrights.

Section 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That there shall be attached to the Department of the Interior the office, heretofore established, known as the Patent Office, wherein all records, books, models, drawings, specifications, and other papers and things pertaining to patents shall be safely kept and preserved. [See Revised Statutes, Section 475.]

Section 2. *And be it further enacted*, That the officers and employees of said office shall continue to be : one commissioner of patents, one assistant commissioner, and three examiners-in-chief, to be appointed by the President, by and with the advice and consent of the Senate ; one chief clerk, one examiner in charge of interferences, twenty-two principal examiners, twenty-two first assistant examiners, twenty-two second assistant examiners, one librarian, one machinist, five clerks of class four, six clerks of class three, fifty clerks of class two, forty-five clerks of class one, and one messenger and purchasing clerk, all of whom shall be appointed by the Secretary of the Interior, upon nomination of the Commissioner of Patents. [See Revised Statutes, Section 476.]

Section 3. *And be it further enacted*, That the Secretary of the Interior may also appoint, upon like nomination, such additional clerks of classes two and one, and of lower grades, copyists of drawings, female copyists, skilled laborers, labor-

ors and watchmen, as may be from time to time appropriated for by Congress. [See Revised Statutes, Section 169.]

SECTION 4. *And be it further enacted*, That the annual salaries of the officers and employees of the Patent Office shall be as follows:—

Of the commissioner of patents, four thousand five hundred dollars.

Of the assistant commissioner, three thousand dollars.

Of the examiners-in-chief, three thousand dollars each.

Of the chief clerk, two thousand five hundred dollars.

Of the examiner in charge of interferences, two thousand five hundred dollars.

Of the principal examiners, two thousand five hundred dollars each.

Of the first assistant examiners, one thousand eight hundred dollars each.

Of the second assistant examiners, one thousand six hundred dollars each.

Of the librarian, one thousand eight hundred dollars.

Of the machinist, one thousand six hundred dollars.

Of the clerks of class four, one thousand eight hundred dollars each.

Of the clerks of class three, one thousand six hundred dollars each.

Of the clerks of class two, one thousand four hundred dollars each.

Of the clerks of class one, one thousand two hundred dollars each.

Of the messenger and purchasing clerk, one thousand dollars.

Of laborers and watchmen, seven hundred and twenty dollars each.

Of the additional clerks, copyists of drawings, female copyists, and skilled laborers, such rates as may be fixed by the acts making appropriations for them. [See Revised Statutes, Sections 477, 440, and 167.]

SECTION 5. *And be it further enacted*, That all officers and employees of the Patent Office shall, before entering upon their duties, make oath or affirmation truly and faithfully to

execute the trusts committed to them. [See Revised Statutes, Sections 1756 and 1757.]

SECTION 6. *And be it further enacted*, That the commissioner and 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 duties, and that they will render to the proper officers of the treasury a true account of all money received by virtue of their office. [See Revised Statutes, Section 479.]

SECTION 7. *And be it further enacted*, That it shall be the duty of the commissioner, under the direction of the Secretary of the Interior, to superintend or perform all the duties respecting the granting and issuing of patents which herein are, or may hereafter be, by law directed to be done; and he shall have charge of all books, records, papers, models, machines, and other things belonging to said office. [See Revised Statutes, Section 481.]

SECTION 8. *And be it further enacted*, That the commissioner may send and receive by mail, free of postage, letters, printed matter, and packages relating to the business of his office, including Patent Office reports. [See 19 Statutes at Large, Chap. 103, Section 5, p. 335; and 20 Statutes at Large, Chap. 180, Section 29, p. 362.]

SECTION 9. *And be it further enacted*, That the commissioner 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 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. [See Revised Statutes, Section 494.]

SECTION 10. *And be it further enacted*, That the examiners-in-chief shall be persons of competent legal knowledge and scientific ability, whose duty it shall be, 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; 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 them. [See Revised Statutes, Section 482.]

SECTION 11. *And be it further enacted*, That in case of the death, resignation, absence, or sickness of the commissioner, his duties shall devolve upon the assistant commissioner until a successor shall be appointed, or such absence or sickness shall cease. [See Revised Statutes, Sections 177, 178, and 179.]

SECTION 12. *And be it further enacted*, That the commissioner shall cause a seal to be provided for said office, with such device as the President may approve, with which all records or papers issued from said office, to be used in evidence, shall be authenticated. [See Revised Statutes, Section 478.]

SECTION 13. *And be it further enacted*, That the commissioner 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 said office; and said rooms and galleries shall be kept open during suitable hours for public inspection. [See Revised Statutes, Section 484.]

SECTION 14. *And be it further enacted*, That the commissioner 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. [See Revised Statutes, Section 485.]

SECTION 15. *And be it further enacted*, That there shall be purchased, for the use of said office, a library of such scien-

tific works and periodicals, both foreign and American, as may aid the officers in the discharge of their duties, not exceeding the amount annually appropriated by Congress for that purpose. [See Revised Statutes, Section 486.]

SECTION 16. *And be it further enacted*, That all officers and employees of the Patent Office shall be incapable, during the period for which they shall hold their appointments, to acquire or take, directly or indirectly, except by inheritance or bequest, any right or interest in any patent issued by said office. [See Revised Statutes, Section 480.]

SECTION 17. *And be it further enacted*, That for gross misconduct the commissioner 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. [See Revised Statutes, Section 487.]

SECTION 18. *And be it further enacted*, That the commissioner 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. [See Revised Statutes, Section 488.]

SECTION 19. *And be it further enacted*, That the commissioner, subject to the approval of the Secretary of the Interior, may from time to time establish rules and regulations, not inconsistent with law, for the conduct of proceedings in the Patent Office. [See Revised Statutes, Section 483.]

SECTION 20. *And be it further enacted*, That the commissioner may print or cause to be printed copies of the specifications of all letters-patent and of the drawings of the same, and copies of the claims of current issues, and copies of such laws, decisions, rules, regulations, and circulars as may be necessary for the information of the public. [See Revised Statutes, Sections 489, 490, and 491.]

SECTION 21. *And be it further enacted*, That 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 Secretary of the Interior and countersigned by the commissioner, and they shall be recorded, together with the specifica-

tion, in said office, in books to be kept for that purpose. [See Revised Statutes, Section 4883.]

SECTION 22. *And be it further enacted*, That 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 said invention or discovery throughout the United States and the Territories thereof, referring to the specification for the particulars thereof; and a copy of said specifications and of the drawings shall be annexed to the patent and be a part thereof. [See Revised Statutes, Section 4884.]

SECTION 23. *And be it further enacted*, That every patent shall 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 shall not be paid within that period, the patent shall be withheld. [See Revised Statutes, Section 4885.]

SECTION 24. *And be it further enacted*, 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, not known or used by others in this country, and not patented, or described in any printed publication in this or any foreign country, before his invention or discovery thereof, and not in public use or on sale for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the duty required by law, and other due proceedings had, obtain a patent therefor. [See Revised Statutes, Section 4886.]

SECTION 25. *And be it further enacted*, That 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: *Provided*, The same shall not have been introduced into public use in the United States for more than two years prior to the application, and that the patent shall 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 ; but in no case shall it be in force more than seventeen years. [See Revised Statutes, Section 4887.]

SECTION 26. *And be it further enacted*, That before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the commissioner, 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 ; and said specification and claim shall be signed by the inventor and attested by two witnesses. [See Revised Statutes, Section 4888.]

SECTION 27. *And be it further enacted*, That 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 said drawings, to be furnished by the Patent Office, shall be attached to the patent as part of the specification. [See Revised Statutes, Section 4889.]

SECTION 28. *And be it further enacted*, That 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. [See Revised Statutes, Section 4890.]

SECTION 29. *And be it further enacted*, That in all cases which admit of representation by model, the applicant, if required by the commissioner, shall furnish one of convenient size to exhibit advantageously the several parts of his invention or discovery. [See Revised Statutes, Section 4891.]

SECTION 30. *And be it further enacted*, That the applicant

shall make oath or affirmation 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. And said oath or affirmation 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 of the foreign country in which the applicant may be. [See Revised Statutes, Section 4892.]

SECTION 31. *And be it further enacted*, That on the filing of any such application and the payment of the duty required by law, the commissioner 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. [See Revised Statutes, Section 4893.]

SECTION 32. *And be it further enacted*, That all applications for patents shall be completed and prepared for examination within two years after the filing of the petition, and in default thereof, or upon failure of the applicant to prosecute the same within two years 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 that such delay was unavoidable. [See Revised Statutes, Section 4894.]

SECTION 33. *And be it further enacted*, That patents may be granted and issued or reissued to the assignee of the inventor or discoverer, the assignment thereof being first entered of record in the Patent Office; but in such case the application for the patent shall be made and the specifications sworn to by the inventor or discoverer; and also, if he be living, in case of an application for reissue. [See Revised Statutes, Section 4895.]

SECTION 34. *And be it further enacted*, That 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 shall be 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. [See Revised Statutes, Section 4896.]

SECTION 35. *And be it further enacted*, That 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 has failed 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: *Provided*, That the second application 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, as aforesaid, was ordered to issue, prior to the issue thereof: *And provided further*, That when an application for a patent has been rejected or withdrawn, prior to the passage of this act, the applicant shall have six months from the date of such passage to renew his application, or to file a new one; and if he omit to do either, his application shall be held to have been abandoned. Upon the hearing of such renewed applications abandonment shall be considered as a question of fact. [See Revised Statutes, Section 4897.]

SECTION 36. *And be it further enacted*, That every patent or any interest therein shall be assignable in law, by an instru-

ment 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 said 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. [See Revised Statutes, Section 4898.]

SECTION 37. *And be it further enacted*, That every person who may have purchased of the inventor, or with his knowledge and consent may have constructed any newly invented or discovered machine, or other patentable article, prior to the application by the inventor or discoverer for a patent, or sold or used 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. [See Revised Statutes, Section 4899.]

SECTION 38. *And be it further enacted*, That 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 cannot 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. [See Revised Statutes, Section 4900.]

SECTION 39. *And be it further enacted*, That if any person shall, in any manner, mark upon any thing 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 shall in any manner mark

upon or affix 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 shall in any manner mark upon or affix to any unpatented article the word "patent," or any word importing that the same is patented, for the purpose of deceiving the public, he shall be liable for every such offence to a penalty of not less than one hundred dollars, with costs; one moiety 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 offence may have been committed. [See Revised Statutes, Section 4901.]

SECTION 40. *And be it further enacted*, That any citizen of the United States, who shall have made any new invention or discovery, and shall desire further time to mature the same, may, on payment of the duty required by law, file in the Patent Office a caveat setting forth the design thereof, and of its distinguishing characteristics, and praying protection of his right until he shall have matured his invention; and such caveat shall be filed in the confidential archives of the office and preserved in secrecy, and shall be operative for the term of one year from the filing thereof; and if application shall be made within the year by any other person for a patent with which such caveat would in any manner interfere, the commissioner shall deposit the description, specification, drawings, and model of such application in like manner in the confidential archives of the office, and give notice thereof, by mail, to the person filing the caveat, who, if he would avail himself of his caveat, shall file his description, specification, drawings, and model within three months from the time of placing said notice in the post-office in Washington, with the usual time required for transmitting it to the caveator added thereto, which time shall be indorsed on the notice. And an alien shall have the privilege herein granted, if he shall have resided in the United States one year next preceding the filing

of his caveat, and made oath of his intention to become a citizen. [See Revised Statutes, Section 4902.]

SECTION 41. *And be it further enacted*, That whenever, on examination, any claim for a patent is rejected for any reason whatever, 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 shall persist in his claim for a patent, with or without altering his specifications, the commissioner shall order a re-examination of the case. [See Revised Statutes, Section 4903.]

SECTION 42. *And be it further enacted*, That 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 shall be adjudged the prior inventor, unless the adverse party shall appeal 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. [See Revised Statutes, Section 4904.]

SECTION 43. *And be it further enacted*, That the commissioner 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. [See Revised Statutes, Section 4905.]

SECTION 44. *And be it further enacted*, That 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 his agent or attorney, issue [a] subpœna for any witness residing or being within said district or terri-

cory, commanding him to appear and testify before any officer in said district or territory authorized to take depositions and affidavits, at any time and place in the subpœna stated; and if any witness, after being duly served with such subpœna, shall neglect or refuse to appear, or after appearing shall refuse 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. [See Revised Statutes, Sections 4906 and 4908.]

SECTION 45. *And be it further enacted*, That 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, 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, nor be deemed guilty of contempt for disobeying such subpœna, unless his fees and travelling 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. [See Revised Statutes, Sections 4906, 4907, and 4908.]

SECTION 46. *And be it further enacted*, That every applicant for a patent or 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 interference[s], in such case to the board of examiners-in-chief, having once paid the fee for such appeal provided by law. [See Revised Statutes, Section 4909.]

SECTION 47. *And be it further enacted*, That if such party is dissatisfied with the decision of the examiners-in-chief, he may, on payment of the duty required by law, appeal to the commissioner in person. [See Revised Statutes, Section 4910.]

SECTION 48. *And be it further enacted*, That if such party, except a party to an interference, is dissatisfied with the decision of the commissioner, he may appeal to the Supreme Court

of the District of Columbia, sitting in banc. [See Revised Statutes, Section 4911.]

SECTION 49. *And be it further enacted*, That when an appeal is taken to the Supreme Court 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. [See Revised Statutes, Section 4912.]

SECTION 50. *And be it further enacted*, That it shall be the duty of said court, on petition, to hear and determine such appeal, and to 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, notifying the commissioner of the time and place of hearing; and the revision shall be confined to the points set forth in the reasons of appeal. And 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 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. [See Revised Statutes, Section 4914.]

SECTION 51. *And be it further enacted*, That on receiving notice of the time and place of hearing such appeal, the commissioner shall notify all parties who appear to be interested therein in such manner as the court may prescribe. 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 it 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 machine or other thing for which a patent is demanded. [See Revised Statutes, Section 4913.]

SECTION 52. *And be it further enacted*, That whenever a patent on application is refused, for any reason whatever,

either by the commissioner 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 requisitions of law. And 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. [See Revised Statutes, Section 4915.]

SECTION 53. *And be it further enacted*, That 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 a 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 the case of his death or assignment of the whole or any undivided part of the original patent, to his executors, administrators, or assigns, for the unexpired part of the term of the original patent, the surrender of which shall take effect upon the issue of the amended patent; and 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. And the specifications and claim in every such case shall be subject to revision and restriction in the same manner as original applications are. And the patent so reissued, together with the corrected speci-

fication, shall have the effect and operation in law, on the trial of all actions for causes thereafter arising, as though 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. [See Revised Statutes, Section 4916.]

SECTION 54. *And be it further enacted*, That 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 duty 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 ; said 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 Revised Statutes, Section 4917.]

SECTION 55. *And be it further enacted*, That all actions, suits, controversies, and cases arising under the patent laws of the United States shall be originally cognizable, as well in equity as at law, by the circuit courts of the United States, or any district court having the powers and jurisdiction of a circuit court, or by the Supreme Court of the District of Colum-

bia, or of any territory ; and the court shall have power, upon bill in equity filed by any party aggrieved, 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 *claimant* [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 powers to increase the same in its discretion that are given by this act to increase the damages found by verdicts in actions upon the case ; but all actions shall be brought during the term for which the letters-patent shall be granted or extended, or within six years after the expiration thereof. [See Revised Statutes, Section 629, ¶ 9, and Section 4921.]

SECTION 56. *And be it further enacted*, That a writ of error or appeal to the Supreme Court of the United States shall lie from all judgments and decrees of any circuit court, or of any district court exercising the jurisdiction of a circuit court, or of the Supreme Court of the District of Columbia, or of any Territory, in any action, suit, controversy, or case, at law or in equity, touching patent rights, in the same manner and under the same circumstances as in other judgments and decrees of such circuit courts, without regard to the sum or value in controversy. [See Revised Statutes, Section 699.]

SECTION 57. *And be it further enacted*, That written or printed copies of any records, books, papers, or drawings belonging to the Patent Office, and of letters-patent under the signature of the commissioner or acting commissioner, with the seal of office affixed, shall be competent 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. And copies of the specifications and drawings of foreign letters-patent, certified in like manner, shall be primâ facie evidence of the fact of the granting of such foreign letters-patent, and of the date

and contents thereof. [See Revised Statutes, Sections 892 and 893.]

SECTION 58. *And be it further enacted*, That whenever there shall be interfering patents, any person interested in any one of such interfering patents, or in the working of the invention claimed under either of such patents, 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 having cognizance thereof, as hereinbefore provided, 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 rights of any person except the parties to the suit and those deriving title under them subsequent to the rendition of such judgment. [See Revised Statutes, Section 4918.]

SECTION 59. *And be it further enacted*, That damages for the infringement of any patent may be recovered by action on the case in any circuit court of the United States, or district court exercising the jurisdiction of a circuit court, or in the Supreme Court of the District of Columbia, or of any Territory, in the name of the party interested, either as patentee, assignee, or grantee. And whenever in any such action a verdict shall be 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. [See Revised Statutes, Section 629, ¶ 9, and Section 4919.]

SECTION 60. *And be it further enacted*, That whenever, through inadvertence, accident, or mistake, and without any wil[l]ful default or intent to defraud or mislead the public, a patentee shall have (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 as aforesaid, 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 bonâ fide his own, provided it shall be a material and substantial part of the thing patented, and be definitely distinguishable from the parts so claimed, without right as aforesaid, notwithstanding the specifications may embrace more than that of which the patentee was the original or 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; nor shall he be entitled to the benefits of this section if he shall have unreasonably neglected or delayed to enter said disclaimer. [See Revised Statutes, Section 4922.]

SECTION 61. *And be it further enacted*, That 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,

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 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 defences 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. [See Revised Statutes, Section 4920.]

SECTION 62. *And be it further enacted*, That whenever it shall appear that the 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. [See Revised Statutes, Section 4923.]

SECTION 63. *And be it further enacted*, That where the patentee of any invention or discovery, the patent for which was granted prior to the second day of March, eighteen hundred and sixty-one, shall desire an extension of his patent beyond the original term of its limitation, he shall make application therefor, in writing, to the commissioner, setting forth the reasons why such extension should be granted; and he shall also furnish a written statement under oath of the ascertained value of the invention or discovery, and of his receipts and expenditures on account thereof, sufficiently in detail to exhibit a true and faithful account of the loss and profit in any manner accruing to him by reason of said invention or discovery. And said application shall be filed not more than six months nor less than ninety days before the expiration of the

original term of the patent ; and no extension shall be granted after the expiration of said original term. [See Revised Statutes, Section 4924.]

SECTION 64. *And be it further enacted*, That upon the receipt of such application, and the payment of the duty required by law, the commissioner shall cause to be published in one newspaper in the city of Washington, and in such other papers published in the section of the country most interested adversely to the extension of the patent as he may deem proper, for at least sixty days prior to the day set for hearing the case, a notice of such application, and of the time and place when and where the same will be considered, that any person may appear and show cause why the extension should not be granted. [See Revised Statutes, Section 4925.]

SECTION 65. *And be it further enacted*, That on the publication of such notice, the commissioner shall refer the case to the principal examiner having charge of the class of inventions to which it belongs, who shall make to said commissioner a full report of the case, and particularly whether the invention or discovery was new and patentable when the original patent was granted. [See Revised Statutes, Section 4926.]

SECTION 66. *And be it further enacted*, That the commissioner shall, at the time and place designated in the published notice, hear and decide upon the evidence produced, both for and against the extension ; and if it shall appear to his satisfaction that the patentee, without neglect or fault on his part, has failed to obtain from the use and sale of his invention or discovery, a reasonable remuneration for the time, ingenuity, and expense bestowed upon it, and the introduction of it into use, and that it is just and proper, having due regard to the public interest, that the term of the patent should be extended, the said commissioner shall make a certificate thereon, renewing and extending the said patent for the term of seven years from the expiration of the first term, which certificate shall be recorded in the Patent Office, and thereupon the said patent shall have the same effect in law as though it had been originally granted for twenty-one years. [See Revised Statutes, Section 4927.]

SECTION 67. *And be it further enacted*, That the benefit of the extension of a patent shall extend to the assignees and grantees of the right to use the thing patented to the extent of their interest therein. [See Revised Statutes, Section 4928.]

SECTION 68. *And be it further enacted*, That the following shall be the rates for patent fees :—

On filing each original application for a patent, fifteen dollars.

On issuing each original patent, twenty dollars.

On filing each caveat, ten dollars.

On every application for the reissue of a patent, thirty dollars.

On filing each disclaimer, ten dollars.

On every application for the extension of a patent, fifty dollars.

On the granting of every extension of a patent, fifty 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, 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 ; of over one thousand words, three dollars.

For copies of drawings, the reasonable cost of making them. [See Revised Statutes, Section 4934.]

SECTION 69. *And be it further enacted*, That patent fees may be paid to the commissioner, 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, who shall give the depositor a receipt or certificate of deposit therefor. And 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 ; and all disbursements for said office shall be made

by the disbursing clerk of the Interior Department. [See Revised Statutes, Sections 496 and 4935.]

SECTION 70. *And be it further enacted*, That the Treasurer of the United States is authorized to pay back any sum or sums of money to any person who shall have paid the same into the treasury, or to any receiver or depositary, to the credit of the treasurer, as for fees accruing at the Patent Office through mistake, certificate thereof being made to said treasurer by the Commissioner of Patents. [See Revised Statutes, Section 4936.]

SECTION 71. *And be it further enacted*, That any person who, by his own industry, genius, efforts, and expense, has invented or produced any new and original design for a manufacture, bust, statue, alto-relievo, or bas-relief; any new and original design for the printing of wool[l]en, silk, cotton, or other fabrics; any new and original impression, ornament, pattern, print, or picture, to be printed, painted, cast, or otherwise placed on or worked into any article of manufacture; or any new, useful, and original shape or configuration of any article of manufacture, the same not having been known or used by others before his invention or production thereof, or patented or described in any printed publication, may, upon payment of the duty required by law, and other due proceedings had the same as in cases of inventions or discoveries, obtain a patent therefor. [See Revised Statutes, Section 4929.]

SECTION 72. *And be it further enacted*, That the commissioner may dispense with models of designs when the design can be sufficiently represented by drawings or photographs. [See Revised Statutes, Section 4930.]

SECTION 73. *And be it further enacted*, That 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. [See Revised Statutes, Section 4931.]

SECTION 74. *And be it further enacted*, That patentees of designs issued prior to March two, eighteen hundred and sixty-one, shall be entitled to extension of their respective patents

for the term of seven years, in the same manner and under the same restrictions as are provided for the extension of patents for inventions or discoveries issued prior to the second day of March, eighteen hundred and sixty-one. [See Revised Statutes, Section 4932.]

SECTION 75. *And be it further enacted*, That the following shall be the rates of fees in design cases :—

For three years and six months, ten dollars.

For seven years, fifteen dollars.

For fourteen years, thirty dollars.

For all other cases in which fees are required, the same rates as in cases of inventions or discoveries. [See Revised Statutes, Section 4934.]

SECTION 76. *And be it further enacted*, That all the regulations and provisions which apply to the obtaining or protection of patents for inventions or discoveries, not inconsistent with the provisions of this act, shall apply to patents for designs. [See Revised Statutes, Section 4933.]

[Sections 77 to 110, inclusive, refer to trade-marks and copyrights, and not to patents.]

SECTION 111. *And be it further enacted*, That the acts and parts of acts set forth in the schedule of acts cited, hereto annexed, are hereby repealed, without reviving any acts or parts of acts repealed by any of said acts, or by any clause or provisions therein : *Provided, however*, That the repeal hereby enacted shall not affect, impair, or take away any right existing under any of said laws ; but all actions and causes of action, both in law or in equity, which have arisen under any of said laws, may be commenced and prosecuted, and if already commenced may be prosecuted to final judgment and execution, in the same manner as though this act had not been passed, excepting that the remedial provisions of this act shall be applicable to all suits and proceedings hereafter commenced : *And provided also*, That all applications for patents pending at the time of the passage of this act, in cases where the duty has been paid, shall be proceeded with and acted on in the same manner as though filed after the passage thereof : *And provided further*, That all offences which are defined

and punishable under any of said acts, and all penalties and forfeitures created thereby and incurred before this act takes effect, may be prosecuted, sued for, and recovered, and such offences punished according to the provision of said acts, which are continued in force for such purpose.

APPROVED July 8, 1870.

Repealed June 22, 1874. Revised Statutes, Title LXXIV.

PATENT ACT OF MARCH 3, 1871.

16 STATUTES AT LARGE, 583.

An Act to amend an Act to revise, consolidate, and amend the Statutes relating to Patents and Copyrights.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That that part of section thirty-three of an act entitled "An act to revise, consolidate, and amend the statutes relating to patents and copyrights," approved July eighth, eighteen hundred and seventy, which requires that, in case of application by assignee or assignees for reissue of letters-patent, the application shall be made and the specification sworn to by the inventor or discoverer, if living, shall not be construed to apply to patents issued and assigned prior to July eighth, eighteen hundred and seventy.

APPROVED March 3, 1871.

Repealed June 22, 1874. Revised Statutes, Title LXXIV.

PATENT ACT OF MARCH 24, 1871.

17 STATUTES AT LARGE, 2.

An Act to further regulate the publication of the Specifications and Drawings of the Patent Office.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That if, in the judgment of the joint committee on printing, the provisions of the joint resolution providing for publishing specifications and drawings of the Patent Office, approved January eleventh, eighteen hundred and seventy-one, can be

performed under the direction of the Commissioner of Patents more advantageously than in the manner provided in said joint resolution, it shall be so done, under such limitations and conditions as the joint committee on printing may from time to time prescribe.

SECTION 2. That the price of the printed copies of specifications and drawings of patents, when uncertified, shall be determined by the Commissioner of Patents, ten cents being hereby fixed as the minimum, and fifty cents as the maximum price of the same; certified copies to be sold at the price fixed by the patent act of eighteen hundred and seventy.

APPROVED March 24, 1871.

Repealed June 22, 1874. Revised Statutes, Title LXXIV.

THE REVISED STATUTES

RELATING TO PATENTS.

440. Clerks and employés.
441. Secretary of the Interior.
475. Establishment of the Patent Office.
476. Officers and employés.
477. Salaries.
478. Seal.
479. Bonds of Commissioner and chief clerk.
480. Restrictions upon officers and employés.
481. Duties of Commissioner.
482. Duties of examiners-in-chief.
483. Establishment of regulations.
484. Arrangement and exhibition of models, &c.
485. Disposals of models on rejected applications.
486. Library.
487. Patent-agents may be refused recognition.
488. Printing of papers filed.
489. Printing copies of claims, laws, decisions, &c.
490. Printing specifications and drawings.
491. Additional specifications and drawings.
492. Lithographing and engraving.
493 Price of copies of specifications and drawings.
494. Annual report of the Commissioner.
496. Disbursements for Patent-Office.
629. Jurisdiction of Circuit Courts.
699. Writs of error and appeals, without reference to amount.
892. Copies of records, &c., of Patent-Office.
893. Copies of foreign letters-patent.
894. Printed copies of specifications and drawings of patents.
973. Costs where disclaimers are necessary.
4883. Patents, how issued, attested, and recorded.
4884. Their contents and duration.
4885. Date of patent.
4886. What inventions are patentable.

4887. Patents for inventions previously patented abroad.
4888. Requisites of specification and claim.
4889. Drawings, when requisite.
4890. Specimens of ingredients, &c.
4891. Model, when requisite.
4892. Oath required from applicant.
4893. Examination and issuing patent.
4894. Limitation upon time of completing application.
4895. Patents granted to assignee.
4896. When, and on what oath, executor or administrator may obtain patent.
4897. Renewal of application in cases of failure to pay fees in season.
4898. Assignment of patents.
4899. Persons purchasing of inventor before application may use or sell the thing purchased.
4900. Patented articles must be marked as such.
4901. Penalty for falsely marking or labelling articles as patented.
4902. Filing and effect of caveats.
4903. Notice of rejection of claim for patent to be given to applicant.
4904. Interferences.
4905. Affidavits and depositions.
4906. Subpœnas to witnesses.
4907. Witness fees.
4908. Penalty for failing to attend or refusing to testify.
4909. Appeals from primary examiners to examiners-in-chief
4910. From examiners-in-chief to Commissioner.
4911. From the Commissioner to the supreme court D. C.
4912. Notice of such appeal.
4913. Proceedings on appeal to supreme court.
4914. Determination of such appeal and its effect.
4915. Patents obtainable by bill in equity.
4916. Re-issue of defective patents.
4917. Disclaimer.
4918. Suits touching interfering patents.
4919. Suits for infringement; damages.
4920. Pleading and proof in actions for infringement.
4921. Power of courts to grant injunctions and estimate damages.
4922. Suit for infringement where specification is too broad.
4923. Patent not void on account of previous use in foreign country.
4924. Extension of patents granted prior to March 2, 1861.
4925. What notice of application for extension must be given.
4926. Applications for extension to whom to be referred.
4927. Commissioner to hear and decide the question of extension.
4928. Operation of extension.
4929. Patent for designs authorized.
4930. Models of designs.
4931. Duration of patents for designs.
4932. Extension of patents for designs.
4933. Patents for designs subject to general rules of patent-law.
4934. Fees in obtaining patents, &c.
4935. Mode of payment.
4936. Refunding.

SECTION 440. There shall also be in the Department of the Interior:

* * * * * *

In the Patent Office:

One chief clerk, at a salary of two thousand five hundred dollars a year.

One examiner in charge of interferences, at a salary of two thousand five hundred dollars a year.

One examiner in charge of trade-marks, at a salary of two thousand five hundred dollars a year.

Twenty-four principal examiners, at a salary of two thousand five hundred dollars a year each.

Twenty-four first assistant examiners, at a salary of one thousand eight hundred dollars a year each.

Twenty-four second assistant examiners (two of whom may be women), at a salary of one thousand six hundred dollars a year each.

Twenty-four third assistant examiners, at a salary of one thousand four hundred dollars a year each.

One librarian, at a salary of two thousand dollars a year.

One machinist, at a salary of one thousand six hundred dollars a year.

Three skilled draughtsmen, at a salary of one thousand two hundred dollars a year each.

Thirty-five copyists of drawings, at a salary of one thousand dollars a year each.

One messenger and purchasing clerk, at a salary of one thousand dollars a year.

One skilled laborer, at a salary of one thousand two hundred dollars a year.

Eight attendants in the model-room, at a salary of one thousand dollars a year each.

Eight attendants in the model-room, at a salary of nine hundred dollars a year each. [See prior patent statutes: Sections 2 and 3, 1870; Sections 4 and 7, 1861; Sections 1 and 3, 1848; Section 10, 1837; Section 2, 1836.]

SECTION 441. The Secretary of the Interior is charged with supervising all public business relating to * * *

Fifth. Patents for inventions. [See prior patent statutes: Section 1, 1870; Section 2, 1849.]

SECTION 475. 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. [See prior patent statutes: Section 1, 1870; Section 1, 1836.]

SECTION 476. 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 prior patent statutes: Section 2, 1870; Section 2, 1861; Section 1, 1836.]

SECTION 477. The salaries of the officers mentioned in the preceding section shall be as follows:

The Commissioner of Patents, four thousand five hundred dollars a year.

The Assistant Commissioner of Patents, three thousand dollars a year.

Three examiners-in-chief, three thousand dollars a year each. [See prior patent statutes: Section 4, 1870; Sections 2 and 4, 1861; Section 11, 1837; Section 1, 1836.]

SECTION 478. 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. [See prior patent statutes: Section 12, 1870; Section 4, 1836.]

SECTION 479. 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 offices. [See prior patent statutes: Section 6, 1870; Section 3, 1836.]

SECTION 480. 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. [See prior patent statutes: Section 16, 1870.]

SECTION 481. 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. [See prior patent statutes: Section 7, 1870; Section 1, 1836.]

SECTION 482. The examiners-in-chief shall be persons of competent legal knowledge and scientific ability, whose duty it shall be, 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 re-issues 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 them. [See prior patent statutes: Section 10, 1870; Section 2, 1861.]

SECTION 483. 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. [See prior patent statutes: Section 19, 1870.]

SECTION 484. 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. [See prior patent statutes: Section 13, 1870; Section 20, 1836.]

SECTION 485. 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. [See prior patent statutes: Section 14, 1870; Section 5, 1861.]

SECTION 486. 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. [See prior patent statute: Section 15, 1870.]

SECTION 487. 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. [See prior patent statute: Section 17, 1870.]

SECTION 488. 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. [See prior patent statutes: Section 18, 1870; Section 8, 1861.]

SECTION 489. 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. [See prior patent statute: Section 20, 1870.]

SECTION 490. 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 cer-

tified 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 Joint Resolution No. 5, January 11, 1871, 16 Statutes at Large, 590.]

SECTION 491. 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. [See Joint Resolution No. 5, January 11, 1871, 16 Statutes at Large, 590.]

SECTION 492. 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 judginent 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. [See Joint Resolution No. 5, January 11, 1871, 16 Statutes at Large, 590, and Section 1 of Patent Act of March 24, 1871.]

SECTION 493. The price to be paid for uncertified printed copies of specifications and drawings of patents shall be deter-

mined by the Commissioner of Patents, within the limits of ten cents as the minimum and fifty cents as the maximum price. [See prior patent statute : Section 1, March 24, 1871.]

SECTION 494. 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. [See prior patent statutes : Section 9, 1870 ; Section 14, 1837 ; Section 1, July 3, 1832.]

SECTION 496. All disbursements for the Patent-Office shall be made by the disbursing clerk of the Interior Department. [See prior patent statutes : Section 69, 1870 ; Section 14, 1837.]

SECTION 629. The circuit courts shall have original jurisdiction, as follows : * * *

Ninth. Of all suits at law or in equity arising under the patent or copyright laws of the United States. [See prior patent statutes : Section 55, 1870 ; Section 14, 1836 ; Section 1, 1819.]

SECTION 699. A writ of error may be allowed to review any final judgment at law, and an appeal shall be allowed from any final decree in equity hereinafter mentioned, without regard to the sum or value in dispute :

First. Any final judgment at law or final decree in equity of any circuit court, or of any district court acting as a circuit court, or of the Supreme Court of the District of Columbia, or of any Territory, in any case touching patent-rights or copyrights. [See prior patent statutes : Section 56, 1870 ; Section 1. February 18, 1861 ; Section 16, 1836 ; Section 1, 1819.]

SECTION 892. 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. [See prior patent statutes: Section 57, 1870; Section 15, March 2, 1861; Section 2, 1837; Section 4, 1836; Sections 3, 6, 1790.]

SECTION 893. Copies of the specifications and drawings of foreign letters-patent, certified as provided in the pr ceding section, shall be primâ-facie evidence of the fact of the granting of such letters-patent, and of the date and contents thereof. [See prior patent statute: Section 57, 1870.]

SECTION 894. 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. [See Joint Resolution No. 5, January 11, 1871; 16 Statutes at Large, 590.]

SECTION 973. 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 Revised Statutes, Section 4922; and prior patent statutes: Section 60, 1870; Section 9, 1837; Section 15, 1836.]

SECTION 4883. 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 Secretary of the Interior and countersigned 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. [See prior pat-

ent statutes : Section 21, 1870 ; Section 5, 1836 ; Section 1, 1793 ; Section 1, 1790.]

SECTION 4884. 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. [See prior patent statutes : Section 22, 1870 ; Section 16, 1861 ; Section 5, 1836 ; Section 1, 1793 ; Section 1, 1790.]

SECTION 4885. 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. [See prior patent statutes : Section 23, 1870 ; Section 3, 1863 ; Section 8, 1836.]

SECTION 4886. 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, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, and not in public use or on sale 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, obtain a patent therefor. [See prior patent statutes : Section 24, 1870 ; Sections 6 and 7, 1836 ; Section 1, 1800 ; Section 1, 1793.]

SECTION 4887. 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. [See prior patent statutes: Section 25, 1870; Section 6, 1839; Section 8, 1836.]

SECTION 4888. 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. [See prior patent statutes: Section 26, 1870; Section 6, 1836; Section 1, 1793; Section 2, 1790.]

SECTION 4889. 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. [See prior patent statutes: Section 27, 1870; Section 6, 1837; Section 6, 1836; Section 3, 1793.]

SECTION 4890. 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. [See prior patent statutes: Section 28, 1870; Section 6, 1836; Section 3, 1793.]

SECTION 4891. 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. [See prior patent statutes: Section 29, 1870; Section 6, 1836; Section 3, 1793; Section 2, 1790.]

SECTION 4892. 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 of the foreign country in which the applicant may be. [See prior patent statutes: Section 30, 1870; Section 4, 1842; Section 6, 1836; Section 3, 1793.]

SECTION 4893. 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. [See prior patent statutes: Section 31, 1870; Section 7, 1836; Section 1, 1790.]

SECTION 4894. All applications for patents shall be completed and prepared for examination within two years after the filing of the application, and in default thereof, or upon failure of the applicant to prosecute the same within two years 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. [See prior patent statutes: Section 32, 1870; Section 12, 1861.]

SECTION 4895. Patents may be granted and issued or re-issued 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 re-issue 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. [See prior patent statutes: Section 33, 1870; Section 6, 1837.]

SECTION 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 life time; 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. [See prior patent statutes: Section 34, 1870; Section 10, 1836; Section 2, 1800.]

SECTION 4897. 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. [See prior patent statutes: Section 35, 1870; Section 1, 1865; Section 1, 1864.]

SECTION 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. 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. [See prior patent statutes: Section 36, 1870; Section 11, 1836; Section 4, 1793.]

SECTION 4899. 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. [See prior patent statutes: Section 37, 1870; Section 7, 1839.]

SECTION 4900. It shall be the dut 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 cannot 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. [See prior

patent statutes : Section 38, 1870 ; Section 13, 1861 ; Section 6, 1842.]

SECTION 4901. 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 offence, 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 offence may have been committed. [See prior patent statutes : Section 39, 1870 ; Section 5, 1842.]

SECTION 4902. Any citizen of the United States who makes any new invention or discovery, and desires further time to mature the same, may, on payment of the fees required by law, file in the Patent-Office a caveat setting forth the design thereof, and of its distinguishing characteristics, and praying protection of his right until he shall have matured his invention. Such caveat shall be filed in the confidential archives of the office and preserved in secrecy, and shall be operative for the term of one year from the filing thereof ; and if application is made within the year by any other person for a patent with which such caveat would in any manner interfere, the Commissioner shall deposit the description, specification, drawings, and model of such application in like manner in the confidential archives of the office, and give notice thereof, by

mail, to the person by whom the caveat was filed. If such person desires to avail himself of his caveat, he shall file his description, specifications, drawings, and model within three months from the time of placing the notice in the post-office in Washington, with the usual time required for transmitting it to the caveator added thereto; which time shall be indorsed on the notice. An alien shall have the privilege herein granted, if he has resided in the United States one year next preceding the filing of his caveat, and has made oath of his intention to become a citizen. [See prior patent statutes: Section 40, 1870; Section 9, 1861; Section 12, 1836.]

SECTION 4903. 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. [See prior patent statutes: Section 41, 1870; Section 7, 1836.]

SECTION 4904. 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. [See prior patent statutes: Section 42, 1870; Section 8, 1836; Section 9, 1793.]

SECTION 4905. 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. [See prior patent statutes: Section 43, 1870; Section 1, March 3, 1861; Section 12, 1839.]

SECTION 4906. 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 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. [See prior patent statutes: Section 44, 1870; Section 1, 1861.]

SECTION 4907. 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. [See prior patent statutes: Section 45, 1870; Section 1, 1861.]

SECTION 4908. 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 travelling 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. [See prior patent statutes: Sections 44 and 45, 1870; Section 1, 1861.]

SECTION 4909. 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. [See prior patent statutes: Section 46, 1870; Section 1, 1866.]

SECTION 4910. 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. [See prior patent statutes: Section 47, 1870; Section 2, 1861.]

SECTION 4911. If such party, except a party to an interference, is dissatisfied with the decision of the Commissioner, he may appeal to the Supreme Court of the District of Columbia, sitting in banc. [See prior patent statutes: Section 48, 1870; Section 1, 1852; Section 11, 1839.]

SECTION 4912. When an appeal is taken to the Supreme Court 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. [See prior patent statute: Section 49, 1870.]

SECTION 4913. 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. [See prior patent statute: Section 51, 1870.]

SECTION 4914. 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 pro-

ceedings 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. [See prior patent statute: Section 50, 1870.]

SECTION 4915. 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. [See Revised Statutes and prior patent statutes: Section 52, 1870; Section 10, 1839.]

SECTION 4916. 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 the 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 re-issue for each of such re-issued 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 re-issued, together with the corrected specification, 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. [See prior patent statutes: Section 53, 1870; Sections 5 and 8, 1837; Section 13, 1836; Section 3, 1832.]

SECTION 4917. 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 prior patent statutes: Section 54, 1870; Section 7, 1837.]

SECTION 4918. 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. [See prior patent statutes: Section 58, 1870; Section 16, 1836.]

SECTION 4919. 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. [See prior patent statutes: Section 55, 1870; Section 14, 1836; Section 3, 1800; Section 5, 1793; Section 4, 1790.]

SECTION 4920. 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,

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 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 defences 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. [See prior patent statutes : Section 61, 1870 ; Section 15, 1836 ; Section 6, 1793 ; Section 6, 1790.]

SECTION 4921. 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 dam-

ages 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. [See prior patent statutes: Section 55, 1870; Section 17, 1836; Section 1, 1819.]

SECTION 4922. 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 bonâ 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 prior patent statutes: Section 60, 1870; Section 9, 1837.]

SECTION 4923. 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. [See prior patent statutes: Section 62, 1870; Section 15, 1836.]

SECTION 4924. Where the patentee of any invention or dis-

covery, the patent for which was granted prior to the second day of March, eighteen hundred and sixty-one, shall desire an extension of this patent beyond the original term of its limitation, he shall make application therefor, in writing, to the Commissioner of Patents, setting forth the reasons why such extension should be granted; and he shall also furnish a written statement under oath of the ascertained value of the invention or discovery, and of his receipts and expenditures on account thereof, sufficiently in detail to exhibit a true and faithful account of the loss and profit in any manner accruing to him by reason of the invention or discovery. Such application shall be filed not more than six months nor less than ninety days before the expiration of the original term of the patent; and no extension shall be granted after the expiration of the original term. [See prior patent statutes: Section 63, 1870; Section 1, 1848; Section 18, 1836; Section 2, July 3, 1832.]

SECTION 4925. Upon the receipt of such application, and the payment of the fees required by law, the Commissioner shall cause to be published in one newspaper in the city of Washington, and in such other papers published in the section of the country most interested adversely to the extension of the patent as he may deem proper, for at least sixty days prior to the day set for hearing the case, a notice of such application, and of the time and place when and where the same will be considered, that any person may appear and show cause why the extension should not be granted. [See prior patent statutes: Section 64, 1870; Section 18, 1836.]

SECTION 4926. Upon the publication of the notice of an application for an extension, the Commissioner shall refer the case to the principal examiner having charge of the class of inventions to which it belongs, who shall make the Commissioner a full report of the case, stating particularly whether the invention or discovery was new and patentable when the original patent was granted. [See prior patent statutes: Section 65, 1870; Section 1, 1848; Section 18, 1836.]

SECTION 4927. The Commissioner shall, at the time and place designated in the published notice, hear and decide upon the evidence produced, both for and against the extension;

and if it shall appear to the satisfaction of the Commissioner that the patentee, without neglect or fault on his part, has failed to obtain from the use and sale of his invention or discovery a reasonable remuneration for the time, ingenuity, and expense bestowed upon it, and the introduction of it into use, and that it is just and proper, having due regard to the public interest, that the term of the patent should be extended, the Commissioner shall make a certificate thereon, renewing and extending the patent for the term of seven years from the expiration of the first term. Such certificate shall be recorded in the Patent-Office; and thereupon such patent shall have the same effect in law as though it had been originally granted for twenty-one years. [See prior patent statutes: Section 66, 1870; Section 18, 1836.]

SECTION 4928. The benefit of the extension of a patent shall extend to the assignees and grantees of the right to use the thing patented, to the extent of their interest therein. [See prior patent statutes: Section 67, 1870; Section 18, 1836.]

SECTION 4929. Any person who, by his own industry, genius, efforts, and expense, has invented and produced any new and original design for a manufacture, bust, statue, alto-relievo, or bas-relief; any new and original design for the printing of woollen, silk, cotton, or other fabrics; any new and original impression, ornament, patent, print, or picture to be printed, painted, cast, or otherwise placed on or worked into any article of manufacture; or any new, useful, and original shape or configuration of any article of manufacture, the same not having been known or used by others before his invention or production thereof, or patented or described in any printed publication, may, upon payment of the fee prescribed, and other due proceedings had the same as in cases of inventions or discoveries, obtain a patent therefor. [See prior patent statutes: Section 71, 1870; Section 11, March 2, 1861; Section 3, 1842.]

SECTION 4930. The Commissioner may dispense with models of designs when the design can be sufficiently represented by drawings or photographs. [See prior patent statute: Section 72, 1870.]

SECTION 4931. 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. [See prior patent statutes: Section 73, 1870; Section 11, 1861; Section 3, 1842.]

SECTION 4932. Patentees of designs issued prior to the second day of March, eighteen hundred and sixty-one, shall be entitled to extension of their respective patents for the term of seven years, in the same manner and under the same restrictions as are provided for the extension of patents for inventions or discoveries, issued prior to the second day of March, eighteen hundred and sixty-one. [See prior patent statutes: Section 74, 1870; Section 11, March 2, 1861.]

SECTION 4933. 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. [See prior patent statute: Section 76, 1870.]

SECTION 4934. The following shall be the rate 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 filing each caveat, ten dollars.

On every application for the re-issue of a patent, thirty dollars.

On filing each disclaimer, ten dollars.

On every application for the extension of a patent, fifty dollars.

On the granting of every extension of a patent, fifty 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; of over one thousand words, three dollars.

For copies of drawings, the reasonable cost of making them. [See prior patent statutes: Section 2, March 24, 1871; Sections 68 and 75, 1870; Section 1, 1866; Section 10, March 2, 1861; Section 2, 1848; Section 8, 1839; Sections 4, 9, 11, 1836; Section 11, 1793; Section 7, 1790.]

SECTION 4935. 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. [See prior patent statutes: Section 69, 1870; Section 14, 1837.]

SECTION 4936. 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. [See prior patent statutes: Section 69, 1870; Section 1, 1842.]

APPROVED June 22, 1874.

PATENT ACT OF FEBRUARY 16, 1875.

18 STATUTES AT LARGE, PART 3, 316.

Section 2 of an Act to facilitate the disposition of cases in the Supreme Court of the United States, and for other purposes.

SECTION 2. The said [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 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.

APPROVED February 16, 1875.

PATENT ACT OF 1887.

24 STATUTES AT LARGE, CHAP. 105.

An Act to amend the law relating to patents, trade-marks and copyright.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, 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.

SECTION 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.

APPROVED February 4, 1887.

PATENT ACT OF 1888.

25 STATUTES AT LARGE, CHAP. 15.

An Act to amend section four thousand eight hundred and eighty-three of the Revised Statutes, to enable the Assistant Secretary of the Interior to sign patents.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section four thousand eight hundred and eighty-three of the Revised Statutes is hereby amended by inserting after the words "Secretary of the Interior," where they occur therein, the following words: "or under his direction by one of the Assistant Secretaries of the Interior," so that the said section as amended will read as follows:

"SECTION 4883. 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 Secretary of the Interior, or under his direction by one of the Assistant Secretaries of the Interior, and countersigned 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."

APPROVED February 18, 1888.

JUDICIARY ACT OF 1891.*

26 STATUTES AT LARGE, CHAP. 517.

As Amended February 18, 1895.

28 STATUTES AT LARGE, CHAP. 96.

An Act to establish Circuit Courts of Appeals, and to define and regulate in certain cases the jurisdiction of the Courts of the United States, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress Assembled,

SECTION 6. That the Circuit Courts of Appeals, established by this act, shall exercise appellate jurisdiction to review by appeal or by writ of error final, decisions in the District Courts and the existing Circuit Courts, unless otherwise provided by law, and the judgments or decrees of the Circuit Courts of Appeals shall be final in all cases arising under the patent laws, excepting that in every such subject within its appellate jurisdiction, 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 Courts of Appeals in such case, or it may require that the whole record and cause may 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. And excepting also that in any such case as is hereinbefore made final in the Circuit Court of Appeals, it shall be competent for the Supreme Court to require, by certiorari or otherwise, 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.

* The parts which are not relevant to patent cases are omitted.

SECTION 7. That where, upon a hearing in equity in a District Court or a Circuit Court, 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, in a case in which an appeal from a final decree may be taken under the provisions of this Act to the Circuit Court of Appeals, an appeal may be taken from such interlocutory order or decree, granting, continuing, refusing, dissolving or refusing to dissolve an injunction, to the Circuit Court of Appeals; *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 during the pendency of such appeal; *And provided* further that the court below may in its discretion require as a condition of the appeal, an additional injunction bond.

SECTION 10. And whenever on appeal or writ of error or otherwise, a case coming from a Circuit Court of Appeals shall be reviewed and determined in the Supreme Court, the cause shall be remanded by the Supreme Court to the proper District or Circuit Court, for further proceedings in pursuance of such determination. Whenever on appeal or writ of error or otherwise a case coming from a District or Circuit Court shall be reviewed and determined in the Circuit Court of Appeals, in a case in which the decision in the Circuit Court of Appeals is final, such cause shall be remanded to the said District or Circuit Court, for further proceedings to be there taken in pursuance of such determination.

SECTION 11. That no appeal or writ of error by which any order, judgment, or decree may be reviewed in the Circuit Courts of Appeals under the provisions of this Act, shall be taken or sued out except within six months after the entry of the order, judgment, or decree sought to be reviewed. And all provisions of law now in force regulating the methods and system of review, through appeals or

writs of error, shall regulate the methods and system of appeals and writs of error provided for in this act in respect of the Circuit Courts of Appeals, including all provisions for bonds or other securities to be required and taken on such appeals and writs of error, and any judge of the Circuit Courts of Appeals, in respect of cases brought or to be brought to that court, shall have the same powers and duties as to the allowance of appeals or writs of error, and the conditions of such allowance, as now by law belong to the justices or judges in respect of the existing courts of the United States respectively.

SECTION 14. And all acts and parts of acts relating to appeals or writs of error inconsistent with the provisions for review by appeals or writs of error in the preceding sections five and six of this act are hereby repealed.

SECTION 15. That the Circuit Court of Appeals in cases in which the judgments of the Circuit Courts of Appeals are made final by this act shall have the same appellate jurisdiction, by writ of error or appeal, to review the judgments, orders, and decrees of the Supreme Courts of the several Territories as by this act they may have to review the judgments, orders, and decrees of the District Courts and Circuit Courts; and for that purpose the several Territories shall, by order of the Supreme Court, to be made from time to time, be assigned to particular circuits.

APPROVED March 3, 1891.

JUDICIARY ACT OF 1893.*

27 STATUTES AT LARGE, CHAP. 74.

AN ACT to establish a Court of Appeals for the District of Columbia, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, 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, which shall consist of

* All parts not relevant to patent law, are omitted.

one chief justice and two associate justices, who shall be appointed by the President, by and with the advice and consent of the Senate, and shall hold office during good behavior.

SECTION 7. That any party aggrieved by any final order, judgment, or decree of the Supreme Court of the District of Columbia, or of any justice thereof, may appeal therefrom to the Court of Appeals hereby created; and upon such appeal the Court of Appeals shall review such order, judgment, or decree, and affirm, reverse, or modify the same as shall be just. Appeals shall also be allowed to said Court of Appeals from all interlocutory orders of the Supreme Court of the District of Columbia, or by any justice thereof, whereby the possession of property is changed or affected, such as orders for the appointment of receivers, granting injunctions, dissolving writs of attachment, and the like; and also from any other interlocutory order, in the discretion of said Court of Appeals, whenever it is made to appear to said court upon petition that it will be in the interest of justice to allow such appeal.

SECTION 8. That any final judgment or decree of the said Court of Appeals may be re-examined and affirmed, reversed or modified by the Supreme Court of the United States, upon writ of error or appeal, in cases, without regard to the sum or value of the matter in dispute, wherein is involved the validity of any patent.

SECTION 9. 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 seven hundred and eighty 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.

APPROVED February 9, 1893.

FORMS OF PATENT PLEADINGS.

DECLARATION.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

OF THE SEPTEMBER TERM OF THE YEAR EIGHTEEN HUNDRED AND NINETY-FIVE.

DISTRICT OF CONNECTICUT, *ss.*

THOMAS TRACY, of Hartford, Connecticut, who is a citizen of the State of Connecticut, and of the United States, plaintiff in this suit, by John Jay, his attorney, complains of the Atherton Electric Company, which is a corporation created and existing in due form of law in the State of Connecticut, defendant, of a plea of trespass on the case.

For that, Samuel Sinclair, of New Haven, Connecticut, before and at the time of his application for the hereinafter mentioned letters patent, was a citizen of the United States, and was the true original and first inventor of a certain new and useful machine, fully described in the specification of the letters patent hereinafter mentioned, and named therein an "Improved Dynamo," and which was not known or used in this country, and not patented or described in any printed publication in this or in any foreign country, before his invention thereof; and was not in public use or on sale, in this country, more than two years prior to his application for letters patent of the United States therefor.

And for that, heretofore, to wit: on the first day of June, 1878, and before the issuing of the hereinafter mentioned

letters patent, the said Samuel Sinclair, by an instrument in writing duly executed and delivered by him, and bearing date on the last named day, did assign to Rufus Russell, of Meriden, Connecticut, all the right, title, and interest whatever in said invention; and for that, said instrument in writing was duly recorded in the Patent Office on the tenth day of June, 1878.

And for that, on the sixteenth day of July, 1878, letters patent No. 206,206 for said invention, in due form of law, were, on the application of said Samuel Sinclair, issued and delivered to said Rufus Russell, in the name of the United States of America, and under the seal of the Patent Office of the United States, and were signed by the Secretary of the Interior of the United States, and countersigned by the Commissioner of Patents; and for that, said letters patent did grant to said Rufus Russell, his heirs or assigns, for the term of seventeen years, the exclusive right to make, use, and vend the said invention, throughout the United States, and the Territories thereof; and which letters patent the plaintiff now brings here into court.

And the plaintiff says, that the said Rufus Russell, before the committing of the grievances hereinafter mentioned, to wit: on the sixteenth day of September, 1880, by a certain instrument in writing, duly executed and delivered by him, and bearing date on said last mentioned day, did assign to the said plaintiff, the entire right, title, and interest in and to the then unexpired portion of the term of said letters patent, which instrument in writing was recorded in the Patent Office on the thirty-first day of October, 1880.

And the plaintiff further says, that always hitherto, from the time of the execution of the said last mentioned instrument, up to the expiration of the said letters patent, he was the sole owner of said letters patent, and is now the sole owner of all rights of action which arose from any infringement thereof during that time.

And the plaintiff further says, that the said Rufus Russell, and the said plaintiff, and all persons who ever made or sold any specimen of said "Improved Dynamo" for or

under them, or either of them, gave sufficient notice to the public that the same was patented, by fixing thereon the word "patented" together with the day and year the said letters patent were granted.

Yet the defendant, well knowing the premises, but contriving to injure the plaintiff, heretofore, to wit: on and after the first day of January, 1881, and up to and on the sixteenth day of July, 1895, and during and within the term of seventeen years mentioned in said letters patent, and after the execution of the said assignment to the plaintiff, and before the bringing of this suit, and within the United States, unlawfully, wrongfully, and injuriously, and with intent to deprive the plaintiff of the royalties which he might and otherwise would have derived from the sale of licenses to make and use and sell specimens of said machine, and without the license of the plaintiff or of the said Rufus Russell, and against the will of the plaintiff, did make, and did use, and did sell, and did cause to be made, and did cause to be used, and did cause to be sold, sundry specimens of said machine, and of machines which contained and employed substantially the invention covered by said letters patent, and particularly pointed out in the third claim thereof, in infringement of the said exclusive rights secured to the said Rufus Russell by the letters patent aforesaid, and assigned by him to the said plaintiff, as hereinbefore set forth, and contrary to the statutes of the United States in such cases made and provided; whereby the plaintiff has been and is greatly injured, and has been deprived of large royalties which he might and otherwise would have derived from the sale of licenses to make and use and sell specimens of said machine, and has sustained actual damages thereby to the amount of ten thousand dollars.

Wherefore, by force of the statutes of the United States, a right of action has accrued to the said plaintiff to recover the said actual damages, and such additional amount, not exceeding, in the whole, three times the amount of such actual damages, as the court may see fit to adjudge and order, besides costs.

Yet the defendant, though often requested so to do, has never paid the same, nor any part thereof, but has refused, and still refuses so to do, and therefore the plaintiff brings his suit.

JOHN JAY,
Attorney for the Plaintiff.

PLEA IN BAR.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY *v.* THE ATHERTON ELECTRIC COMPANY.	*Trespass on the Case.*

And the said defendant, by Richard Ray, its attorney, comes and defends the wrong and injury when, etc., and says, that it is not guilty of the supposed grievances above laid to its charge, or any or either of them, or any part thereof, in manner and form as the said plaintiff has above thereof complained against it. And of this the defendant puts itself upon the country.

And for a further plea in this behalf, the defendant says, that the machine covered by the letters patent mentioned in the plaintiff's declaration, was not an invention when produced by the said Samuel Sinclair. And of this the defendant puts itself upon the country.

And for a further plea in this behalf, the defendant says, that the said machine was not novel when produced by the said Samuel Sinclair; for that, a machine substantially identical with it in character, was previously patented in

letters patent of the United States, granted to Mason Montgomery, May 16, 1872; and for that, another like machine was previously described on page 777 of a certain printed book entitled "The Day of the Dynamo," published in London, England, in the year 1873, by William Wright, of Paternoster Row; and for that, still another like machine was previously known and used by Nathan Norris, of Rochester, New York, in said Rochester, in the year 1874. And of this the defendant puts itself upon the country.

And for a further plea in this behalf, the defendant says, that said Samuel Sinclair actually abandoned his said alleged invention, before said letters patent were granted. And this the defendant is ready to verify.

And for a further plea in this behalf, the defendant says, that said alleged invention was in public use in this country more than two years before said Samuel Sinclair made any application for letters patent thereon. And of this the defendant puts itself upon the country.

And for a further plea in this behalf, the defendant says, that the invention covered by said letters patent of July 16, 1878, was previously patented in the republic of France, to said Samuel Sinclair, for fifteen years from August 1, 1877, and that the foreign patent thus granted expired August 1, 1892. And this the defendant is ready to verify.

And for a further plea in this behalf, the defendant says, that the plaintiff's action is barred by Section 1375 of the General Statutes of Connecticut, so far as said action is based upon any alleged doings of the defendant prior to August 10, 1889. And this the defendant is ready to verify.

RICHARD RAY,
Attorney for the Defendant.

REPLICATION.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY *v.* THE ATHERTON ELECTRIC COMPANY.	*Trespass on the Case.*

And the said plaintiff, as to the said pleas of the said defendant by it above pleaded, of which it has put itself upon the country, doth the like.

And the plaintiff, as to the said plea of the defendant, by it fourthly above pleaded, says that the said Samuel Sinclair did not actually abandon said invention before said letters patent were granted. And of this the plaintiff puts himself upon the country.

And the plaintiff, as to the said plea of the defendant, sixthly above pleaded, says that the invention covered by said letters patent of July 16, 1878, was not previously patented in the republic of France. And of this the plaintiff puts himself upon the country.

And the plaintiff, as to the said plea of the defendant, seventhly above pleaded, says that the defendant fraudulently concealed from the plaintiff, until after August 10, 1889, the existence of that part which accrued prior to that day, of the cause of the plaintiff's action. And this the plaintiff is ready to verify.

JOHN JAY,
Attorney for the Plaintiff.

REJOINDER.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY *v.* THE ATHERTON ELECTRIC COMPANY.	*Trespass on the Case.*

And the said defendant, as to the said replication of the said plaintiff, to the said fourth and sixth pleas of the said defendant, and of which he hath put himself upon the country, doth the like.

And the said defendant, as to the replication of the plaintiff, to the said seventh plea of the defendant, says that the defendant did not fraudulently conceal from the plaintiff until after August 10, 1889, or at any time, the existence of *that part which accrued prior to that day* of the alleged cause of the plaintiff's action. And of this the defendant puts itself upon the country.

RICHARD RAY,
Attorney for the Defendant.

SUR-REJOINDER.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY *v.* THE ATHERTON ELECTRIC COMPANY.	*Trespass on the Case.*

And the said plaintiff, as to the said rejoinder of the said defendant, and whereof it hath put itself upon the country, doth the like.

JOHN JAY,
Attorney for the Plaintiff.

BILL OF COMPLAINT.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

To the Judges of the Circuit Court of the United States, for the District of Connecticut.

IN EQUITY.

THOMAS TRACY, of Hartford, Connecticut, who is a citizen of the State of Connecticut, and of the United States, brings this his bill into this court, against The Atherton Electric Company, which is a corporation created and existing in due form of law in the State of Connecticut.

And thereupon your orator complains and says, on information and belief, that Samuel Sinclair, of New Haven, Connecticut, before and at the time of his application for the hereinafter mentioned letters patent, was a citizen of the United States, and was the true original and first inventor of a certain new and useful machine, fully described in the

specification of the letters patent hereinafter mentioned, and named therein an "Improved Dynamo," and which was not known or used in this country, and not patented or described in any printed publication in this or in any foreign country, before his invention thereof; and was not in public use or on sale, in this country, more than two years prior to his application for letters patent of the United States therefor.

And your orator further shows unto your Honors, on information and belief, that on the first day of June, 1888, and before the issuing of the hereinafter mentioned letters patent, the said Samuel Sinclair, by an instrument in writing duly executed and delivered by him, and bearing date on the last named day, did assign to Rufus Russell, of Meriden, Connecticut, all the right, title and interest whatever in said invention; and that said instrument in writing was duly recorded in the Patent Office on the tenth day of June, 1888.

And your orator further shows, on information and belief, that on the sixteenth day of July, 1888, letters patent No. 386,386, for said invention, in due form of law, were on the application of said Samuel Sinclair, issued and delivered to said Rufus Russell, in the name of the United States of America, and under the seal of the Patent Office of the United States, and were signed by the Secretary of the Interior of the United States, and countersigned by the Commissioner of Patents; and that the said letters patent did grant to the said Rufus Russell, his heirs or assigns, for the term of seventeen years, the exclusive right to make, use and vend the said invention throughout the United States and the Territories thereof; and which letters patent the complainant now brings here into court.

And your orator further shows, that the said Rufus Russell, on the sixteenth day of September, 1888, by a certain instrument in writing, duly executed and delivered by him, and bearing date on said last mentioned day, did assign to your orator the entire right, title, and interest, in and to the then unexpired portion of the term of said letters patent;

and that said instrument in writing was recorded in the Patent Office on the thirty-first day of October, 1888.

And your orator further shows, that always hitherto, from the time of the execution of the said last mentioned instrument, up to the beginning of this action, he was, and that he now is, the sole owner of said letters patent, and is now the sole owner of all rights of action which arose from any infringement thereof, since the execution of the said last mentioned instrument.

And your orator further shows, on information and belief, that the said Rufus Russell and your orator, and all persons who ever made or sold any specimen of said "Improved Dynamo" for or under them, or either of them, gave sufficient notice to the public that the same was patented, by fixing thereon the word "patented," together with the day and year said letters patent were granted.

And your orator further shows, on information and belief, that the said defendant, on and after the first day of January, 1889, and up to the time of the commencement of this action, and during and within the term of seventeen years mentioned in said letters patent, and after the execution of the said assignment to your orator, and before the commencement of this action, and within the United States, unlawfully, wrongfully, and injuriously, with intent to derive profits from making and using and selling specimens of said machine, and to deprive your orator of the royalties which he might and otherwise would have derived from the sale of licenses to make, and use and sell specimens thereof, and without the license of your orator, or of the said Rufus Russell, and against the will of your orator, did make and did use, and did sell, and did cause to be made, and did cause to be used, and did cause to be sold, sundry specimens of said machine, and of machines which contained and employed substantially the invention, covered by said letters patent, and particularly pointed out in the third claim thereof, in infringement of the said exclusive rights secured to the said Rufus Russell by the letters patent aforesaid, and assigned by him to your orator as here-

inbefore set forth; but how many such specimens the defendant so made, and used, and sold, or caused to be made, and used, and sold, respectively, your orator is ignorant, and cannot set forth; but your orator avers, on information and belief, that the defendant so made, and used, and sold, and caused to be made, and used, and sold, a large number thereof, and that it derived large profits therefrom, but to what amount your orator is ignorant and cannot set forth, and that your orator has been deprived of large royalties by reason of the aforesaid infringement of the defendant, and has thus incurred large damages thereby.

And your orator further shows, that he fears, and has reason to fear, that unless the defendant is restrained by a writ of injunction, issuing out of this court, it will continue to make, and to use, and to sell, numbers of specimens of said machine, and thereby will cause irreparable injury to your orator's aforesaid exclusive rights.

And your orator further shows, on information and belief, that the validity of the said letters patent, has heretofore been uniformly affirmed, after strenuous litigation, by verdicts and judgments at law, and by final decrees in equity, in several of the Circuit Courts of the United States; and that the electric companies of the United States have long generally acquiesced in that validity.

And your orator prays your Honors to grant unto your orator a preliminary, and also a permanent writ of injunction, issuing out of and under the seal of this honorable Court, directed to the said The Atherton Electric Company, and strictly enjoining it and its officers, agents, and employees, not to make, or use, or sell, nor cause to be made, or used, or sold, any machine or apparatus containing or employing the invention covered and secured by said letters patent, and particularly pointed out in the third claim thereof.

And your orator further prays, that the defendant, by a decree of this Court, may be compelled to account for, and pay over to your orator, all the profits which the defendant

has derived, or shall have derived, from any making and using, or from any making and selling, or from any using, of any specimen of the machine covered and secured by said letters patent, and particularly pointed out in the third claim thereof; and also that the defendant be decreed to pay all the damages which your orator has incurred, or shall have incurred, on account of the defendant's infringement of said letters patent; and that the defendant be decreed to also pay the costs of this suit; and that your orator may have such further and other relief, as the equity of the case, or the statutes of the United States, may require, and to this Court may seem just.

To the end, therefore, that the defendant may, if it can, show why your orator should not have the relief hereby prayed, and may (but not under oath, any oath being hereby expressly waived) full, true, direct, and perfect answer make to such of the several interrogatories hereinafter numbered and set forth, as by the note hereinunder written, it is required to answer; that is to say:

1. Whether, after the first day of January, 1889, it made or used, or sold, or caused to be made or used or sold, anywhere in the United States, any specimen of any machine or apparatus which contained or employed the invention covered and secured by said letters patent, and particularly pointed out in the third claim thereof; and if so, how many such specimens it so made, and how many it so sold, and how many it so used, and how long it used the same.

May it please your Honors to grant unto your orator a writ of *subpœna ad respondendum*, issuing out of and under the seal of this Honorable Court, and directed to the said The Atherton Electric Company, and commanding it to appear and make answer to this bill of complaint, and to perform and abide by such order and decree herein, as to this Court shall seem just.

And your orator will ever pray.

THOMAS TRACY,
Complainant.

LUTHER LEARNED,
Of Counsel.

JOHN JAY,
Solicitor for the Complainant.

The defendant, The Atherton Electric Company, is required to answer the interrogatory numbered 1.

JOHN JAY,
Solicitor for the Complainant.

STATE OF CONNECTICUT, COUNTY OF HARTFORD, *ss.*

On this tenth day of August, 1895, before me personally appeared Thomas Tracy, and made oath that he has read the foregoing bill, subscribed by him, and knows the contents thereof, and that the same is true of his own knowledge, except as to matters which are therein stated to be based on information and belief, and that as to those matters he believes it to be true.

L. S.

ARTHUR ANSON,
Notary Public.

PLEA IN EQUITY.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY

v.

THE ATHERTON ELECTRIC COMPANY.

} *In Equity.*

The plea of The Atherton Electric Company, defendant, to the bill of complaint of Thomas Tracy, complainant.

This defendant, by protestation, not confessing or acknowledging the matters and things in and by said bill set forth and alleged to be true, in such manner and form

as the same are thereby and therein set forth and alleged; for plea to the whole of said bill, says that, prior to January 1, 1889, the Gray Electric Company, and the Franklin Electric Company, were separate corporations, created and existing in due form of law in the State of Connecticut; and that each had theretofore, on August 1, 1888, purchased, and then possessed, a license in writing executed by said Rufus Russell, authorizing the licensee to make, use and sell any convenient number of specimens of said machine throughout the term of said letters patent; and that on or about the said January 1, 1889, the said Gray Electric Company and the said Franklin Electric Company, were lawfully consolidated into one corporation, to wit: this defendant.

All which statements this defendant doth aver to be true, and it pleads the said licenses to the said complainant's bill, and prays the judgment of this Honorable Court, whether it should be compelled to make any other or further answer to the said bill, and prays to be hence dismissed with its costs in this behalf sustained.

In witness whereof, the said defendant, The Atherton Electric Company, has hereunto affixed its corporate seal, and caused the same to be attested by Charles Clark, its secretary.

{ L. S. }

CHARLES CLARK,
Secretary.

RICHARD RAY,
Solicitor and Counsel for the Defendant.

I hereby certify that in my opinion the foregoing plea is well founded in point of law.

RICHARD RAY,
Solicitor and Counsel for the Defendant.

STATE OF CONNECTICUT, COUNTY OF HARTFORD, *ss.*

On this seventh day of October, 1895, before me personally appeared Charles Clark, and made oath that he has

read the above plea, and knows the contents thereof, and that it is not interposed for delay, and that it is true in point of fact.

{ L. S. }

ARTHUR ANSON,
Notary Public.

ANSWER.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY

v.

THE ATHERTON ELECTRIC COMPANY. } *In Equity.*

The defendant, for answer to the bill of complaint of the complainant, answering, says:

The defendant admits, that it is a corporation created and existing in due form of law in the State of Connecticut.

The defendant denies, on information and belief, that Samuel Sinclair was the true, original, and first inventor of the machine covered by the alleged letters patent mentioned in said bill; and the defendant says, on information and belief, that said apparatus was not an invention when produced by said Samuel Sinclair; and that it was not novel at that time, and that an apparatus substantially identical with it in character was previously patented in letters patent of the United States, granted to Mason Montgomery, May 16, 1872; and that another like apparatus was previously described on page 777 of a certain printed book entitled "The Day of the Dynamo," published in London, England,

in the year 1873, by William Wright, of Paternoster Row; and that still another like machine was previously known and used by Nathan Norris, of Rochester, New York, in said Rochester, in the year 1874

And the defendant further says, on information and belief, that said Samuel Sinclair actually abandoned his said alleged invention, before said letters patent were granted.

And the defendant further says, on information and belief, that the said alleged invention was in public use, in this country, more than two years before said Samuel Sinclair made any application for letters patent thereon.

And the defendant further says, that it has no knowledge whether the said Samuel Sinclair ever executed and delivered any instrument of assignment to Rufus Russell, purporting to convey the entire right, title, and interest in said alleged invention.

And the defendant further says, that it has no knowledge whether the alleged letters patent for said alleged invention, were ever issued and delivered to said Rufus Russell.

And the defendant further says, that it has no knowledge whether the said Rufus Russell ever executed and delivered any instrument of assignment to the complainant, purporting to convey the entire right, title, and interest in and to the then unexpired portion of the term of said alleged letters patent.

And the defendant further says, on information and belief, that the invention covered by said letters patent of July 16, 1888, and particularly pointed out in the third claim thereof, was previously patented in the republic of France to said Samuel Sinclair, for fifteen years from August 1, 1884, and that the foreign patent thus granted will expire August 1, 1899.

And the defendant further says, that the plaintiff's action is barred by Section 1375 of the General Statutes of Connecticut, so far as said action is based upon any alleged doings of the defendant prior to August 10, 1889.

And the defendant denies, on information and belief, that it ever made, or used, or sold, or caused to be made, or

used, or sold, any machine which contained or employed any invention covered by said letters patent; and likewise denies that it ever derived any profit from any such making, or using, or selling; and likewise denies that the complainant ever incurred any damage on account of any such transaction, committed or caused to be committed by the defendant.

The defendant further says, that it has no knowledge whether the validity of any such alleged letters patent has heretofore been uniformly affirmed, after strenuous litigation, by verdicts or judgments at law, or by final decrees in equity, in several of the Circuit Courts of the United States; but the defendant denies, on information and belief, that any such validity has been generally acquiesced in by the electric companies of the United States.

All of which statements and defences this defendant is ready to aver, maintain, and prove, as this Honorable Court shall direct; and it prays hence to be dismissed with its costs in this behalf sustained.

In witness whereof, the said defendant, The Atherton Electric Company, has hereunto affixed its corporate seal, and caused the same to be attested by Charles Clark, its Secretary.

L. S.

CHARLES CLARK,
Secretary.

RICHARD RAY,
Solicitor and Counsel for the Defendant.

STATE OF CONNECTICUT, COUNTY OF HARTFORD, *ss.*

On the fourth day of November, 1895, before me personally appeard Charles Clark, and made oath that he has read the foregoing answer, and knows the contents thereof; and that the same is true of his own knowledge, except as to the matters which are therein admitted, or stated to be based on

information and belief, and as to those matters he believes it to be true.

L. S.

ARTHUR ANSON,
Notary Public.

REPLICATION IN EQUITY.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY
v.
THE ATHERTON ELECTRIC COMPANY.
} *In Equity.*

This repliant, saving and reserving unto himself all and all manner of advantage of exception to the manifold insufficiencies of the said answer, for replication thereunto saith, that he will aver and prove his said bill to be true, certain, and sufficient in the law to be answered unto; and that the said answer of the said defendant is uncertain, untrue, and insufficient to be replied unto by this repliant; without this, that any other matter or thing whatsoever in the said answer contained, material or effectual in the law to be replied unto, confessed and avoided, traversed or denied, is true; all which matters and things this repliant is, and will be, ready to aver and prove, as this Honorable Court shall direct; and humbly prays, as in and by his said bill he hath already prayed.

JOHN JAY,
Solicitor for the Complainant.

INDEX.

THE REFERENCES ARE TO THE SECTIONS.

ABANDONMENT,
actual, of applications, 145.
actual, of invention, 87–92.
actual, of invention, by acquiescence in rejection of application, 92.
actual, of invention, by disclaimer, 90
actual, of invention, by express declaration, 89.
actual, of invention, by laches, 91.
constructive, of applications, 146.
constructive, of application, working constructive abandonment of invention, 103, 147.
constructive, of invention, 87, 93, 147.
constructive, of invention, after application, 103.
constructive, of invention, must be negatived in declarations and bills, 425, 579.
constructive, of invention, not condoned by excuses, 104.
evidence of actual, 512.
evidence of constructive, 513.
how pleaded in actions at law, 449.
how pleaded in actions in equity, 602.
of experiments, 86.
of invention, 86.
of invention, after issue of letters patent, 106, 107.
of patents, 106, 107.
several kinds of, 86.

ACCIDENT
causing reissuable faults, 220.
necessitating disclaimers, 193, 194.

ACCOUNT
of profits, covering what time, 714.

ACCOUNTINGS
before masters, 739–743.

ACQUIESCENCE
in rejection of applications, 92.
necessary length of, as foundation of right to preliminary injunctions, 668, 669.
need not be universal, in order to constitute foundation of right to preliminary injunctions, 670.
public, as foundation of right to preliminary injunctions, 665, 667.
working license, 312.

ACTIONS
for infringement, form of, 421.
for infringement, where brought, 389, 390.
for infringement not affected by subsequent disclaimers, 198.
on assigned rights of action, 395, 435, 579.
to enforce contracts relevant to patents, 388.
to set aside contracts relevant to patents, 388.

ACTIONS AT LAW,
declarations in, 422–438.
defendants in, 401-416.
for assigned rights of action, 395, 435.
for infringements of patents, 418.
plaintiffs in, 394–400.
pleas in, 439–477.
practice in, 489.
testimony in, 535.
trial of, 487.

ACTIONS IN EQUITY,
answers in, 598–622.
bills in, 576–584.
complainants in, 394–400, 574.
defendants in, 401–416, 575.
depositions in, 638, 639.
for assigned rights of actions, 395.
hearings in, 632.
hearings in, before masters, 643.
pleas in, 589, 590.
rehearings in, 645–648.
replications in, 623.
trials by jury in, 642.

ADDITION
to composition of matter, as affecting infringement, 369.
to mechanical patent, as affecting infringement, 347.
to process patent, as affecting infringement, 338.

AFFIDAVITS
on motions for new trials, 539.
on motions for preliminary injunctions, 662.

AFFIDAVITS—*Continued.*
on motions to dissolve preliminary injunctions, 694.
on petitions for leave to file bills of review, 652.
on petitions for rehearings, 647.

AFFIRMATION
made instead of oath, 124.

AGENTS
as defendants in actions for infringement, 403.

AGGREGATION
distinguished from combination, 32.

AMENDMENTS
of applications for patents, 135–139.
of bills in equity, 586, 587.
of declarations at law, 483.
of drawings and models, 138, 214.

ANSWERS
to bills of complaint, 588, 598–622.
to bills in the nature of supplemental bills, 631.
to bills of review, 652.
to bills in the nature of bills of review, 653.
to supplemental bills, 631.
to supplemental bills in the nature of bills of review, 648.
when used as affidavits, 662.

ANTIQUITY OF PARTS
never negatives novelty of combinations, 66.

APPEALS
from examiners to board of examiners-in-chief, 132.
from board of examiners-in-chief to Commissioner of Patents, 132.
from Commissioner to Court of Appeals of District of Columbia, 132, 133, 134.
from Court of Appeals of District of Columbia to Supreme Court of the United States, 144, 654.
from Circuit Courts of the United States to Circuit Courts of Appeals, 144, 644*a*, 654, 655, 691, 696*a*, 703.
from Supreme Court of the District of Columbia to Court of Appeals of the District of Columbia, 144, 654.

APPLICATIONS
actual abandonment of, 145.
amendments of 135–139.
Commissioner's decisions upon, 148.

APPLICATIONS--*Continued.*
constructive abandonment of, 146.
dates of, 120.
elements of, 109.
examination of, 130.
fees due upon filing, 125.
for letters patent, 109.
for Patent Office extensions, 261, 266.
for reissues, 212–214, 250.
how stated in declarations and bills, 427, 570.
may fix dates of inventions, 59, 69.
more than two years after sale or public use, 98.
more than two years after making, 99.
never negative novelty, 58, 60.
of executors or administrators, 123.
papers forming, when evidence, 187.
re-examination of, 131.
rejection of, 131.

ART
patent-law, meaning of the word, 3.

ASSIGNEES
as complainants or plaintiffs, 394–397.
may make disclaimers, 193.
may receive letters patent, 110, 171.
may receive reissues, 212, 250, 252.

ASSIGNMENTS
authenticated, how, 275.
conflicting, 281.
construction of, 278.
descriptions in, 275.
how proved, 495.
notice of, 281.
of extensions, 280.
of inventions, 97, 273.
of licenses, 310.
of patents, 274.
of patents under creditors' bills, 156.
of rights of action for past infringements, 277, 281.
pendente lite, 699.
recording of, 281.
reformation of, 278, 279.

ASSUMPSIT
actions of, 418–420.

ATTACHMENTS FOR CONTEMPT
when issued, and against whom, 708.

BAKER, JUDGE
opinion on aggregation, 32.

BALDWIN, JUSTICE
opinion on rights of persons to use a patented process, who used it with the consent of the inventor before the patent, 159.

BANKRUPTCY
conveying title to patent rights, 290.

BEAUTY
has a utility of its own, 22, 80.

BENEDICT, JUDGE
opinion on a question of utility, 78.

BILLS IN EQUITY
amendments of, 586, 587.
answers to, 588.
defences to, 591.
for preliminary injunctions, 660.
interrogating part of, 581.
introductory part of, 578.
oaths to, 584.
original, 576.
pleas to, 589, 590.
prayer for process in, 582.
prayer for relief in, 580.
signature of counsel to, 583.
stating part of, 579.
to compel issue of letters patent, 134, 144.
to perpetuate testimony, 585.
to restrain publications of statements about patent controversies, 585.
when may be composite, 629.
when may be used as affidavits, 662.

BILLS IN THE NATURE OF BILLS OF REVIEW
by whom filed, 653.
distinguished from bills of review, 653.
required, when, 653.

BILLS IN THE NATURE OF BILLS OF REVIVOR
by whom filed, 628.
required, when, 628.
subordinate to original bills, 624.

BILLS IN THE NATURE OF SUPPLEMENTAL BILLS
leave of court necessary to filing, 630.
required, when, 626.
subordinate to original bills, 624.

BILLS OF REVIEW
by whom filed, 653.
filed subsequent to appeal, 652.
sorts of, 650.
to correct errors apparent on the record or pleadings, 651.
to introduce newly discovered evidence, 652.
when proper, 650.

BILLS OF REVIVOR
by whom filed, 628.
proceedings upon, 627.
subordinate to original bills, 624.
when required, 627.

BILLS OF REVIVOR AND SUPPLEMENT
when required, 629.

BILLS OF EXCEPTIONS
nature and function of, 551, 552.
what must contain, and what exclude, 551, 552.
when to be prepared and signed, 554.
where cases are tried by judge without jury, 540.

BLATCHFORD, JUSTICE
opinion on decrees, where a disclaimer is found necessary, 209.
opinion on disclaimers, 199.
opinion on injunctions in interference actions, 319.
opinion on invention, 37.
opinion on respective rights of patentees and others, 100.

BLODGETT, JUDGE
opinion on invention, 35.

BOND, JUDGE
opinion on invention, 34.

BONDS
required from complainants on issuing preliminary injunctions, 688, 696.
required from defendants in place of preliminary injunctions, 685 687.
required from defendants, where permanent injunctions are postponed till final decrees, 702.
required from defendants, where permanent injunctions are suspended pending appeals, 703.

BRADLEY, JUSTICE
dissenting opinion in Hartell *v.* Tilghman, 388.
opinion on description in specification, 174.
opinion on indistinct claims, 455.
opinion on invention, 25, 26.

BROADENED REISSUES
when too late to apply for, 226, 227.

BROWN, JUSTICE
opinion on invention, 24.

BURDEN OF PROOF
on questions of abandonment, 108.
on questions of delay in applying for reissues, 523.
on questions of infringement, 532.
on questions of intention in *qui tam* cases, 327.
on questions of invention, 42.
on questions of novelty, 76.
on questions of profits, 719.
on questions of utility, 85.

CADWALLADER, JUDGE
opinion on decree, where a disclaimer is found necessary, 209.

CAMPBELL, JUSTICE
opinion on attempts to disguise legal liability, 414.

CAUSES OF ACTION
when plurality of are suable in one action, 417.

CAVEATS
their nature and functions, 143.

CAVEAT EMPTOR
application of the maxim, 286.

CERTIFICATE OF DIVISION OF OPINION
function and operation of, 657.

CIRCUIT COURTS OF THE UNITED STATES
jurisdiction of, 134, 323, 331, 379, 389, 390, 393, 658.
titles of, 422, 577.

CIRCUIT COURTS OF APPEALS
appeals to, from final decrees, 654.
appeals to, from interlocutory decrees, 644*a*.
appeals to, from preliminary injunctions, 696*a*.
certificates from, to Supreme Court, 550, 654.
writs of certiorari to, from Supreme Court, 550, 654.
writs of error from, to Circuit Courts, 550.

CITIES
as defendants in infringement suits, 401.

CITIZENSHIP
stated in declarations and bills, 422, 423, 426, 579.

CLAIMS
co-extensive, 180*a*.
compound, in respect of disclaimers, 199.
construed in the light of the state of the art, 184.
defective, 218.
excessive, 216.
for combinations, 198.
for single devices, in reissues, 246.
function of, 176.
functional in form, 183
how tested for co-extensiveness, 180*a*.
how written, 116.
indistinct, 177.
indistinctness of, how affecting letters patent, 178.
indistinctness of, how pleaded in actions at law, 455.
indistinctness of, how pleaded in actions in equity, 608.
indistinctness of, how proved, 520.
in specifications of compositions of matter, 119.
in specifications of designs, 120*a*
in specifications of machines, 117.
in specifications of manufactures, 118.
in specifications of processes, 120.
insufficient, 218.
on separate parts of machines, 117*a*.
reference letters or numerals in, 117*a* 182*a*.
use of word "means" or "mechanism" in, 117*a*.
valid and void, in same letters patent or reissue, 177, 249.
validity of, governs validity of letters patent, 177.

CLIFFORD, JUSTICE
opinion on assignees, 395.
opinion on ethical character of patents, 153.

COLT, JUDGE
decision on liability of government agents for infringement, 393.
opinion on jurisdiction of equity, 593.

COMBINATION
claim for, not to be broadened by construction, 186.
dissolved by omission of any one element, 349.
distinguished from aggregation, 32.
every part of, conclusively presumed to be material, 349.
of old devices, having old mode of operation, 37.
patentability of, 26, 33.

COMITY
between courts on questions of fact, 635.

COMMISSIONER OF PATENTS
appeals to, from board of examiners-in-chief, 132.
appeals from, to Court of Appeals of District of Columbia, 132.
erroneous decision of, when remedied by reissue, 220.
force of decision of, in application cases, 148.
force of decision of, in extension cases, 266.
force of decision of, in interference cases, 142, 318.
force of decision of, in reissue cases, 221.

COMMON LAW
confers no paramount right in inventions, 149.

COMPLAINANT
exceptions of, to master's report, 749.
who may be, in patent cases, 394-400, 574.

COMPOSITIONS OF MATTER
claims in specifications of, 119.
distinguishable from manufactures, 19.
patents for, how infringed, 369.
prerequisites of patentability of, 18.
specimens of, 128.
subjects of patents, 1.
the various classes of, in respect of infringement, 374.

COMPROMISE
money paid in, no criterion of damages, 559.

CONFORMITY ACT
Federal, relevant to practice, 421.

CONGRESS
power of, to promote progress of science and useful arts, 1.

CONSIDERATION
partial or total failure to pay, for assignment, 276.

CONSTITUTION OF THE UNITED STATES
foundation of United States patents, 1, 150.

CONSTRUCTION
of assignments, 278.
of claims, functional, 183.
of claims in the light of the state of the art, 184.
of claims narrowly, when necessary to save their validity, 185.
of claims, not by artificial rules, 117*a*.
of letters patent, 181.
of letters patent according to contemporaneous laws, 188.
of letters patent after disclaimer, 207.
of letters patent in the light of contemporaneous construction of the inventor, 187.

CONSTRUCTION—*Continued*
of letters patent in the light of Patent Office restrictions, 187*a*.
of letters patent in the light of expert testimony, 189, 500.
of letters patent on motions for preliminary injunctions, 676.
of letters patent, question of law, 189.
of letters patent with proper liberality, 185.
of letters patent with proper strictness, 186.
of licenses, 306.
of reissues, 248.
of title papers on motions for preliminary injunctions, 675.

CONTEMPT OF COURT
how punished, 710.

CONTRIBUTION
between joint infringers, 581.

CORPORATIONS
as defendants in patent cases, 401, 409.
assignments of patents to, 275.
consolidated, as defendants, 416.
consolidated, invoking licenses given to their constituents, 310.
consolidated, succeeding to patent rights of their constituents, 285.
dissolution of, *pendente lite*, 700.
how mentioned in declarations and bills, 422, 578.
where suable for infringements of patents, 389.

COSTS
in cases of disclaimer, 205, 208.
in cases of new trials, 539.
in favor of whom recoverable, 543, 545.
may include what, 544–549.
on amendment of bills, 586.
taxed how, 544–549.
where equity refuses to take jurisdiction, 594.

COUNTIES
as defendants in infringement suits, 401.

COURTS
circuit, bills in, to compel issue of letters patent, 134.
circuit, jurisdiction of, over patent actions against government agents, 393.
circuit, titles of, 422.
comity between, on questions of fact, 635.
having original jurisdiction in actions for infringement, 379.
having jurisdiction in *qui tam* actions, 331.
having jurisdiction to grant injunctions, 658.
having jurisdiction to repeal patents, 323.
having appellate jurisdiction, 133, 134, 550, 644*a*, 654, 696*a*.

COURT OF CLAIMS
jurisdiction of, in certain patent cases, 301, 302.

COXE, JUDGE
opinion on disclaimers, 209.

CREDITORS' BILLS
patent rights subject to, 156.
titles transferred by, 289.

CROSS APPEALS
to Circuit Court of Appeals, 655.

CROSS BILLS
not required in interference actions, 316.

CURTIS, JUSTICE
opinion on abandonment, 89.
opinion on invention, 33.
opinion on mode of operation, 340.

DAMAGES
accruing before surrender and reissue, 231.
actual, not lessened by ignorance of patent, 569.
decrees for, 573.
evidences of, 502, 565, 636.
excessive assessment of, how remedied, 539.
exemplary, 567.
for infringement of design patents, 571*a*.
for infringement by making, 564.
generic measure of, 555.
how stated in declarations, 436.
include no counsel fees or other expenses of litigation, 570.
increased, 568.
interest on, 571.
jurisdiction of equity, to assess, 573.
measures of, 555–563.
no measure of profits, 716.
not measured by what, 559, 560.
remote consequential, 566.
resulting to defendants from improper injunctions, 696.
when measured by royalties, 562.

DANIEL, JUSTICE
opinion on ethical character of patents, 153.

DATES
of applications, how proved, 129.
of applications, significance of, 180*a*.
of invention, the only issue in interference actions, 317.
of patented inventions, how fixed and how proved, 60, 69, 70, 510.
of unpatented inventions, when fixed by aid of abandoned applications, 59.

DECLARATIONS
commencement of, 422.
conclusion of, 437.
degree of correctness required in, 438.
in trespass on the case, 422–438.
statement of right of action in, 423–436.
title of court in, 422.
title of term in, 422.
venue in, 422.
when demurrable in patent actions, 483.

DECREES
action of Circuit Court of Appeals upon, 656.
appeals from, 644*a*, 654, 696*a*.
by consent of defendants when injunction is based on, 709.
consent, when foundation of preliminary injunctions against third parties, 672.
final, when entered, 649.
for pecuniary recoveries, 573.
how assailable in the Circuit Court of Appeals, 655.
in interference actions, 320.
interlocutory, 644.
interlocutory, not pleadable as *res judicata*, 468.
interlocutory, when including orders for permanent injunctions, 697.
performance of, before filing bills of review, 650.
pro confesso, pleadable as *res judicata*, 468.
pro confesso, when foundation of right to preliminary injunctions, 671.
reversal of, by Circuit Court of Appeals, resulting in dismissal of bill, 704
where disclaimers are found necessary, 209.

DEFECTIVE
meaning of the word, in the law of reissues, 217.

DEFENCES
based on expiration of patent, 441.
based on omission to mark "patented," 441.
based on repeal of patent, 441.
in respect of their classification, 441.
in respect of special pleading, 442.
laches, how set up, 597.
the twenty-seven, 440, 591.
those pleadable by the general issue, with notice of special matter, 443.
to bills in equity, 588.
to bills in the nature of supplemental bills, 631.
to motions for preliminary injunctions, 677–684.

DEFENCES—*Continued*
to supplemental bills, 631.
where licensee is sued as infringer, 309
which assail reissues, 441.
which deny validity, 441.

DEFENDANTS
costs recoverable by, 543.
death of, *pendente lite*, 700.
doings of, how proved by plaintiffs, 497.
evidence in chief, 503-534.
in actions at law, 401-416.
in actions in equity, 401-416, 575.
in patent actions generally, 401-416.
where suable for infringement, 389, 390.

DEGREE
change of, in respect of patentability, 31, 31*a*.

DEMURRERS IN ACTIONS AT LAW
dangers of, 486.
function of, 482.
to declarations, 482, 483.
to pleas, 482, 484.
to replications, 482.
to rejoinders, 482.

DEMURRERS IN ACTIONS IN EQUITY
setting up laches, 597.
setting up non-jurisdiction of equity, 594.
sustaining to bills, 649
take precedence of motions for preliminary injunctions, 663.
to bills, 588.
to bills in the nature of supplemental bills, 631.
to supplemental bills, 631.

DEPOSITIONS
in actions at law, 535.
in actions in equity, 639.
used in cases other than those in which taken, 640.

DESCRIPTIONS
defective, 218.
errors in, 175.
excess of, 175.
fullness of, 174.
in general, 111, 115.
insufficient, 218.
need not be changed in cases of disclaimer, 207.
vague, how affecting letters patent, 178.

DESIGNS
claims for, 120*a*.
novelty of, 64
on whose invention patentable, 21.
subjects of patents, 20.
utility of, 22

DESIGN PATENTS
damages for infringement of, 571*a*.
duration of, 162.
fees for, 125.
how infringed, 375.
profits for infringement of, 723*a*.

DESTRUCTION
of infringing articles, 644.

DIFFERENCE
what degree of, inconsistant with negation of novelty, 57.

DIRECTORS
of corporations as defendants, 410, 411, 414, 415.

DISCLAIMERS
as documents, 193.
based on mistakes of fact, 195.
based on mistakes of law, 196
causes of necessity for, 193.
costs in cases of, 205.
decrees, in cases of necessity for, 209.
delay to file, when beginning, 204.
effect of, on pending actions, 193.
errors which justify, 194.
errors which do not justify, 197.
filed by part owner, 206.
filed pending suit, 208.
function of, 197.
how affected by fraudulent or deceptive intention, 202.
how stated in declarations, 430.
in respect of combination claims, 198.
in respect of compound claims, 199.
in respect of immaterial claims, 200.
letters patent, how construed after, 207.
need not change description, 207.
of equivalents, 372.
of reissue claims, 201.
right of appeal on, necessity for, 209.
statements in, 206.
statutory authorization of, 192.

DISCLAIMERS—*Continued*
subjects of, not reclaimable by reissue or otherwise, 209.
unreasonable delay to file, 203, 208.
unreasonable delay to file, how pleaded in actions at law, 456.
unreasonable delay to file, how pleaded in actions in equity, 609.
unreasonable delay to file, how proved, 521.
working abandonment of invention, 90.

DISCOVERY
patent-law, meaning of the word, 2.

DISTRICT COURTS OF THE UNITED STATES
jurisdiction of, in *qui tam* actions, 324

DISTRICTS
wherein defendants may be sued, 389.

DIVISION OF OPINION
certificate of, 657.

DOUBLE USE
not invention, 38.

DRAWINGS
amendment of, 138, 214.
constitute part of letters patent, 172,
description of, in specification, 111, 114.
in prior patents or printed publications, 56.
may aid construction of claims, 182.
may constitute birth of subsequently patented invention, 70.
unpublished, never negative novelty, 61.
what must show, 126.
when required, 126.

DRUMMOND, JUDGE
decision on "finding" defendants, 389.

DUE PROCESS OF LAW
meaning of the phrase, 151.
statutes are not, 158.

ELECTRIC LIGHT PATENT
Edison, 31*a*.

EMPLOYERS
as defendants, 404.

EMPLOYEES
as defendants, 403

EQUITY
hearings in, 682,
jurisdiction of, in infringement cases, 572, 592, 593.
jurisdiction of, in infringement cases, not dependent on prior adjudication at law, 595.
jurisdiction of, over interfering patents, 316.
jurisdiction of, to repeal patents, 322.
laches a defence in, 591, 596.
non-jurisdiction of, 591, 592.
non-jurisdiction of, how set up, 594.
profits recoverable in, 711.

EQUIVALENTS
among elements of processes, 338.
among ingredients of compositions of matter, 370.
defined, 354.
disclaimed, 372.
element of age in, 354.
inquired into, 354.
meaning of the word, 352–354.
substitution of, not invention, 36.
tests of, 362.
where claimable in reissues, when not described or claimed in originals, 247.

ERRORS
of judge or jury, when ground for new trial, 539.

ESTATES
in patent rights, 274.

ESTOPPEL
by matter of deed, 469.
by matter *in pais*, 313.
by matter of record, 468.
classes of, 467.
conveying title, 275.
elements of, 313.
in actions at law, 440, 467.
in actions in equity, 591, 621.
in interferences, 141.
on motions for preliminary injunctions, 683.
pleaded how, in actions at law, 470.
pleaded how, in actions in equity, 621.
proved how, 533.
working implied license, 313.

EVICTION
of licenses, 307.

EVIDENCE

before masters, 740, 741.
complainant's, in chief, 630.
defendant's, in chief, 503-534.
documentary, in equity cases, 641.
how far to be set forth in bills of exceptions, 551, 552.
in disproof of infringement, when unnecessary, 532.
in equity cases, 637.
in interference actions, 318.
newly discovered, when ground for new trial, 539.
newly discovered, when ground for rehearing, 647.
newly discovered, when ground for bill of review, 652.
objections to before masters, 741.
objections to, for want of pleading, 600.
objections to, when to be made, 535
of absence of inadvertance, accident, and mistake, 522.
of actual abandonment, 512.
of constructive abandonment, 513.
of damages, 502, 565.
of deceitfully lacking or excessive specification, 518.
of estoppel, 533.
of experts, 498.
of expiration of patent before end of apparent term, 527.
of facts to sustain defence in Miller *v.* Brass Co., 523.
of facts to sustain defence in Miller *v.* Eagle Co., 525.
of infringement, 497-501.
of joint invention for sole patent, 516.
of lack of identity between application and letters patent, 514.
of lack of identity between letters patent and reissue, 459, 524.
of licenses, 530.
of marking patented, 496.
of non-infringement, 532.
of not being a proper subject of a patent, 504.
of omission to mark "patented," 528
of prior knowledge or use, 508.
of prior patents, 506.
of prior printed publications, 507.
of profits, 636, 740.
of release, 531.
of repeal of patent, 526.
of *res judicata*, 533.
of sole invention for joint patent, 517.
of surreptitious or unjust obtaining of patent, 515.
of title, 495.
of unreasonable delay to file disclaimer, 521.
of want of invention, 505.
of want of novelty, 506-510.

EVIDENCE—*Continued.*
of want of title, 520.
of want of utility, 511.
plaintiff's, in chief, 491.
rules of, in interferences, 141.
rules of, in patent actions, 490.
that claims are indistinct, 520.
that specification is insufficient, 519.
to rebut defence of laches, 636.
to rebut defence of want of novelty, 509, 510.
to support defence of laches, 637
to support plea of statute of limitation, 534.

EXAMINATION
of applications, 130.

EXAMINERS-IN-CHIEF
appeals to board of, 132.

EXCEPTIONS
to instructions, and to refusals to instruct, 553, 554.

EXECUTORS AND ADMINISTRATORS
applying for letters patent, 110, 171.
applying for Patent-Office extensions, 261.
applying for reissues, 250.
as plaintiffs or complainants. 396.
filing disclaimers, 206.
oath of, to applications, 123.
reissue granted to one of several, 251.

EXPERIMENTAL USE
distinguished from "public use," 95.

EXPERTS
cross-examination of, 501.
hypothetical questions put to, 499.
testimony of, affecting construction of leters patent, 189, 500.
testimony of, on motions for preliminary injunctions, 676.
testimony of, regarding the state of the art, 500.
testimony of, relative to infringement, 498.
testimony of, relative to non-infringement, 532.

EXPIRATION OF PATENT
how pleaded in actions at law, 462.
how pleaded in actions in equity, 615.
how proved, 527.

EXTENSIONS
application for Patent-Office extension, 261.
assignability of inchoate right to Patent-Office extension, 273.
assignment of, 280.
constitutional foundation of, 255.
congressional, 256.
congressional, how effected, 257.
congressional, whom for benefit of, 258.
facts justifying Patent-Office extension, 267.
fraud in procuring or granting Patent-Office extension, 269.
how stated in declarations, 431.
Patent-Office extensions, 259.
Patent-Office extensions, applications for, 261.
Patent-Office extensions, certified how, 265.
Patent-Office extensions, grantable when, 262, 264.
Patent-Office extensions, inventors' rights therein, 263.
Patent-Office extensions, operation of, on existing specimens of the invention, 270, 271.
Patent-Office extensions, proceeding on applications for, 268.
Patent-Office extensions, repeal of, 269.
Patent-Office extensions, statutory foundation of, 260.

FAULTS
which cause patents to be reissuable, 218.

FEES
attorneys' docket, taxable as costs, 545.
clerks', taxable as costs, 546.
commissioners', taxable as costs, 547.
final Patent-Office, 103, 125.
witness, taxable as costs, 548.

FIELD, JUSTICE
opinion on jurisdiction of State courts, 380.

FIFTH AMENDMENT
to Constitution of United States, 151, 158.

FINDING
of judge, when trying action at law without a jury, 540.

FOR THE PURPOSES SET FORTH
nature of the phrase, 182.

FOREIGN COUNTRY
knowledge or use in, prior to patentee's invention, 54.
public use or sale in, more than two years prior to patentee's application, 101.

FOREIGN PATENTS
mentioned in preamble to specification, 111.
operation on novelty, 55.

FORFEITURE
not favored in the law, 108.
of licenses, 308, 309.

FORM
as affecting questions of infringement, 363-368.
as affecting questions of invention, 41.

FRAUD
in granting or procuring letters patent, 321.
in granting or procuring Patent-Office extensions, 269.
remedy for, in granting or procuring letters patent, extensions, or reissues, 321-323.

FUNCTIONS
considered in respect of equivalents, 352.
difference of, consistent with identity of invention, 180*a*.
good, in wrong places, 84.
not subjects of patents, 3.
performed in "substantially the same way," 353.
thought by some to be good, and by others to be evil, 83.
which sometimes work good, and sometimes evil, 82.

GILBERT, JUDGE
opinion on invention, 35.

GOVERNMENT OF THE UNITED STATES
has no special right to patented inventions, 157.

GRANTS
of rights under letters patent, 287.
operation of, extra territorially, 288.

GRANTEES
joining in actions for infringement, 399.
need not join in surrender and reissue, 252.
rights of, under reissues, 253.

GRIER, JUSTICE
opinion on mode of operation, 344, 345.

HALL, JUDGE
opinion on abandonment of patents, 107.
opinion on witness fees taxable as costs, 548.

HAMILTON, ALEXANDER
opinion on jurisdiction of State courts, 380.

HEARING
final, 633.
interlocutory, 633.
of motions for preliminary injunctions, 662.

HUGHES, JUDGE
opinion on actions of assumpsit for infringement of patents, 419.

HUNT, JUSTICE
opinion on bill seeking a decree of non-infringement, 585.

IDENTITY
degree of, involved in constructive abandonment, 98.
lack of, between application and letters patent, how pleaded in actions at law, 450.
lack of, between application and letters patent, how pleaded in actions in equity, 603.
lack of, between application and letters patent, how proved, 514.
lack of, between letters patent and reissue, how pleaded in actions at law, 459.
lack of, between letters patent and reissue, how pleaded in actions in equity, 612.
lack of, between letters patent and reissue, how proved, 524.
presence of, between several patents to one inventor, how pleaded in actions at law, 460.
presence of, between several patents to one inventor, how pleaded in actions in equity, 613.
presence of, between several patents to one inventor, how proved, 525.
presence of, between several patents to one inventor, how tested, 180*a*.

IGNORANCE
of anticipating matter never averts negation of novelty, 73.
of letters patent never averts judgment or decree for infringement, 377, 569.

IMPROVEMENT
a subject of a patent, 1.
may or may not be invention, 16.
sorts of, 16.

INADVERTENCE
causing reissuable faults, 220.

INADVERTENCE, ACCIDENT, AND MISTAKE
absence of, how proved, 522.

INFRINGEMENT
absence of, how proved, 582.
beyond the jurisdiction of the court, 676.
by making, damages for, 564.
by making and selling, damages for, 561.
by making and selling, profits derived from, 717-723, 735.
by making and using, damages for, 561.
by selling, damages for, 568.
by selling, profits derived from, 724.
by using, damages for, 561.
by using, profits derived from, 725–734.
by making, by using, and by selling, suable in one action, 417.
cessation of, no defence to a motion for a preliminary injunction, 676, 701.
committed in the Northern District of New York, not suable in Southern District of that State, 390.
denial of, how pleaded in actions at law, 466.
denial of, how pleaded in actions in equity, 620.
different sorts of, how treated by masters, 743.
doubtful questions of, not decided on motions for attachment, 708.
extent of, ascertained by masters, 742.
how stated in bills of complaint, 579.
how stated in declarations, 434, 435.
ignorance no excuse for, 377.
of design patents, 375.
of patents for compositions of matter, 369-372.
of patents, involves infringement of claims, 339.
of process patents, 335–338.
of primary patents, 359, 362.
of secondary patents, 359, 362.
of two or more terms of a patent, suable in one action, 417.
option to sue for infringement or for royalty, 309.
partly unprofitable, 713.
plaintiff's evidence of, 497–501.
proof of, or of danger of, on motions for preliminary injunctions, 676.
qestions of, as affected by addition, 347.
questions of, as affected by change of form, 363–368.
questions of, as affected by made of operation, 341–346.
questions of, as affected by omission, 349.
questions of, as affected by rearrangement of parts, 348.
questions of, as affected by results, 340.
questions of, as affected by substitution of parts, 350.
questions of, as affected by utility, 376.
questions of, not to be taken to Circuit Court of Appeals on certificates of division of opinion, 657.
repeated, suable on, in one action, 435.

INJUNCTIONS
acquiescence of the public as foundation for preliminary, 667-670.
against corporations, upon what persons binding, 708.
appeals from, 644*a*, 696*a*.
averted by proof of estoppel, 683.
averted by proof of expiration or repeal of patent, 681.
averted by proof of laches, 684.
averted by proof of license, 682.
averted by proof that patent is void, 679, 680.
bills for, 660.
bonds pending motions for preliminary, 663.
consent decree, when foundation for preliminary, 672, 709.
decree, *pro confesso* as a foundation for preliminary, 671.
defences to preliminary, when set up in answer, 664.
defendant's admission of validity, when foundation for preliminary, 673.
description in preliminary, 702.
dissolution of permanent, 704.
dissolution of preliminary, 659.
duration of, in general, 706.
duration of, when granted by district judge in vacation, 707.
foundation of right to preliminary, 665.
hearing of motions for preliminary, 662.
imperative character of right to preliminary, 685.
interference decision, when foundation for preliminary, 674.
jurisdiction to grant, 658.
motions for preliminary, 662.
motions to dissolve preliminary, 692-694.
motions to reinstate dissolved preliminary, 695.
motions to dissolve reinstated preliminary, 695.
motions for attachment for violation of, 708-709.
not averted by cessation of infringement, 701.
not averted by existence of remedy at law, 689.
not granted on trivial infringements, 705.
not granted to restrain complainants from suing third parties, 705.
not granted to restrain issue of letters patent, 134.
notice of motions for preliminary, 661.
obedience to, insisted upon, 696.
on bills in interference actions, 319.
penalty for disobeying, 710.
permanent, when granted, 697.
permanent, when postponed, 702.
permanent, when refused, 698-700.
permanent, when suspended pending appeal, 654, 703.
preliminary, 659.
preliminary, when averted by proof that acquiescence was collusive, 680.

INJUNCTIONS—*Continued*
preliminary, when based on prior adjudications, 666.
proof of complainant's title a necessary element in right to, 675.
proof of infringement, or danger of infringement, a necessary element in right to, 676.
suspension of, *pending appeal*, 654, 708.
suspension of motions for preliminary, 668.
temporary restraining order pending motion for preliminary, 664.
to restrain actions at law, 705.
to restrain unauthorized marking of patented articles, 333.
to restrain wrongful declarations of forfeiture of licenses, 308.
violations of, how punished, 710.
void when granted without jurisdiction, 696.
when granted after expiration of patent, 698.
when granted, *pro confesso*, 690.
writ of, 708.

INOPERATIVENESS
a cause of reissuability, 216, 218, 219.

INSTRUCTIONS
exceptions to, 553, 554.
how reviewed, 552.
to be given in writing, 537.
what must embody, 537.

INSUFFICIENT
meaning of the word in the law of reissues, 217.

INTEREST
on damages, 571.
on profits, 736.

INTERFERENCES
defined, 140.
number of possible, 141.
when decision in, is foundation for preliminary injunctions, 674.

INTERFERENCE ACTIONS IN EQUITY
authorized, 316.
issues in, 317.
evidence in, 318.
decrees in, 320.

INTERFERING PATENTS
causes of, 315.
defined, 315.

INVALIDITY
when a cause of reissuability, 216.

INVENTION
absent from mere aggregation, 32.
absent from mere change in degree, 31.
absent from mere duplication, 34.
absent from mere enlargement, 30.
absent from mere improvement in workmanship, 27.
absent from mere omission of parts, 35.
absent from mere substitution of equivalents, 36.
absent from mere substitution of superior materials, 28.
absent from new combination of old devices having no new mode of operation, 37.
absent from new use of old process or thing, 38.
absent from product of mere mechanical skill, 25.
evidence of want of, 505.
form no criterion of, 41.
necessary to patentability, 23.
patentable but once, 180*a*.
questions of presence or absence of, are determined by negative rules, 24.
questions of presence or absence of, are questions of fact, 42.
questions of presence or absence of, are sometimes affected by the state of the art, 43.
questions of presence or absence of, are sometimes determined by comparative utility, 40.
want of, how pleaded in actions at law, 446.
want of, how pleaded in actions in equity, 599.
want of, how proved, 505.

JOINT INFRINGEMENT
facts which constitute, 407.
profits recoverable in cases of, 712.

JOINT INFRINGERS
as defendants, 406.
contribution between, 531.
releases to one of several, 531.

JOINT INVENTION
distinguished from sole invention, 45, 46.
distinguished from suggestions to sole inventor, 47.
for sole patent, how pleaded in actions at law, 452.
for sole patent, how pleaded in actions in equity, 605.
for sole patent, how proved, 516.
for sole patent, voids the patent, 50.

JOINT PATENT
for sole invention, how pleaded in actions at law, 452.
for sole invention, how pleaded in actions in equity, 605.
for sole invention, how proved, 517.
for sole invention, voids the patent. 51.

JUDGES
directing juries to find verdicts for defendants, 536.
trying actions at law without juries, 540.

JUDICIAL NOTICE
in respect of pleadings, 445.
when taking the place of evidence, 505, 509.

JUDGMENTS
by default pleadable as *res judicata*, 408.
for amount larger than verdict, finding, or report, 542.
when and how entered, 542.

JUNIOR PATENT
conformity to, of defendant's doings, relevant to motions for preliminary injunctions, 687.
conformity to, of defendant's doings, relevant to trial of issue of infringement in action at law, 532.

JURISDICTION
consent of parties cannot confer, 390.
in interference actions, 316.
in *qui tam* actions, 331.
of Commissioner of Patents, to issue letters patent, 148, 178.
of Commissioner of Patents to grant extensions, 266,
of Commissioner of Patents to grant reissues, 211–221.
of Circuit Courts over actions for infringement against agents of the United States Government, 393.
of Court of Claims in patent cases, 391, 392,
of courts of first resort in patent cases, 379,
of equity in patent cases, 572, 573, 592, 593, 658, 689.
of individual Federal courts. of first resort in patent cases, 389.
of State courts to enforce or set aside contracts relevant to patents, 388.
original in patent cases, 379.
question of jurisdiction of State courts in infringement cases, 380.

JURIES
instructions to, 537.
when directed to find a verdict for defendants, 536.

JURY TRIALS
in actions at law, 488.
in actions in equity, 632.

KENT, CHANCELLOR
opinion on jurisdiction of State courts, 380.

KNOWLEDGE
fund of, required by inventors, 48.
in foreign country, 54.
inventor presumed to have, of state of the art, 43.
lack of, of anticipating matter, on the part of patentees, 73.
necessary to acquiescence, 312.
of patent not necessary to constitute infringement, 377.
public, works no constructive abandonment, 100.
what must include, in order to negative novelty, 72.

LACHES
a defence in equity, 591, 596.
a defence to a motion for a preliminary injunction, 684.
defence of, how guarded against, 597.
how set up as a defence, 597.
working abandonment of application and invention, 145.
working abandonment of invention, 91.

LAPSE OF TIME
before applying for broadened reissue, 226, 227.

LAW
sources of, 537, 634.

LAW OF THE CIRCUIT
meaning of the phrase, 634.

LAWS OF NATURE
not subjects of patents, 2.

LEAVITT, JUDGE
opinion on witness fees taxable as costs, 548.

LESSORS
of infringing machines, as defendants, 405.

LETTERS PATENT
apparently in force, *prima facie* evidence that they have not expired or been repealed, 494.
as documents, 172.
bill in equity to compel issue of, 134.
claims of, 176, 177.
constituents of, 172.
construction of, 181.
construction of, a question of law, 189.
constructive notice to all persons, 191.
construed according to contemporaneous statutes, 188.
construed in light of contemporaneous construction of inventor, 187.

LETTERS PATENT—*Continued*
construed in light of expert testimony, 189.
construed in light of Patent Office restrictions, 187*a*.
construed in light of the state of the art, 184.
construed with proper liberality, 185.
construed with proper strictness, 186.
description in, affecting constructions of claims, 182.
duration of, 162, 163.
errors in, when fatal to validity of, 172.
extent of, 160, 161.
granted to whom, 110, 171.
how affected by vague description of claims, 178.
how construed after disclaimer, 207.
how set out in declarations, 428.
matters of public record, 191.
nature of, 151–157.
only one for one invention, 180*a*.
presumed to be for same invention as application, 190.
prima facie evidence of their own validity, 491.
separate, granted for different parts of one machine, 180.
signed by whom, 172.
surrender of, 105.
surreptitious or unjust obtaining of, how pleaded in actions at law, 451.
surreptitious or unjust obtaining of, how pleaded in actions in equity, 604.
the description in, 174, 175.
valid as to one or more claims while void as to the residue, 177.
when may cover plurality of inventions, 180.

LICENSES
arising from acquiescence, 312.
arising from estoppel, 312, 313.
arising from recovery of damages or profits, 314.
as defences to motions for preliminary injunctions, 682.
assignability of, 310.
construction of, 306.
defined, 296.
duration of, 308.
express, with implied incidents, 297–301.
express, without implied incidents, 300, 302.
forfeiture of, 308.
from one of several mutual owners, 305.
how pleaded in actions at law, 465.
how pleaded in actions in equity, 618.
how proved, 530.
implied from conduct, 312.
need not be negatived in declarations, 434.

LICENSES—*Continued*
need not be negatived in plaintiff's evidence in chief, 496.
none required, to buy specimens of patented things, 299.
notice of, 304.
purely implied, 311.
recording of, 304.
to corporations, 310.
to one of several joint users, 305.
to partnerships, 310.
written or oral, 303.

LICENSEES
how suing for infringement, 400.
need not join in surrender and reissue, 252.
of one of several mutual owners, 294, 305.
when evicted, 307.
when sued as infringers, 309.

LIMITATION OF TIME
relevant to beginning actions, 472, 476, 477.
relevant to filing bills of review, 651, 652.
relevant to filing bills of revivor, 627.

LOST ART
significance of, 71.

LOWELL, JUDGE
opinion on costs in cases of disclaimers, 205.
opinion on experimental use, 95.
opinion on invention, 37.
opinion on novelty, 69.
opinion on liability of officers, directors, and stockholders of corporations for corporate infringement, 410.

MACHINES
claims in specifications of, 117.
defined, 16.
distinguishable from manufactures, 19.
subjects of patents, 1.

MAGISTRATES
before whom oath may be made to affidavits, 584.
before whom oath may be made to specifications, 122.

MAKING
more than two years before application for letters patent, 99.

MANDAMUS
to compel Commissioner of Patents to allow appeal, 132.
when not grantable, 134.

MANUFACTURES
claims in specifications of, 118.
distinguishable from compositions of matter and from machines, 19.
patent-law meaning of the word, 17.
subjects of patents, 1.

MARKING "PATENTED"
making or selling without, how far a defence in equity, 616.
making or selling without, how pleaded in actions at law, 463.
making or selling without, how pleaded in actions in equity, 616.
making or selling without, how proved, 528.
making or selling without, must be negatived by plaintiff's pleading and evidence in chief, 433*a*, 496.

MARRIED WOMEN
as assignors and assignees of patent rights, 275.
as defendants in patent cases, 402.

MARSHALL, CHIEF JUSTICE
opinion on equity jurisdiction, 395.
opinion on reissues, 210.

MASTERS IN CHANCERY
draft reports of, 744.
exceptions to reports of, 745–749.
fees of, by whom paid, 739.
final reports of, 750.
hearing in equity cases before, 632, 643.
infringement investigated by, in point of extent, 742.
infringement investigated by, in point of varieties, 743.
proceedings before, 739–743.
system of practice relevant to findings of, 750.
taking account before when stopped, 648.

MATTHEWS, JUSTICE
opinion on invention, 24, 32
opinion on disclaimers, 209.

MCCRARY, JUDGE
opinion on mode of operation, 343.

MCKENNA, JUDGE
opinion on aggregation, 32.
opinion on claims, 177.

MCKINNON, JUDGE
opinion on novelty, 69.

MCLEAN, JUSTICE
opinion on witness fees taxable as costs, 548.

MEANS
use of word in claims, 117*a*.

MECHANIC-EMPLOYEES
as defendants in actions for infringement, 403.

MENTAL CONCEPTIONS
inventions do not date from, 70.

MILLER, JUSTICE
opinion on ethical character of patents, 153.
opinion on injunctions after expirations of patents, 698.

MILLER *v.* BRASS CO.
defence in, 226.
defence in, how pleaded in actions at law, 458.
defence in, how pleaded in actions in equity, 611.
defence in, how proved, 523.

MILLER *v.* EAGLE CO.
defence in, 180*a*.
defence in, how pleaded in actions at law, 460.
defence in how pleaded in actions in equity, 613.
defence in, how proved, 525.

MISTAKE
causing reissuable faults, 220.
justifying disclaimers, 195, 196.
remedy for issuing or obtaining patent through, 321.

MODE OF OPERATION
as affecting infringement, 341–346*a*.
described in specifications, 111.
novelty of, when necessary to invention, 37.
when changed by omission of parts, 35.

MODELS
amendment of, 138, 214.
making of may constitute birth of subsequently patented inventions, 70.
never negative novelty, 61.
when required, 127.

MONTHS
calendar, not lunar, 125.

MORTGAGES
of patents, 288*a*.

MOTIONS
alleging non-jurisdiction of equity, 504.
for attachments, 708-710.
for preliminary injunctions, 659-668.
to dissolve preliminary injunctions, 659, 692-694.
to reinstate dissolved preliminary injunctions, 695.
to dissolve reinstated preliminary injunctions, 695.
to strike evidence from the record, 600.

MOWRY v. WHITNEY
the rule of profits in, 725-735.

NELSON, JUSTICE
opinion on injunctions in interference actions, 319.
opinion on joint invention, 46.
opinion on liability of officers, directors and stockholders of corporations, for corporate infringement, 410.

NEW MATTER
in reissues, 214.
meaning of the phrase, 240.

NEW TRIALS
in actions at law for infringement, 539.

NEW USE
of old thing not invention, 38.

NOTICE
constructive of letters patent, 191.
of licenses, 304.
of motions for preliminary injunctions, 661.
of special matter, 444.
protecting prior unrecorded assignments, 281.

NOVELTY
as affected by another patent to same inventor for same invention, 69, 180*a*.
as affected by prior abandoned experiments, 63.
defined, 53.
depends on questions of fact, 75.
evidence of want of, 506–508.
must be put in issue in declarations, 424.
necessary to patentability, 52.
negatived by prior knowledge and use in this country, 71.
negatived by prior making in this country, 72.
negatived by prior patent, 54, 57.
negatived by prior printed publication, 54, 55, 57.
negation of, not averted by ignorance of anticipating matter, 73.
negation of, not averted by producing old thing from new source, 74.
not negatived by antiquity of part, 66.

NOVELTY—*Continued*
not negatived by anything neither designed, apparently adapted, nor actually used, to perform the same function, 68.
not negatived by anything occurring after the date of the invention, 69.
not negatived by description in prior application, 60.
not negatived by incomplete prior description, 57.
not negatived by prior abandoned application, 58.
not negatived by prior accidental and not understood production, 67.
not negatived by prior description of substantially different thing or process, 57.
not negatived by prior model, 61.
not negatived by prior private foreign patent, 55.
not negatived by prior English preliminary specification, 55.
not negatived by prior use in foreign country, 54.
not negatived by prior useless process or thing, 65.
not negatived by substantially different prior process or thing, 62.
not negatived by unpublished drawings, 61.
of designs, 64.
predicated of everything which is absolutely new, 52.
predicated of some things not absolutely new, 53.
want of, how pleaded in actions at law, 447.
want of, how pleaded in actions in equity, 600.
want of, how proved, 76, 506–508.
want of, how rebutted, 509, 510.

OATHS
affirmations substituted for, 124.
effect of waiving, in bills, 581.
to answers, 581.
to bills in equity, 584.
to pleas in equity, 589.
to specifications, 122, 123.

OBITER DICTA
significance of, 537.

OBJECTIONS
to evidence, 535.
to evidence before masters, 741.

OFFICERS OF CORPORATIONS
as defendants, 410, 411, 413, 415.

OMISSION
as affecting infringement, 338, 349, 369.
as affecting invention, 35.
as affecting sameness of invention, 244.

On Sale
in foreign country more than two years before application, 101.
in this country more than two years before application, 93.
patent-law meaning of the phrase, 90.

Options
of patentee-licensor to sue for royalty, or for infringement, 309.

Oral Descriptions
whether fixing dates of subsequently patented inventions, 70.

Owners in Common
as plaintiffs or complainants, 399.
must join in surrender and reissue, 252.

Parker & Whipple Co. *v.* Yale Clock Co.
rule in, 283.

Partition
of patent rights, 295.

Partnerships
as defendants, 408.
licenses to, 310.

Parts
of machines, how claimed, 117*a*.

Patentability
prerequisites of, 1, 2, 3, 23,

Patents
alleged abandonment of, 106, 107.
beginning of terms of, 170.
consideration given for, 153.
duration of, 162–165.
expiration of, before end of apparent term, how pleaded in actions *at* law, 462.
expiration of, before end of apparent term how pleaded in actions in equity, 615.
expiration of, before end of apparent term, how proved, 527.
founded upon what, 150.
granted for what subjects, 1.
how construed, 181–189.
interfering, 315.
mortgages of, 288*a*.
not odious monopolies, 153.
plurality of approximating, to one inventor, 180*a*.
plurality of, when suable on in one action, 417.
repeal of, 321.
territory covered by, 160.
when dated, 170.

PATENT LAWS
the sources of, 587, 634.

PATENT RIGHTS
absolute, not qualified, 154.
dignity of, 152.
exclusive of government, 157.
not subject to common law execution, 156.
property, 151.
relevant to specimens made or purchased before application for, 158.
subject to creditors' bills, 156.

PATENT OFFICE RULES
founded on what, 109.
governing applications, 109.
relevant to applications, 109.
relevant to drawings, 126.
relevant to interferences, 140.
relevant to models, 127.
relevant to specimens of compositions of matter, 128.

PENALTIES
for disobedience of injunctions, 710.
in *qui tam* actions, 329.

PERPETUATION OF TESTIMONY
bills for, 585.

PETITIONS
for letters patent, 110.

PLAINTIFFS
costs recoverable by, 543.
in actions at law for infringement, 394–400.
in *qui tam* actions, 330.

PLEAS IN ACTIONS AT LAW
bad in part, bad altogether, 482.
demurrable, when, 484.
dilatory, 439.
in bar, 440.
of actual abandonment, 449.
of constructive abandonment, 449.
of deceptively lacking or excessive specification, 453.
of defence in Miller *v.* Eagle Co., 460.
of estoppel, 467.
of expiration of patent, 462.
of indistinct claims, 455.
of insufficient specification, 454.

PLEAS IN ACTIONS AT LAW—*Continued*
of joint invention for sole patent, 452.
of joint patent for sole invention, 452.
of license, 465.
of making or selling without marking "patented," 468.
of non-infringement, 466.
of release, 465.
of repeal of patent, 461.
of rule in Miller *v.* Brass Co., 458.
of statutes of limitation, 471.
of surreptitious or unjust obtaining of patent, 451.
of unreasonable delay to file needed disclaimer, 456.
of want of being a statutory subject of a patent, 446.
of want of identity between application and letters patent, 450.
of want of identity between letters patent and reissue, 459.
of want of invention, 446.
of want of novelty, 447.
of want of reissuability, 457.
of want of title, 464.
of want of utility, 448.

PLEAS IN ACTIONS IN EQUITY
found bad in law, 590.
found good in law and true in fact, 590, 649.
found good in law and untrue in fact, 590.
proceedings on, 590.
replications to, 590.
to bills in the nature of supplemental bills, 631.
to original bills, 588, 589.
to supplemental bills, 631.

POLICE POWERS
over specimens of patented things, 155.

PRACTICE
in actions at law, 489.
in actions in equity, 489.
on bills to repeal patents, 323.
on masters' findings, 750.

PRAYERS
for preliminary injunctions, 660.
for process, 582.
for relief, 580.

PREAMBLE
of specifications, 111, 112.

PRESUMPTIONS
that inventors borrowed whatever in their inventions was old, 43.
that letters patent are for same inventions, as applications, 190.
that reissues are for same inventions as originals, 243.

PRIMARY INVENTIONS
defined, 359.

PRIMARY PATENTS
how infringed, 359, 362.

PRINCIPLE
of invention, how explained in specification, 115.

PRINCIPLES
distinguished from processes, 7-15.
not patentable, 2, 7.

PRINTED PUBLICATIONS
defined, 56.

PRIOR ABANDONED EXPERIMENTS
as affecting novelty, 63.

PRIOR ADJUDICATION
a foundation for a preliminary injunction, 665, 666.

PRIOR MAKING
may negative novelty, 72.

PRIOR PRINTED PUBLICATION
negatives novelty, 56.

PRIOR PRIVATE FOREIGN PATENT
never negatives novelty, 55.

PRIOR PUBLIC PATENT
negatives novelty, 55.

PRIOR PRELIMINARY ENGLISH SPECIFICATION
never negatives novelty, 55.

PRIOR USE
in foreign country when negatives novelty, 54.
in this country negatives novelty, 71.

PRIORITY
question of, between rival inventors, how settled, 140-142, 315-320.

PROCESSES
claims for, how construed, 186.
classes of, 3.
distinguished from principles, 7-15.
machine, 3*a*.
manipulative, 3*a*.
mechanical, 3*a*.
non-mechanical, 3.
patentability of, 3.

PROCESS PATENTS
claims in specifications of, 120.
exclusive of those who practised the process after invention and before application, 159.
infringed, how, 885–888.

PROFERT
in declarations and bills of complaint, 428, 483, 579.

PROFITS
account of, covering what time, 714.
accruing before surrender and reissue, 231.
decrees for, 573.
defendants', recoverable in equity, 711.
evidence of, 636, 740.
from infringement by making and selling, 717–723, 735.
from infringement by selling, 724.
from infringement by using, 725–734.
from infringement of design patents, 723*a*.
generic rule for ascertaining, 715.
interest on, 736.
not measured by damages, 716.
proceedings for ascertaining, 739–750,
recoverable in cases of joint infringement, 712.
recoverable in cases where infringement was partly unprofitable, 713.

PROPORTION
change of, as affecting invention, in compositions of matter, 41*a*.
change of, as affecting infringement of patent for composition of matter, 373.

PUBLIC KNOWLEDGE
after invention and prior to application, 100.

PUBLIC USE
more than two years before application, 93.
patent-law meaning of the phrase, 94–95.

PUTNAM, JUDGE
discussion of, on lost arts, 71.

QUESTIONS OF FACT
abandonment, 108.
absence or presence of invention, 42.
infringement, 339.
novelty, 75.
sufficiency of specification, 179.
Supreme Court, decisions on, 635.

QUESTIONS OF LAW
arising on hearings in equity, 634.
arising on trials at law, 537.
construction of letters patent, 189.

QUI TAM ACTIONS
declarations in, 332.
form of, 332.
functions of, 324.
penalties in, 329.
plaintiffs in, 330.
writs of error in, 334.
wrongs remedied by, 325-327.

RAILWAY CO. *v.* SAYLES
rule in, 184, 359-362.

REARRANGEMENT
of parts as affecting infringement, 348.

RECEIVER
of court invoking licenses to insolvent, 310.

RECORD
letters patent, matter of, 191.

RECORDING
of assignments, 281.
of grants, 287.
of licenses, 304,

RECOVERY
of damages or profits working license, 314.

REFEREE
trial by, 541.

REFERENCE NUMERALS OR LETTERS
significance of, in claims, 117*a*, 182*a*.

REHEARING
effect of, on accounting, 648.
for matter apparent on the record, 646.
on account of newly discovered evidence, 647.
petitions for, 645.

REINVENTION
what right conferred by, 158.

REISSUES
applications for, 214.
beginning of history of, 210.

REISSUES—*Continued*
broadened, 219, 226, 227.
claims of, disclaimed, 201.
construed liberally, 248.
covered by assignment of original, 250.
covering things made before date of, 254.
how stated in declarations, 429.
invalidity of, for want of reissuability of original, how pleaded in actions at law, 457.
invalidity of, for want of reissuability of original, how pleaded in actions in equity, 610.
invalidity of, for want of reissuability of original, how proved, 522.
leaving claims unchanged in scope, 218*a*,
legal effect of, 254.
must be for same invention as original, 233.
mutual owners must join in applications for, 252.
narrowed, 216*a*.
new matter in, 214.
not affected by more than two years' prior public use or sale, 229.
not granted after expiration of original, 232.
novelty of, dating from when, 254.
of reissues, 232.
prima facie evidence of their own validity, 492.
remedies for refusal to allow, 214.
rights of grantees under, 253.
to assignees, 212, 214, 250, 252.
to executors or administrators, 250.
to one of several executors, 251.
statutory foundation of, 211-215.
subjects of, 216.
substituting equivalents in, 247.
under the statue of 1832, 211.
under the statute of 1836, 212.
under the statute of 1837, 213.
under the statute of 1870, 214.
under the Revised Statutes, 215.
under general authority of the Commissioner, 210.
void in part and valid in part, 249.
when may claim single device shown, but not separately claimed in the original, 246.
when may claim sub-combination shown in the original, 245.
where there is neither model nor drawing, 214.

REJOINDERS
bad in part, bad altogether, 482.
function of, in actions at law for infringement, 478, 480.

RELEASES
how pleaded in actions at law, 465.
how pleaded in actions in equity, 619.
how proved, 531.
need not be negatived in plaintiff's evidence in chief, 466.
to one of several joint infringers, 531.

REMEDIES
for infringement where treated in this book, 378.

REPAIRING PATENTED MACHINE
how far lawful, 301.

REPEAL OF PATENTS
for what causes had, 321.
in what courts obtainable, 322, 323, 654.
how pleaded in actions at law, 461.
how pleaded in actions in equity, 614.
how proved, 526.
practice in cases of bills for, 323.

REPLICATIONS IN ACTIONS AT LAW
bad in part, bad altogether, 482.
function of, in patent cases, 478–480.

REPLICATIONS IN ACTIONS IN EQUITY
to answers, 623.
to pleas, 590.

REPORTS
exceptions to masters', 745-749.
masters' draft, 744.
masters' final, 750.

RES JUDICATA
foundation, limitations, and operation of the doctrine of, 468.
how pleaded in actions at law, 470.
how pleaded in actions in equity, 621.
how proved, 533.
in interferences, 141, 142.

RESTRICTIONS
of claims by Patent Office, 187*a*.

RESULT
as affecting infringement, 340.
necessary to utility, 77.

RIGHTS
kinds of, in patented inventions, 155.
of inventors, patentees, etc., where treated in this book, 378.

RIGHTS OF ACTION
assignment of, 277.
assignment of, how protected from subsequent purchasers, 281.

ROOT *v.* RAILWAY CO.
rule in, 572, 592, 598.

ROYALTIES
as measures of damages, 556-558.
established rate of, how affecting right to preliminary injunctions, 686.
for making, 564.
for making and using, no criterion of damages for making and selling, or *vice versa*, 561.
of plaintiff, no measure of recoverable profits, 716.
option of patentee-licensor to sue for, or for infringement, 309.
regard to proportion, in measuring damages by, 562.
reserved on sale of patents, no measure of damages, 560.

SAGE, JUDGE
opinion on actions for assigned rights of action, 395.

SAME INVENTION
meaning of the phrase, as between applications and letters patent thereon, 138, 440, 450, 514, 603.
meaning of the phrase, as between interfering patents to different inventors, 315.
meaning of the phrase, as between a plurality of original approximating patents to the same inventor, 180*a*.
meaning of the phrase, as between an original patent and a reissue thereof, 233, 242, 243, 244, 440, 459, 524, 612.
presumption of, as between applications and letters patent thereon, 190.
presumption of, as between an original patent, and a reissue thereof, 243.

SAWYER, JUDGE
opinion of, on witness fees as taxable costs, 548.

SECONDARY INVENTIONS
defined, 359.

SECONDARY PATENTS
how infringed, 362.

SHEPLEY, JUDGE
opinion of, on repeal of patents, 322.
opinion of, on substitution of ingredients in compositions of matter, 371.

SHIPMAN, JUDGE NATHANIEL
opinion of, on doctrine where disclaimer is found necessary, 209.
opinion of, on invention, 85.
opinion of, on novelty, 65.

SHIPMAN, JUDGE W. D.
opinion of, on indistinctness of claims, 177.
opinion of, on liability of officers, directors, and stockholders of corporations for corporate infringement, 410.
opinion of, on proceedings before masters, 741.

SHIPS
American, practice of patented invention on board of, on high seas, 161.
foreign, use of patented invention on board of, in United States ports, 161.

SHIRAS, JUDGE
opinion of, on mode of operation, 343.
opinion of, on admissibility of depositions in interference suits, 318.

SIGNATURES
to drawings, 126.
to specifications, 111, 121.

SIMILITER
function and importance of, 481.

SKILFUL MECHANIC
meaning of the phrase, 57.

SOLE INVENTION
distinguished from joint invention, 45, 46.
for joint patent, 51.
not inconsistent with received mechanical assistance, 49.
not inconsistent with specially sought information, 48.

SPECIAL PLEADING
ancient function of, 442.

SPECIFIC PERFORMANCE
enforced, of contracts relevant to patent rights, 286.

SPECIFICATION
claims, the operative parts of, 219.
constituents of, 111.
deceitfully lacking or excessive, how pleaded in actions at law, 453.
deceitfully lacking or excessive, how pleaded in actions in equity, 606.

deceitfully lacking or excessive, how proved to be, 518.
insufficient, how pleaded in actions at law, 454.
insufficient, how pleaded in actions in equity, 607.
insufficient, how proved to be, 519.
meaning of the word, 173, 217.
oath to, 122, 128.

STANDARD OF COMPARISON
under the rule in Mowry *v.* Whitney, 732–734.

STATES
power of,over patented articles, 155.

STATE COURTS
jurisdiction of, over actions to enforce or set aside contracts relevant to patents, 388.
jurisdiction of, over creditors' bills filed to collect debts out of patent rights, 289.
non-jurisdiction of, in infringement actions, 380.

STATE OF THE ART
affecting questions of invention, 43.
claims construed in the light of, 184.
evidence of experts relevant to, 500.
mistake relevant to, how remedied, 220.

STATUTES
special, grafted upon general statutes, 188.

STATUTES OF LIMITATION
application of, to actions in equity, 622.
how pleaded in actions at law, 471.
how pleaded in actions in equity, 622.
the national, 472.
the State, 476, 477.
when requiring evidence to support plea of, 534.

STOCKHOLDERS IN CORPORATIONS
as defendants, 410, 411, 412, 415.

STORY, JUSTICE
opinion of, on abandonment of patents, 107.
opinion of, on jurisdiction of State courts, 380.
opinion of, on liability of officers, directors and stockholders of corporations for corporate infringement, 415.
opinion of, on patent covering thing made before application, 158, 159.

SUB-COMBINATIONS
when may be claimed in reissues, though not claimed in originals, 245.

SUBJECT OF PATENT
want of being, how pleaded in actions at law, 446.
want of being, how pleaded in actions in equity, 508.
want of being, how proved, 504.

SUBSTANTIAL
variant force of the word, 302.

SUBSTANTIALLY AS DESCRIBED
function of the phrase, 182.
when the phrase is implied, 182.

SUBSTITUTION
as affecting infringement, 350, 370, 371.

SUGGESTIONS TO INVENTORS
distinguished from joint invention, 47.

SUPERSEDEAS
on appeal to Circuit Court of Appeals, 654.

SUPPLEMENTAL BILLS
leave of court necessary to filing, 630.
subordinate to original bills, 624.
when proper, 625.

SUPPLEMENTAL BILLS IN THE NATURE OF BILLS OF REVIEW
character and function of, 647, 648.

SUPREME COURT OF THE UNITED STATES
appeals to, from Court of Appeals of the District of Columbia, 144, 550, 654.
appeals to, from Circuit Courts of Appeals, 654.
certificates to, from Circuit Courts of Appeals, 550, 654.
certiorari from, to Circuit Courts of Appeals, 550, 654.

SUPREME COURT OF THE DISTRICT OF COLUMBIA
appeals from, to Court of Appeals of the District of Columbia, 144, 654.
jurisdiction of in patent cases, 134, 379.
writ of error to, from Court of Appeals of the District of Columbia, 550.

SUR-REJOINDERS
function of, in actions at law for infringement, 478.

SURRENDER OF INVENTIONS
how effected, 105.

SURRENDER OF LETTERS PATENT
effect of, on accrued damages and profits, 231.
mutual owners must join in, 252.
when reissue is refused, 231.
with a view to reissue, 230-232.

SUSPENSION
of permanent injunctions pending appeals, 703.

SWAYNE, JUSTICE
opinion of, on joint invention, 46.

TANEY, CHIEF-JUSTICE
opinion of, on reissuability of patents, 226.

TAXATION OF COSTS
appeal from, 549.
how and when made, 549.

TEMPORARY RESTRAINING ORDERS
pending motions for preliminary injunctions, 664.

TENANCY IN COMMON
in patent rights, 292.

TENANTS IN COMMON
rights of, 291.

TENURES
upon which patent rights may be held, 274.

TERM OF PATENT
how fixed, 112.

TERRITORY
covered by patents, 160.

TEST CASES
pendency of, excusing delay, 684.

TESTIMONY
in actions at law, 535.
in actions in equity, 638.

TEXT WRITERS
weight of statements of, 537.

THEORY
invention which resides in, may be patentable, 23.

TIME
for taking depositions in actions in equity, 639.

TITLE
after acquired, 282.
by assignment, 274.
by bankruptcy, 290.
by creditor's bill, 289.
by death, 291.
by grant, 287.

TITLE—*Continued*
by occupancy, 273.
certainty of, necessary to preliminary injunction, 665, 675.
conveyance of legal, conveying equitable, 280.
conveyed by estoppel, 275.
equitable, how arising, 274, 285.
how stated in declarations, 432.
how proved, 495.
in a plurality of persons, 292.
inchoate, 273.
methods of acquisition of, 272.
to reissues, 250.
to reissues when granted to executors or administrators, 251.
variant nature of, 272.
want of, how pleaded in actions at law, 464.
want of, how pleaded in actions in equity, 617.
want of, how proved, 529.
warranty of, 282.

TRESPASS ON THE CASE
actions of, for infringements of patents, 418, 421.
character of actions of, 442.
declarations in actions of, 422–438.

TRIALS
by judges without juries, 540.
by juries, 488.
by juries in equity cases, 642.
by juries, of issues sent out of equity, 595.
by referees, 541.
of actions at law, 487.

TRUSTEE
infringer treated as, in respect of his profits, 715.

TRUSTS
constructive, 285.
resulting, 285.

TWO YEARS
sale, or public use more than, before application, 93, 94,95, 96, 229.

UNANIMITY OF JURIES
history of, 488.

UNAUTHORIZED MARKING
how punished, 325.
how restrained, 333.

USEFUL ART
subject of a patent, 1.

USES
all, of patented thing, covered by the patent, 180.

UTILITY
burden of proof in respect of, 85.
constituent elements of, 77.
doubts relevant to, 85.
in respect of infringement, 376.
may reside in beauty, 80.
must be stated in declarations, 424.
necessary to patentability, 77.
necessary to whatever is claimed to negative novelty, 65.
negatived where function is always evil, 81.
not negatived by mere imperfection, 79.
patents *prima facie* evidence of, 85.
performance of specified function necessary to, 78.
want of, how pleaded in actions at law, 448.
want of, how pleaded in actions in equity, 601.
want of, how proved, 511.
when functions are thought by some to be good, and by others to be evil, 83.
where functions sometimes work good, and sometimes work evil, 82.
where primary function is good, and ultimate function is evil, 84.

VALIDITY
defendant's admission of, when foundation of right to preliminary injunction, 673.
letters patent, *prima facie* evidence of their own, 491.
reissues *prima facie* evidence of their own, 492.
special presumption of, necessary to preliminary injunction, 665.
warranty of, 283, 284.

VENUE
how laid in declarations, 422.

VERDICTS
in patent cases, 538.

WALLACE, JUDGE
opinion of, on abandonment of patents, 107.
opinion of, on decree where disclaimer is found necessary, 209.

WARRANTY
of title, 282.
of validity, 283, 284, 307.

WASHINGTON, JUSTICE
opinion of, on abandonment of patents, 106.
opinion of, on jurisdiction of State courts, 380.

WHEELER, JUDGE
opinion of, on actions of assumpsit for infringements of patents, 419.
opinion of, on decree where disclaimer is found necessary, 209.
opinion of, on McClurg *v.* Kingsland, 159.
opinion of, on public use, 95.

WITNESSES
to specifications, 121.
to want of novelty, need not be named as such, in notices of special matter, 444.

WOODRUFF, JUDGE
opinion of, on mode of operation, 345.
opinion of, on witness fees taxable as costs, 548.

WORKMANSHIP
distinguishable from invention, 27.

WRITS OF ERROR
function of, 550.
in *qui tam* actions, 334.
where cases are tried by judges without juries, 540.

WRONGS
classification of, 411.
of infringement, where treated in this book, 378.

Ex. L. B.