EXPOSITION

OF

PART OF THE PATENT LAW.

BY A

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OF THE

UNITED STATES.

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TO WHICH IS ADDED,

Reflections on the Patent Law.

1816.

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INTRODUCTION.

It is a singular and somewhat extraordinary fact, that almost all jurists misconstrue the act, entitled "an act to promote the progress of the useful arts," and all think nearly the same way at the first reading. Yet when their attention is closely drawn to different points and bearings of the act, they almost all construe it correctly, and nearly alike.

This misconstruction in the first instance cannot be accounted for better than by supposing it to be owing to their want of practical mechanical knowledge, which they have no need of acquiring;—this being the subject of the law, reflection, and a little attention to the act, and the object to be attained, would soon expel every doubt about its true construction.

APR 25 1907

EXPOSITION

OF

PART OF THE PATENT LAW.

THE constitution of the United States delegates to congress the power "to promote the progress of science and useful arts, by securing for limited times to authors and *inventors* the exclusive right to their respective writings and discoveries"—not to the first and true inventors exclusively.

Congress passed the first act "to promote the progress of useful arts," February 10th, 1790, in which they confined or limited the grants to the *first* and *true* inventors or discoverers *exclusively;* but discovering either deficiencies or injustice in the operations of this act, they appointed a committee to frame a bill "to promote the progress of useful arts, and to repeal the act heretofore made for that purpose," which is dated February 21st, 1793.

Their first consideration will naturally be: How shall we attain the great object?

1st. Excite to action, the inventive genius of the nation.

2d. Induce inventors to divulge and describe their useful discoveries, by securing to them, for sufficiently limited times, the exclusive right to their discoveries. And observing that the word used in the constitution is *inventors*, (not first and original inventors) they discover and believe that there may be several truly original inventors, and but one first and original inventor. For every person who originally discovers the thing without suggestion, hint, aid, or information, is the true inventor, or discoverer; as much so as the first true inventor or discoverer: and several persons may truly invent or discover the same thing.

3d. To invite and insure a speedy disclosure, to the public, of all useful discoveries, that they may not be lost, but that the progress of useful arts may be promoted; they deem it expedient, to extend the terms to be held out, to any or either of *the true inventors or discoverers*, as well as to the first true inventor or discoverer: to him who may *first* apply, accept the proffered terms, and comply with the requisitions, and specify the discovery in the patent office, to be designated for that purpose. Because it would be impolitic, as well as often unjust, to limit the grant, to the first and original inventor, only; for every true inventor, believes himself to be the *first* inventor, until otherwise informed, because he knows that he discovered the thing *originally*, without suggestion, hint, aid, or in-

formation. Impolitic, because the first inventor may refuse to accept the proffered terms; keep his discovery a secret, for his own use, and that of his friends;* and the public might be deprived of the benefits of his useful discovery, to which they claim a right, after the inventor shall be remunerated, and rewarded, by exclusive right, for sufficient limited times, holding principles to be *common stock*. Unjust, to award the patent to the first true inventor after the second true inventor had incurred the expenses of specifying in the patent office, obtaining his patent, perfecting the discovery, and introducing it into operation, which often amounts to enormous sums.

4th. To establish, and define, what shall be a patentable interest, or object, the exclusive right to which shall be granted for limited times to *inventors*, as authorised by the constitution.

5th. Define and establish the character of the *inventor*, and his qualifications, to entitle him to a grant of exclusive right to a patentable interest.

They having thus drawn the ground lines, let us enquire how they have proceeded; and whether they have once mentioned the *first* and true inventor, or discoverer, in the act.

* Which is often the case when the inventor is negligent, or when he is unwilling to incur the expenses, or encounter the difficulties.

The Character of the Patentee, and Patentable Objects, defined.

Sect. 1st, states, 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," and shall present or petition, &c. and [sect. 3.] swear or affirm that he verily believes that *he is the true inventor or discoverer*, &c.—here they have designated the character to whom a patentable object shall be secured, by patent, and—Have defined and established the patentable interests to consist, entirely, in the *new or improved application of principles*, which principles are *common stock*, to which every man claims equal right, to seek for, find, take and use, or to leave for another to find, take and use, as in the case of fish, wild fowl and beasts, and spontaneous productions. But the whole community have agreed, in forming the constitution of the United States, that no individual who may find, shall take and use *principles*, exclusively, longer than for the limited times that may be granted by congress. But here the public claim more than their right; for the ingenuity and labour of the inventor is his, *exclusively*, by natural law and justice.

Let it be premised, that many inventions, or improvements, have cost more to perfect and bring into

use, than 100 acres of the best land, well improved for farming, would sell for.

The law having defined, and established, both the character of the inventor, and the objects that may be granted to him, exclusively: Then supposing a grant to be fairly made according to law, to *the true inventor*, and he has expended his time and money, to great amount, to perfect his invention, and get it introduced into use;—Have congress the power to recal the grant, or to grant the same right, or any part thereof, to any other person, either directly or indirectly, during the limited *term;* or to impose any new condition, or to require any new or additional qualifications, either directly or indirectly, of the patentee, by any subsequent act? The answer is clear: No. But they had power to provide, in the same act, That whenever it shall be proved in any court, on any suit, by one or more witnesses, to the satisfaction of the judges and jury, That the patentee, although he be the *true inventor*, was not the first original inventor, or that the thing had been in use *in any other country*, the patent shall be declared void. But this they have not done, because it would have been both highly impolitic and unjust;—opening the way to, and inviting perjury, and imposing a constant terror, and check on the mind of the patentee, to deter him from risquing the time, labour and money necessary to perfect his invention, and introduce it into use; from divulging and specifying his discovery, or taking his patent *at all;*—he being certain, that it would be sworn away, if it ever became productive,

and thus effectually to *impede* the progress of useful arts.

But congress has provided, that the patent may be declared void on three grounds only, during the first three years; viz.

1st. On proof being made, That the patentee never possessed the character *required by law;* that he was not *the true inventor;* but had received some information of the thing having been invented, or in use.

2d. That he has obtained a patent for an *unpatentable object.* That the thing had been so extensively in use, as to have lost the character of being *new.*

3d. Or, That he has not complied with the *conditions prescribed* by the law.

Conditions Prescribed.

What are the conditions prescribed by the law?

Sect. 1. He shall present a petition, alleging that he has invented a new and useful thing, signifying a desire of obtaining exclusive property in the same; and

Sect. 3. Swear or affirm, That he does verily believe, that he is *the true inventor or discoverer*—(which oath he may freely make, after he may be informed that another had invented or discovered the thing be-

fore him)—" and deliver a written description of his invention, *and manner of using it*,"—(This is in cases where his invention consists only in the new application of principles, or in a new and improved mode of applying principles to produce any new art, &c. or to improve any art, &c. without having invented or improved any machine)– " in such full, clear, and exact terms, as to distinguish the same from all things before known; and to enable a person skilled in the art, or science, to make, compound, and use the same."

Now it is evident, that if "*his manner of using the same*" be by the means of old machines, he must describe every part of each machine; yet his patent cannot be for the *machines*, which he did not invent. If by old machines which he has improved, to make them applicable to his purpose, he must describe the whole machines, with his improvements on them; yet his patent is for the *principle* applied to improve the art, &c. by means of the improved machines; and he may in such case take patents for each of his improved machines separately, for all *the various new purposes* to which his improvements enables him to apply them.

The same, if his manner of using his improvement be by means of *new* machines, of his own invention, he may take separate patents for them.

But if " his manner of using the same" be by means of several machines, *invented* and patented by several different persons, his patent will still be for the *application* of the *principles*, to produce the improvement,

by means of the patented machine, or by means of the combination of the several machines; for it cannot be *for the machines patented by others, nor can it be for* the combination unconnected with the improvement, or useful result, for the combination is one of his *manners* of using the improvement, or *modes* of application of the principle. But in this case he may only name the machine or machines; he need not describe any part of the machines, for the several patentees have described them; and neither he, nor any other person, can make or use them, without the license of the respective patentees. His patent cannot be for the machine.

But in all other cases the law compels him to describe the *whole* machine, "so that any person skilled in the art, or science, shall be enabled to make and use the same:" for if he fails so to describe, and it shall appear to a jury, to have been with intent to *deceive* the public, the patent shall be declared void; so that he is compelled *by law*, to describe more than he does invent, or claim. His obeying the law cannot forfeit his right; neither is there any clause in the law, that forbids the improver, to describe the whole art, machine, or manufacture, &c.; nor does his describing the whole machine, amount to a *claim* of the whole. He had a right in common to use the old principle, or art, or machine; his patent secures to him the exclusive right to use the whole art or machine, with his improvements added; as his patent, while in full force, does not preclude any person from using the old art or machine, there can be no necessity of declaring it void. How

then could any person conceive, that describing the whole machine, should *forfeit* the patent for the improvement. The idea has originated in error; if it is established as law in England, it is contrary to reason, and justice, therefore cannot be good law; but it is contrary to our *statute*, therefore cannot be law here.

"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." Here *the application of the principle* is the invention, and the machine is the *mode of application* or the manner of using the invention: and here it appears evident, that all patents are for *principles, applied* by *modes, or machines*, to produce useful results; That under our law no patent can be granted or held, even for any machine, unless a *principle* be described.

But why must the patentee "describe the *principle*, and the several modes in which he has contemplated the application?" In order that his whole invention, and no more, may be secured to him; viz. his new or improved application *of the principle* to a certain purpose, to produce a new and beneficial result, and all the *modes* he may so describe. That the way may be clearly left open, for further discoveries, of improvements *in the principle*, viz. any better *mode* of applying *the principle*.

Of the word "Principle."

Quest. What is a *principle*, or what is meant by an improvement in the principle? in the words of the 2d section.

Ans. I will premise, that the most profound learning in the laws, sheds but little light on the mind, to answer this question, or to understand the specification, or description, of any patented machine, or improvement. A jurist defines the word *principle*, to mean the "radical elementary truths of science;" "the first grounds and rule for arts and sciences;" "something existing in the mind without *tangibility*, for which a patent cannot be good."

But these definitions, by English judges, are much more difficult to comprehend, than the word principle itself. A simple mechanist understands *intuitively;* he defines the word principles to mean, *The eternal, immutable laws of nature, or nature's God;* viz. gravity, attraction, repulsion, adhesion, weight, levity, impetus, motion, resistance, friction, rest, inertiæ, momentum, fluidity, solidity, heat, light, electricity, galvanism, magnetism, quantity, quality, capacity, duration, extension, expansion, condensation, leverage,* proportion, unity, numbers, infinity, eternity, truth, falsehood, right, wrong, &c. &c. &c.; of some of which we can form distinct ideas, but of most of the principles in nature, art, and science, our ideas are very confused. We conceive them to be too nu-

* The principle of mechanical power.

merous to be mentioned, yet the *fundamental* principles may be few. We know that they cannot be invented or created by man; they have co-existed with eternity; and are *common stock*, but may be *discovered* by study and ingenuity, and variously applied to useful purposes, by labour and expense, which constitutes *inherent*, exclusive right. The mechanist knows in the application of which of them, he has discovered an improvement, to improve any art, manufacture, or machine, either to produce equal beneficial effects, at *a less expense*, or a greater *beneficial effect in a given time*, or a more perfect and more *beneficial result*. In either of these cases he knows that he has made *an improvement in the principle*, within the meaning of the 2d section of the act; and he knows what it has cost him, and claims a remuneration. His patent, as proffered by the act, he applies for and obtains, although he may be unable to name or describe the principles of his improvement in any other way than by describing the effect produced, and his modes of applying the principle for the purpose of producing that result; and it is cruel and unjust to deprive him of it, because a jurist may not comprehend his description of the principle, nor what constitutes an improvement in the principle of any art, manufacture or machine.

After he launches into all the expenses, of obtaining his patent, perfecting his improvement, and sending agents to traverse the United States, to disseminate and introduce it into useful operation, can we suppose that congress intended to provide any means to repeal

his patent, after he had incurred such expenses, while he retains his character of being the *true inventor*, established by *the act itself*; and has fairly obtained his patent, for a patentable object? No; we cannot believe it.

How Patent Rights may be declared void within three years.

Quest. How is the right of a patentee to be tested?

Ans. Section 10th provides a *summary* mode, in which any person may proceed to prove, 1st, That the patent was obtained surreptitiously; 2d, That the patentee was not the true inventor or discoverer; and the patent shall be declared void within three years, *but not afterwards*. This is evidently intended principally for the benefit of the *first* and original inventor, in cases where the patentee may have surreptitiously obtained the patent, for "the discovery of another person." But observe, he cannot succeed, even in this *seemingly* hard case, unless he can prove that the patentee was not *the true inventor*, but had stolen his invention, or that of another. He cannot prevail by proving that he or another invented the thing; "anterior to the supposed discovery of the patentee;" for the principle of the law is just, viz. That if he who first discovers unknown common stock, and does not take and possess, as the law directs, the next who may *as truly and originally discover* the same thing, may take and possess it on paying the price, 30 dol-

lars, demanded by the community; and although it had cost only *thirty dollars*, yet it would be injustice, if the law would award it to the first finder, who either refused or neglected to take it on the terms prescribed by law. The patent right is then so far at rest, that at the expiration of three years, all persons are barred from this *summary* mode of proceeding.

Quest. Is there then no means provided for repealing the patent, after the expiration of three years?

Ans. The sixth section provides, That in cases of action for damages, for infringement of patent right, the defendant shall be permitted to plead the general issue, and give any special matter in evidence, on giving thirty days notice, tending to prove three points, viz.

1st. That the specifiation filed by the plaintiff, does not contain the whole truth, with intent to *deceive* the public.

2d. "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. That is, *known* or *used*, as in section 1.

3d. Or, that he had *surreptitiously* obtained a patent for the discovery of another.

In either of which cases "the patent shall be declared void" within the first three years.

Each of these two last points, if proved, tend to destroy the most *essential* qualification of the patentee designated and established by the law, viz. That of being *the true inventor.*

After the Expiration of Three Years.

But if it be a true rule in construing statutes, that each section shall *control* all the preceding, the 10th section is to control the 6th section; and supposing that congress did not intend to set the patent right *completely* at rest at the expiration of three years, then the two points, allowed to be proved in the 10th section, within three years, *but not afterwards*, are certainly set at rest, if no more, and cannot be proved under the 6th section, *after the expiration of three years*, viz.

1st. That the patent was *surreptitiously* obtained.

Or,

2d. That the patentee was not the *true* inventor; neither of which can be admitted to be proved after the end of three years.

There remains, then, but two points, of the three mentioned in the 6th section, that are permitted to be proved, after the expiration of three years, if any thing remains *at all* to be proved to declare the patent void; viz.

1st. That the patentee has not specified his invention truly, according to the act, and that it was with intent to *deceive* the public.*

2d. That the thing thus secured by patent, " was not *originally* discovered by the patentee," because it appears that it had been in use, or had been described in some public work, (meaning in the United States) so *extensively* that it had ceased to be a patentable object anterior to the *supposed* discovery of the patentee; although the patentee may have verily believed and knew that he truly and *originally* discovered it, and *was the true inventor or discoverer* designated *by the law*, entitled to a patent; and although the jury may also so believe, yet the patent cannot be good for an object not patentable *at the time* he so discovered it. But this is supposing and allowing too much.

The words " was not originally discovered by the patentee, but, &c." cannot authorise any enquiry, whether the patentee was the *first* and true *original* discoverer; for the act does not authorise that to be proved in any case *whatever*. That character is not mentioned *at all*, in the act; nor can the enquiry be gone into, whether the patentee be even *the true inventor*, after the expiration of three years. These enquiries are stopped by the 10th section. What then can the sentence mean? the word *but*, which imme-

* This was all that was allowed to be proved in case of action under the first and repealed act.

diately follows it, directs to the enquiry, and the testimony that may be given; viz. that the defendant may prove that the thing patented, had been in use, or had been described in some public work, (in the United States) so extensively, and publicly, as to have ceased to be a *patentable object*, anterior, &c. known or used, as in sect. 1, and that the patentee had no right to a patent for it.

That this is the true construction, if not too much against the patentee, we may safely conclude; for certainly congress intended to set the patent right completely at rest, *in time;* yet they may have failed in expressing their true intent and meaning; for if 20 years peaceable possession gives a right, to be at rest *for ever*, to real property, shall not three years be sufficient to set the patent right at rest for 11 *years?* the remainder of the limited time.

Had congress intended that any testimony should ever be admitted, tending to prove that the patentee was not the *first true inventor or discoverer*, would they not have said so, in these words, or that the patentee was not the *first and original inventor or discoverer* of the thing thus secured by patent, *but* that it had been *invented by another*, or had been in use, or had been described in some public work, anterior, &c.

But such a supposition would be deeming congress destitute of all legislative *integrity*, to require of the patentee, other and additional qualifications, to enable him to *retain* his patent, than was required to enable

him to *obtain* it. To have intentionally disguised the meaning of the section, to mislead and deceive *the true inventor*. This we cannot believe, nor that there ever existed a legislature so destitute of integrity; or that any other country than the United States is *alluded* to; no other being mentioned, no other could be intended by saying less, than *in this or any other country.*

But the words "was not originally discovered," &c. will bear no such construction; for they are the best words in the English language, to convey the ideas already stated, to be their true intended meaning; viz. That a true inventor, discovers *originally*, that there may be more than one *true inventor*. That a thing very generally in use, in one part of this country, may be truly and *originally* discovered in another part, and the inventor may be *the true inventor or discoverer*, designated by the act; yet his patent for the thing shall be declared void, when the general use is proved to have been so extensive that the thing was not *new* in the United States, because it had ceased to be a patentable object—anterior to his *supposed* discovery; for it was *known or used*, as in sect. 1; that the patentee was mistaken when he supposed that his discovery entitled him to a patent.

Of the Notice of Special Matter.

The thirty days notice of the *special* matter; so evidently intended for the benefit of the patentee, to give him this (*too short*) time, to prepare to rebut the tes-

timony that may be *stated* in the notice, to be brought against him. The notice must therefore be *special;* specifying the *places* where, and the *time* when, the thing patented had been in use: The *books* where, and *when* published, and where *now* to be found, in which the thing secured by patent, was described, anterior to the *supposed* discovery of the patentee, and by whom these facts are to be proved: or what part of his specifications are deficient, or untrue: to give the patentee the opportunity of sending to the *places*, to ascertain the facts; of searching the books, to ascertain *what* is there described; of ascertaining the character of the witnesses, for they may be *suborned*, &c. otherwise the notice will be of no use to him; he cannot be prepared to rebut. The notice must confine itself to the *two* points, permitted to be proved by the act; and the proofs to be made, must be confined to the *notice*. Otherwise the notice may direct the patentee to a northern state, to places where it states the thing to have been in use, on purpose to deceive him, and consume the 30 days; and on the trial may prove it to have been in use in a southern state, in places not contained in the notice, where the patentee had no notice to go; and the judge may be induced to declare the patent void, on the testimony of *false*, suborned witnesses. And afterwards it may be ascertained, that the thing had never been in use, in those *places*, or at the time, sworn to by the witness; or if it was in use, it may be found to be under the *license* of the patentee, and *constructed*, and sold by *himself* or his *agents*, which he might have proved during the trial, had he had due notice. Who would repair the injury

done to the patentee in such case? A judge cannot go on such uncertain, dangerous grounds.

Of the word "Supposed."

The word *supposed* is very important in the 6th section. It secures great *privileges* to the patentee, and gives great *latitude* to the jury. Many discoveries are made long before the invention is exhibited publicly, in useful operation; or patented. For instance, the *improved* Columbian Steam Engine was discovered, about *thirty* years before it could be exhibited, in useful operation; and the improvements in the art of manufacturing flour, about two and a half or three years.

The jury ought to hear, and the patentee should be permitted to offer, every kind of testimony, tending to lead to a *supposition*, that the thing patented, was discovered by the patentee long before it had been exhibited in public useful operation, or patented; or that it had not been so extensively in use, or described so *publicly* as to cause the jury to infer that there remained no necessity for its being *specified* in the patent office; nor of the *exertions* of the patentee, to put the public in possession of the discovery.

The Prerogative of the Jury.

The jury are to judge, first, whether the thing was already in the *possession* of the public; and so exten-

sively in use, as to have lost the character of being *new;* but was *known* and used, as in sect. 1, and had ceased to be a patentable object, anterior to the *supposed* discovery of the patentee.

2. Whether the thing having been invented, and put in use, by the *first* true inventor or discoverer, for his *own*, and his *friends'* benefit, or had been so *useless*, as to have gone out of use; and being neither specified in the patent office, nor described and published in a *public* work, in this country, had ceased to be a *patentable* object, to a *second* true inventor or discoverer, anterior to his *supposed* discovery.

3. Whether its having been in use in a foreign country, or described and published in a *public work*, in a foreign country, it ceases to be a patentable object here, to *a true inventor or discoverer*, until it be known, and used here.

4. Whether a thing that was a patentable object in this country, because it was neither *known or used* in this country, at the time it was *truly* and originally discovered, specified, and patented, *by the true inventor*,—can ever after be made an *unpatentable* object, and the patent be declared void, on the arrival of *books*, in which the thing had been described; or of *persons* to prove that the thing had been in use in a foreign country, *anterior* to the supposed discovery of the patentee; or any way affect the right of *the true inventor* here. Certainly not.

The judge may expound the law, sum up the evidence, and charge the jury, (in case he thinks the patent right was not set *completely* at rest in three years) That if it shall appear to them from the evidence,

1. That the specification filed by the patentee, did not contain the *whole truth*, with an intent to *deceive* the public. (This is all that was allowed to be proved under the first act.)

2. Or, That the patent had been granted for an unpatentable object.

They must find for the defendant, and the patent shall be declared void.

But if neither of these points have been proved, they being the only two left to be proved, after the expiration of three years, to affect the right of the patentee,—they must find for the plaintiff.

The judge will not say that either of these points has been proved, but leave the jury to judge of the facts.

The rule for ascertaining damages, is, to ascertain the value of the *use* of the improvement patented, for and during the *whole* time of infringement; to which sum the jury may add whatever they may think proper, for injuries, delays, and expenses of suits, &c.

For certainly the right of the patentee is as exclu-

sive to his improvement, as that of any person to houses and lands; and the same *rule* must apply in ascertaining the damages for the forcible use in each case, viz. The full rents of each year, or value of the use, with interest. But if the right is not *exclusive*, as it is declared by the *act* to be, then any other rule may be adopted.

Of the Intention of Congress.

It appears that congress, *to promote the progress of the useful arts*, intended, That when a patent for any patentable object should be fairly granted, *to the true inventor or discoverer*, the right should be firmly secured and established, and at rest, at the expiration of three years. All opposition to the right should then cease, and be barred, excepting only on two grounds, (and it appears doubtful whether they are left to be plead or not) in case of action; viz.

1st. That the patentee had not complied with the conditions prescribed by the act; that he had not specified his invention truly; with intent to *deceive* the public.

2d. Or that he had obtained a patent for an unpatentable object. For certainly this was necessary to be done. Who would wish to obtain property, always liable to be *sworn* away, by false or suborned witnesses, whenever he should make it productive.

What construction can be put on these words of section 6? "but had been in use or had been described in some public work." They can have no *allusion* to any country but the United States.

1st. Because a foreign country is not mentioned. Congress have not said, *in this or any other* country, which they must have said had they so intended.

2d. Because the acts of congress can have no operation, or *allusion*, beyond their legislative jurisdiction, in no country but the United States. If any other country is alluded to, it is so mentioned in all cases.

3d. Because it would have been both highly impolitic, and unjust, to have intended any such allusion.

Impolitic, because it would tend to *impede* the progress of useful arts, by damping the ardour of all inventors: the right would not be secured.

Unjust, because it would be inviting and promoting perjury, and establishing *legal robbery*, and placing all patents in a state liable to be sworn away, at any time, as soon as they become *productive*, or that interest may *combine* sufficient numbers, to attempt to have the patent declared void, that they may use the thing without paying for license, and that after the patentee had acquired great additional right by his labours, time and expenses. They would never be at a loss for witnesses, when the importance of the object would be sufficient to procure them.

Besides, to suppose these words to allude to foreign countries, their principles of operation would be *absurd*, and *cruelly* unjust. For should the thing patented be, by some means, proved to have been in use, in raising the cities of Babylon and Palmyra to their eminent splendour 2000 years ago, but since totally lost, during the barbarous times that followed, and was neither *known nor used* in the United States: Should this proof annul the patent of *the true inventor* under the act? No.

Suppose, again, that it had been invented, and put in use in England one day anterior to the *supposed* discovery of the patentee, but was totally unknown in the United States; Shall this proof annul the patent? No.

At what time, then, and in what country, may the thing be proved to be in use, to annul the patent, while it remains *evident* that no person in the United States knew of the thing or its use, anterior to the supposed discovery of the patentee?

Answer. At no time in no country.

If Arthur, living in the United States on the first day of the month, knows that the thing patented was in use in England, before he left there, but no one else, in the United States, knows it, but himself: Is the thing then "*known, or used*" in the United States, as meant by the words in the act, section 1.

Answer. No; because Arthur may go out of the United States on the 2d day of the month, without informing another.

If proving that one man having known of the thing, shall not annul the patent, shall proof by ten men do it? if not, will proof by one hundred do it? if not, will proof by one thousand do it? Who are to be the judges of the proper number, necessary to know that the thing was in use, in any foreign country, to *annul the patent?*

Answer. It appears that no number will be sufficient; but that congress meant, that the thing must be known and used in this country, so extensively, as to have ceased to be a *patentable* object, anterior to the *supposed* discovery.

Otherwise it would be in effect, *recalling* the grant indirectly, which they have not *power* to do directly; and that after the patentee, by great expense of time, labour and money to perfect the improvement, get it *into use*, and put the public in *possession* of it, had acquired great *additional* right. It would be an *atrocious* legal robbery, which we cannot believe congress ever intended.

Congress did think proper, in passing the act of 1800, to confine foreigners to their own inventions, or discoveries, not known or used *in this or any foreign country*, for the following good reasons; viz. That the patentee must always be *the true inventor*, designated

and established by law; and for the further good reasons, viz. Several foreigners, or other persons, might be, at the same time, erecting the thing for use; therefore a foreigner shall not patent a thing he imports. Here "any foreign country" is mentioned, because congress intended, that if the thing had been imported by a foreigner, and known and used *any where*, the patent "shall be utterly void."

But this does not at all show that congress ever intended that a citizen, *the true inventor or discoverer*, should ever be deprived of his patent, and robbed of his rights, both *inherent*, and fairly, justly, and *legally* acquired, in case the thing, by him *truly and originally discovered*, (without hint, or information, of its ever having existed, and at great expense of thought, labour, and expensive experiments,) should ever be proved to have been known or used in any foreign country, anterior to his *supposed* discovery.

Query. Is it not far more probable, that congress intended quite the reverse, and to pursue the policy of the English laws in this respect, viz. That citizens, who might travel to foreign countries, to discover useful improvements, *not known or used* in the United States, and to introduce them into use *in the United States*, should be rewarded for their labour and expenses, be deemed the true *discoverers*, and entitled to a patent, *to promote the progress of the useful arts.* That this was the original intention of the framers, and passers, of the act, appears most probable. If the act has unfortunately already received an opposite legal

construction in any case, one of the best provisions of the act, *to attain its object*, is so far destroyed.

From every view of the subject, it appears most probable, that whatever congress may have expressed, in the 10th section, their intent and meaning was, to secure the patent right and set it *completely* at rest for the remainder of the term, totally out of danger from false and suborned witnesses and perjury,—to prevent legal robbery.

The words *first and true inventor or discoverer*, are used in the 5th and 6th sections of the first act of congress, to promote the progress of the useful arts, passed April 10th, 1790; and the grants of patents is confined to them exclusively.

But in the act of February 21st, 1793, and act of April 17th, 1800, the words *first and true inventor or discoverer*, or *first* original inventor or discoverer, is not once used, but studiously and intentionally left out; and the words the *true inventor or discoverer* are introduced and used, purposely to extend the grants to any or either of *the true inventors*. Therefore in no case shall the defendants be permitted to plead that the patentee is not the *first* original inventor. The first inventor, being a true inventor also, is not excluded if he applies first; but if he neglects to apply first for a patent, and to specify his discovery, it is at his peril. He is not permitted to keep his discovery secret. The public claim too much, when they claim the benefits of his ingenuity and labours at the end of

14 years; yet they do claim a disclosure, promising him protection in his right, if he will accept it, on the conditions prescribed. And he is greatly indulged, in other respects; for the law prohibits any one from *stealing his invention*, and does not compel him to take his patent, before he has perfected his discovery; if he will divulge it, by publishing it, describing it truly, *in a public work*, even in a newspaper, he may prevent any other from obtaining a patent for it. But if he will specify it in the patent office, established *by law*, it will then be a *public work;* his right to the patent will be secure; he has divulged his discovery; the public is in *possession* of it; and he may take his own time, and suit his own convenience in taking the patent; and in the mean time he may perfect his discovery, introduce it into use as fast as he can, and when he conceives it will promote his interest and he takes his patent, he may demand of all those who *continue* to use it, the same sum he may receive from others who may pay for his license.

But if he attempts to keep it secret, or neglects to specify it, and another *true inventor* obtains a patent for it; he may try to keep it secret, and solely for his own use, for his right is exclusive; and at the end of three years, the *first* and true inventor loses all his right, for the law does not permit him to keep it secret, except at his peril, nor to prove that the patentee was not the *first* true inventor.

Thus construed, the several sections of the statute harmonise. It appears to be a wonderful production

of legislative ingenuity, and integrity, well calculated to promote the progress of the useful arts, and do justice to all parties; securing to each inventor the exclusive right to his *whole* invention, or improvement, and no *more*, for the *whole* term, and keeping the way open for further improvements in the principles, excluding every other means from being used to produce the same result to injure or destroy the right secured; excepting only that the term of fourteen years is too short, and nine patentees out of ten will be reduced to poverty, during the term, if they take their patents *too soon*, and if they spend their time, relying on their exclusive right for remuneration.

All have agreed, that it is better to let ninety-nine guilty persons escape, than to punish *with death* one innocent person. And will it not be better to let ninety-nine patentees hold their patents, although by *construction* the law would make them void, than to *rob one* of his *just* right *fairly* obtained *according to law?* more especially when they are interested in publishing and disseminating their inventions, and have incurred great expense, by which they *acquire right;* and are the means of putting the people in possession of their *useful* discoveries in a *shorter* space of time than they would in case no patent had been taken; for a new and useful thing will spread ten times as fast, when patented.

ADDENDA.

In order to construe truly that part of the 6th section most liable to be misconstrued.

Where it permits the defendant to prove "that the thing thus secured by patent was not originally discovered by the patentee, but had been in use, &c."

Let us premise the following questions.

1. Can a thing be discovered by *six* persons, at different *times*, and in different *places*, each without having received the least hint or information of its ever having existed?

Answer. Of this there can be no doubt, and each of them may *truly* and *originally* discover the thing, for there can be no invention nor discovery, unless it be *original.* Inventor, discoverer, and original discoverer, are synonymous terms for one act, as it respects *originality*, and all meaning the finder out of a thing, not known to either of them. The word *first* is necessarily used, to designate him who discovered *prior* to all the rest; he is the *first* true inventor or discoverer,

the *first* original discoverer; all the rest are only *true inventors or discoverers*, or true *original* inventors or discoverers.

2. To which of them does congress proffer the exclusive right, to the use of the thing invented, or discovered, by each of them, *equally*, truly, and *originally?*

Answer. To either of the six individuals; he that may *first* specify and describe the thing discovered, in the patent office, swear or affirm that he verily believes that he is *the true inventor or discoverer*, and comply with all the conditions prescribed.

3. How does this appear to be the intent and meaning of congress?

Answer. It is evident from their having in their *first* act to promote the progress of useful arts, limited their grants, to *secure* exclusive rights to the use of new improvements, to the *first* true inventors or discoverers *exclusively*. And in their *second* act, which *repeals* the *first*, they have *extended* their grants to *the true inventors or discoverers* generally, and have not *once* mentioned the *first* true inventor or discoverer, or the *first* original inventor or discoverer, in the act.

4. Why has congress made this *change* in their policy?

Answer. To open the door *wider*, for receiving more speedy and certain *disclosures*, specifications, and descriptions, of all *useful* discoveries, in the patent office, and thus the more *certainly* and *effectually* to promote the progress of useful arts.

To cause the law to operate more *justly* on the improvers of the arts *themselves;* for it is evident that every true inventor or discoverer conceives himself to be the *first* true and original inventor until he is otherwise informed; and if he proceeds to obtain his patent and incur expenses, to perfect his invention, and introduce it into use, *hoping* for remuneration during the *latter* part of his patent term, it would be *injustice* to a great degree to repeal his patent, or to award it to the *first* true inventor, should there happen to be one before him, who had incurred *no* expenses, but waited to *seize* on the profits.

5. Can a patent once granted *fairly* for an object *patentable* at the time, ever be repealed while the patentee retains the character of *the true inventor or discoverer* designated by the act?

Answer. Never, unless it be proved that the patentee has not complied with the conditions prescribed.

Or, that the thing secured by the patent was not *patentable* at the *time* of his *supposed* discovery.

6. What do these words in the section mean, viz.

"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?"

Answer. They can mean nothing more, nor less, than what they clearly *express;* they are the best words in the English language that could be used, to express the intention of the framers of the section and of congress, in passing the act, viz. That as section 1 provides that nothing that had been "known or used before" should be a patentable object, here the defendant may prove that the thing had been in use or known before, and that the patentee was mistaken; that the law itself shall conclude, that if the thing secured by the patent was not *patentable* at the time of the *supposed* discovery of the patentee, but can be proved to have been *in use*, or had been described in some *public* work, so *extensively* as to have ceased to be *new*, but was *known or used*, as meant in section 1, the patent shall be void, notwithstanding the patentee supposed that his discovery had entitled him to the patent. For it is self-evident that a patent cannot be good for a thing that was not *patentable.*

The word *but* leads us to this construction, and away from every other, viz. "*But* had been in use, or had been described in some public work, anterior to the supposed discovery." The words can have no *allusion* to the *first* original discoverer, for congress have not said, *but* had been discovered by another, &c.; their intention is evident.

7. Who are to judge of the *knowledge*, or the *use*, or of the *description* in a public work, of the *possession* the public had of the thing, anterior to the *supposed* discovery?

Answer. The jury from the testimony, for the judge cannot decide by the law, it gives him no data to go by, no proposition to conclude from.

Suppose A discovered an improved *mode* of manufacturing paper in 1780, and described it fully and clearly in his books, but kept it secret, showing it only to E.

B discovered the same thing in 1800, and described it in his books, kept it secret, showing it only to F, but neither of them tested it by experiment, or by use, believing that if they incurred the expenses of perfecting it, and specifying and patenting it, and introducing it into general use, it would be sworn away from them as soon as it became productive.

C invented the same improvement in 1810, and he proceeded to perfect it, specify it in the patent office to obtain a patent for it, and sent agents to traverse the United States to disseminate it, and to sell licenses to use it, to the paper makers, at $100 a vatt, or roll, while it was worth $1000 per year. A and B begin to think that the $100 per vatt more properly belongs to them; and G and H, *paper makers*, will use it, but will not pay C for his license. C commences a suit,

and G and H defends, and under the 6th section, the judge should permit them to bring A and B to swear, that they invented it long before C, and described it in their books, and E and F to swear that they saw and read the description, and the books are produced to confirm the fact.

Quest. How will the judge expound the law? will he say the thing was known as meant in section 1? or will the jury think so, and find for the defendant? although it may appear that C has expended many years of the prime of life, and many thousand dollars to invent and perfect the thing, and his agents rode hundreds of thousands of miles to put the community in possession of it? Certainly not; if they do, C may regret his own patriotism, and that nature has endowed him with a talent, to serve his country, but to impoverish and enslave himself; but such proof is not permitted.

Suppose again that A and B both swear that they did perfect the improvement, and have used it up to 1816, and that E and F swear that they worked the improvement for A and B, during the whole time, but secretly. Such proof is permitted.

Quest. Will the jury find for the defendant, on the ground that the thing was known and used, as meant in section 1? and will the judge declare the patent void? Certainly not; for the community has been already deprived of the benefits of the invention thirty

years, owing either to the *shortness* of the patent term, or the misconstruction of the law, by A and B, the *first* discoverers; and might have been deprived thirty years more, had not C, the third true inventor, construed the law more correctly, and risqued the necessary expenses, and his patriotic exertions, to perfect and describe the improvement, and put the public in possession of it, in 1810. That neither A nor B can have any claim to the patent, nothing can be more evident, either in point of justice or law, after three years of C's patent term has expired.

Suppose again, that after C has expended thirty years of the prime of his life, in endeavouring to get his improvement adopted by the *paper makers*, that he gave it gratis at first, to any one who should be the first in a county to construct and use it, but that none in the counties where the mills of I K L M, were situated, could be induced to accept the improvement on those terms for several years, because they would not believe that the thing could be made useful; and on account of those many difficulties, congress had granted a new term to C. Yet thirty years after C first exhibited his improvement publicly in useful operation.

G and H, bring P and Q into court, who swear *positively* that they saw the improvement patented by C, in use in the mills of I K L and M, from 40 to 36 years ago, viz. from 4 to 8 years anterior to the *supposed* discovery of C; and C proves by his agents, that

I K L and M had all purchased licenses of him to use the improvement, that C had erected the improvement with his own hands, in the mill of M, and received pay, and granted M license to use it, and brings other witnesses to prove that he truly and originally discovered the thing, after long study and labour of mind, in the research, and the great difficulties he met in convincing the paper makers of the utility of it, &c.

Quest. Will the jury infer from these testimonies, that the thing was known or used as meant in section 1? that it had been in use, as meant in section 6, to such extent as to have lost the character of being *new*? that the public were already in possession of it? that there was no necessity of the specification of C, the true inventor, to be filed in the patent office, nor of his exertions to disseminate it, to put the public in possession of it? that it had ceased to be a *patentable* object, anterior to the supposed discovery of the patentee? that therefore they must find for the defendant? And will the judge declare the patent void? and thus strip C of the right he had acquired by the labours of mind and body, for the prime of his life? We hope not.

The foregoing train of reasoning was intended to show,

1. That several persons may truly and originally discover the same thing, that they are all the true inventors or discoverers, and each equally entitled to the patent,

2. That a patent fairly granted for a patentable object to the first of them that may apply for it, can never be repealed while he retains the character of true inventor designated by the act, unless it be proved that he has failed in complying with the conditions prescribed.

Or that the thing patented was not a patentable object at the time of his supposed discovery.

3. That the jury are the judges, and have a discretion, to ascertain from testimony; whether the thing was a patentable object at the time of the supposed discovery of the patentee.

An improvement in useful arts certainly remains a patentable object, while it retains the character of being *new* and *not known and used* with the great mass of the public or those who might be benefited most by its use; while the knowledge of it being confined to so few persons, and those interested in keeping it *secret*, that it is not likely to spread for public benefit.

The jury in this *supposed* case will most probably conclude very *justly* that the public, but particularly G and H, have derived their knowledge and use of the thing, not from the discovery of A or B, but from the discovery of C, his specification filed in the patent office, and his exertions to disseminate it with hopes of remuneration. That the act to promote the useful arts, has operated beneficially in the case. That the witnesses P and Q are most probably mistaken as to

the time they saw the thing in the mills of I K L and M, who it cannot be supposed would purchase licenses of C, if they had the thing in use anterior to the supposed discovery of C, that they must have seen it after the discovery of C in the said mills. That therefore C is, in point of justice and law, entitled to his patent.

RECAPITULATION.

It has been Shown,

That *the people*, in the constitution of the United States, delegated to congress, the *power* to promote the progress of science, and useful arts, by securing for limited times, to authors, and *inventors*, the exclusive right to their respective writings, and discoveries, but had no power to delegate, to divest a grant, of security when invested.

Congress passed the first act to promote the progress of useful arts, April 10th, 1790; in which they limited the grants to *the first and true inventors, or discoverers*, exclusively; see sect. 5 & 6.

On February 21st, 1793, congress passed the act now in force, for the same purpose, and to repeal the act heretofore made for that purpose: and in this act

1. The *character* of the patentee is changed, and designated, and established, to be *the true inventor or discoverer* of any patentable object. The first and true inventor is not mentioned at all in the act.

2. The patentable interests or objects are designated to consist *entirely* in the new and improved applica-

tion of *principles*, to produce any new and useful art, machine, manufacture, or composition of matter; or any new and useful improvement on any art, machine, or composition of matter, not known or used.

3. The conditions on which the patent shall be granted, are designated. A citizen, who having first paid into the treasury 30 dollars, and shall allege, that he has invented a patentable object, and shall present a petition to the secretary of state, &c. "swear or affirm that he verily believes that he is *the true inventor or discoverer;*" "deliver a written description of his *invention*, and *manner* of using it, in clear, true and exact terms, &c." "and in case of any machine, *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," &c. &c.

Of which description, filed in the office of the secretary of state, certified copies shall be competent evidence in all courts, that the patentee is the true inventor, or discoverer, and is the sole proprietor, of the thing; and that it is truly specified.

And it has been attempted to be Shown,

1. That all patents under this law, must be for *principles*, with a mode or *modes* of applying or using them. Machines are *modes* of application of their principles.

2. That after a patent is fairly granted to *a true inventor*, for a patentable object, no new conditions can be imposed on him, nor any additional qualification required of him, other than those established by the act, to entitle him to his patent; nor can the grant be recalled or granted to another.

But that his right to the patent may be tested, during the first three years, in case of any suit, by permitting the defendant to plead all the points, designated in the 6th section. But after the expiration of three years, he shall not be permitted to plead those points designated in the 10th section, which are limited to three years, viz. *That the patent was surreptitiously obtained;* or, *that the patentee was not the true inventor.* The pleas are then reduced to *two:* viz.

1st. That the patentee has not described his invention truly, with intent to *deceive* the public.

2d. Or, That the thing secured by patent, had been so *extensively* in use, or described so publicly (in the United States) as to have ceased to be a *patentable* object.

3d. That of these pleas the jury are the sole judges.

4th. That patents under this act, are not confined to the *first and true inventor or discoverer*, as in the repealed act; for that character is not once mentioned in the act, but purposely left out, and the character of the *true inventor* introduced and established, to whom

the patents are to be granted. Therefore in no case whatever can the defendant be permitted to plead, that the patentee was not the *first original inventor.*

5th. That the acts of congress can have no effect or operation beyond their legislative jurisdiction; therefore the words in section 1, "not known or used," and in the 6th section, "but had been in use, or had been described in some public work," can have no allusion to any country but the United States; because they have not said " in this *or any foreign country,*" which are the words used in section 1 of the act of 1800, to express their intention with respect to patents to be granted to foreigners; for they, too, must be *the true inventors or discoverers* designated by law, and therefore shall not patent the improvements they import.

6th. That the words in the 6th section, "*was not originally discovered by the patentee,*" can have no allusion to the first and original discoverer, but only to the use in which the thing had been, or to the description in some public work, which might show that the thing had ceased to be a patentable object *anterior* to the *supposed* discovery of the patentee, although he might believe he had truly or originally discovered it. —The defendant is permitted to prove that it was used or known and not patentable by sect. 1.

7th. An improvement in the principle of any art, or machine, section 2, is *a better or improved mode* of applying the principle, producing a more beneficial

result, and is entitled to a patent, subject to the patent for the original discovery, but any change of *mode*, or form, to any degree, to produce a less beneficial, or not more beneficial result, is no improvement, on a thing patented, deemed a mere change of form or proportions, and not a discovery, nor shall it entitle its author to a patent, or to use the original discovery. For the patentee shall be allowed all benefits from change of form or proportions during his term.

8th. The law compels the improver of any art, machine, or manufacture, &c. to describe the whole, in cases where no description of the thing is to be found in the patent office, to enable a workman to make and use the same. But in cases where the thing is patented, he need not describe the old thing, the patentee must have described it in the patent office, describing the whole does not amount to claiming the whole.

The patent secures the exclusive right to use the whole, with the improvement, (if the old thing be not patented) but not the old thing *without the improvement*. The patentee has only a common right to use it. If patented, the improvement cannot be used without the *license* of the original discoverer. There is neither necessity nor law for declaring the patent void, in this country; for the patent for the improvement remaining in full force precludes no one from using the old thing. The longer the right is held, and the more the patentee expends to put the public in possession of his improvement the greater is his acquired right.

A patent granted cannot be recalled, nor granted to another, neither in *whole* nor in *part*, the public faith is *pledged*, to secure the *whole* right for the *whole* term. No person can be permitted to use any other machine, *mode* or means to produce the same result, to destroy, infringe, or curtail, in any degree, a right already secured. Sect. 2.

Every inventor shall have a patent for the whole of his invention, or improvement, and no more, sect. 3, he shall describe it. Sect. 2, secures it.

A patent cannot be for a principle *exclusively*, that was ever *known or used* (because it is *common stock*) but only for the new *application* of the principle described to produce a useful result, by means of the *mode*, or *modes*, or *machine*, or machines, described.

Principles are the immutable laws of nature, which are *common stock*, by natural law, as far as they have been discovered, known and applied to science, arts, machines, manufactures, or composition of matter.

But if an inventor discovers a *new unknown principle*, he is entitled to a patent for his *whole discovery*, certainly at the least, for all the purposes which he shall describe, to which he contemplates the application of that principle, and to all the *modes* of application that he shall describe. But is he not entitled to all the *various purposes*, to which his *newly* discovered principles will apply? he does not monopolize it, for

it was not known to exist, he finds and gives it to the public at the end of his term.

The product of the ingenuity, thought, and labour of the mind, as well as the labour of the hands, and expense of experiments, of the inventor, are by natural law, more *exclusively* his, than any other property that he can possess, the community can have no common right to them, nor any property in them. They have no right to claim these, at the expiration of 14 years. The patent term should be extended.

REFLECTIONS

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PATENT LAW.

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PATENT Laws are erroneously said to be a contract between the public and the inventors of useful improvements; but as inventors have no part in the contract, but merely comply with certain conditions, it follows that the patent laws are public propositions for awarding exclusive privileges, or rather affording protection of *natural right* to inventors, on the following terms, viz.

If any one will invent or discover any new and useful improvement in the arts and sciences, not known and used (in the United States) before such invention or discovery, then we will protect and secure to him exclusively the right to his invention or discovery, during a term not exceeding fourteen years, in the first instance, and for any other limited time or terms that we may think his improvement merits, on condition that he pay for that protection, thirty dollars into the treasury, and disclose the secret, by a specification to be filed in the secretary of state's office, so

that after the aforesaid limited time or terms may have expired, the improvement may become public property.

These terms are fair in some respects; they neither compel the inventor to disclose the secret of his discovery, nor limit the time in which he may accept the proffered protection; he may consult his own convenience, and if he thinks the proffered protection too inconsiderable or of too short duration, he may refuse to devote his time and studies to make new discoveries, or to make new improvements. He may keep secret his invention or discovery, until circumstances may occur, in which his interest may be promoted by taking out his patent. But by taking out a patent he accepts the terms, and the transaction becomes a contract mutually binding. The inventor must then, as required by the United States patent law, section 3d, act of 1793, make a full disclosure of the secret of his invention or discovery, describe the principle of his improvement and the manner of using it, in such full, clear, and exact terms, as to distinguish it from all other things known, (*in the United States*) so as to enable a person skilled in the art to which it is most nearly connected, to make and use the same;—and this he must do, first without drawings or letters of reference, that this specification or description may be suitable to be registered in a book in the patent office. He must also deliver drawings with explanations, with letters of reference, where the case will admit of explanations by drawings, and deliver models, if required by the secretary of state. If he conceals any thing, or

his specifications contain too much, which shall appear to be with design to deceive the public, his patent will be void.

But as it will be impossible, (for the inventor will in many instances, be *incapable* to describe his improvement as required by this act,) his patent on that account shall not surely be declared void; and though he may not be able to recover under it, in cases where, by his description, it could not be ascertained what his invention really was, and therefore infringements could neither be guarded against, avoided, nor detected, until he, by additional specifications, models, or actual operations, does on his part comply with the law, which, when done, will entitle him to the protection promised. If the public, by granting him an invalid patent, be in fault, he is entitled to a *good* one, for the *full* term promised. And unquestionably the patent office will always be open to receive such additional specifications, as may be found necessary.

The law requires also, that he shall describe the *principle* of his improvement, and his manner of using the same; the characteristic mark which distinguishes it from all other things known (*in the United States*) and in case of any machine, he shall *designate* the principle and all the various modes in which he contemplates the application and use of that *principle* or character, by which it may be distinguished from other inventions. It does not require that he should describe all *possible* modes of the application of the principle; but only such modes as will produce the

effect *described*, or the *result* of his improvement. Such *modes* as he shall *describe* in order to have them secured to him, with the *application* of the principle, will exclusively be secured to him, and no *more*. And if he does describe the principle, and only *one* mode of application to produce the result, the application is exclusively secured to him, and no other person can use the principle by any *mode* of application, to produce the same result, without his license. The way is left open for further improvements in the application of the principle. He that discovers any *better* mode of application than any described by the patentee, is entitled to a patent for that *mode*, subject to the patent for the original discovery of the new application and result.

It is provided, section 2d of the act of 1793, "That if any person shall discover 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 improvements, 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 forms or proportions of any machine or composition of matter, in any degree, shall not be deemed a discovery." Why not, while section first declares, that the inventor of any new and useful improvement in any art, machine, manufacture, &c. is entitled to a patent? for certainly a change of form or proportions may make a very useful improvement in many cases. Because here, the original discovery is supposed to be under

patent, and the public *bound by contract* to secure it to the inventor, and the limited times unexpired. The provision is expressly for the protection of the right of the true inventor to his discovery, during his patent terms, but leaving the way open for further improvement in the principle. And no patent, for change of form or proportions, can be sustained, until the patent terms for the original discovery expire, and such ought not to be granted.

A patent for an improvement in the principle of a patented improvement, can be sustained, and ought to be granted. Such as a new and improved mode of the application of the principle, to produce the same result with greater despatch or less expense, &c. &c. But it would be subject to the prior right of the true inventor, for "he (the discoverer of an improvement) shall not be at liberty to use the original discovery; nor shall the inventor be at liberty to use the improvement." It then evidently becomes the interest of the inventor and the improver to unite their discoveries, which would render their improvements more valuable to themselves, and useful to the public.

Both parties cannot hold exclusive right to the same thing at the same time; nor have congress the power to grant any right to one that will lessen the right of another. They have power only to protect and secure right, for limited times, to any length and number the case may require.

This section, while it secures the original discovery

to the true inventor, affords encouragement for improvements in the principle, and security to the improver. Without this provision, no patent would be worth the expense of obtaining; every right could be evaded, by change of form or proportion, or pretended improvements in the principle; for no machine was ever made to produce an effect that could not be produced by a machine of a different form, nor effect or result produced by one arrangement or process, that could not be produced by another arrangement or process, somewhat different.

What is the original discovery in a new and useful improvement in any art, machine, manufacture, or composition of matter. It is the new and useful effect or result produced by the application of principles, and may consist in

1. The discovery of the application of a principle, by means of old and known machines, to produce a new and useful result. In this case the application of the principle and result will be secured.

2. The discovery of a new machine to produce a known effect or result, with less labour or expense. In this case the patent will be for the machine, and the application of its principle as described.

3. The discovery of a new combination of known machines, to produce a new and useful result. In this case the combination will be secured by patent, as well as the new result.

4. The application of known principles to produce a new and useful result. In this case, viz. application of the principles of the machine by means of the machine or mode, the result will be secured, and the application of the principles to produce the result.

5. The discovery of the application of a known machine, to a new use. Here the new application will be secured, if it be useful.

6. The discovery of an improvement on a known machine, to fit it for applying to a new use, to produce a useful result. Here the improvement in the principle and new application will be secured.

7. The discovery of a new and useful improvement in the process of any art or manufacture, and manner of using it, although on experiment no means may be yet known, by which this improvement may be carried into effect with increased profit to the manufacturer. Here the improvement in the process will be secured.

8. The discovery of a new machine that was necessary to carry a new process into effect that had been discovered by another. Here the application of the principles of the machine is the discovery, and will be secured for all purposes to which it will apply; but subject to the patent for the new improvement in the process.

9. The discovery of a new and improved process

in any art or manufacture, and also a set of machines, some improved, others entirely new, and their combination, to carry the improved process into effect to produce a new and useful result. In this case the new improved process, and the new result, is the discovery, and will be secured; also the improved and new machines are discoveries, and will be secured for all the uses to which they will apply, jointly and separately.

10. The discovery of the application of a known power or principle to a new and useful purpose, or the extension of the application to move a known machine with greater force, by the discovery of a new and improved form of the machine, rendering it susceptible of the new or extended application, so as to produce a greater effect, or new or more useful result, or at a less expense. In this case the original discovery consists in the new or extended application, and in the change of or improved form of the machine, both will be secured either jointly or separately.

11. The discovery of an unknown principle, applicable to useful purposes without discovering the means of profitable application. Here the principle discovered, and mode of application described, will be secured by our laws, differing from the British.

12. The discovery of the means of profitably applying a useful principle, discovered by another, to a useful purpose. Here the means of application will be

secured, subject to the prior right of the discoverer of the principle.

13. The discovery of an improvement in the mode or means of the application of a principle. Here the improved mode will be secured, subject to the prior right of the discoverer of the principle, also to the first discoverer of the means of application; for no prior right shall be *destroyed or lessened* by a subsequent grant of protection.

14. The discovery of an unknown plant and its uses. Here the plant will be secured, and all the uses that are specified by the patentee.

15. The discovery of new uses of a known plant. Here the new uses will be secured, subject to the prior right of the discoverer of the plant, during the patent term.

The cases are too numerous to be enumerated. Every inventor or discoverer is entitled to an exclusive right to his own invention or discovery, and no prior right can be *lessened or destroyed* by a subsequent invention or discovery of improvement on the same thing. But a patent right may be lessened in value by a *new discovery;* as for instance, a patent for the use of oars instead of paddles, to propel boats, would have been valuable until sails were invented; yet the right to the oars would have remained entire. But had the discoverer of the oars invented boats also, and patented them, the sails could not be used with

the boats without his license, neither could he use the sails to his boats without the license of the inventor of sails.

It is not the machine discovered that constitutes the original discovery; but application of the principle of the machine, or of the principle of the improvement on any art, &c. the useful result of the whole invention. The result required is first sought after, and when conceived, a search for machines or the means or modes necessary to produce it, is commenced. Sometimes they are to be found in use for other purposes; at others they must be invented for the express purpose, and many of different forms may be made to produce the result.

The result or improvement in the application of principles then constitutes the original discovery in most cases, and the original discovery in all cases is secured to the original discoverer.

What ideas then do the terms invention or discovery, inventor or discoverer, as used in the patent law, convey? They certainly are not synonymous, for may not a thing be discovered without invention? Certainly it can; a plant unknown may be discovered, or a new use of a known plant, by diligence and search, without invention. A new and useful principle or law in nature may, by expensive and laborious researches or experiments, be discovered, though the aid of invention may be necessary to apply them to useful purposes. A man may travel over Europe, Asia and

Africa at great expense, on purpose to discover what improvements are in use there, "*not known or used*" in the United States, and in case he introduces any of them for the benefit of his country, did neither the framers of the constitution, nor congress, contemplate a reward for such expensive and patriotic labours to promote the welfare of his fellow citizens? Certainly they did intend to secure to the discoverers of things new and useful, *in the United States*, the exclusive right to their respective discoveries, for limited times.

The constitution of the United States does not delegate to congress the right, nor if it did, has it the power to legislate beyond its territories; therefore their acts can only take effect within the limits of *the United States and its territories.*

Congress have power to promote science and the useful arts, by securing to authors and inventors the exclusive right to their respective writings or discoveries.

Had the power been given to grant rights, they might have granted monopolies. They can, however, only secure inherent rights, for limited times, renewable at their pleasure.

Congress have passed laws "To promote science, and the progress of useful arts;" therefore no part of these laws can be construed to impede their progress, nor can their laws have effect beyond the limits of

their territories. Therefore the words *not known or used before*, must mean in, and apply to, the *United States and Territories*, and not to China or Tartary. For it is no benefit to the United States, no improvement in the arts here, for a thing to be known and used in any other country.

And in section 6th of the same act these words "but had been in use or had been described in some *public work*," must mean in the *United States or Territories*, such as the patentee might have got his improvement from, and which any other person might have done as well as he, without any claim to the merit of an invention. For it is to be presumed, that if the work be public, many at the same time most probably would be engaged in taking the thing from it for their own use. It cannot mean a public work in China or Tartary, or any other country, nor any book in any foreign language even in this country, for it is not a public work here.

To make a work public within the meaning of the law, it should be printed and published in the United States, or written and filed in some public office of the United States, designated by law, before it can be said that its contents can be supposed to have been known to the patentee. A specification of an improvement filed in the patent office is unquestionably a public work in this country, within the meaning of the law, and will secure the right to the original inventor, or to any true inventor or discoverer.

If, after an inventor has by the most ardent study and indefatigable industry, invented, and got into useful operation at a great expense, an improvement *not known or used in the United States*, others seeing the benefits, and coveting the use of it, but unwilling to make any reasonable compensation, shall have the right to search all the books, in all languages in the world, for a description of the thing, to render the patent right null and void;—if this be a fair construction of the patent laws, then it may be fairly inferred, that congress intended to impede the progress of the useful arts, and that they sanction injustice, *which would be absurd;* for although the thing may have been described in a book, it may never have been tested by experiment, or applied to practical utility.

Those provisions are to be construed favourably to the improvers of the arts, considering that their rights are unprotected, excepting for limited times, at the pleasure of congress. Otherwise they would have an effect contrary to the true intent of the act, which will bear no other construction than to mean, "not known or used before" in *the United States*, or "had been described in some public work" published in *the United States.*

By the act of 1793, a citizen of the United States, the true inventor or discoverer is entitled to a patent for his invention or discovery of any new and useful improvement, on any art, machine, manufacture, &c. He is unlimited in his range to make the discovery; he may, it seems, invent it in this or any other coun-

try, or discover it by travel, and if it prove to be new and useful *in the United States*, his patent will be good by a fair construction of the law.

But the alien is limited to his own invention. By the proviso in the first section of the act of 1800, "he shall swear, or affirm, that to the best of his knowledge or belief, his invention or discovery hath not been known or used in this *or any other country*," and if it proves to have been known or used any where, his patent is void. The reason why this distinction is made, is evident. The citizen is encouraged to travel to make discoveries, by a promise of protection in the exclusive right to his discoveries, for limited times, as a reward for his labour and expense in introducing new and useful improvements into the United States. Whereas one alien can have no better claim than any other, who may bring the same thing with them into the United States, and which is attended with little expense to them, and the law has established that the patentee *must be the true inventor or discoverer*. It would, however, probably have been better policy to have extended the same privileges to aliens as fully as to citizens. which would have brought not only the arts, but the artizans, and all improvements from the different parts of the world, into the United States in a much shorter time, as was undoubtedly the intention of congress in passing the original act of 1793.

Section 2d of the act of 1800 provides, "that when the inventor or discoverer of any new and useful improvement shall die before he obtains a patent, the

right of applying for, and obtaining such patent, shall devolve on his heir or legal representatives."

On the whole view, it appears clearly, that if an inventor is not able to put his improvement in operation at his own expense, nor to obtain aid from others to do it, that he may secure his right to himself or his heirs, of taking out a patent, when it may appear to be for their interest, by specifying his invention according to law, and filing it in the patent office, where it will then be *a public work*, ready to render void any patent that might surreptitiously be obtained for his invention, the thing has ceased to be a patentable object to any except the true inventor, who described it in the public work. He may then publish his specification describing his improvement, and hold out inducements to others to associate with him, to apply his improvements to practical utility; and he or his heirs (in case of his death) may take a patent when it may appear to be worthy their expense or attention.

The states, in their individual capacity, retain the supreme power of securing to an inventor or discoverer, his heirs, or assigns, &c. the exclusive right to their improvements for such time as to do *perfect justice*. Their having delegated to congress the power to protect right, for limited times in the United States, does not at all lessen their sovereign power to grant what protection they may think the improvement merits; or any other aid or encouragement the inventor may need to put his improvement in useful operation, without interference with the laws of the United

States. A state may even grant a monopoly of an invention and improvement to any one who is not the inventor, to induce him to put it in operation, provided they do not by this grant, divest any person of a vested or inherent right; for there can exist no power in our free country, to divest any one of his vested right.

It appears then, that when an inventor cannot succeed to get his improvement in operation with profit to himself, under the protection afforded by the United States, that he may, with hopes of success, apply to the individual state which his improvement will be most likely to benefit, for such protection, aid and assistance, as he may need.

Section 3d, act of 1800, fixes the penalty for breach or infringement of patent right, at three times the actual damages sustained by the patentee.

The jury, in assessing the actual damages, ought to take into consideration the value of the improvement, during the time of infringement, the time lost to the patentee, and the expense of sustaining and attending law suits, the stoppage of sales, or the collections of monies due from others for said improvements, &c. &c. But they have no authority, jurisdiction or right, to consider whether this penalty be too high or too low; that would be assuming the prerogative of legislation. The province of the jury is to ascertain the actual damages sustained by the patentee, and leave the law to take its course. If the jury do

not allow sufficient damages generally, the law will operate as a complete denial of justice to every patentee who has not wealth to risque; he will be deterred from commencing a suit, in cases where a combination of rich infringers may be formed to divide the expenses of defence between them, and to keep off the trials until the expenses amount to a sum too great for the abilities of the plaintiff to bear, such as would totally ruin him, should the cause be decided against him.

Every patentee will find his interest in licensing his new improvement gratis, or to sell at very low prices at first, until its utility be established; therefore his prices in the first years are no rule to regulate his prices by for the latter part of his term.

If judges and jurors will call patent rights for new inventions, monopolies, the patentees will be deterred, suppress their inventive genius, and cease to make further exertions to monopolize things that never existed; but they will hold on to what they have, it has cost them much, for they know they are not monopolies.

Those who are inimical to patent rights, and wish to oppose them, call them monopolies, to make them odious to the people. This is a mere perversion of the term. A monopoly deprives the people of the use or benefit of something that they have possessed or used in their own, or common right, before the grant. But they cannot have possessed or used in their own, or common right, any thing that never did exist, or was

unknown to them. A patent right can be good only for things that are new and useful, that never existed, or were never known or used, *in the United States or Territories*, until they were invented or discovered by the patentee. Our patent laws preclude monopolies: congress cannot grant a monopoly: a patent right cannot be a monopoly; prove it to be such, and it is void by law. A patent is a protection of an *inherent right* for a limited time, and no good reason can be assigned why the term should be limited to fourteen years only. The odious term monopoly should be expunged from our vocabulary.

In England, patents are granted for fourteen years only in the first grant; but if it shall appear that the inventor will not be sufficiently remunerated, nor able to extend his improvement in so short a term, he may, and in many instances does, petition parliament long before his term expires, for a special act, granting their protection for another term, to enable him to make his arrangements proportionable to the terms that may be granted to carry his improvements extensively into useful operation; which grant they so seldom refuse to make, that he can rely on it as a thing of course. The second term granted has been various, from seven to fourteen, fifteen, eighteen, twenty-one, twenty-five and thirty-one years, according to circumstances.

These acts are deemed private acts of parliament, and are not published unless the acts themselves declare them to be public acts; in that case they are

published with the statutes at large, at the public expense.

The courts in England have held, that damages will not lie for infringement of private acts, until after notice of them be given. The reason is evident: no person can be bound to know an act until it be published. Whereas all are bound to know a public act, because it has been published at the public expense.

It is otherwise in the United States; congress direct all their acts, private as well as public, to be published, at the public expense. Therefore the same cause for giving notice of private acts cannot exist here that does in England.

Thus it appears, that no one can plead ignorance of a private act of congress, any more than of a public act. For if they can plead ignorance of one act, after it has been published at the public expense, according to law and usage, they may, on the same grounds, plead ignorance of every other act of congress so published.

The patent laws afford sufficient protection to the inventor for and during his patent term. Extend the term sufficiently, and no complaint ought to be made of the law; the patentee need not wish a better.

4/13/07

Correction.

In page 32, line 4 from bottom, read "all meaning the finder out of a thing, not known to them,"—instead of "all meaning the first finder out of a thing, not known to either of them."