SUMMARY

OF THE

LAW OF PATENTS

FOR

USEFUL INVENTIONS

WITH

FORMS.

BV

WILLIAM EDGAR SIMONDS.

NEW YORK: L. K. STROUSE & CO., 95 Nassau St., 1883. Copyright 1883, By WILLIAM EDGAR SIMONDS.

PREFATORY NOTE.

In A. D. 1874, I published a Manual of Patent Law, smaller even than the present volume and intended mainly for unprofessional readers. The edition being exhausted—largely by sale to the profession—and the patent law having had important additions made to it, by the action of the courts, I have rewritten the whole into a substantially new book, intending to make it more useful to lawyers than the former one, without, I trust, making the greater part less useful to unprofessional readers.

W. E. S.

August, 1883.

CHAPTER I.

HISTORY AND NATURE OF THE PATENT LAW.

THE patent law of these United States is, in some sort, the offspring of the pre-existing system of Great Britain, which arose, not from positive enactment, but from a negative provision in a statute passed during the reign of James I, A. D. 1624, curtailing the power of the Crown to grant monopolies, but excepting "Letters Patent and grants of privilege for a term of twenty-one years or under, heretofore made, of the sole working or making of any manner of new manufacture, within this realm, to the first and true inventor or inventors of such manufacture," etc.

Although the patent laws of these two countries, statutory and constructive, are not identical in all respects—notably in the fact that the British courts construe an introducer, as well as an originator, to be an inventor—they are in many points, the same: in the earlier years of the republic the English cases were freely cited in our courts, and such citation, both to and by our courts, is still practiced to some extent; but the mass of American patent litigation is so large in later years that there is little occasion to go to English courts for precedents.

During our colonial existence, patents for invention granted by the crown were sometimes extended to have effect in these colonies.¹

One colony, at least, had what was virtually a patent law.²

After the Declaration of Independence, and before the adoption of the present constitution, various of the states exercised the right of granting patents.³

Rumsey founded a *Rumseian Society* with Benjamin Franklin as president, procured the endorsement of Gen. Washington and generally prevailed over Fitch.

¹ An example is that of Thomas Masters, of Philadelphia, who, in A. D. 1717, petitioned William Keith, Lieutenant Governor of Pennsylvania, setting forth that his majesty had graciously granted to his wife, Sybella Masters, two patents, one for curing corn, and another for weaving chip hats, and praying that the same might be recorded in Pennsylvania, which prayer was granted.

Witness the following from the printed statutes of Connecticut for the year 1672, page 52:—"It is ordered that there shall be no monopolies granted or allowed among us but of such new inventions as shall be judged profitable to the country and for such time as the general court shall deem meet." As early as 1716 this colony granted to Ebeneazer Fitch, of Suffield, a monopoly of slitting mills for fifteen years; and afterward kept up what was for those times an active business in granting patents of this sort, sometimes advancing to the grantee the funds necessary to put his invention into practice. Massachusetts, in 1641, granted to Samuel Winslow a monopoly of salt making after his peculiar method, for ten years.

⁸ New Hampshire, in 1786, granted to Benjamin Dearborn, a virtual patent for a printing press and for a book printed on it called the "Pupil's Guide." The next year Dearborn procured another exclusive grant covering a water throwing engine and weighing scales. John Fitch, from Philadelphia, and James Rumsey, from Virginia, contended before several of the state legislatures for the exclusive rights to propel boats by steam. There was no need of a contest from our modern stand point for the two systems were as different as could well be: Fitch had paddles at the sides of his boat worked by an engine within, while Rumsey attained propulsion by forcing a stream of water out at the stern and against the water of the river.

The framers of the constitution of these United States, therefore, acted in the light of experience when they made provision for patents upon new and useful inventions, in the fundamental law of the nation. The constitutional provision for patents is contained in Article I, Section 8:

"The Congress shall have power * * *: To promote the progress of science and the useful arts, by securing, for limited times, to authors and inventors the exclusive right to their respective writings and discoveries: * * * also to make all laws which shall be necessary and proper for carrying into execution the foregoing powers."

The first patent law of these United States was approved April 10, 1790, and, though it has been amended and changed many times since, there has been no radical departure from the system as originally founded.

The first patent law of these United States, approved April 10, 1790, prescribed a petition to the Secretary of State, the Secretary of War, the Attorney General, and demanded a fee of five dollars. February 21, 1793, the Act of 1790 was repealed and a new one passed permitting the merger of the existing state grants in regular national patents, and raising the fee to thirty dollars. By Act of July 4, 1836, the Patent Office and the office of Commissioner of Patents were created; patents ran fourteen years, conditionally extensible for seven more; provision for examination into the novelty of alleged inventions was made; the fee for citizens was kept at thirty dollars with a drawback of twenty dollars if the patent was not allowed. The Act of August 29, 1842, made designs patentable. The Act of March 2, 1861,

abolished extension and made the term of patents seventeen years; the application fee was made fifteen dollars and the final fee twenty dollars. The later acts are substantially codifications of the Act of 1861 as modified by construction.

The language of the provision for patents contained in the constitution is worthy of careful attention, for it states the reasons why patents are granted; which reasons are not the ones that the popular understanding supposes them to be. The belief is very generally entertained that inventors have a natural right to the exclusive use of their inventions, that the passage of the patent statute is but a recognition of this natural right and that the chief end and aim of the law is to give rewards to the inventors. Such is not the fact: an inventor has no natural right to the exclusive use of his invention.¹

It is a tolerably self-evident proposition that one natural right of a man is to have an equal chance with his fellow-man to amass wealth. When, of two neighbors in the state of nature as nearly as may be, rudely cultivating the soil with primitive and awkward tools, one of them invents an improved implement, there is no principle of natural justice which forbids the neighbor, on seeing how well the new implement works, to make and use one like it. The neighbor's act does not injure the inventor in any possible way. If the neighbor has not the right to make and use the improved tool he is shut off from an equal chance with the inventor of making gains, and this when his hindrance is no help to the

¹ Traite des Brevets D'Invention par C. Renouard, Phillips on Patents.

inventor. It is not uncommon to urge upon this point that as the inventor confers a benefit on his neighbor by giving him knowledge of the invention, the neighbor is bound by that gratitude which is natural to the race, to make some return therefor: this may be admitted, but the principle is not so strong as the one that the inventor is bound in common justice to his fellow, to allow him an equal chance with himself to amass wealth, when doing so entails no injury on himself. Not only this but the neighbor, at the time the inventor brought out his new tool, might have already begun to ponder upon the poor work done with the old one, and very soon would have invented the improvement himself and thus acquired as good a title to the exclusive use thereof as the prior inventor, a use, however, from which he would be debarred by a person having no better title than himself, a thing clearly unjust.

This is by no means a suppositious or fanciful case; it is a very common one. On an average about 20,000 applications for patents are made yearly to the United States Patent Office and only about 12,000 patents are granted thereupon; the remainder are generally rejected for want of novelty; that is, because some one has invented the same thing previously. At a first glance this may seem surprising but on further consideration it ceases to be so, for it is a recognized fact that the mind is governed by laws of action just as much as the body; so that given a certain mechanical desideratum to be produced and two minds of similar knowledge and habits to produce it, and they will be quite likely to travel the same road to the same result.

As a learned judge has said :-- "An inventor has no right to his invention at common law. He has no right of property in it originally. The right which he derives is a creature of the statute and of grant, and is subject to certain conditions incorporated in the statutes and in the grants. If to-day you should invent an art, a process or a machine, you have no right at common law, nor any absolute natural right, to that for seven, ten, fourteen, or any given number of years against him who invents it to-morrow, without any knowledge of your invention, and thus cut me and everybody else off from the right to do to-morrow what you have done to-day. There is no absolute or natural right at common law that I, being the original and first inventor to-day, have to prevent you and everybody else from inventing and using to-morrow or next day the same thing."1

If an inventor has a natural exclusive right for his invention for one moment he has it forever; and if any limit of time can be set to such a right only infinite wisdom is adequate to so delicate a task. To state the doctrine of natural right thus is to show that it does not exist. The law has never recognized the doctrine of natural right for it cannot recognize what does not exist.

The Policy of the Patent Law is primarily a selfish one on the part of the public. The benefit of the inventors is a secondary consideration; it is only a means to an end.

The constitution of these United States gives Congress power to enact patent laws for a definite purpose, which

 $^{^1\}mathrm{Am}.$ H. & L. S. & D. Co. v. Am. Tool & Machine Co., 4 Fisher's Patent Cases, 294.

is "to promote the progress of science and the useful arts," and the means to be used are, "by securing, for limited times, to authors and inventors the exclusive right to their respective writings and discoveries." The reason for enacting patent statutes is clearly stated in the fundamental law.

The theory of the law is that the promotion of science and the useful arts is of great benefit to the community at large and that such promotion can be attained by securing to inventors and authors for limited times the exclusive right to their inventions and writings. That such theory is correct it is needless to say. It is almost self-evident, or at any rate susceptible of proof, that there has been no more powerful factor in the production of the magnificent material prosperity of the United States of America than wise patent laws and their kindly construction by the courts. A Commissioner of Patents held, after careful estimate, that one-half of the manufacturing investments of the whole country are based upon patents. A later official opinion puts patents as the basis of two-thirds of the manufactures of the nation. It needs but little observation to learn that there is hardly an important manufacturing industry in the Union that has not had its success assured at some time by one of these qualified monopolies. After making due allowance for that versability and vigor produced and stimulated in a people by its growth in a new country, the wisely framed and kindly construed patent law remains a

¹ Day v. Union Rubber Co., 3 Blatchford, 500; Kendal v. Winsor, 21 Howard, 322.

factor as potent as any, if not more potent than any other, in the production of our unrivaled national prosperity.¹

It might be supposed that the advance in prosperity due to inventions would be confined to patent owners, during the existence of the monopoly, but such is not the case; the general public is benefited, even while the patents are in force, more than the patent owners, in the cheapened price of manufactured goods and the like.²

It has not rarely been said that the invention and introduction of labor saving machinery has lessened the demand for manual labor and lowered the wages thereof. Statistics show that in the whole result the demand for labor is enlarged and wages raised by such inventions ³

¹ The production of woolen goods in Massachusetts in 1865 was 46,008,141 yards, the number of employees 18,753; the production in 1875 was 98,208,280 yards, number of employees 19,036; an increase in proportion of 96½ per cent., and in employees of 1½ per cent. The number of pairs of boots and shoes made in Massachusetts in 1865 was 31,870,581, and in 1875 was 59,762,866, with no increase in the number of employees. The production of carpeting in Massachusetts in 1875 was four-fold the production of 1865, while the number of employees only doubled. Patented labor-saving machinery was the chief agent in all this increased production. Massachusetts Census of Manufactures, 1875.

In twenty years after Hayward of Connecticut discovered the use of sulphur in rubber the annual sale of goods made under the invention was over \$2,500,000 in Boston alone, a vast industry created by one invention. The profits of the Lowell Company on carpets made upon the Bigelow loom from 1859 to 1863 were nearly \$700,000, the profits of the Hartford Company from the same source from 1855 to 1863 were over \$1,000,000. Rep. Com. Pats. 1863, Vol. 1.

² The average value of the boots and shoes mentioned in the last foot note, was \$1.80 per pair in 1865 and \$1.50 per pair in 1875. The value of the carpets mentioned was \$2.00 per yard in 1865 and less than 73 cents per yard in 1875. Massachusetts Census of Manifactures, 1875.

⁸ In 1850 there were 52,069 tailors in the United States in a population of 33,191,876, or one tailor to 445 inhabitants. In 1870,

The patent laws promote the progress of useful arts in different ways, prominent among which are: first, by stimulating inventors to constant and persistent effort in the hope of producing some financially valuable improvement; second, by protecting the investment of capital in the development and working of a new invention from ruinous competition till the investment becomes remunerative; and third, by accustoming large numbers of mechanics to the use of machinery requiring more than ordinary intelligence, thus educating them not only in mechanical knowledge but also in practical skill and deftness.

notwithstanding the introduction and use of many thousands of sewing machines, there were 106,679 tailors in a population of 38,558,371; or, one tailor to 361 inhabitants. Meanwhile, the manufacture and sale of sewing machines had practically given profitable employment to about fifty thousand persons—that industry employed 17,372 mechanics in the sewing machine shops in 1870. The following table shows the hands employed in the factories of the United States in the years named.

	YEAR.	HANDS.	WAGES.	POPULATION.
-	1850,	958,079	\$236,759,464	23,191,876
	1860,	1,311,246	378,878,966	31,443,321
	1870.	2,053,996	775,584,343	38,558,371

An innumerable number of labor szving machines were introduced between 1850 and 1870, but the number of laborers employed more than doubled, and the wages nearly quadrupled, while the population only increased about 67 per cent.—Census Reports.

¹ The Bigelow loom before referred to in a foot note, required the investment of a million dollars in one instance before it could be remunerative. The scarcity of capitalists who would make such an investment experimentally with a certainty that competition would ensue the moment the invention was taken to be a practical success exceeds computation; it must be left for the imagination.—Rep. Com. Pat. 1863, Vol. 1.

²Again and again full sets of American labor-saying machinery, notably watch machinery, boot and shoe machinery and gun machinery, have been set up abroad and put under the attendance of the

The efficacy of our patent laws in all these directions is not only well understood by native observers but is admitted, understood and acted upon by prominent foreign manufacturers, journals and governments.¹

A Patent is a Contract between the inventor and the government representing the public at large.²

The consideration moving from the inventor is the production of a new and useful invention and the full disclosure thereof to the public—which disclosure is embodied in the application for patent—whereby the public is enabled to freely practice the invention when the patent expires. The consideration moving from the government is the grant of an exclusive right, for a limited time, which grant the government allows the inventor to protect and enforce through its courts.

It is necessary to a clear understanding of the patent law and the decisions of the courts that it should always be remembered that an inventor is not entitled to a patent giving him an exclusive right to the use of his invention as a matter of natural right but that the govern-

best foreign mechanics, particularly Swiss and English artisans, and they have always failed to give anything like the results achieved here, because of the lack of skill and deftness of the foreign workmen as compared with our native artisans.

¹An article to this effect in the *London Times*, of August 21, 1878, is a sample of a number which have appeared in that journal on our patent system. See also the address of M. Edouard Favre-Perret at Chaux-De Fonds, Nov. 14, 1876, Swiss Commissioner to the Centennial Exposition, printed in—among other papers—the *Hartford Daily Times*, of January 2, 1877. The German patent law and German patents are obviously modeled after those of the United States. Switzerland deliberately adopted the policy of not granting patents and is now agitating for a law like ours.

² Ransom v. New York, I Fisher's Patent Case, 252.

ment acting in behalf of the public, grants the patent only on condition that the applicant produces a new and useful invention and makes a full disclosure of it to the public.

It is not uncommon, when this topic is under consideration, for the inquiry to be made why the government does not protect inventors in their exclusive rights at its own expense. There are many answers to such a question. The government does not protect any right of property in a citizen at its own expense. The law gives a man the right to have debts due him paid, but it does not collect those debts at its own expense. A practical answer to the question is that if the government were to attempt to carry on, at its own cost, all suits for infringement that patentees should request, it would require such a number of courts and such a host of advocates that the whole national revenue would hardly suffice to pay them, and the whole patent system would break with its own weight. Another practical answer is that the government would find in many such suits that the alleged inventor had not given the consideration demanded for his patent, in that his invention was not new; and the public would be unjustly taxed to pay the expense of suits which the patentee had no right to have brought. There are other answers of equal force.

The government provides the machinery of the courts to enforce the rights of inventors. This machinery can be set in motion by the patentee; and by the provision of this machinery the government practically does its whole duty in the premises.

The method followed by the United States in the granting of patents for new and useful inventions seems,

in the light of experience, to be the best in the world. Foreign journals freely admit this; so do foreign governments, in assimilating to our system in greater or less degrees.

Few of the foreign governments make an examination into the novelty of an alleged invention presented as subject matter for a patent; none of them make the thorough and systematic examination that is made here.

The small sum of money paid by the applicant for a patent is not a payment for the franchise—regarded in that light the fee is absurdly small—but it is money paid to support trained experts kept to examine into the novelty of alleged inventions and to prevent inventors from going away from the Patent Office with clearly invalid patents. Were it not for this governmental examination no one would purchase a patent or risk capital in working under it, except after a thorough and expensive search and vindication by a private professional expert. The government really does a large amount of expert work for a small sum of money.

That the examination made is not always perfect is not surprising when the vast number of applications acted on is taken into account, there being about twenty thousand applications per year. The matter for surprise is not that so many mistakes are made by the Examiners of the Patent Office but that they make so few.

CHAPTER II.

PATENTABLE SUBJECT MATTER.

THE statute enacts 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 fees required by law, and other due proceedings had, obtain a patent therefor."

He who understands each and every part of the foregoing section, as the same is construed by the courts, has a good knowledge of a large part of the patent law; but it is not likely that the English language contains another collocation of the same number of words upon the construction of which the amount of skill, acumen, research and learning has been expended that has been lavished upon these paragraphs. The section requires—

r. That a patentable thing must be "invented or discovered" by the patent taker.

¹ Title LX. Chap. 1, Sec. 4886, Revised Statutes.

- 2. That it must be "new," a matter or topic hereinafter treated in a subsequent chapter upon "Novelty."
- 3. That it must be "useful," a topic treated in a subsequent chapter entitled "Utility."
- 4. That it must be an "art, machine, manufacture or composition of matter" or an "improvement thereof," a topic treated in this present chapter under the head of "Patentable Subject Matter."
- 5. That it must be "not known or used by others in this country before his invention or discovery thereof," a topic treated in a subsequent chapter entitled "Novelty—Prior Use."
- 6. That it must be "not patented or described in any printed publication in this or any foreign country before his invention or discovery thereof," a topic hereinafter treated in the chapter entitled "Novelty—Prior Patent or Publication."
- 7. That it must be "not in public use or on sale for more than two years prior to his application," a topic hereinafter treated in the chapter entitled "Public Use—Two Years."
- 8. That it must not "have been abandoned," a topic hereinafter treated in the chapter entitled "Abandonment."

The words "invented" and "discovered" are for the purposes of the patent law synonymous.

An invention to be patentable in these United States must be original with the applicant therefor. Some countries, notably Great Britain, allow the first introducer of an invention to take a patent therefor, holding

¹ Morton v, New York Eye Infirmary, 2 Fisher's Patent Cases, 321.

such an introducer to be the first inventor within the realm. Under our law the applicant must be really the inventor—the invention must be original with him. Although the statute specifies "any person" this is construed to permit joint inventors, no matter how many in number, to apply for and take a patent for a joint invention. Minors can take patents as well as adults; likewise married women as well as single persons.

The patent law does not protect every new and useful invention or discovery: a discovery in mathematics, such as a new method of squaring a circle, or computing the area of an irregular figure, is not a patentable invention; neither is an invention in finance, such as a new method of banking; nor an invention in the science of government, such as a new method or principle of laying taxes; and it was held by a really learned judge that the art of producing insensibility in the human frame by means of inhalation of etheric vapors, although the discovery of the anæsthetic powers of ether was original with the patentee, is not a patentable invention.

He said:—"a discoverer of a new principle, force, or law, operating, or which can be made to operate, on matter, will not entitle the discoverer to a patent. It is only when the explorer has gone beyond the domain of discovery and has laid hold of the new principle, force, or law and connected it with some particular medium or mechanical contrivance by which or through which it acts on the material world, that he can secure the exclusive control of it under the patent laws. He then controls his discovery through the means by which he has brought it into practical action or their equivalent and only

through them. It is then an invention although it embraces a discovery."

The inventions (aside from matters of design) specified as patentable, are:

- 1. An art, or an improvement of an art.
- 2. A machine, or an improvement of a machine.
- 3. A manufacture, or an improvement of a manufacture.
- 4. A composition of matter, or an improvement thereof.

An Art in the sense of the patent law is substantially the same thing as a process or method: a patent for an art is for a way or manner of doing something in distinction from the means made use of in the process, and in distinction from the product of a process. That which is substantially a single invention, not rarely presents subject matter for patentability as an art, a machine and a manufacture; for instance, there is at this writing a patent in existence for an improvement pertaining to the manufacture of car-wheels; the body of the wheel is of cast-iron and the tire of steel both poured while molten into the same mold, at or about the same time, the two metals being kept separate by an annular gate of sheet iron put into the matrix of the mold.

In this case the inventor had his choice to patent the process, the mold or the wheel, all being new; or he might patent all three, thus covering an art, a machine and a manufacture in what is really a single invention.

¹ Morton v. New York Eye Infirmary, 2 Fisher's Patent Cases, 321.

He chose to patent the art, claiming the process of casting a wheel having a body of one kind or quality of metal and a tire of another kind or quality of metal by pouring both metals into the same mold at or about the same time, the two metals being kept apart while molten by a circumferential band in the mold.

It may be remarked here that when a new principle in nature has been discovered and a way devised of practically applying the principle—probably in all those cases which admit of it—it is advisable to claim the invention as a process or art if it is susceptible of being thus claimed; for then the use of any agencies involving the application of the principle will be an infringement of the patent, while if only the particular means—as the machine made use of—are patented, another person may devise some other means which are not legal equivalents therefor, to accomplish the same result, and thus avoid infringement while really making use of the invention.

A process may be put in practice by means of mechanical or chemical agencies according to its nature; in either case new agents may be employed to produce a new result, new agents may be employed to produce an old result, or old agents may be used in new relations to reach an old or a new result, and in either case the process will be patentable.

It is of little or no importance to specify an invention in a patent as an art, machine, manufacture or composition of matter so far as any requirements of law are concerned, provided the description is full and clear and the claim unambiguous, for courts voluntarily take notice whether the invention be one or the other. It might, however, be a serious error to plainly claim an invention

as one of these when it is clearly another; in a British case a man invented a *process* for spinning flax, the essential feature of which was the maceration of the flax, whereby it could be spun at a shorter "reach"; he claimed his invention as "new and improved machinery for macerating flax," etc., when in fact his invention was not a machine but a *process*. The patent was held invalid for this defect.¹

A Machine is defined by Webster to be "in general, any body or assemblage of bodies used to transmit and modify force and motion, as a lever, pulley, wedge, screw, etc.; especially a construction more or less complex consisting of a combination of moving parts," etc.,; and perhaps no better definition can be given.

It will be observed that this definition is broad enough to include a thing of fixed and immovable parts as a lever, a hammer or a wheel, as well as a combination of moving parts and the connecting or supporting frame work thereof; such for instance as a sewing machine.

It is altogether likely that the idea of a machine moving in the mind of the legislature who drafted the patent law was that of a combination of moving parts and the supporting framework thereof, for producing or working on some tangible product, and this in distinction from a tool of fixed and immovable parts, as a hatchet or gimlet; for the law immediately after its mention of a machine specifies a manufacture as patentable and that word has a more appropriate application to these latter objects.

¹ Kay v. Marshall, 2d Webster's Patent Cases, 34.

A Manufacture in the sense of the patent law is a product, in distinction from a process or a machine of moving parts, which are ordinarily agencies for the creation of products, and in distinction also from products of a chemical nature which are more correctly comprehended under the specification "composition of matter."

The word or term "manufacture" includes most of the ordinary and vendible articles of trade, such as textile fabrics, articles of personal attire, general hardware, house furnishing goods and the like. As above suggested it comprehends the simpler forms of machines, like saws, hammers and gimlets.

As understood by the Patent Office—and no reason is seen for dissenting from the understanding—an article does not need to be a finished product in order to enable it to be an "article of manufacture"; the term fairly covers such products as are complete in themselves, or are so far complete as to be subject to independent manufacture and sale.¹ Thus in a community of boot and shoe manufacturers, certain shops make and sell only certain parts of a boot or shoe, and in such case these parts are "articles of manufacture." Again in a community of clock-makers, certain manufacturers produce but a certain part, clock-springs for instance, and in that case a clock-spring is an "article of manufacture."

Composition of Matter comprises medicinal and chemical preparations and new compounds intended as articles of food; however, in some cases a new article of

¹ Blanchard Exparte, Com. Dec. 1870, p. 59; Butterfield Exparte, Com. Dec. 1872, p. 153.

food, as a new and agreeable cracker or biscuit is as well comprehended under the term "manufacture." Polishing powders, plating solutions, artificial stone, artificial ivory, celluloid and the like are familiar instances of "composition of matter."

Improvements. The law not only makes an art, a machine, a manufacture and a composition of matter patentable, but it makes any "improvement" of one of these patentable as well; and it is important that this is so, for it would be difficult to find a patented improvement that is new in all its parts as an entirety or that is not simply an improvement of something that had prior existence. It is very rare that an invention is in an entirely new field and is entirely novel; that is not the way or manner in which invention commonly proceeds. It travels step by step: these steps follow one after the other in rapid succession so that a very short time suffices to push the advance line over a wide interval; still the march is step by step.

In considering the patentability of an improvement upon some existing device it matters not whether that existing device be or be not patented or whether the improvement when embodied and put to use will infringe an existing patent. The Patent Office has no authority to decide and does not attempt to decide any question of infringement. The main question before the Patent Office in acting upon an application for patent is whether the alleged invention is novel. Matters that impeach its novelty may be found in one place or another; in an expired patent, in an existing patent, in a printed publication or in common and public use in this country. Such

impeaching matters have precisely the same force in this regard whether found in one or another of the places mentioned, in an existing patent the same as in an expired patent, and with no other force.

Whatever points of novelty the invention presented for patent has, as compared with existing things, patented or otherwise, may—when rightly claimed—be patented; but the thing which embodies such points of novelty may also embody the invention claimed in some earlier patent, and thus be an infringement of the earlier patent. The Patent Office has no jurisdiction of the question of infringement, and the grant of a patent for a device settles nothing, as to whether that device infringes existing prior patents.

Can a Principle be Patented? This is a question not unfrequently asked; and minds of the first order have been found arguing in the affirmative, although the Supreme Court has twice, at least, answered it in the negative, and this, in one instance, when one of the most important inventions of all ages—that of the electric telegraph—was under consideration.

A principle, in the sense of the patent law, is an elementary physical truth or law; a confusion results in discussing the question whether a principle is patentable unless there is kept in mind just what question is to be answered. A principle is certainly patentable in one sense; that is, when a man has invented a new machine and properly patented it he is entitled to treat as infringements all other machines operating on the same principle.

The customary and proper way of ascertaining whether two machines operate on the same principle is to enquire if both make use of the same mechanical parts, or equivalents therefor, acting in substantially the same way, to accomplish substantially the same result; and by mechanical equivalents is meant such substitutes for other mechanical parts as are within the knowledge of a person skilled in the matters to which the invention pertains, for producing results similar to the results produced by such other mechanical parts.

In this sense a principle is patentable, but the question now under discussion has, usually, quite another meaning. It usually means: Can all ways of producing a certain result be covered and claimed in a single patent, or can all ways of producing a certain result, by means of a certain agent, be covered and claimed in a single patent? To the question, as put in this shape, a negative answer is given by the Supreme Court, our highest authority.

A patentee claimed as an improvement in looms: "The connection of the reed with the yarn-beam, and the communication of the motion from the one to the other, which may be done as above specified."

In a suit brought on this patent, the defendants contended that this was a claim to an abstract principle. Judge Story held it was a claim to the specific mechanism shown in the patent, and said: "We hold this opinion the more readily because we are of opinion that if it be construed to include all other modes of communication of motion from the reed to the yarn-beam, and for the connection of the one to the other, generally, it is utterly void, as being an attempt to maintain a patent for

an abstract principle or for all possible and probable modes whatsoever of such communication."

In a later case, tried by the same Judge, in the same year, the following excerpt from the decision gives both the law and the facts: "Now, what is the language in which the patentee has summed up his claim and invention? The specification states: 'It is claimed as new to cut ice of a uniform size, by means of an apparatus worked by another power than human. The invention of this art, as well as the particular method of the application of the principle, is claimed by the subscriber.' It is plain, then, that here the patentee claims an exclusive title to the art of cutting ice by means of another power other than human power. Such a claim is utterly unmaintainable, in point of law. It is a claim for an art or principle in the abstract and not for any particular method or machinery by which ice is to be cut. No man can have a right to cut ice by all means or methods, or by all or any sort of apparatus, although he is not the inventor of any or of all such means, methods, or apparatus "2

This question came in some sort before the Supreme Court in an action upon a patent for a machine for making lead pipe. The patentee claimed as his invention:—"The combination of the core and bridge or guide-piece, with the cylinder, the piston, the chamber and the die, when used to form pipes of metal under heat and pressure in the manner set forth or in any other manner substantially the same."

¹ Stone v. Sprague, I Story, 271.

² Wyeth v. Stone, I Story, 285.

The Supreme Court took occasion to say that a claim for all ways of doing a thing is not sustainable and that no one can maintain an exclusive right to the new power, such as steam, electricity or any other power of nature should such be discovered.¹

In 1853 the early patent of Morse for his electric telegraph came before the Supreme Court. One claim in the patent reads:—"I do not propose to limit myself to the specific machinery or parts of machinery described in the foregoing specification and claims; the essence of my invention being the use of the motive power of the electric or galvanic current which I call electro-magnetism, however developed, for marking or printing intelligible characters or signs at any distances, being a new application of that power, of which I claim to be the first inventor or discoverer."

It is hardly possible that a case could arise presenting a fairer chance or greater inducement than this one for an endorsement of such a claim. The court fully found that Morse was the first inventor of the art of conveying intelligence through an electric conductor as to all the world; the court fully realized the vast importance of the invention; and the specification and claims were drawn with care and skill. These are arguments which appeal to any properly constituted mind with great force, yet the court flatly condemned the claim. Said a learned Chief Justice:—"It is impossible to misunderstand the extent of this claim. He claims the exclusive right to every improvement where the motive power is the electric or galvanic current and the result is the marking or printing

¹LeRoy v. Tatham, 14 How. 175.

intelligible characters, signs or letters at a distance. this claim is maintained, it matters not by what process or machinery the result is accomplished. For aught that we now know some future inventor in the onward march of science may discover a mode of writing or printing at a distance by means of the electric or galvanic current without using any part of the process or combination set forth in the plaintiff's specification. His invention may be less complicated, less liable to get out of order, less expensive in construction and in its operation, but yet if it is covered by this patent the inventor could not use it. nor the public have the benefit of it, without the permission of this patentee. Nor is this all: while he shuts the door against inventions of other persons, the patentee would be able to avail himself of new discoveries in the properties and power of electro-magnetism which scientific men might bring to light. The court is of opinion that the claim is too broad and not warranted by law."1

While a patentee cannot claim all ways of accomplishing the result he arrives at, or even all ways of accomplishing that result by the use of the agent he makes use of, yet it makes a vast difference with the breadth and strength of a patent whether the invention covered by the patent be in a new field or whether it be a mere step forward, behind which there are other steps tending in the same general direction; for, where an inventor is the pioneer in the field to which his invention appertains, the court will give the claims the broadest possible construction; but when an inventor is only an improver in mat-

¹ O'Reilly v. Morse, 15 Howard, 62.

ters of detail then a court will give his claims narrow construction and only treat as infringers those who use identically the patentee's improvement or other things which are simply evasions thereof: the Supreme Court in one of McCormick's reaper cases, laid down this rule thus:— "If he be the original inventor of the device or machine called the divider he will have the 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 infringer who has improved the original machine by the use of a different form or combination performing the same functions."1

Conclusions.

First. A claim in terms to all ways of effecting a certain result, or a claim to all ways of effecting a certain result by means of a certain agent, is void.

Second. When one makes an invention in a new field, one that is not a mere improvement on some prior thing, the court will give the claim therefor the broadest possible construction; will give the broadest possible scope to the term "equivalent," and will generally, if not always, construe as an infringement any other thing which makes use of the vital and essential characteristics of the invention, even though the mechanical parts or other tangible

¹ McCormick v. Talcott, 20 Howard, 402.

agencies may appear to be widely different; but when an invention is only an improvement on some prior thing then only plain, palpable, and known substitutes will be held to be equivalents.

Third. Where an invention is susceptible of being claimed as a process, that is generally the strongest and most comprehensive form of claim, as, by its nature, it approaches nearest to a claim for an abstract principle.



CHAPTER III.

NOVELTY -- IN GENERAL.

The law requires that an invention, in order to be patentable, must be "new." It is not sufficient that it be original with the applicant for patent. It must be new as compared with all prior patents of this and foreign countries, as compared with all prior printed publications of this and other countries, and as compared with all things in prior and common use in this country; prior common use abroad is not regarded by our law.

The reason of this requirement of novelty is not obscure. The law offers the monopoly of a patent to an applicant only on the condition that he adds something to the knowledge—as regards patentable improvements—possessed by or accessible to this people.

The patents and printed publications of this and foreign countries, and matters and things in common and public use in this country, are all supposed, by the law, to be known to all our people: it is true that in a majority of cases the contents of foreign patents and printed publications are not known to our people but such contents are readily accessible, if any one cares to

¹ Title LX. Rev. Stat. Chap. 1, Sec. 4886.

make a search therefor, and the law, not unreasonably, counts the accessibility of this information as its possession.

By a parity of reasoning the law supposes what is simply in use abroad not to be known to our citizens. If the applicant for patent does not put the public in possession of something—in this regard—that it did not possess before, he does not give the consideration which the law demands for the grant of the patent. The use in this country, or the patent or printed publication anywhere, which will bar an inventor's claim to a patent must be previous to his invention; such use, patent or publication will not affect an inventor's right to a patent if it be merely prior to his application for patent and not prior to his invention.¹

Invention. The change made by the inventor from prior existences must, in order to be patentable, amount to an *invention*, a thing defined by Webster to be "contrivance of that which did not before exist." Not every change amounts to invention: almost all mechanics and artisans, not employed in mere routine duplication, daily and constantly vary the application of their art, as common sense and judgment dictate, in the production of structures of different sizes and shapes; and substitute

This subject is discussed hereinafter under the head of "Public Use—Two Years,"

¹A statutory exception to this otherwise universal rule is that the invention must be "not in public use or on sale for more than two years prior to his application," which refers solely to a use in this country and is intended to prevent the grant of a patent if the inventor or any one else puts the invention into common and public use—this as distinguished from an experimental use—, or on sale, for more than two years, prior to the application.

materials appropriate to the purpose in hand, the product of which acts is that which, in exactitude and detail, "did not before exist," and yet neither the acts nor the products are inventions. For instance, if lifting handles had long been applied to boxes and chests, but not to trunks, he who should first apply them to trunks but does a thing that the commonest judgment dictates, and not an act that amounts to the dignity of invention.

Mere Mechanical Skill. He who does an act like that last described is deemed by the law to have exercised nothing more than mere mechanical skill, and the courts deny the right to a patent therefor.

The Patent Office, at different times, has decided that *mere* reversal of the operation of a device, passage tickets with advertisements thereon, changing parts from horizontal to vertical operation, substituting one form of spring for another, omitting parts of a device, while the other parts remain unchanged, substituting one well-known joint for another, putting up articles for market in sealed packages, attaching an advertisement to an anchored balloon, a mirror in front of a car driver,

¹Blake, ex parte, C. D. 1869, p. 9.

² Towne, ex parte, C. D. 1869, p. 39.

⁸ Stevens & Powers, C. D. 1869, p. 63.

⁴ Jones, ex parte, C. D. 1870, p. 87.

⁵ Schemerhorn, ex parte, C. D. 1870, p. 122.

⁶ Wilber & Velie, C. D. 1872, p. 77.

⁷Bates v. Seeger, C. D. 1872, p. 232.

⁸ Gould, ex parte, C. D. 1873, p. 172.

⁹ Stephenson, ex parte, C. D. 1874, p. 33.

rigid fastening between two plow beams, substituting one old form of cutting edge for another, putting up belt lacing for market on spools, increasing the curve of a metallic lath, and using the sand-blast for cleaning scale from iron, on to amount to anything more than the exercise of mere mechanical skill.

These decisions of the Patent Office are not, of course, of equal authority with court adjudications but they serve to illustrate a variety of cases where the question under consideration becomes pertinent.

In a case which came before the United States Supreme Court, a man had taken a patent for an iron wagon reach, in the place of the previous wooden ones; the court in declaring the patent void said:—"The use of one material instead of another in constructing a known machine is, in most cases, so obviously a matter of mere mechanical judgment, and not of invention, that it cannot be called an invention unless some new and useful result, an increase of efficiency, or a decided saving in the operation, is clearly attained." * *

Axe helves made of hickory may be more durable and more cheap in the end than those made of beech or pine but the first application of hickory to that purpose would not be therefore patentable."

In a later case before the same court, a patentee had claimed two tanks—for conveying oil and the like—

¹ Slemmons, ex parte, C. D. 1874, p. 115.

² Cutting, ex parte, C. D. 1877, p. 9.

⁸ Cook ex parte, C. D. 1877, p. 124.

⁴ Carter, ex parte, 14 O. G. 201.

⁵ Spear, ex parte, 16 O. G. 1052.

⁶ Hicks v. Kelsey, 18 Wallace, 670.

placed and cleated upon a railway car. The court said: "There is no novelty and no utility. It does not appear, to use the language of appellant's brief, that there was a 'flash of thought' by which such a result as to either was reached, or that there was any exercise of the inventive faculty, more or less thoughtful, whereby anything entitled to a patent was produced. It strikes us that the entirety, and all the particulars of the summary and the claim, are frivolous and nothing more."

Double Use. The mere application of an existing machine, manufacture or process to a purpose to which it had never before been applied is not patentable. It is a general rule that if the prior device is a patented one, the patentee has the exclusive right to it for all the uses to which it is applicable, no matter whether he knew of those uses or not, and no matter what the use for which he deemed it specially applicable. All the uses that are afterward discovered for the invention are his property.²

Such a new use of an existing thing is known to the patent law as double use. Upon this topic of double use a learned judge said: "It requires no commentary to establish that the application of an old thing to a new use, without any other invention, is not a patentable contrivance. A man who should use a common coffee-mill for the first time to grind peas could hardly maintain a patent for it. A man who should, for the first time, card wool on a common cotton-carding machine would find it

¹ Densmore v. Scofield, 19 O. G. 289.

² Woodman v. Štimpson, 3 Fish. Pat. Case. 104; McCombe v. Brodie, 2 P. O. G. 119.

difficult to establish an exclusive right to the use of it for such a purpose."

In a subsequent case before the same judge, Elias Howe brought suit for an infringement of a patent owned by him for a process of preparing palm-leaf or brub-grass for stuffing for beds. It appeared at the trial that the same process had been previously applied to the preparation of hair for the same purpose. The judge said of the patented process: "It is therefore the mere application of an old process or old machinery to a new use. It is precisely the same as if a coffee-mill were now for the first time used to grind corn. The application of an old process to manufacture an article to which it had never before been applied is not a patentable invention.

There must be some new process or some new machinery used to produce the result. If the old spinning machine to spin flax were now first applied to spin cotton. no man could hold a new patent to spin cotton in that mode; much less the right to spin cotton in all modes, although he had invented none. He who produces an old result by a new mode or process is entitled to a patent for that mode or process; but he can not have a patent for a result merely without using some new mode or process to produce it."2 The patent was held invalid. It may not be inappropriate to remark in this connection that the claim was not so drawn as to present the real points of novelty; the claim was for a process which clearly was old and for a strictly analogous purpose; if the claim had been made to the prepared brubgrass as a new article of manufacture it might have

¹ Ames v. Howard, I Robb's Pat. Cas. 689.

² Howe v. Abbott, 2 Robb's Pat. Cas. 103.

been possible to show that the new manufacture had such different properties from, and advantages over, the old manufacture as to support a patent. The closing sentence of the last quotation may seem to make against such a proposition. It does not. The judge was talking about a process and all language used by judges in rendering decisions in patent causes must be taken in connection with the facts of the case in hand and allowed no application beyond that.

In a still later case before the Supreme Court the improvement claimed in the patent was the making of door and other knobs of clay or porcelain, fitted upon a shank in a common manner.

It was shown that knobs of clay and porcelain, apart from the particular application in hand, were old, and that the mode of fastening the shank into the cavity of the knob was old when metallic knobs were used. The only new thing was the substitution of the clay or porcelain knob in place of the metallic one. The court said: "The difference is formal and destitute of ingenuity or invention. It may afford evidence of judgment and skill in the selection and adaptation of the materials in the manufacture of the instrument for the purposes intended, but nothing more"; and the patent was declared void.¹

The Patent Office has, at one time and another, decided the following to be non-patentable examples of double use:—transferring a latch from a wooden to a sheet metal frame, 2 taking a device from a wheeled land

¹Hotchkiss v. Greenwood, 11 Howard, 248.

² Platt ex parte, C. D. 1869, p. 42.

conveyance and similarly employing it on a paddle-wheel boat, placing in a wind-mill a construction which is old in a paddle-wheel, plating metals for special purposes, printing a label directly on the end of a wooden spool, the application of paper bags for sacking brooms, printing an envelope after a mode old as to other papers, adapting a packing box of peculiar but old construction for a new article, using for jellies, wooden cans that were old for butter, preserving fruits by a process that was old for eggs.

Before leaving this topic of *double use* it seems necessary to call attention to some fine distinctions presented mainly in cases later than those cited heretofore.

In one case ¹⁰ the patented invention was for "an improvement in steam fire-engine pumps, whereby such an engine, having constant power for discharging several streams of water through lines of hose of various lengths, may be made to throw fewer streams, or the same number through longer lines where the resistance to discharge would be greater, without varying the power or causing undue strain upon the working parts or hose, by means of a passage from the discharge to the suction side of the

¹ Biedler ex parte, C. D. 1869, p. 91.

² Glassgon ex parte, C. D. 1870, p. 40.

⁸Osborne & Dayton ex parte, C. D. 1870, p. 149.

⁴ Hall & Averill ex parte, C. D. 1871, p. 194.

⁵ Toll ex parte, C. D. 1873, p. 149.

⁶ Orr ex parte, C. D. 1874, p. 74.

⁷ Young ex parte, C. D. 1874, p. 91,

⁸ Sherwood ex parte, C. D. 1874, p. 93.

⁹ Howell ex parte, C. D. 1876, p. 21.

¹⁰ Campbell v. the Mayor etc. of New York, 9 Fed. Rep. 500—citing Tilghman v. Proctor, 102 U. S. 707.

pump, regulated by a valve, for the surplus water on the discharge side caused by the restriction upon the discharge." The court found that prior to the patentee's invention a manufacturing firm "made and put into rotary steam fire-engines manufactured by them a passage for water leading from the suction to the discharge side of the engines, which could be opened and closed by a valve, for the purpose of having water carried through it, and past the pumping apparatus, and discharged through the hose by hydrant pressure, when the pumps were not operating, which was used at places where there was hydrant pressure for that purpose"; and that another manufacturer "made and put into steam-piston fire-engines, tubes leading from the suction and discharge parts of the engine towards each other until they met, and in one tube, from the place of meeting to the boiler, which could be opened and closed by valves, one in each branch, for the purpose of taking water from either the suction or discharge side into the boiler, -- the two branches leading from the suction and discharge sides constituting a passage controlled by two valves, through which water could be taken from the discharge to the suction side to relieve pressure on the discharge side; but it does not appear by that measure of clear proof, beyond any fair and reasonable doubt, which is necessary to defeat a patent, that either of these devices was ever before that time used for the purpose of passing water from the discharge to the suction side of the engines to relieve undue pressure on the discharge side, caused by reducing the number of discharge openings, or increasing the difficulties of discharge by lengthening the hose; nor that the utility of these passage-ways for that purpose was before

that time known, neither does it at all appear that Knibbs" (the inventor) "derived any aid from either of these devices."

The court proceeded:—"This presents the question, on this part of the case, whether such prior knowledge and use of a like device, as is found to have been had, will defeat a patent." * * * "The statutes providing for defences to suits upon patents require defendants to set forth the names and residences of persons having prior knowledge of the thing patented, and where and by whom it had been used. * The proof must, of course, correspond with and support these allegations. The proofs in this case do not support the allegation that the persons knowing of and using the Amoskeag engines and the engine Philadelphia, as these persons are found to have known and used them, knew of and used Knibb's They had brought together all the invention. parts necessary to accomplish the result he accomplished, but did not know how to use them. This is not the known use required to defeat a patent." The following and still later case by the Supreme Court 1 should be read in this connection. The patentee said: "The nature of my invention relates to that class of wooden pavements in which the blocks are laid directly upon the sand foundation; and it consists in laying the blocks in rows with spaces between the rows and in filling or partially filling said spaces with sand or gravel and driving or swaging the same into the sand foundation below in order to pack or compress the sand under the blocks for the purpose of sustaining the weight of heavy vehicles passing over the

¹ Stow v, City of Chicago, 21 Of. Gaz. 700.

pavement"; the claim was in accord with this statement. Of a prior pavement the court said:—"It was made with similar wooden blocks placed in rows on an earth foundation, with spaces between the rows. The spaces were filled with gravel, which was rammed with an iron rammer made expressly for the purpose. We have here every part of the invention described in the letters-patent under consideration, except that it does not appear that the gravel in the spaces between the rows was so completely rammed as to drive it below the under surface of the pavement into the earth foundation. * Can this be called invention?"

In this last case, as in the one just preceding it, the user had no knowledge of the peculiar utility of the patented invention, yet the Supreme Court treats that fact as of no moment, while it was the very point upon which the former case turned. The two cases are not, however, in any real conflict; on the other hand, taken together, they limit and define the application of the doctrine of double use in a class of otherwise close and doubtful cases. The principle to be deduced is this: -where the prior use was for the same, or clearly analogous purpose -as in the cases of the two pavements - and the peculiar utility of the patented device was actually attained in the prior device—as in the cases of the two pavements, then the prior use is a bar to the later patent even though the prior user did not know of such special utility. where—as in the cases of the two engines—the prior use did not attain the special utility of the patented device, then a lack of knowledge of such utility, on the part of the prior user, prevents the prior device from being a bar to the later patent,

Form, Number and Size. As a general rule, an alteration of the form, size or proportions of an existing device, or the multiplication or division thereof, is not such a change as gives patentable novelty. Enlarging or diminishing any or all of the parts of a machine or manufacture does not alter or change the machine or manufacture in matter of substance and hence is not patentably novel. But there are exceptions to this rule, cases in which form is of the essence of the invention, and then change in form is change in substance. The shares, mold-boards and land-sides of plows, the buckets of water wheels, the sails of wind-mills, and the fans of rotary meters, motors and pumps are examples of things changes in the form of which may amount to substantial change.

In a case which came before the U.S. Supreme Court, where the invention was an improvement in plows, Chief Justice Marshall said: "It is not every change of form and proportion which is declared to be no discovery but that which is *simply* a change of form or proportions, and nothing more. If, by changing the form or proportions, a new effect is produced, there is not simply a change of form and proportion, but a change of principle also."²

In a later case a learned judge said: "There are instruments invented in which the particular form is a material part of the discovery, and then a departure from the form would be a substantial departure, because the form is essential to the invention. But there are many manufactures where the particular form of the thing is not

¹ Reutgen v. Kanour, I Wash. 171; Park v. Little, 3 Wash. 198.

²Davis v. Palmer, 1 Robb. 518.

essential to its utility, and there may be a departure from that form and still a valuable instrument be constructed. Take the plaintiff's wheel for an illustration. The curved form is given to the plates in casting the chilled rim. But, for the purpose of making allowance for contraction, any other form involving the principle of that allowance may be used, and there would obviously be no substantial change in the thing manufactured, because the particular form given by the first inventor is not essential to the production of the instrument. If the form is a part of the thing invented, and is essential to its value, then a change from the form is a substantial change and may be the means of producing a new manufacture."

The Patent Office has, at one time and another, decided the following to be cases of unsubstantial and unpatentable change: a damper, new only in the shape of its opening, a machine new only in the number of intermediate gears used, changing the size of an article and making it portable where before it had been fixed, duplication of parts to attain strength, mere addition to the number of marks on a ticket, increasing the size of lamp wick and wick tube.

¹ Many v, Jagger, I Blatchford, 372.

² Fenno ex parte, C. D. 1869. p. 9.

⁸ Webster ex parte, C. D. 1869, p. 9.

⁴ Woodward v. Reist, C. D. 1869, p. 34.

⁵ Perkins ex parte, C. D. 1872, p. 234.

⁶McNaughton ex parte, C. D. 1873, p. 158.

⁷ Atwood ex parte, C. D. 1874, p. 79.

Sufficiency of Invention. Although it is a settled principle of law that a new device in order to be patentable must involve the exercise of something more than mere mechanical skill, be something more than the mere double use of an already existing contrivance, and more than a mere alteration in form, number or size; that is, must amount to an invention, it often happens that the application of that principle to practical cases is extremely difficult. Not infrequently it is a task of rare difficulty to determine where mere judgment and skill terminate and invention begins. Between the portions of these two domains that are well defined there is a border land of some breadth within which many improvements lie, seemingly belonging as much to one domain as the other.

The courts attempt the practical solution of this difficulty in particular cases by resolving all genuine doubts in favor of the patentee, only condemning those improvements about which no reasonable question can be raised as to whether or not they are the products of skill or invention; in all cases of real doubt the improvement is relegated to the domain of invention.

The amount of labor or thought expended upon an invention is, for the purposes of this discussion, immaterial. It may be "a simple but happy conception which, when reduced to practice, produced surprising results both in the quality of the article manufactured and the rapidity with which it is turned out. A subject-matter to be patentable must require invention, but it is not necessarily the result of long and painful study, or embodied alone in complex mechanism. A single flash of thought may reveal to the mind of the inventor the new idea, and a frail and simple contrivance may embody it.

Some inventions are the result of long and weary years of study and labor, pursued in the face of abortive experiments and baffled attempts, and finally reached after the severest struggles, while others are the fruit of a single happy thought."

It may sometimes become pertinent to inquire whether an alleged invention is not so absurd or so frivolous as to exclude the possibility of *any* thought having been exercised upon it, but in all other cases the amount of thought or labor exercised is unimportant.

As courts cannot look into the minds of men and determine the kind and quality of their mental processes in originating an improvement, all inquiry in that direction, except as to absurdity or frivolity, has been abandoned; and the result arrived at through the improvement—this sometimes coupled with the amount of apparent change—has been taken as the test of the exercise of sufficient invention to support a patent.

"Where the utility of a change and the consequences resulting therefrom (in a machine) are such as to show that the inventive faculty has been exercised—though, in point of fact, the change was the result of accident,—the requisite test of a sufficient amount of invention may exist."

"Whenever the change in the arrangement of a machine or invention, and its consequences, taken together, are considerable, there is sufficiency of invention to support a patent. When the change, however minute, leads to consequences and results of great practical importance,

¹ Magic Ruffle Co. v. Douglas, 2 Fish. Pat. Cas. 330.

² Everson v. Ricard, Law's Digest, 422, par. 20.

this condition is satisfied; but not when the consequences are inconsiderable, and the change also inconsiderable."

In one case the claim was:—"As a new article of manufacture, pantaloons or other garments having their pocket-openings secured at the edges by means of rivets or their equivalents, substantially in the manner described and shown," and the judge said:—"On the point that there is no invention in the thing patented the defendants contend that the want of patentability consists in the fact that the invention is nothing more than the employment at the corners of the pocket opening of the old and well known rivet, and that no new function is performed by the rivet in that place from what is performed by it in any other place." * * *. "The result of them was new and useful. The case is not one of mere double use or of the use of an old rivet in a new place. It is not merely the usual through-and-through binding or uniting function of the rivet that is availed of."2

In another case the improvement consisted in change in the proportions of a spinning spindle and its bobbin. The defendant attacked the patent on the ground that the change did not amount to invention. The judge said:—"No more difficult task is imposed upon the court in patent cases than that of determining what constitutes invention, and of drawing the line of distinction between the work of the inventor and the constructor. The change from the old structure to the new may be one which one inventor would devise with the expenditure of but little thought and labor and

¹ Waish ex parte, Appeal Cases Law's Dig. 423, par. 31.

² Strauss et al. v. King et al., 17 O. G. 1450.

another would fail to accomplish after long and patient effort. It may be one which one whose mind is fertile in invention will suggest almost instantaneously when the skilled hand of the constructer will fail to reach the apparently simple result by the long and toilsome process of experiment. It may be one which viewed in the light of the accomplished result, may seem so simple as to be obvious almost to an unskilled operative and yet the proof may show that this apparently simple and obvious change has produced a result which has for years baffled the skill of the mechanical expert, eluded the search of the discoverer, and set at defiance the speculations of inventive genius. The change described in the specification of Pearl is a change in the form of the spindle and a change in the form of the bobbin. out a knowledge of the results accomplished by these changes they might, at first glance, appear to be merely structural changes. Nothing has a greater tendency to prove that these changes involve some fundamental difference beyond mere mechanical perfection and adjustment than the greatly improved result attending the change when viewed in connection with the failure of the many experiments previously made to accomplish similar results by mere structural changes like those, for example, of diminishing the weight of the spindle in all its parts. It does seem impossible to reconcile the greatly improved results attained by the invention of Pearl with the theory that no functional but only a mere structural change was effected."1

In a case which came before the Supreme Court the claim was:—"The plate of hard rubber, or vulcanite, or

¹ Pearl v. Ocean Mills et al., II O. G. 2.

its equivalent for holding artificial teeth, or teeth and gums, substantially as described." The patent was attacked by the defence on the ground that such a product involved the exercise of nothing more than mere mechanical skill and the mere double use of a well known material, vulcanite; the court said:—"The process of forming a plate by the use of such molds was well known, and so was the process of converting a vulcanizable compound into vulcanite by heating it and allowing it to cool in molds" * * * * *

"A new product was the result differing from all that had preceded it, not merely in degree of usefulness and excellence but differing in kind, having new uses and properties. It was capable of being perfectly fitted to the roof and alveolar processes of the mouth. It was easy for the wearer and favorable for perfect articulation. It was light and elastic yet sufficiently strong and firm for the purposes of mastication. The teeth, gums and plate constituting one piece only, there were no crevices between the teeth and their supporters into which food could gather, and where it could become offensive, and there could be no such crevices so long as the articles lasted. They were unaffected by any chemical action of the fluids of the mouth.

Besides all this they were very inexpensive as compared with other arrangements of artificial teeth. To us it seems not too much to say that all these peculiarities are sufficient to warrant the conclusion that the device was different in kind or species from all other devices."

The principle to be drawn from all these decisions is

¹ Smith v. The Goodyear D. V. Co. et al, 11 O. G. 246.

that—in cases where this question of sufficiency of invention is likely to arise—the test of the presence of such sufficiency of invention as will support a patent is the answer to the question whether the change made from the pre-existing things results in any palpable and positive advantage not of the perfectly obvious sort, not of the kind that the mechanic knows in advance, and from his stock of common knowledge, will result from the change in question, such for instance as the attainment of additional strength by the duplication of parts; and it is to be remembered in this connection that however obvious an improvement may seem, after it is once made, if it brings about any marked advantage, that is pretty good evidence that it was not obvious or the improvement would have been made before.

A notable instance of marked and important advantages flowing from a slight change is found in the sewing-machine needle, which differs from the common hand-used needle mainly in the location of the eye, but without that slight change the sewing machine in its present shape would not be possible.

An instance of a non-obvious advantage flowing from a common process is that of plating the pulp strainers of paper making machines with nickel; by increasing the thickness of the plating, which can be done at will, the orifices in the strainers can be made very small, very regular and very smooth, more so than it is possible to attain in any other way; a patent was properly granted therefor.

An instance of a non-obvious advantage flowing from what was apparently the use of an old material for an old purpose was the use of copper for making moulds wherein to cast steel. The use of the copper for this purpose gave the castings improved soundness and homogeniety; a patent was properly granted for it.

It follows that improvements which may seem, at first glance, to be merely the result of the exercise of mechanical skill, or mere double use of an existing device, or process, or mere change in form or number or size, must be adjudged to necessitate the exercise of a sufficiency of invention to support a patent if the change involved gives a positive advantage of some sort that is not a perfectly obvious one.

This test rule holds good even if the change made be to substitute for some part of a machine or device another part which in general would be deemed an equivalent for the part removed, but which in its new place gives an advantage that the removed part lacked.¹

Combination and Aggregation. Many inventions consist in bringing together into one structure a number of either new or old parts or elements, and when the union is such that the function, office or purpose of one element is influenced or modified by the presence of the other elements the union is a patentable combination. A combination may be composed of all new elements and then generally, each element will be susceptible of being claimed singly as well as in the combination.

A combination may be composed of elements some of which are old and some of which are new and in this

¹Brown v. Deere. et al., 19 O. G. 361.

case also the new elements will generally be susceptible of being claimed specifically and singly as well as in the combination.

A combination may be a valid and proper one though all the parts or elements which compose it are old when separately considered. When the invention under consideration is a combination its novelty is not impugned by showing that any one or more of its elements less than the whole had been used together before. The novelty of a combination can only be destroyed by showing that all the elements thereof had been used together before, and in the same relation to each other as in the combination under consideration. It is not, however, every union of different things that constitutes a patentable combination. Thus, if one takes a common hammer, puts an awl into one end of the handle and a screw driver into the other, the result is not a combination having patentable novelty. The hammer, the awl and the screw driver each serves its own peculiar office and function precisely as it would if the other tools were not present in the structure: the action of one of the tools is nowise modified or influenced by the presence or action of either of the other tools, so that no new action has been brought about. The law denominates such an assemblage of parts a mere aggregation and not a patentable combination.

The elements of a patentable combination must coact; the action of one element must influence and modify the action of the other elements, and all must work

¹ Evans v. Eaton, Peters' C. C. Rep. 322; Barrett v. Hall, I Mass. 447.

toward a common end, the result of their combined action must be something different from the sum of the results of their separate action. "A combination in mechanism must consist of distinct mechanical parts having some relation to each other, and each having some function in the organism." All the parts of a combination must "co-act in producing the result claimed for a combination."

In a case which came before the Supreme Court the patented thing was a stove and the patentee had made claim to a combination which included the fire-pot, coal-reservoir, revertible flues, direct draft and illuminated openings all of which singly considered were old, but their union in one structure gave the stove many desirable qualities.

The court said thereof:—"It must be conceded that a new combination, if it produces new and useful results, is patentable though all the constituents of the combination were well known and in common use before the combination was made. But the results must be a product of the combination and not a mere aggregate of several results, each the complete product of one of the combined elements. Combined results are not necessarily a novel result nor are they an old result obtained in a new and improved manner. Merely bringing old devices into juxtaposition, and then allowing each to work out its own effect without the production of something novel, is not invention. No one by bringing together several old devices without producing a new and

¹ Yale & Greenleaf Mfg. Co. v. North, 3 Fish. Pat. Cas. 279.

^{*} Swift & Whisen, 3 Fish. Pat. Cas. 343.

useful result, the joint product of the elements of the combination and something more than an aggregate of old results, can acquire a right to prevent others from using the same devices either singly or in other combinations, or, even if a new and useful result is obtained, can prevent others from using some of the devices, omitting others in combination."



¹ Hailes et al. v. Van Wormer et al., 5 P. O. G. 89.

CHAPTER IV.

NOVELTY-PRIOR USE.

THE statute prescribes that an invention, in order to be patentable, must be "not known or used by others * before his invention or discovery in this country The statute, further specifies² as a defence to a suit on a patent :—"Third. That he was not the original and first inventor or discoverer of any material and substantial part of the thing patented: in notices as to proof of previous *, knowledge, or use of the thing patented, the defendant shall state the names and residences of the persons alleged * have had the prior knowledge of the thing patented, and where and by whom it had been used." Such a knowledge or use of the invention is technically known as "prior use."

It will be observed from a reading of the foregoing that the knowledge or use in question must be a knowledge or use by another than the inventor, occurring prior to the making of the invention and not merely prior to the date of the patent or the application therefor; also

¹ Title LX., Rev. Stat., Chap. 1, Sec. 4886.

² Section 4920.

that it must be a knowledge or use in this country. A mere prior use of the invention abroad will not invalidate a patent subsequently granted here for the same thing. If it could be shown that the alleged inventor derived his knowledge of the patented device from the foreign use, that would destroy the validity of the patent for it would show the patentee not to be an inventor of the patented thing: and our law grants patents to inventors only. A prior patent and a prior publication abroad,—matters treated of in the next chapter—stand on a different footing from a mere foreign use and effectually invalidate a patent granted here for a subsequent invention.

An interesting question, as to whether a knowledge by persons resident in this country of a prior use abroad is such prior knowledge and use as will bar a patent here has been raised in a late case but not decided: as it is the settled policy of the courts to construe the law liberally in sustaining patents, and as no reason would exist for declaring a patent invalid on the ground of prior knowledge or use unless that knowledge or use were accessible to the American public, it does not seem possible that the court of final resort will see fit to declare a patent invalid because of a knowledge of a prior foreign use locked or latent in the minds of one or two persons resident here. If the case should ever happen where a number of persons should possess such a knowledge, a question of more gravity might arise.

The topic of *prior use* is to be distinguished from that of *prior invention*, which is treated in a subsequent chapter: in discussing prior use it is not of consequence

¹ Illingworth v. Spaulding, 9 Fed. Rep. 611.

whether the alleged prior thing was ever patented or intended to be patented, while in discussing prior invention it is of the essence of the question that the prior thing was patented or intended to be patented with reasonable diligence, or that the invention was put into public use with diligence. When prior use is set up as a defence, to a suit upon a patent, the use to be effectual must have been an actual reduction to practice (not conception and experiment merely though the same ultimately proceed to a patent prior in date to the patent sued on) prior to complainant's conception.¹

Prior Abandoned Experiments. The novelty of a practical and successful invention can not be destroyed by the exhibition of prior abandoned experiments tending in the same direction. Nothing short of a practically successful prior invention, actually reduced to practice and (unless the question arises in connection with the topic of prior invention, a subject hereinafter considered) in public use, can destroy the patentable novelty of an invention which has been perfected, and made practical and successful.

In the case of Cahoon v. Ring (Vol. 1 Fisher's Patent Cases, p. 409), the judge said to the jury, of an alleged prior machine like Cahoon's seed-sower, said to have existed prior to Cahoon's invention: "Should you find that it was made and completed prior to the Cahoon invention, and that it does embody the improvements in the Cahoon patent, as already defined and explained, you will then inquire whether it was in point of fact, a ma-

¹ Tyler et al. v. Crane, 7 Fed. Rep. 775.

chine completed and reduced to practice, in contra-distinction to an experimental machine, or a machine made by the supposed inventor, in the prosecution of experiments and inquiries; and that, unless it appears to your satisfaction, that such machine was actually used as a seed-sower in sowing seed for agricultural purposes, you are warranted in presuming that it was a mere experiment; and, if so, you are instructed that it would not invalidate the plaintiff's patent."

In the celebrated case of Goodyear v. Day (Vol. ii. Wallace, Jr. p. 298) upon Goodyear's rubber patent, the judge said: "The testimony shows that many persons had made experiments—that they had used sulphur, lead and heat—before Goodyear's patent, and probably before his discovery. But to what purpose? Their experiments ended in discovering nothing, except, perhaps, that they had ruined themselves. The great difference between them and Goodyear is, that he persisted in his experiments, and finally succeeded in perfecting a valuable discovery; and they failed.

It is usually the case, when any valuable discovery is made, or any new machine of great utility has been invented, that the attention of the public has been turned to that subject previously; and that many persons have been making researches and experiments.

Philosophers and mechanicians may have in some measure, anticipated, in their speculations, the possibility or probability of such discovery or invention; many experiments may have been unsuccessfully tried, coming very near, yet falling short of the desired result. They have produced nothing beneficial. The invention, when perfected, may truly be said to be the culminating of

many experiments, not only by the inventor, but by many others, and he may have profited indirectly by the unsuccessful experiments and failures of others; but it gives them no right to claim a share of the honor or the profit of the successful invention. It is when speculation has been reduced to practice, when experiment has resulted in discovery, and when that discovery has been perfected by patient and cautious experiments,—when some new compound, art, manufacture, or machine has been thus produced, which is useful to the public, that the party making it becomes a public benefactor, and entitled to a patent."

In a subsequent case, the learned judge quoted the above decision in the case of Goodyear v. Day and then said: "So I say in reference to this case: it does not matter how many experiments have been tried by different inventors, if they failed, if their experiments were never perfected, if they were never brought into use,—and, by that, I do not mean general use, put to perform the functions of the plaintiff's machine or any of the perfected machines of the day,—if they rested in experiment alone, they were not of such a character as to deprive subsequent inventors of the benefit of their inventions, if they brought them into use. The man who brings his invention before the country, and into actual use, is the one to be protected: for he is the one who confers a benefit upon the country."

This doctrine is fully settled and not subject to dispute.

¹ Singer v. Walmsley, I Fish. Pat. Cas. 576.

Prior Use Must be Successful Use. In defending against a suit brought on a patent the defendant in his search for anticipatory structures often happens on devices not used for the purpose of the patented device nor for an analogous purpose, which have all the parts of the patented thing in substantially the same relation; and which appear to meet the terms of the claim in the patent and to substantially anticipate the patented invention.

But a closer examination, trial and comparison of the patented structure with the prior device often develop the fact that the prior device can not be actually and practically used for the purpose in hand because of some difference in shape, size, number or location of parts. difference may be such an one as in some instances and for some purposes would be merely formal and unsubstantial. In such a case, unless the difference is too trival for serious consideration, where the purpose and office of the prior structure was not the same as that of the patented structure, and the prior structure will not actually and practically perform the purpose in hand, the courts are likely to hold that such prior structures do not anticipate the patented invention.1 "The rule is familiar, that where it is claimed that a patented device is anticipated by another, and that there has been a prior use, it is necessary to show not, perhaps, that the anticipatory device has been actually used, but certainly that it was capable of practical and successful use.2

¹ Thatcher Heating Co. v. Spear, I Fed. Rep, 4II; Fischerv. Hayes, 6 Fed. Rep. 76; Coburn et al. v. Schroeder et al, 8 Fed. Rep. 519.

² Allis v. Stowell, 9 Fed. Rep. 304.

Accidental Prior Existence. There are cases where a patented device or structure is found to have existed prior to the invention which led to the patent, but is not adjudged by courts to anticipate the patented invention.

Such a case is where the prior device or structure was not used for the purpose or office of the patented invention, nor for any use analogous to, or suggestive of the patented use, and where the prior users had no knowledge of the patented use.

Such a subsequent patented use might at first thought seem a mere double use of the prior structure which, it is well settled, is not patentable.

Such a case is that already discussed under the head of double use, in the preceding chapter, where the patented machine was a steam fire engine having a valved duct leading from the discharge end to the suction end for the purpose of permitting the passage of water from the discharge to the suction end, in the case of any sudden increase in pressure such as might result from shutting off one or more of several streams, or the like. It was found that the patented structure had existed in two different prior instances, the use in one case being to permit water under pressure from a hydrant to flow into the suction end and thence into the hose without passing through the pumping apparatus, and the use in the other case being to permit the boiler to take feed water from either the suction or discharge ends. Precisely the question now under discussion arose and was decided in that case to the effect that such a prior existence and use was not the prior knowledge and use required to defeat a patent under the statute, for the reason that the users had no knowledge of the patented use, that the patented use was never attained in the prior structures, and that the prior use was not analogous to the patented use. On principle this decision was correct for the prior users did not give to the public that knowledge of the use in question which would have rendered the patentee's subsequent invention of no value to the public.¹

Such a case as that just presented should not be confounded with other cases where the patented use was actually put in practice in the prior instance, though with no special knowledge of its presence on the part of the users,² or where the prior instance of use though not for the exact purpose of the patent was for a use analogous to, and suggestive of the patented use, as where the patentee fastened a plug into the hollow butt of a whipstock that he might, by "turning," finish the butt, and then saw off the plug, and the prior structure had such a plug for another but analogous purpose.³

Prior Use Must Be Public. An effectual prior use may be very limited in extent, amounting to nothing more than a single instance of use by a single person, but it must be a public use, a use in a way and manner accessible to the public.

The first of the following line of cases has, perhaps, been as often misunderstood and misapplied as any case found in the reports.

¹Campbell v. New York, 9 Fed. Rep. 500; Maxheimer v. Meyer, 9 Fed. Rep. 460.

² Stow v. City of Chicago, 21 O. G. 790.

³Am. Whip Co. v. Hamden Whip Co., 4 Fed. Rep. 536.

⁴Collender v. Griffith, 2 Fed. Rep. 206; McNish v. Everson, 2 Fed. Rep. 899; Proctor v. Brill, 4 Fed. Rep. 415; Miller v. Force, 9 Fed. Rep. 603.

Judge Story on this point used the following language: "It has been argued by the plaintiff, that the defence set up by the statute does not apply, except in cases where the invention, or (as the statute expresses it) the thing originally discovered, has been before generally known, and in general use, among persons engaged in the art or profession to which it properly belongs. But I do not so understand the language of the statute.

To entitle a person to a patent as a first inventor, it is certainly not necessary for him to establish that he has put his invention into general use, or that he has made it generally known to artisans engaged in the same busi-And yet, upon the argument we are considering, unless it were so generally known and in use, he would be defeated by a patentee who was a subsequent independent inventor. The intent of the statute was to guard against defeating patents by setting up of a prior invention which had never been reduced to practice. If it were the mere speculation of a philosopher or mechanician, which had never been tried by the test of experience. and never put into actual operation by him, the law would not deprive a subsequent inventor, who had employed his labor and talents in putting it in practice, of the reward due his ingenuity and enterprise. But, if the first inventor reduced his theory to practice, and put his machine or other invention into use, the law never could intend that the greater or less use, in which it might be, or the more or less widely the knowledge of its existence might circulate, should constitute the criterion by which to decide upon the validity of any subsequent patent for the same invention.

¹Bedford v. Hunt, I Mason, 302.

I hold it, therefore, to be the true interpretation of this part of the statute, that any patent may be defeated by showing that the thing secured by the patent had been discovered and put in actual use prior to the discovery of the patentee, however limited the use or the knowledge of the prior discovery might have been."

It is not surprising that the case had been misunderstood.

The question at issue before the court was prior use; it was discussed and decided as an issue involving the question of prior invention which was not really present in the case. No reflection on the eminent judge who made this decision is intended in the last remark: post-humous wit and knowledge is easy, and it does not, at the present day, require a tithe of the discernment to properly label this case that it required in Judge Story's day to make his luminous decisions.

The fact is, however, as stated and the proper bearings of the case should be understood.

In a subsequent (A. D. 1848) case ¹ Judge Woodbury said: "Was the use public in these cases, is one chief ingredient under this head? Was such a safe as Conner's used by the community? Was it actually sold in the stores? * * But if one man, alone, kept it—made it for himself, kept it in his counting room or in his cellar—it would be a private use."

Judge Sprague said (A. D. 1849):

"The article must be completed for public use and the result must be known."²

¹Adams v. Edwards, I Fish. Pat. Cas. I.

² Many v. Sizer, I Fish. Pat. Cas. 17.

Judge Kane said (A. D. 1849.):

"It is not enough for the defendant to show that wheels like the patented ones were *made*, but he must also show that they were *used*, before the plaintiff's invention." ¹

Judge Woodbury said (A. D. 1851):

"It is no matter whether those prior inventions were patented or not, if they existed, if they were discovered, if they were used." 2

Judge Clifford said (A. D. 1859.):

"Upon this same subject you are also instructed, that, as a single specimen only of such a machine was made,

* if you find from the evidence, that the same was kept in his own possession, from the knowledge of the public, and was subsequently broken up, * * so that the public could not derive the knowledge of it from the machine itself," that would not affect the subsequent inventor's right to his patent.

The patent franchise is given to an inventor because he is the first to give the knowledge of his invention to the public, and if some one else has not given the public this knowledge before him, there is no reason why he does not give to the public that thing which the public values, and rewards by the grant of a patent.

Keeping this principle and the decisions just quoted in view, the conclusion is plain that a prior use, to avail against a subsequent inventor, must be a *public* use,—a use that the public knew of, or from the conditions of the use, had full liberty to know of, as to which point it is well to read in this connection the chapter on "Public Use—Two Years."

¹ Parker v. Hulme, I Fish. Pat. Cas. 44.

² Colt v. Mass. Arms Co., I Fish. Pat. Cas. 108.

Prior Use Requires Full Proof. "A patentee is entitled to the presumption of priority which his patent affords, and this presumption is only overcome by clear and satisfactory proof to the contrary.

Some of the cases hold that the defence that the patentee was not the original and first inventor of the patented subject matter can only prevail when shown beyond any reasonable doubt."¹

"When the defence of want of novelty is made, it is the duty of the tribunal, whether court or jury, to give it effect; but such proof or testimony should be weighed with care, and never be allowed to prevail where it is unsatisfactory, nor unless its probative force is sufficient to outweigh the *prima facie* presumption arising from the introduction of the patent."

In one case the judge held that the unsupported testimony of a single witness to the minor details of a few structures he made fifteen years before, none of which were produced, could not overcome the presumption that belonged to the patent³; and in another case the same judge said:—

"The testimony of all these witnesses is merely from recollection of the shape of a few articles made from twenty-three to twenty-five years before they testified, and is not sufficient to destroy the presumption of a patent upon an article which has been long and extensively used.

* In the absence of specimens of the work

¹ Rogers v. Beecher, 3 Fed. Rep. 639.

² Miller v. Smith, 5 Fed. Rep. 359.

³ Woven Wire Mattress Co. v. Wire Web Bed Co., 8 Fed. Rep. 87.

made at the time, such testimony is an unsafe foundation upon which to rest a finding that the patent had been anticipated."

In another case another judge said:—"We do not intend to be understood as intimating that the witnesses who have testified to the various instances of the use of barbed wire for fencing purposes have been guilty of intentional false swearing, but simply to say that this proof which is almost wholly made up of the recollections of witnesses revived after the lapse of many years, and contradicted as it is in most instances, by the testimony of other equally credible witnesses, leaves so much doubt as to the actual existence of these various barbed wire fences, or any of them, as to make it at least unsafe ground on which to defeat a patent."²

While it is well settled that prior use, to be effectual, must be supported by clear and satisfactory proof,³ and that negative testimony—that is testimony of persons favorably circumstanced to have seen the alleged prior use if it had occurred, to the effect that they did not know thereof—has rather unusual weight given to it on this question,⁴ yet the testimony of single witnesses has, in exceptional instances, sufficed to prove prior use.⁵

¹ Zane v. Peck, 9 Fed. Rep. 101.

² W. & M. M'f'g. Co. v. Haish, 4 Fed. Rep. 900.

⁸ Fischer v. Hayes, 6 Fed. Rep. 76: Andrews v. Cross, 8 Fed. Rep. 269: Spring v. Domestic Sewing Machine Co., 9 Fed. Rep. 505: Atwood v. Portland Co., 10 Fed. Rep. 283.

⁴ Shirley v. Sanderson, 8 Fed. Rep. 905: Am. Ballast Log Co. v. Cotter, 21 O. G 1,030.

⁵ Collender v. Griffith, et al., 2 Fed. Rep. 206: McNish v. Everson, 2 Fed. Rep. 899: Miller v. Foree, 9 Fed. Rep. 603.

CHAPTER V.

NOVELTY - PRIOR PATENT OR PUBLICATION.

THE statute 1 requires that a patentable invention shall be "not patented or described in any printed publication in this or any foreign country, before his" (the inventor's) "invention or discovery thereof."

The statute² also specifies as a defence to a suit upon a patent: "Third. That it" (the patented thing) "had been patented or described in some printed publication prior to his" (the patentee's) "supposed invention or discovery thereof."

The prior patent or publication, in order to void the later patent must precede the patentee's *invention*; it is not sufficient to simply precede the patent, or the application therefor.³

So far as a prior patent is concerned it makes no difference what the *claims* of that patent are, or whether the device of the later patent would, if made, infringe the prior patent; *infringement* is not a factor in the consideration of this topic. In this regard the prior patent

¹Title LX. Chap. 1. Sec. 4886, Rev. Stat.

²Title LX. Chap. 1, Sec. 4920.

⁸ Bartholomew v. Sawyer, I Fish Pat. Cas. 520; Judson v. Cope, I Fish. Pat. Cas. 615; Elizabeth v. Pavement Co., 7 Otto, 126.

stands on precisely the same footing as a prior printed publication, the question in either case being,—what does the prior patent or publication show or describe?

The prior patent may be expired or unexpired, and may claim anything or nothing; the only question, in this regard, is,—what does it show or describe?

In discussing the topic of "prior use" it was seen that the mere fact of the use and practice of an invention in a foreign country prior to a subsequent inventor's production thereof here, has no bearing or effect on his right to a patent provided he did not know of such foreign use. The case is different with reference to a prior patent or prior publication. If a device has been patented or described in a printed publication, either in this or a foreign country, prior to the invention of the American patentee, such prior patent or publication is fatal to the subsequent American patent.

The reason for this distinction between prior use and prior patent or publication is clear. The mere fact of a prior use in a foreign country raises no presumption that a knowledge of such use is accessible to the American public; on the contrary the natural presumption is that the knowledge of the use is confined to the locality of the use; but patent records and printed publications of one country find their way over the civilized world and the presumption is that a foreign patent or publication is known to the American public. The presumption is in close accord with the fact; any person who sets out to ascertain whether a certain thing has been patented abroad or described in a foreign publication can almost always accurately settle the question at some one of our libraries.

"If the foreign invention had been printed or patented, it was already given to the world and open to the people of this country, as well as of others, upon reasonable inquiry. They would therefore derive no advantage from the invention. It would confer no benefit upon the community, and the inventor therefore is not considered to be entitled to the reward."

It is not pertinent to inquire whether or not the prior patent or publication has been seen or read. "Because of the difficulty of ascertaining the amount of knowledge which may have been derived from the exhibition, publication or use of the invention, it has always been held that when the public have had means of knowledge, they have had knowledge of the invention. Thus, if a book has been published describing the invention, it is not important that no one has read it." ²

When it is attempted to anticipate the novelty of an invention by a prior patent or prior publication, the description contained in such patent or publication must, in order to be effective as an anticipation, be so full, clear, exact, and precise that a person skilled in the art to which the invention appertains can, working by such description, and without any inventions, trials, experiments or substantial additions of his own, construct or put in practice the invention; and it, when so constructed or put in practice, must embody the same mode of operation and produce the same result as the thing under consideration.

¹ Gaylor v. Wilder, 10 Howard, 477.

²Perkins v. Nashua C. & G. P. Co., 2 Fed. Rep. 451; Stead v. Williams, I M. & G. 818.

Mere hints at the result in question, or statements to the effect that such a thing can be done or such a result effected, without showing how it can be done, or how the result can be effected, will not answer.

"Where the defence that a mechanical contrivance, claimed to be essentially similar to that covered by the plaintiff's claim, is set up, and the proof relied on is a description of such structure, contained in a printed publication, such description must have been sufficiently full and precise to have enabled a mechanic to construct it, and must also have been, in all material respects, like that covered by or described in the plaintiff's patent."

In one case it was held that a book of plates or drawings, without any printed description of the plates, is not such a "printed publication" as the law contemplates; in another case it was held that an *unprinted* book does not fulfill the requirements of the law; in another case the invention under consideration being a lifting apparatus attached to a steam-boiler injector, the prior patent stated that a lifting apparatus might be combined with the injector but did not state *how* it was to be done, and the prior patent was held insufficient as an anticipation.

Rejected applications for patents are not prior patents or prior publications.⁵

In a case, brought upon a patent to one Clark, for a steam-regulator, the defendant set up that the same thing was shown in a prior patent to one Brunton. In his

¹ Parker v. Stiles, I Fish. Pat. Rep. 336.

² Judson v. Cope, I Fish. Pat. Cas. 618.

³ Keane v Wheatley, 9 Am. Law Reg. 65.

⁴ Nathan v. N. Y. El. R. Co., 2 Fed. Rep. 225.

⁵ Howes v. McNeal, 15 Of. Gaz. 608.

charge to the jury, the judge said: "You will then look at Brunton's description, and see if you find there substantially described the invention of Clark; to wit: a mechanism so organized and connected to a steam-generator, that, when properly set by the engineer or operator, at a given pressure in the boiler or generator, it will automatically, by force of the pressure in the boiler or generator, open and shut the damper, as the pressure in the boiler or generator rises above or falls below the figure at which the mechanism is set. If you find in Brunton's patent such a mechanism, so organized, then, of course, Clark's invention is not new. But, if you do not find such a mechanism, not only substantially the same in its particular parts, but so organized as that, when set in operation, it will produce substantially the same results in substantially the same way, then Clark's patent is valid, unless the change made by Clark is so obvious that it required no invention or labor of thought to make that change."1

While the device shown in the prior patent or publication must be capable of effecting the purpose of the device of the later patent without changes or additions, a prior patent is not rendered nugatory as a bar to subsequent patents by the fact that the machine or structure described therein has defects in working that mere mechanical skill would remove; and a description without drawings, of mechanical device, has been held sufficient to enable a mechanic to work by it.

¹ Clark P. S. R. Co. v. Copeland, 2 Fish. Pat. Cas. 227. See also Roberts v. Dickey, 4 Fish. Pat. Cas. 544.

² Pickering v. McCullough, 21 Of. Gaz. 73.

⁸ Gottfried v. Crescent Brewing Co., 9 Fed. Rep. 762.

In attempting to anticipate a patent by a prior patent the Patent Office model appurtenant to the application for the latter can not be made use of to show something different from what is described in the prior patent, neither can the file wrapper of the application for the prior patent be put in evidence, neither is proof as to the date of making the invention described in the prior patent admissible.

A foreign patent kept secret is not a bar to a later American patent, for the public can not derive a knowledge of the invention from such a patent; and in considering all foreign patents, for the purpose now in hand, the date of the *publication* of the patent is the date of the patent.

In the chapter on "Prior Use" it was shown that the accidental prior existence of an afterward patented structure, never used for the patented purpose in hand, nor for an analogous purpose, and with no knowledge of the patented purpose on the part of the users, does not constitute a bar to a patent subsequent in date thereto. On principle this would be as true of a prior patent or publication as of prior use.

¹ Thatcher Heating Co. v. Spear, I Fed. Rep. 411.

² Howes v. McNeal, 4 Fed. Rep. 151.

³ Tyler v. Crane, 7 Fed. Rep. 775.

⁴ Schoerken v. Swift and Courtney and Beecher Co., 7 Fed Rep. 469.

CHAPTER VI.

NOVELTY-PRIOR INVENTION.

THE statute provides 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 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." 1

In section 4909 and 4910, of the same statute, these interference proceedings in the Patent Office are made appealable as far as to the Commissioner of Patents in person. Section 4911, of the same statute expressly omits interferences from the cases which are appealable from the Commissioner of Patents to the Supreme Court of the District of Columbia but they are made practically

¹ Title LX, Chap. 1, Sec. 4904, Rev. Stat.

appealable to an United States court by a proceeding de novo as follows:-"Sec. 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 "1

The United States Circuit Courts have exclusive jurisdiction of suits of this kind, and as "no law of the United States makes provision for the service of any process outside of the district," it follows that the party seeking a patent in this manner must bring the suit in that United States Circuit Court which has jurisdiction of the person of his opponent.

Interference proceedings between patents are provided for by the statute as follows: "Whenever there are interfering patents any person interested in any one of them

¹ Title LX. Chap. 1, Sec. 4915, Rev. Stat.

²L. & M. Tobacco Co. v. Miller, I Fep. Rep. 203.

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 in the invention patented. But no such judgment or adjudication shall effect the right of any person except the parties to the suit and those deriving title under them subsequent to the rendition of such judgment."

The statute in Section 4920, provides as one defence to an action for infringement of a patent:—"Second. That he (the inventor,) had surreptitiously and unjustly obtained the patent for that which was in fact invented by another who was using reasonable diligence in adapting and perfecting the same."

The question, the determination of which is provided for by these portions of statute, is priority of invention; and it is to be understood that the defence of prior invention made to a suit brought for infringement of a patent is a distinctly different defence from that of prior use. When the latter is made a defence it is of no consequence whether or not the prior user invented the thing he used or whether he ever sought or intended to seek a patent for it. When the former defence is set up it is of the very essence of the defence that the alleged prior thing

¹ Title LX. Chap. 1, Sec. 4918, Rev. Stat.

was an invention, and it is generally important that the inventor took or intended to take a patent for it, although reasonable diligence in perfecting the invention and bringing it into public use, will take the place of the procurement of a patent.

When prior use is set up as a defence it is essential that the prior thing should have been reduced to practice, and put into actual and successful use which use must have been in public or accessible to the public. When prior invention is a defence it is not essential that the prior thing should be anything more than a well evidenced conception, provided that conception be followed up to successful reduction to practice and application for patent—or to introduction into public use—with due diligence. It was seen in discussing the topic of prior patent that the character of the model accompanying the application for that patent and the date of the application for that patent are not pertinent facts; both are pertinent facts when prior invention is under discussion.

These remarks about the differences between *prior invention* and *prior use* are necessitated by the fact that the courts have not always made the distinction.

In Bedford v. Hunt, the defence being prior use, the most eminent judge of his day, so far as patent causes were concerned, proceeded to discuss the question of prior invention so well as to make the case forever a prominent one. In Coffin v. Ogden, the Supreme Court said:—"The answer alleges that the thing patented, or a material and substantial part thereof, had been prior to the supposed invention thereof by Kirkham, known and

¹ I Mason, 302.

² 18 Wallace, 120.

used by divers persons," etc. This is the accepted and settled mode of pleading the defence of prior use. The court proceeded to say:—"The appellees insist that Erbe was the prior inventor and that this priority is fatal to the patent." This is language applicable to the topic of prior invention. The court proceeded further:—"The invention or discovery relied upon as a defence must have been complete and capable of producing the result accomplished * . If the question relates to a machine the conception must have been clothed in substantial forms which demonstrates at once its practical efficacy and utility." This is language applicable to the topic of prior use.

One of the earliest, and perhaps the first, of the judicial statements of a difference between prior invention and prior use, was made thus:—"Here the reliance is not on prior use; therefore it is of no consequence whether it (the invention) is abandoned or not, but whether it was the prior invention."

Contests, wherein priority of invention is the subject matter of dispute, are very common in the Patent Office—one or more being always in progress there—but are of much rarer occurrence in the courts. Interferences in the Patent Office are sometimes between two or more applications for patent and sometimes between an application for patent (one or more) and a patent, (one or more,) for though the Commissioner of Patents has no power to cancel a patent once issued, he may, if he finds that another person than the patentee was the prior inventor, give such other person a patent also, and thus

¹ Colt v. Mass. Arms Co., I Fisher's Patent Cases, 116.

place both parties on an equal footing before the courts and with the public.

Under Section 4915 of the statute the contest is usually between an application and a patent; under Section 4918 it is between patents.

The following is a *resumé* of court cases which have distinctively discussed prior invention, near enough complete to give a practical knowledge of the law as construed by the courts.

In the case of *Reed* v. *Cutter*, Judge Story said:—"In a race of diligence between two independent inventors he who first reduces his invention to a fixed, positive and practical form would seem to be entitled to a priority of right to a patent therefor. The clause * now under consideration seems to qualify that right by providing that in such cases he who invents first shall have the prior right, if he is using reasonable diligence in adapting and perfecting the same, although the second inventor has in fact perfected the same and reduced the same to practice in a positive form."

The principles set forth in this case just cited were recognized and followed in the case of *Colt v. Mass. Arms Co.*, where two patents were in conflict. Judge Woodbury instructed the jury that they might go back and find who made the prior invention saying:—"The date of the invention is the date of the discovery involved and the attempt to embody that in some machine—not the date of perfecting the instrument *. If the invention was made—if it was set forth in a machine which would and

¹ I Story, 590.

² I Fisher's Patent Cases, 108.

did discharge a fire—that is all'which is necessary to constitute the invention."

In the case of Ransom v. New York, 1 Judge Hall said: "If the plaintiffs did not use reasonable diligence to perfect the invention patented, after the idea of it was conceived, and in the meantime other persons not only conceived the idea but perfected the invention and practically applied it to public use before the invention of the plaintiffs had been so far perfected that it could be applied to practical use, the plaintiffs' patent is void because they were not the first and original inventors of the thing patented."

In the case of Folmson v. Root,² Judge Sprague said: "If, gentlemen, the invention was perfected,—if Mr. Johnson used reasonable diligence to perfect it: then he had a right to have it incorporated into his patent, and to supercede those who had intervened between his first invention or discovery and his subsequent taking out of his patent. If he had not perfected it and did not use due diligence to carry it into effect and in the meantime before he got his patent somebody else had invented and used and incorporated into a useful practical machine that mode of feeding, then he could not by a subsequent patent appropriate to himself what was embraced in the former machine."

The case of *Ellithorpe* v. *Robertson*, was an interferance case carried to the United States court: therein Judge Ingersoll said:—"To defeat a patent which has been issued, it is not enough that some one before the

¹ I Fisher's Patent Cases, 252.

² I Fisher's Patent Cases, 351.

^{8 2} Fisher's Patent Cases. 83.

patentee conceived the idea of effecting what the patentee accomplished. To constitute such a prior invention as will avoid a patent that has been granted it must be made to appear that some one before the patentee not only conceived the idea of doing what the patentee has done but also that he reduced his idea to practice and embodied it in some practical and useful form. The idea must have been carried into practical operation. The making of drawings of conceived ideas is not such an embodiment of such conceived idea into practical and useful form as will defeat a patent which has been granted."

In order to comprehend the exact force of the words just quoted it must be taken into consideration that the later applicant for patent did not allege in his bill of complaint to the court that he had used reasonable diligence in adapting and perfecting his invention so that this decision applies only to that case where one party has a patent and the other cannot show, in addition to prior conception on his part, that he used reasonable diligence in adapting and perfecting his invention.

In Cox v. Griggs, Judge Drummond said:—"It is the right and privilege of a party, when an idea enters his mind in the essential form of invention—inasmuch as most inventions are the result of experiment, trial, and effort and few of them are worked out by mere will—to perfect, by experiment and reasonable diligence, his original idea so as not to be deprived of the fruit of his skill and labor by a prior patent, if he is the first inventor."

¹ 2 Fisher's Patent Cases, 174.

In Reeves v. Keystone Bridge Co., complainants' patent was dated in 1862 and defendant's in 1865: defendant's inventors, Linville and Piper, were shown to have sketched the invention in 1860, prior to complainants' conception. Of these facts Judge McKennan said: "It must therefore be considered as an established rule that illustrated drawings of conceived ideas do not constitute an invention, and that unless they are followed up by a seasonable observance of the requirements of the patent laws they can have no effect upon a subsequently granted patent to another. Applying this rule to the present case the conclusion is unavoidable that Linville and Piper had not 'perfected and adapted' an invention in 1860, and that by reason of their subsequent and long continued remissness they lost any inchoate right they might have had to priority over Reeves."

In Smith v. O'Connor,² Judge Sawyer said:—"The next objection is that one Carr, for whom the defendants sold, first made a model in 1854, which is prior to the making of the machine by the plaintiff. There is testimony here tending to show that he did make some progress toward making a model; but the testimony also shows that he never reduced it to a practical working machine until sometime after making the model and laying it aside. The party having gone to Europe, in the meantime, and returned, it was afterward taken up. In the meantime the plaintiff had perfected his machine and had made a practical working machine. I think on that score he is in advance of the defendants and entitled to the patent as between the two."

¹ I Official Gazette, 466.

² 4 Official Gazette, 633.

In *Pelton* v. *Waters*, it was held that defendants accidental production of the invention, a peculiar cast metal bottle, prior to complainants' invention, with no knowledge how to make another, did not affect complainants' rights as prior inventor."

In the Electric Railroad Signal Co. v. Hall Railroad Signal Co., 2 Pope (complainant's patentee) conceived the invention during the week prior to November 6, 1872; after April 25, 1873, prepared his application for patent; filed his application May 15, 1873, and took patent July 1, 1873. Previous to taking the patent he made neither tests, models or experiments; after his patent was granted he set up a working model in 1875 or 1876. Hall (respondent's patentee) conceived about Dec. 21, 1872; in the latter part of April, 1873, attached a signal, set up in his shop, to a railroad track and let it remain in operation for months; in December, 1873, he attempted to attach it regularly to a railroad and found a practical difficulty which he surmounted February 14, 1874; his patent was granted July 13, 1875. The respondent was held not to infringe and as a necessary consequence Hall was found to be the meritorious inventor. ventor's shop was in Meriden, Conn., not far from the N. Y. & N. H. R. R.; he attached his signal apparatus to the "down" track and had it operate the signal in his shop; this was held to be a reduction to practice. The court in its discussion of the case said :—"He is the first inventor who has actually perfected the invention; the qualification being that if the one first to conceive of the invention was at the time using reasonable diligence in

¹ 7 Official Gazette, 425.

²6 Fed. Rep. 603.

adapting and perfecting the same, he is recognized as the first inventor although the second to conceive may have been the first to reduce to practice." And further: "It is also true that the determination of the fact of diligence is not to be reached by a comparison of the diligence of the two inventors.

If Pope (the first to conceive) was reasonably diligent in perfecting his idea it does not matter that Hall was exceedingly diligent and made more rapid advance." In this case the court held that time spent upon other inventions is not the exercise of reasonable diligence as to the invention in hand.

In the case of the *Union Metallic Cartridge Co.* v. *United States Cartridge Co.*, Judge Lowell practically held that in attempting to defeat a patent under the defence of prior invention such prior invention must have "reached a practical result" before the patentee made his invention.

In the case of the *United States Stamping Co.* v. *Jewett*, the patentee conceived of the invention, as evidenced by a sketch shown to his brother, in the fall of 1869; that same fall or the subsequent spring he experimented at making the invention, a cuspidor, and in 1870 made a large number experimentally; sometime in the summer or fall of that year he made one substantially in the afterward patented shape. It then took about a year to get the necessary machinery to make them for market; he applied for a patent June 3, 1871, which was granted October 10, 1871; the court held that the date of the

¹ **7** Fed. Rep. 344.

³ 7 Fed. Rep. 869.

invention was the fall of 1869 or early in 1870, and that the inventor had exercised reasonable diligence in embodying and perfecting the improvement.

Judge Blatchford—in the case last cited—took occasion to say that where it is sought to anticipate a patent upon a defence of prior invention the case must be made out for the prior invention "beyond all reasonable doubt" in order to succeed: and the testimony of a number of persons to circumstances was not received as proof, they being shown to be mistaken as to other dates incidentally brought in.

In the case of the Siebert Cylinder Oil Cup Co. v. Phillips Lubricator Co., I Judge Lowell said:—"I * do not find that Parshall completed and reduced to practice the invention in question before Gates made it. The idea was probably conceived by the two inventors nearly at the same time. Which was the earlier to conceive it I cannot say, but Gates fully tested and proved and adapted it to use while Parshall was trying to overcome a practical difficulty of construction which the particular form of his machine required him to overcome and he did not succeed until years after Gates' machine had been in general use"; Gates' patent antedated Parshall's six years and priority was awarded to Gates.

There is little difficulty about the rule of law to be deduced from these cases, but the application of the rule is fraught with great difficulties. The rule is that he who first conceives of an invention and reduces it to practice with reasonable diligence is the true and first inventor against all other persons, but that the title of one first to

¹ 10 Fed. Rep. 677.

conceive and afterwards not duly diligent in reducing to practice must give way to the title of another subsequent to conceive but first to reduce to practice.

The grant of a patent to either or both contestants does not alter this rule There are intimations in two of these cases just cited to the effect that when a patent has been granted to one of the contestants and not to the other that such other in order to prevail must show a reduction to practice before the patentee's conception which would put the defence of prior invention on much the same footing as prior use—but such intimations are opposed to the principles of the great majority of cases and opposed to the general principles on which the patent law Suppose A be the first to conceive an invention and the first to reduce it to practice in public and that B, who conceives subsequently to A, reduces to practice subsequently to A, and then takes a patent, A taking none and intending to take none; in such a case the public derives its first knowledge of the invention from the reduction to practice made by A, he being also the first to conceive and duly diligent in reducing to practice; and B does not give that valuable consideration—that is, the first knowledge of a new and useful invention—that the policy of the law demands as the price of a patent. It must be observed, however, in this connection with this supposed case, that the reduction to practice by A must be a public matter to have the effect of preventing B from giving to the public its first knowledge of the invention, from which it follows that the requirement of due diligence must extend either to making the reduction to practice public or making an application for patent on the invention and prosecuting the

same to issue, the patent being in that case the full disclosure of the invention to the public.

The application of the simple rule of law to be deduced from the statute and the cases is not a simple matter; it raises a question of fact the decision of which is hardly ever dependent upon the same or even similar sets of circumstances in any two different cases.

A great many cases involving the question of priority of invention have been decided in the Patent Office 1 and they may be not unprofitably studied in this connection with the understanding, however, that these decisions are not all in harmony with each other and are not of equal authority with court decisions.

Conception of an Invention. The two things necessary to the completion of an invention are its conception and its reduction to practice.

Judge Lowell has defined the conception of an invention as follows:—"Neither does it mean the first moment at which he (the inventor) conceived the idea that it would be a good thing to do that. It means not only when he conceived that such a thing would be a desirable thing to do, but when he had conceived the idea of how to do it substantially as he has done it." The result to be effected must not only be in the inventor's mind but he must have in his mind's eye substantially the means by which that result is to be effected.

^{&#}x27;1 One hundred and thirty two of these cases can be found digested in Simonds' Digest of Patent Office Decisions under the title Prior Invention.

² Woodman v. Stimpson, 3 Fisher's Patent Cases, 105.

The date of such conception an inventor is allowed to prove by sketches or models he made at the time, or even by declarations or descriptions he gave to other persons.

Reduction to Practice. We have seen that conception consists in a distinct apprehension in the inventor's mind of the result to be attained and of the means by which that result is to be reached. The step which completes the invention is reduction to practice and this consists in the embodiment of the principles previously conceived in tangible materials—the making of a machine, manufacture or composition of matter or the actual trial of a process—in accordance with such principles.

The Supreme Court of the District of Columbia held in a series of decisions that the making of drawings is sufficient reduction to practice, and in one case at least that a merely oral description is sufficient even if unaccompanied by a drawing. But there is no need of hesitation in saying that, as affecting claims of rival inventors, an oral or written description or a drawing is not in the sense of the patent law a reduction to practice. In Ellithorpe v. Robertson, Judge Ingersoll said:—"The making of drawings of conceived ideas is not such an embodiment of such conceived ideas into practical and useful form as will defeat a patent which has been granted," and the spirit of this decision is in perfect accord with the other cases.

¹ 2 Fisher's Patent Cases, 83.

In discussing the question of prior use it was seen that when that defence was set up against a patent the alleged prior machine or other device must have been completed and put into actual use; and that this use must have been a public use, in order to have such a defence prevail. The case last cited shows that drawings alone cannot constitute a reduction to practice in any case, so that reduction to practice requires at least the production of an operative machine or process. That is all that is required by the Patent Office and it is all that a court is likely to require. The reason, and perhaps the only reason, for requiring that an invention (supposing it to be a machine) shall be embodied in an operative mechanism in order to constitute the whole of an invention, is that it may be made certain that the new machine will work practically, a thing that cannot be known till an operative mechanism is constructed; for many an invention that seems entirely feasible in a drawing develops some practical and oftentimes insurmountable difficulty in the effort to put it into actual construction. A reduction to practice (supposing the invention to be a machine or the like) consists in an actual making of the machine in full size for actual work, and-if from the nature of the case there is any doubt about its operativeness—an actual and successful trial of the machine.

It is not necessary to constitute a reduction to practice that the tangible embodiment thereof should be made public; but it is perfectly clear that the invention must either be put into public use with due diligence or a patent must be applied for and procured with due diligence, in order to make it available as a defence against the patent of another.

Reasonable Diligence. The one important qualification of the diligence required is that it shall be reasonable. Sickness, poverty or other circumstances beyond the control of the inventor may excuse his laying it by for a time but he cannot lay the invention by merely because it is pleasanter, more profitable, or more convenient to attend to something else. The inventor is required to devote himself to the development of the invention with all the continuity of effort compatible with the discharge of the duties properly incumbent upon a man in his station, occupation and general situation. The plea of poverty is the one that is perhaps oftenest set up, but it is a plea that requires great scrutiny.

"The measure of property which one must possess before he is required to exercise any diligence to prosecute his right, is not to be found in the statute. It is an excuse very readily made, which yet should not be too readily listened to. If a man be utterly destitute of money, without friends and incapable thereby of prosecuting an enterprise, much indulgence may be shown him: but where he has the means of carrying on enterprises of a kindred sort, equally demanding money and friends, and does carry them on, his election to pursue his other enterprises will not be regarded in the law as an excuse of the delay in the one when valuable rights of others, meritorious as himself and in the outset of their struggle equally poor, are to be prejudiced. An election thus made for his supposed advantage or gratification at the time, according to the plainest principles of equity, must not be invoked to the detriment of another innocent party,"1

¹ Wickersham v. Singer, Supreme Court District of Columbia.

There is no limit to the time within which an inventor must perfect and mature his invention; that is, there is no limit to which he may not carry back the date of his conception provided he can show that he exercised due diligence afterwards in perfecting and adapting it. A machine may be so complicated that a long series of years may not suffice wherein to perfect and mature it; but of course such cases are rare. The simplicity or complexity of the invention will generally give a criterion upon this point though an exception to this rule will at once occur to any one at all conversant with the history of important American inventions,—the case of Goodyear, inventor of hard rubber.

The Patent Office has not unfrequently contrasted the relative diligence of inventors struggling before it for priority; but the courts are agreed that this is not a correct process. He who is first to conceive, if he follows up his conception with reasonable diligence, is entitled to the patent against all the world even though one subsequent to conceive followed up his conception with a greater degree of diligence.

Patent Office Procedure. The mode of taking testimony for use in interference cases before the Patent Office is regulated by statute and by rules made by the Commissioner of Patents.¹

An interference in the Patent Office is usually brought about by a request to that effect by an applicant for an

¹ On request the Commissioner of Patents will forward to an applicant a copy of the Rules of Practice of the Patent Office.

original or reissued patent, when the desired claim is refused to such applicant upon reference to some prior patent, and the applicant has reason to think that he may be the first inventor of the device in question; but the Patent Office not rarely takes the responsibility of putting into interference two or more applications, pending at the same time, which show or claim the same patentable subject matter

The first step taken by the Office looking toward the declaration of an interference, is the issue of a requirement to each of the parties to file what is called a "preliminary statement," on or before a day fixed by the Office. giving, under the oath of the party, the date of the original conception of the invention in controversy, the facts and dates of subsequent steps toward reduction to practice, the date of reduction to practice, and the extent of use after reduction to practice. This "preliminary statement" must be sworn to, sealed up, and sent to the Office, where it is kept secret till the day set for the filing of such statements by all the parties, on which day they are opened to the inspection of all the parties concerned. In subsequent testimony, a party is not permitted to substantially depart from dates given in his preliminary statement or to contradict its allegations.

The burden of proof is upon the party whose application, showing or claiming the device in issue, was last filed in the Office; and, if such party fails to file a preliminary statement, or, in filing it, fails to overcome the *prima facie* case made by the date of filing an application by another party, or if it shows that he has abandoned his invention, or that he allowed the invention to

be in public use or on sale for more than two years prior to his application, the case will be adjudged against him at this point, unless the public use appears to affect the rights of other parties, in which latter case the interference will proceed. If the earlier applicant for a patent fails to file a preliminary statement, he will not be allowed, subsequently, to prove the invention by him at an earlier date than the date of filing his application.

If the interference proceeds beyond the filing of preliminary statements, the Office sets a time during which the latest applicant for patent must finish taking of his testimony-in-chief, or his direct evidence, and the other parties have similar times set, in the reversed order of the dates of their respective applications; and after this a time is set for rebutting evidence.

Postponement or extension of these times can be procured upon proper cause being shown by affidavit, a copy of which, together with a copy of the notice of the motion for further time, must be served upon the adverse parties or their attorneys.

An interference properly declared will not be dissolved without judgment of priority being given in favor of one or the other of the parties; but an interference improperly declared,—as if, for instance, the devices shown by the different parties are not really the same,—will be dissolved upon motion to that effect.

Specifications can not be amended during the progress of an interference, except that, if an applicant has clauses of claim not involved in the interference, they can be withdrawn from the interfering application and made the subject of another and new application.

When the evidence is all in (and this is now usually required to be printed) the case is considered upon oral, written, or printed argument.

If it should appear that one of the parties had pirated or copied from another, that would destroy all his rights to a patent.

The office does not recognize the grant of a patent more than two years before the application of another party as necessarily constituting a two years' public use against the subsequent applicant. Where one of the parties was both first to conceive the invention and the first to reduce it to practice, there can be no comparison of diligence between him and subsequent inventors. Only abandonment or more than two years' public use will defeat the right to a patent.¹

If it should happen to appear, clearly and unmistakably, that an invention was joint while applied for as sole, or *vice versa*, that would compel the Office to decide against this application *as made*; but that would be solely a question between the Office and the applicant, with which the adverse parties have nothing to do.

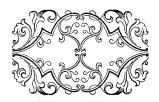
There is no limit to the number of interferences to which an application or patent may be subjected, and a patent without going through an interference ordered by the Commissioner is void.²

Interference cases are appealable from the interference examiner to the board of examiners-in-chief, upon payment of a fee of ten dollars, and from them to the Commissioner in person, upon payment of a fee of twenty

¹Rice v. Winchester, 3 Official Gazette, 348.

² Potter v. Dixon, 2 Fisher's Patent Cases, 381.

dollars. They are not appealable to the Supreme Court of the District of Columbia; but the applicant who is denied a patent may prosecute his claim by a bill in equity before a United States Circuit Court having jurisdiction, and the case is appealable from this court to the United States Supreme Court.



CHAPTER VII.

UTILITY.

THE statute requires that an invention, in order to be patentable, must be "useful." The topic of utility has two phases or aspects,—one absolute, and the other comparative.

The absolute phase is: What utility must an invention have to render it patentable? The comparative phase is: when an alleged invention is being compared with some prior thing in order to ascertain if the two are apparently identical, does the alleged invention possess such superior utility over the prior thing as to show that some new mode or means of operation, use or result has been arrived at?

Absolute Utility. The statute, in requiring that a patentable invention shall be useful does not require that it shall possess any high degree of utility; if it is not positively noxious, immoral, hurtful or frivolous and possess any utility, that suffices. It need not be more useful than other things of its class, it need not be as useful even, and it is of no moment that an invention will not accomplish all that a sanguine inventor claimed for it. The only question is: Does the invention possess any utility?

¹ Eames v. Cook, 2 Fish. Pat. Cases, 146.

93

Entire and absolute failure to accomplish any useful purpose will render the patent granted for such an invention void, but if it will accomplish the intended purpose in any degree, that is sufficient.

In a suit brought for the infringement of a patent on a pump, the defendant claimed that the plaintiff's pump, in order to be patentable, must be better than other pumps so as to supersede the pumps before in use. The judge said: "I do not so understand the law * *, all that the law requires is that the invention should not be frivolous, or injurious to the well-being, good policy or sound morals of society. The word *useful*, therefore, is incorporated into the act in contradistinction to mischievous or immoral * * *. Whether it be more or less useful is a circumstance very material to the interest of the patentee, but of no importance to the public." 1

In a later case the judge said: "All that the law requires is that the invention shall not be frivolous or dangerous. It does not require any degree of utility; it does not exact that the subject of the patent shall be better than anything invented before or that shall come after.

The invention shall not be frivolous; if it is useful at all that suffices." The same doctrine is fully enunciated in many other cases and is nowhere contradicted.

But an entire and absolute lack of utility will render a patent void.⁴

¹Lowell v. Lewis, 1 Mason, 186.

² Hoffheirs v. Brandt, 3 Fisher's Pat. Cases, 236.

⁸ Whitney v. Enmett, Baldwin's C. C. Rep. 300; Wilbut v. Beceher, 2 Blatchford, 137; McCormick v. Many, 6 McLean, 550; Earle v. Sawyer, 4 Mason. 6; Bedford v. Hunt, 1 Mason, 303; Wintermute v. Redington, 1 Fisher's Pat. Cases, 239; Page v. Ferry, 1 Fisher's Pat. Cases, 298.

^{*}Langdon v. De Groot, I Paine, 203.

Comparative Utility. The utility of a device as compared with that of a prior device is often a question of great importance.

In setting forth what constitutes a test of sufficiency of invention in the chapters, which treat of patentable novelty, it was shown that it is a settled rule of law that however slight and insignificant a change may seem, if that change gives a positive advantage of other than the perfectly obvious sort, the result is conclusive evidence that sufficient invention was exercised in making that change to support a patent, so far as the question of patentable novelty is concerned.

The point is stated simply and concisely here; it is elaborated in the chapter on "Novelty—In General."

The question of superior utility is of similar importance when the topic of infringement is under discussion. The courts hold that where it is doubtful whether a patented device and another device complained of as an infringement of the patent are not substantially identical, their comparative utility may be taken into consideration. If, as compared with the patented device, the defendant's device possesses superior utility that is evidence going to show that the latter involves a different principle of operation from the former; and in this case there are two things to be taken into consideration, first, the amount of apparent change and, second, the amount of superior If the change is small and the increase of utility small, that is weak evidence toward establishing a substantial difference; if the change is small and the utility largely increased that is stronger evidence of substantial difference; and if the change is considerable and the increased utility considerable that is generally

conclusive evidence that the two things under comparison are not substantially identical.

In a case where this question was under discussion the judge said: "If one machine which is alleged to be an infringement of another produces a different result, or, in other words, is of greater utility than the preceding machine, it may be some evidence of a difference, a substantial difference between them; and the utility of the one over the other may be so great as to be satisfactory evidence that some new principle is involved, and that it is not substantially the same. This is sometimes coupled, too, in considering the evidence with the mechanical differences. The mechanical differences may be sufficient to show that the two machines are not substantially the same. The difference of result and utility may be so great as to be satisfactory to the jury.

They may be authorized to receive it as satisfactory if it is of so very high a nature.

And it may be that neither of these alone would be satisfactory; yet the mechanical difference and the difference of utility, taken together, may be sufficient to satisfy the mind."

The same doctrine runs through many other cases.2

¹ Johnson v. Root, I Fisher's Patent Cases, 362.

² Judson v. Moore, I Fisher's Patent Cas. 544; Singer v. Walmsley, I Fisher's Patent Cases, 558; Judson v. Cope. I Fisher's Patent Cases, 615; Eames v. Cook, 2 Fisher's Patent Cases, 146; Magic Ruffle Co. v. Douglas, 2 Fisher's Patent Cases, 330; Carter v. Barker, 4 Fisher's Patent Cases, 404; Stanley Works v. Sargent, 4 Fisher's Patent Cases, 443.

CHAPTER VIII.

PUBLIC USE - TWO YEARS.

THE statute requires that an invention, in order to be patentable must have been "not in public use or on sale for more than two years prior to his (the inventor's) application," for patent therefor, and provides as one of the defences to a suit for infringement that the defendant may prove as to the alleged invention: "that it had been in public use or on sale in this country for more than two years before his application for a patent."

History of the "Public Use" Statute. The original statute of 1790 contained the following: "Upon the petition of any person or persons to the Secretary of State, the Secretary for the war department 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

¹ Rev. Stat. Title LX. Chap. 1, Sec. 4886.

² Rev. Stat. Title LX. Chap. 1, Sec. 4920.

and may be lawful * * to cause letters patent to be made out," &c.1

The phrase to which attention is particularly directed in this connection is "not before known or used." At the first reading of the section, a doubt arises as to whether the forbidden knowledge or use must be previous to the making of the invention or only previous to the presentation of the "petition," or—in our later parlance—the "application" for patent. As the constructors of this statute, builded in the main upon the English patent law, which forbade knowledge or use prior to the application, it is reasonable to infer that this was the meaning intended by the American legislature, and the United States Supreme Court so decided.²

The next act, that of 1793, contained the following section: "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" &c.3

Here it will be observed that the matter is made clear by the use of the words "not known or used before the application."

¹Act of 1790, Sec. 1.

^{* 2}Pennock v. Dialogue, 2 Peters, 1; Shaw v. Cooper, 7 Peters, 29.

⁸ Act of 1793, Chap. 2d, Sec. 1.

Under this statute the courts concurred in holding that the invalidating use must be a public use 1 and also that when the use was by others than the inventor it must be with the consent and allowance of the inventor; thus: "The meaning of the words 'not known or used' in paragraph 1 of the Act of 1793 is, that the invention for which the patent is sought must not have been known or used by others * . If before his application his invention should be pirated by another or used without his consent, such knowledge or use will not invalidate the patent." This was a decision by the Supreme Court and of course settled the matter, but there are numerous decisions of the Circuit Courts to the same effect.

Then came the Act of 1836, to the following effect: "Sec. 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. * * "

¹Pennock v. Dialogue, before cited.

²Pennock v. Dialogue, 2 Peters, 18.

⁸ Whitney v. Emmet, 1 Baldwin, 309; Ryan v. Goodwin, 3 Sumner, 518.

⁴Act of 1836, Chap. 537.

The part to which attention is directed in this connection is: "not at the time of his application for a patent in public use or on sale with his consent or allowance." It will be readily understood that this did not at all change the law in substance, and that it simply expressed in terms what the law had come to be by construction of the courts.

Next came the Act of March 3, 1839, containing the "Sec. 7. And be it further enacted, That following: 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 "vears prior to such application for a patent,"

The only change that this statute made in the matter now under consideration was that it changed the date after which the public use or sale was allowable; it did not change the character of the invalidating use or sale,

Prior to the passage of this Act, public use or sale was not allowable till after the application; after the passage of this Act public use and sale was allowable at any time subsequent to a date two years prior to the application.

The next statute mentioning the matter was the Act of July 8, 1870—the same in substance as the present law—

which contained the following: "Sec. 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."

It will be observed that this statute differs from its predecessors, the Act of 1836 as modified by the Act of 1830, in omitting to say in terms that the invalidating use must be with the "consent and allowance" of the inventor; but as the Supreme Court, in construing the statute of 1793, which had the same omission of "consent and allowance." held that such consent and allowance was constructively a part of the law, no reason is seen why a court should not say the same thing of the present statute. But Judge Clifford, one of the justices of the Supreme Court, while presiding in a Circuit Court, said: "The better opinion is that the provision in the present Act is in the nature of a statute of limitations and that it is sufficient to defeat the right of an applicant for a patent if it be shown that his invention had been in public use or on sale more than two years prior to his application without proving that it was with his consent and allowance" 1

¹Kelleher v. Darling, 14 Official Gazette, 673.

This is not the only instance in which a Circuit Court has held that under the existing statute the inventor's consent and allowance is not necessary to an invalidating use or sale, but until the Supreme Court, after a proper presentation of the question, has clearly held the same way, the weight of its authority would seem to be with the opposite view."

Qualities of Public Use. Does "public use" mean a use by the public, that is a use both open and general, or does it mean a use in public, that is a use, perhaps, limited to a single person and a single instance but accessible to the public? This question soon arises in the study of the statute; it is, however, one that is clearly answered by the courts. "Public use" means a use in public, not necessarily a use by the public.²

It is not essential to an invalidating use that any particular portion of the public should have had actual knowledge of the use; the law counts accessibility of information to the public the same as its possession by the public.

In one instance an inventor made a machine containing his invention in 1857; in 1863 he substituted another differing in form but not in mode or purpose of operation and applied for his patent in 1876. Meanwhile, he used the machine "in the ordinary way of his business" in a room where there was other machinery, also workmen, all of whom had keys to the shop which was kept locked. None of the workmen appeared to have divulged a knowledge of the invention till 1876. This

¹ American Whip Co. v. Hamden Whip Co., 4 Federal Reporter, 536.

² Henry v. Providence Tool Co., 14 Official Gazette, 858.

was held to be a public use fatal to the patent, and the court said: "Because of the difficulty of ascertaining the amount of knowledge which may have been derived from the exhibition, publication, or use of the invention, it has always been held that when the public have had means of knowledge they have had knowledge of the invention. Thus, if a book has been published describing the invention, it is not important that no one has read it. If a pier has been placed in the bed of a river or a pipe under ground it is conclusively presumed to be known to all men."

Thus the Supreme Court: "If an inventor, having made his device, gives or sells it to another, to be used by the donee or vendee without limitations or restrictions, or injunctions of secrecy, and it is so used, such use is public within the meaning of the statute even though the use and knowledge of the use may be confined to one person,"² This was said in a case in which the Supreme Court went to the extremest limit it probably will ever go in this direction; an inventor of corset steels took his patent in 1866; in 1855 he gave one pair to a woman to use and another pair in 1858; they were so used under no obligation of secrecy and without any condition or restriction; the use was not for experiment nor to test the quality of the steel, and the Supreme Court held this to be a public use. On the other hand a use in public is not necessarily the "public use" of the statute. In one case it was alleged and proved that the inventor had allowed the public use of his invention, an eight-wheeled

¹ Perkins v. Nashua Card and Glazed Paper Co., 2 Fed. Rep. 451.

²Egbert v. Lippmann, 21 Official Gazette, 75.

car, upon the Baltimore and Ohio Railroad. Of this the learned Judge Nelson said: "If the use be experimental to ascertain the value, or the utility, or the success of the thing invented, by putting it into practice by trial, such use will not deprive the patentee of his right to the product of his genius. The plaintiff, therefore, in this case had a right to use the cars on the Baltimore and Ohio Railroad by way of trial and experiment, and to enter into stipulations with the directors of the road for this purpose without any forfeiture of his rights."

In a later case it was held that keeping a pavement for six years on a public street, not for profit but for trial, was not an invalidating public use.²

In a still later case the inventor of an improvement in steam fire engines permitted the city of Troy to use the improvement upon two of its engines, and the use was held to be merely experimental.³

From these decisions it is to be seen that the use of an improvement in public is not necessarily an invalidating public use.

It would hardly be possible to give a thing greater publicity than that of a railway car on a great public thoroughfare; or than that of a pavement laid in a city street; or than that of a steam fire engine regularly used in city service; yet none of these were held to amount to the public use which bars a patent. The motive with which the act is done is all important here: if the use, however public or long continued, is for the purpose of

Winans v. N. Y. & Harlem R. R. Co., 4 Fisher's Pat. Cases, 10.

² Am. Nicolson Pavement Co. v. Elizabeth, 3 O. G. 522.

³ Campbell v. New York City, 20 O. G. 1817.

trial, test, or experiment, it is allowable; and on the other hand however short and however limited as to the number of persons having knowledge thereof, it is fatal if such use is not for trial, test, or experiment.

As it is for the public's interest that new inventions should be perfected, the law looks with toleration and leniency on efforts that tend in that direction.

"If it were necessary for the inventor to employ others to assist him in the original structure or use by himself * such use will not invalidate the patent." "The patentee may make experiments with his invention or disclose it to others he may wish to consult, or employ others to assist him in making and using it * without impairing his patent. The time during which the thing patented had been known or used is not material; the criterion is its public, not its private or surreptitious use. "If the use be merely experimental to ascertain its value or utility, or the success of the invention by putting it in practice, that is not such a use as will deprive the inventor of his title."

"The use * must be either generally allowed or acquiesced in, or at least unlimited in time, extent, or object. A mere occasional use by the inventor in trying experiments, or a temporary use by a few persons as an act of personal accommodation or kindness for a short and limited period, will not away a right to a patent."

An invalidating public use must be a use of the perfected invention. Thus Judge Lowell: "The sale or

¹ Pennock v. Dialogue, 2 Peters, 18,

² Whitney v. Emmet, 1 Baldwin, 309.

⁸Ryan v. Goodwin, 3 Sumner, 518.

⁴ Wyeth v. Stone, I Story, 281.

use to defeat the patent must have been of the thing patented; and we are of opinion that in order to defeat the patent it is not enough to prove that the inventor has sold an earlier and less perfect article; that is, less perfect in the sense of the patent law.

In other words, the test is not necessarily, whether the article sold would infringe the invention by embodying a part of it, but whether it is the invention,—that is embodying the whole of it. The law does not intend to say that a patentee dedicates to the public whatever he sells more than two years before he applies for a patent and that he dedicates his invention if he sells it before that period.

Of course, a mere formal or colorable change, to escape the consequences of his own acts, would not protect him, nor could he enjoin the use of any specific thing which he had sold; but we are unprepared to say that he might not prevent the general public from using the same sort of thing if it is included in his new and completed machine or other invention."

Generally if a use is in public for profit that is conclusive evidence that it is a fatal public use. The inventor, in such a use, "is not allowed to derive any benefit from the sale or use of his machine without forfeiting his right, except within two years prior to the time he makes application."

"If the machine was completed when it was constructed * and if the patentee put it into public use or put it into operation himself publicly, deriving profit from it, and having no view of further improvements, or

¹Draper v. Wattles, 16 O. G. 629.

of ascertaining its defects, then, this use having occurred anterior to the two years, the effect would be to work a forfeiture." But a use for profit, which is not a use in public, does not work such a forfeiture. "Inventors may, if they can, keep their inventions secret, and if they do it is a mistake to suppose that any delay to apply for a patent will forfeit their right to the same or present any bar to a subsequent application." 2 In one case there is an intimation that a use for profit of an imperfect invention will not amount to a public use when a similar use of a perfect invention would; thus: "It is not true that the inventor cannot safely use for profit such a machine, in its imperfect state, lest two years should elapse during the experimental period before the invention is completed and the patent is applied for." 3

Definition of Public Use. The invalidating public use of the statute is a use, other than for trial or experiment, of the perfected invention under conditions that permit any portion of the public, however small—not under obligations of secrecy—for however a limited time, to have access thereto.

Public Use Not Proved by Prior Patent. The defence of public use cannot be made out by showing that a patent granted more than two years before the application for the patent in dispute shows the invention in question.⁴

¹Pitts v. Hall, I Fisher's Pat. Reports, 447.

² Miller v. Smith, 5 Federal Reporter, 359.

⁸ Sprague v. Smith, & Griggs Mfg. Co., 12 Fed. Rep. 721.

⁴ Weston v. White, 9 O. G. 1196.

Continuity of Applications It not infrequently happens that the inventor makes more than one application for the patent in question, the former of which have been rejected, and in such a case the question often arises as to whether the two years allowed by law shall run from the date of the last application or from the date of the previous application: in such case if there is a reasonable continuity in the applications so that a change of abandonment meanwhile cannot be successfully maintained—as to which, see the chapter on Abandonment—then the two years will date from the last application, otherwise not.¹

In this connection it is pertinent to consider what constitutes an application for patent. The law means thereby a legal application filed with the Commissioner of Patents, and if anything is lacking, under the law or under the lawful rules established by the Commissioner in the premises, to the completeness of the application it is not the application for patent intended by the law. "Neither filing the model nor writing the paper commonly called an application, gives the date of the application from which the two years are to be reckoned. 'Application' in this connection includes the paper or some written paper, and its presentation to the Commissioner."²

Under the present law and rules an application consists of a petition asking for the patent, a specification describing and claiming the invention, accompanied by drawings when the case admits of them, an oath of invention, a government fee of \$15.00—and a model, if

¹ Smith v. O'Connor, 4 O. G. 633; Henry v. Francestown Soapstone Stove Co., 9 O. G. 408.

² Henry v. Francestown Soapstone Stove Co., 17 O. G, 569.

required by the Commissioner: if any one of these is lacking the application is incomplete and a court is not likely to hold that a legal application is made till it is made in its proper completeness.

Public Use Requires Clear Proof. "It is proper to say * that this ground of forfeiture is not favored in law but is regarded as being somewhat harsh in its operation on individual rights. The evidence, therefore, should be quite clear that the use was not by way of experiment or for the purpose of perfecting the machine, in order to justify the conclusion that the patentee had forfeited his rights to the improvement."



¹ Pitts v. Hall, I Fisher's Pat. Reports, 447.

CHAPTER IX.

ABANDONMENT OF INVENTION TO THE PUBLIC.

THE statute¹ excepts from patentability an invention "proved to have been abandoned," and elsewhere ² provides as a defence to an action for infringement proof that the patented improvement "had been abandoned to the public."

The term "abandonment" has, in a general way, different applications in the patent law.

When it is attempted to anticipate a patent by a prior thing, which was never matured and never followed up, with reasonable diligence, such prior thing is known to the patent law as an "abandoned experiment"; that topic was discussed in the chapter on Novelty—Prior Use.

The Two Years Public Use treated in the last chapter is otherwise known as "statutory abandonment." The statute in one place prescribes what shall be deemed an "abandoned application" for a patent.³

None of these are meant by the ordinary use of the

¹ Section 4886, Chapter 1, Title LX. Rev. Stat.

² Section 4920, Chapter 1, Title LX. Rev. Stat.

⁸ Section 4894, Chapter 1, Title LX. Rev. Stat.

word "abandonment," the accepted meaning thereof being that abandonment of an invention to the public provided for in the two sections of the statute quoted from in opening this chapter.

The first time that this abandonment of an invention to the public was mentioned in an U. S. statute, was in Section 7 of the Act of March 3, 1839, which is as follows:

"Section 7. And be it further enacted, That any 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."

But long prior to the passage of this Act the courts had agreed that such a thing as abandonment of an invention to the public was known to the law; thus in *Pennock* v. *Dialogue*, (4 Wash. 544): "If an inventor makes his discovery public, looks on, and permits others to freely use it, without objection, or assertion of claim to the invention, of which the public might take notice, he abandons the incohate right to the exclusive use of the invention."

This construction by the courts was based, originally, on that part of the first section of the Act of 1793, which provides that an invention, in order to be patentable must have been "not known or used before the application" for patent.

The Act of March 3, 1839 somewhat radically affected the law—in some respects—as regards abandonment and public use. Whereas, prior to that Act no public use whatever of an invention was permissible prior to application for patent, this Act expressly permits such a public use for two years prior to application.

As regards abandonment the change effected by the Act was quite as considerable; abandonment, as constructively created by the courts, consisted mainly in allowing a public use of the invention before application for patent however short, the judicial language being in substance to the effect that he who looked on and saw his invention go into public use, without immediately asserting his rights, must be held to abandon his invention to the public: as the law, since the statute of 1839, expressly allows a certain specified public use, the adjudications, making an abandonment of an allowed public use, cease, in a great measure, to be pertinent to questions of abandonment arising subsequent to, and under, the the Act of 1839, such prior adjudications generally having more pertinence to the question of Public Use,occurring more than two years prior to application for patent.

Abandonment of an invention to the public, (aside from an abandonment or dedication to the public in set terms, as by a written instrument,) consists in such wilful or negligent delay by an inventor in asserting his rights to his invention, after the public—or some portion of the public—has acquired a knowledge thereof, as evidences, or reasonably ought to evidence, an intention by the inventor not to further pursue his rights to the invention.

Since the Act of March 3, 1839, expressly permitting two years public use, legitimate questions of abandonment of invention occurring prior to the application for patent, are not likely to arise; for, if the use in question occurs more than two years prior to the application, usually the vital question is, whether the use was a public use without any regard to the subsequent delay or to the inventor's intention in the premises, such a public use being fatal; and if the use in question occurred within two years of the application for patent, the surrounding circumstances must be very extraordinary to work abandonment, for the laws expressly permits two years' delay in making application for patent. This question of abandonment oftenest arises in respect to a delay in prosecuting an application for patent to a successful termination. In all cases it is to be remember that delay has no effect whatever toward working abandonment until after some portion of the public acquires a knowledge of the invention for "the inventor may, if he can, keep his invention secret, and if he does, no length of delay will bar his rights."1

Abandonment is always a question of fact, that is, of opinion based upon all the circumstances of the particular case under consideration, and it is profitable in this connection to see what the decisions of courts have been in the following selection of cases.

¹Kelleher v. Darling, 14 Of. Gaz. 673; Bates v. Coe, 15 Of. Gaz. 337.

"In one case, the inventor made an application in 1836, rejected in 1837; he renewed in 1837 and had a second rejection; he applied a third time and failed; he continued further efforts in 1839; afterward amended and finally obtained his patent, on appeal, in 1843. This state of facts was held not to constitute an abandonment."

In Pitts v. Hall,² 1858, Judge Nelson said: "An abandonment or dedication, may occur within two years (allowed by the Act of March 3, 1839), and at any time down to the procurement of the patent. The mere use or sale, however, of the machine, within the two years, will not alone or of itself work an abandonment. * * The use or sale must be accompanied by some declaration or acts going to establish an intention on the part of the patentee to give to the public the benefit of his improvement."

In a suit upon a sewing machine patent, the jury were instructed "that if they found that the plaintiff, after having taken the machinery out of the frame, * * laid the machinery aside, as something incomplete and requiring more thought and experiment, and never intending to reconstruct the machine, or to restore the needlefeed in the form of an operative sewing machine, without material modification or alterations, but only to preserve the parts to be used in other inventions as circumstances might arise, then the jury were instructed that they would be fully warranted in finding that he deserted and

¹ Adams v. Edwards, I Fisher's Pat. Cases, I: 1848.

² I Fisher's Patent Reports, p. 441.

abandoned the invention, so far as respects the needle-feed; provided they also found that he did nothing to restore the needle-feed in the form of an operative machine, from November 7, 1848, to the last of December 1852, or the first of January, 1853."¹

In a later case the patentee invented his improvement in 1849, and continued to experiment and perfect his invention until 1852, but did not apply for his patent till 1855; but he was all the time in the employ of one who held a prior and controlling patent, which prevented the use of his improvement, and he delayed his application on this account.

The court held that this did not constitute abandonment, notwithstanding a patent for the same thing was granted to other parties in Belgium, June 16, 1853.²

In the case of the American Hide and Leather Splitting and Dressing Machine Company v. The American Tool and Machine Company, (vol. iv. Fisher's Patent Cases, p. 284), 1870, it was held that an inventor might so freely allow the use of his invention within two years immediately preceding his application, as to have his acts amount to an abandonment of the invention.

In another case, the original application was filed in 1850, but was finally rejected by the Commissioner of Patents. An appeal was taken to the Circuit Court, and not decided till 1856, and then the decision of the Commissioner was affirmed. A new Commissioner, coming into office, granted a patent February 24, 1857. Held, that this delay did not constitute abandonment, and that

¹ Johnson v. Root, 2 Fisher's Pat. Cases, 305.

² White v. Allen, 2 Fisher's Pat. Cases, 440: 1863.

an applicant cannot be prejudiced by the laches of the government officers.¹

In the case of Sayles v. The Chicago and Northwestern Railway Company,² 1865, a similar delay of five years occurred, but was held not to constitute abandonment.

Excerpt from a later case: "The next objection to be noticed is, that the inventor abandoned his invention because his application for a patent, which was made April 12, 1855, was rejected February 6, 1856, and because he did not appeal at all or make any new application until March 25, 1864, " it is not possible to hold that any use of the invention, without the consent of the inventor, while his application for a patent was pending in the Patent Office, can defeat the operation of the letters-patent after they are duly granted." 3

In another case where the delay was less than two years and that was by a mechanic who waited in order to find a manufacturer who would put the improvement on the market, the court said: "Lapse of time does not per se constitute abandonment. It may be a circumstance to be considered. The circumstances of the case, other than the mere lapse of time, almost always give complexion to delay, and either excuse it or give it conclusive effect. " We do not mean that an abandonment to the public may not be made " within less than two years. No particular time is necessary, but the fact must be proved, and the lapse of two years does not establish it. There may be sufficient reasons why a de-

Adams v. Jones, I Fisher's Pat. Cases, 527.

² Vol. 2, Fisher's Pat. Cases, 523.

⁸ Dental Vulcanite Co. v. Wetherbee, 3 Fisher's Pat. Cases, 97: 1866,

lay of a much greater number of years will not so operate. On the question of abandonment, in either aspect, time and circumstances, the acts and contemporaneous declarations of the party are all to be considered." 1

The inventor of the driven well did not apply for his patent for more than four years after he made his invention. He was in serious personal trouble meanwhile and it was held to excuse his delay. Cochran, patentee of a fire-arm, delayed eight years between his first rejected application and the second and successful application, during which interval he took out twenty-two other patents on fire-arms; two or three years before he filed his second application, patents were granted to two others for same subject-matter. Cochran's delay was held fatal and the court said: "If there was no purpose on the part of Cochran to withhold his improvement from the public, there was a negligent postponement of his claims until after the other inventors had acquired equities which it seems unjust to destroy." "

In another case the court said: "If an inventor, without substantial reason or excuse, abandons the use of his invention, and for nine years sleeps upon his rights, and in the mean time others in good faith employ their industry, skill, and money in producing the same thing and give the public the benefit thereof, putting it into extensive use and sale, such a state of facts not only warrants the inference of abandonment by the first inventor, but it also creates, as between him and the

¹R. & E. Mfg. Co. v. Mallory, 5 Fisher's Patent Cases, 643.

² Andrews v. Carman, 9 Of. Gaz. 1011.

⁸ U. S. Rifle & Cart. Co. et al. v. Whitney Arms Co. et al. 11 O. G. 373, Shipman.

others, the same equity as would arise if such others had gone further and taken out a patent. Whether the device be patented or had 'gone into use without a patent,' should make no difference.¹ This is not because lapse of time, per se, deprives an inventor or his rights, but because the circumstances giving character to the delay indicate abandonment, and also because the intervening rights of others makes it inequitable that he should thereafter be permitted to assert any such exclusive title to the invention."²

The same learned judge that rendered the decision last quoted, excused a delay of ten years in presenting an application on the ground of poverty.³

Woodbury, in taking out his patent on his planing machine, allowed an interval of more than twenty years to elapse between the rejection of his first application and the filing of his second and successful application, and thereupon the U. S. Supreme Court said:

"It has sometimes been said that an invention cannot be held to have been abandoned unless it was the intention of the inventor to abandon it. But this cannot be understood as meaning that such an invention must be expressed in words."

"An inventor cannot without cause hold his application pending during a long period of years, leaving the public uncertain whether he ever intends to prosecute it, and keeping the field of his invention closed against other inventors. It is not unfair to him, after his application

¹Kendall v. Winsor, 21 Howard, 322.

² Consolidated Fruit Jar Co. v. Wright, 12 Blatch. C. C. R. 149.

⁸ Colgate v. W. U. Tel. Co. 14 O. G. 943.

for a patent has been rejected, and after he has for many years taken no steps to reinstate it, to review it, or to appeal, that it should be concluded that he has acquiesced in the rejection and abandoned any intention of prosecuting his claim further. Such a conclusion is in accordance with common observation. Especially is this so when during those years of inaction he has seen his invention go into common use, and has uttered no word of complaint or remonstrance, or been stimulated by it to a fresh attempt to obtain a patent. When, in reliance upon his supine inaction, the public has made use of the result of his ingenuity, and has accommodated its business and its machinery to the improvement, it is not unjust to him to hold that he shall be regarded as having assented to the appropriation, or in other words, as having abandoned the invention.

There may be, it is true, circumstances which will excuse delay in prosecuting an application for a patent after it has been rejected, such as extreme poverty of the applicant or protracted sickness. * * * It is of little importance that from time he expressed a hope * * that he should some time and in some way obtain a patent. Such was not his language to the public. His inaction, his delay, his silence under the circumstances, were most significant. Though not express avowals of abandonment, 'to reason's ear they had a voice' not to be misunderstood. They spoke plainly of acquiescence in the rejection of his application for a patent.

They encouraged the manufacture and sale of his invention." 1

¹ Woodbury Patent Planing Machine Co. v. Keith, 17 Of. Gaz. 1031.

"Abandonment, or dedication to the public may be made as well after patent granted as before; but where the patent has actually been granted, it would undoubtedly require a strong case to prove abandonment." In a case where abandonment was urged against a patent because the complainant had delayed to sue infringers, the court said: "Neither does mere delay or acquiescence establish abandonment or dedication of the patent; there must be an acquiescence in the appropriation of the right of such character as reasonably to induce the belief that the owner intended to relinquish it to the public use." ²

The Evidence of Abandonment must, in any case, be very clear and cogent. Abandonment, or dedication is in the nature of a forfeiture of a right which the law does not favor, and should be made out beyond all reasonable doubt. It must be proved, never presumed.³

The conclusion is that abandonment may occur at any stage, before application, during application, or after grant of patent; that abandonment may take place in a short time under circumstances clearly showing an intention to abandon and may not occur through the delay of many years' duration when sickness, poverty or other matter of gravity really constrains the delay; and that in any case it must be proved—never being presumed—beyond all reasonable doubt.

¹Bell v. Daniels, 1 Fisher's Pat. Cases, 378: 1878.

² Williams v. B. & A. R. Co., 16 Of. Gaz. 906, Wallace.

³Pilts v. Hall, 2 Blatchford, 238; McCormick v. Seymour, 2 Blatchford, 256; American Hide & Leather Dressing & Splitting Machine Co. v. American Tool and Machine Co., 4 Fisher's Patent Cases, 284.

CHAPTER X.

CAVEATS.

THE statute enacts that: "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 rights 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 a 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, specification, 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 cavetor added thereto; which time shall be endorsed

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."

The statutory governmental fee upon the filing of a caveat is ten dollars.

The United States grants patents to citizens of all countries upon the same terms; but caveats can only be filed by citizens and aliens who have resided here one year next preceding the filing and taken the oath of intention to become citizens.

A caveat is only a notice of an inventor's intention to ultimately apply for a patent, and it prevents another inventor from getting a patent without the knowledge of the caveator while the caveat is in force. It is the practice of the Patent Office to revive a caveat from year to year, so long as the government fee is regularly paid for each year, and to renew a caveat upon the payment of the fee after the caveat has once lapsed or expired. So long as the caveat is in force, no one but the inventor or his attorney can have access to it, or get any information from the Office about it; and after a caveat has lapsed it is still preserved in secrecy.

A caveat does not prevent other parties than the inventor from making, using, and selling the invention. Any invention can always be freely made, used, and sold by others than the inventor, without liability, until the inventor's patent issues from the Patent Office.

Although the filing of a caveat is a very strong assertion of an intention to procure a patent for an invention,

¹Rev. St. Title LX. Chap. 1, Sec. 4902.

yet an inventor may abandon the invention afterward, or allow it to go into public use for more than two years before application, and thereby lose his right to a patent.¹

The specification or description for a caveat does not need to be drawn with the same care and skill as the specification for a patent, and it needs to have no "claim."

A caveat can properly cover the same number and kind of distinct and separable inventions as a patent, and no more; and we have seen that a patent may cover and include as many distinct and separable inventions as are capable of co-operating toward some one result or end. The Patent Office proposes to restrict caveats, in this regard, the same as patents. No models or specimens of ingredients need to be filed with a caveat.

A caveat does, however, require a petition, specification, or description, and an oath; and, when the nature of the invention permits it, drawings executed upon tracing muslin, or paper that can be folded.

A caveat may be legally filed on a complete or an incomplete invention; the filing of a caveat is not conclusive evidence that the invention which forms its subjectmatter is incomplete. The invention may be complete or incomplete, and in either case it is equally proper subject-matter for a caveat.²

In case the Commissioner of Patents omits to inform a caveator of an interfering application the caveator's rights will not be prejudiced thereby.³ When an appli-

¹ Bell v. Daniels, I Fisher's Pat. Cases, 372, Leavitt, 1858.

Fohnson v. Root, I Fish. Pat. Cas. 351.

⁸ Phelps v. Brown, 1 Fisher's Pat. Cases, 479.

cation interferes with a caveat no notice is sent to the caveator until the invention is found patentable. Though the caveat has expired before the affirmative decision of patentability the notice is to be sent and the regular proceeding had. When a caveat and a conflicting application are filed the same day the caveator will be notified. One of joint inventors may lawfully file a caveat on the joint invention.



¹Kenney's Case, C. D. 1869, p. 97.

² Essex ex parte, C. D. 1876, p. 58.

³ Gray ex parte, C. D. 1877, p. 44.

CHAPTER XI.

APPLICATION FOR PATENT.

Statutory Requirements as to Applications.— The following are the chief sections of the statute giving the requirements in the matter of applications for patents.

Section 4888.1 "Before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the Com-· missioner 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

¹ Chapter I, Title LX. Rev. Stat.

specification and claim shall be signed by the inventor and attested by two witnesses."

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."

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."

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."

"The applicant shall make oath that he Section 4802. 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 an applicant resides in a foreign country, before any minister, charge 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.

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."

The government fees prescribed by law are fifteen dollars, payable when the application is filed, and twenty dollars more payable when the patent is ordered to issue.

In order to constitute an application for a patent which the Commissioner will recognize and act upon there is required a petition, a specification, an oath, drawings when the nature of the invention admits of them, a model if called for by the Commissioner, and the fee of fifteen dollars: if the invention is a new compound, or composition of matter, specimens of the ingredients and of the compound must be furnished if required by the Commissioner.

If an inventor dies before the patent is applied for the application can be made by his executor or administrator, on behalf and for the benefit of the heirs, or devisees of the deceased.¹

The Petition. No particular form of words is prescribed for a petition, and any form will be held sufficient which respectfully and clearly sets forth the desire of the

¹ Section 4896, Chap. 1, Title LX. Rev. Stat.

petitioner for the grant to him of a patent. If a patent issues upon a defective petition or upon an application entirely lacking a petition, it is not at all likely that such an irregularity or omission will affect the validity of the patent; for it is obvious that the oath of invention called for by the statute is a more important matter than the petition and it is held, as will be seen in that part of this chapter specially relating to the oath, that the statute calling for the oath is merely directory in its nature and that a patent issued on an application containing an irregular or defective oath, or having the oath entirely lacking, is not void for that reason.

The Drawings.² The drawings form a part of the specification and can be consulted to explain it, make it clear, or make it certain. The drawings should be referred to in the specification by letters of reference;

¹ As to all such matters it is best to follow the forms prescribed in the rules of practice issued by, and to be had gratis of, the Patent Office.

² Patent Office drawings are now required to be upon paper stiff enough to stand in the portfolios, the surface of which must be calendered and smooth. The size of the sheet is ten by fifteen inches with a marginal line just one inch from the edge all around.

Nothing but the drawings and signatures are permitted on the face of the sheet and these must all be within the marginal line. One of the ends of the sheet is taken as the top and a space of one and one-fourth inches downward from the marginal line must be left blank for Patent Office purposes.

The signature of the inventor and witnesses are to be at the bottom of the sheet. As many sheets can be used as are necessary. Drawings must be rolled, and not folded for transmission to the Patent Office. The care required by the Office is necessary in order to make the drawings reproducible by photo-lithography: a lithographed copy is inserted in the patent when issued.

but if the drawing can be understood without them their omission will not render the patent invalid.¹

The drawings need not be to an exact scale, but it is not safe to make a gross mistake in the relation of the parts; in one instance where the patent was for a grain separater, the deflector was shown in the drawing so near the shaker that it could not operate if so made in practice, and the court held the patented device to be "inoperative and without value." ²

Though the specification, considered alone and apart from the drawings, may be somewhat obscure and defective, yet, if by the aid of the drawings the defect or obscurity is removed, the specification will be held sufficient; and courts go some length in this regard, Judge Wheeler saying in such a case: "To understand these patents it is necessary to examine the drawings in this connection with, and as a part of, the specification, and to rely upon them to some extent to ascertain the exact form and composition of some of the parts." 3

On the other hand while "the drawing could and should be looked at if necessary in order to explain an ambiguous or doubtful specification and to make the invention capable of being understood and used, " it cannot supply an entire want of any part of the specification or claim in a suit upon a patent."

¹Earl v. Sawyer, 4 Mason, 9; Burrall v. Fewett, 2 Paige, 134; Brooks v. Bicknell, 3 McLean, 250; Washburne v. Gould, 3 Story, 122; Emerson v. Hogg, 2 Blatch. 9.

²Royer v. Russell, 9 Fed. Rep. 696,

⁸ Banker v. Bostwick, 3 Fed. Rep. 517.

⁴ Tinker v. W. E. M. & R. Mfg Co., I Fed. Rep. 138.

The Oath. The inventor is required to make oath, not that he is the original inventor or discoverer, but that he believes himself to be such; that he does not know or believe that the same was ever before known or used, and he must state of what country he is a citizen. Joint inventors must make oath that they believe themselves to be the original, first and joint inventors.

The executor or administrator must make oath that he believes the deceased to have been the original and first inventor, etc.

The statute directing the taking of the oath is held to be merely directory, so that if it is irregular in form or is omitted altogether the patent granted upon the application with such an oath would not be invalid.¹

A party sued for infringement who wishes to show that the oath on which the patent issued is irregular, defective, or lacking, cannot do so simply by offering in evidence a certified copy of the application on which the patent issued, for it would still remain that a proper oath might have been made outside such record.²

The Model. For many years it was the uniform practice of the Patent Office to require a model in all cases admitting thereof and an application was not considered complete without it; but at this time the Office rarely calls for one, the rule being not to furnish one unless specially called for. The principal use of a model is to afford a basis for proper corrections in the reissue of a defective patent, the law permitting the model and

¹ Whittimore v. Cutter, I Gall. 432; Dyer v. Rich, I Metcalf, 191; Crompton v. Bellknap Mills, 3 Fisher's Pat. Cases, 536.

² Hoe v. Kahler, 12 Fed. Rep. 111.

drawings to be amended in a reissue "each by the other." And when a reissued patent is in question in court the character of a model filed with the application for the original patent is a matter for proof. Where, in court, it is attempted to defeat or narrow a patent by reference to a prior patent the model of such prior patent, if differing from the patent to which it is appurtenant, cannot affect the patent in suit.

The Specification is *the* important thing about a patent, and the highest care and skill are often requisite in its preparation.

Specifications may, and often do, have faults which render the patents, of which they form a part, void and worthless. If, however, the patentee has made an honest effort to clearly describe his invention, and to accurately claim it and nothing more, a court, before which his patent may come for consideration and adjudication, will sustain its validity, if it can be reasonably done.

"It is now a principle, settled by the concurrent opinions of some of the most enlightened jurists of this country, that patents securing to inventors the just rewards of their labor and industry, are to be construed liberally, and with a fair purpose of carrying out the object of the constitutional provision on this subject and the legislation of Congress based upon it.

It is now held, that these exclusive rights are not to be viewed in the light of odious monopolies, but as the result

¹ Section 4016, Chap. 1, Title LX. Rev. Stat.

² Meyer v. Goodyear Co., 11 Fed. Rep. 891.

⁸ Thatcher Heating Co. v. Spear, 1 Fed. Rep. 411.

of a policy at once beneficent and wise. The Constitution of the United States (Art. 1 Sec. 8) has conferred on Congress, among other delegations of power, the right to pass laws 'to promote the progress of science and the useful arts, by securing, for limited times, to authors and inventors, the exclusive right to their respective writings and discoveries.' And Congress, in the exercise of the power thus granted, has, from time to time, passed laws on this subject, designed to give practical effect to the constitutional provision. At this day, there are probably few who doubt the justness and the wisdom of this policy. That it has been followed with good results, in stimulating our countrymen to intellectual effort, and has thereby contributed essentially to our rapid national advance in 'science and the useful arts,' is too clear for controversy."1

The law, however, requires that a specification shall describe the invention which forms its subject-matter, 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 he shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery"; and, while the courts are bound to construe a patent liberally, they will not permit a patentee to couch his specification in such ambiguous terms that it cannot be worked by, or so that its claim may be expanded or contracted to suit different exigencies.²

¹Parker v. Stiles, 5 McLean, 44, 1849.

³ Parker v. Sears, 1 Fisher's Pat. Cases, 93.

It will be observed that the requirements of the statute in this respect, are twofold: first, that the invention shall be fairly and clearly described; and, second, that it shall be accurately claimed.

The object of the first requirement is, that the public may be enabled to practice the invention when the patent has expired.¹

Pains were taken to point out, in the first chapter, explaining the nature of a patent privilege, that a patent is in the nature of a bargain between the inventor and the public, and that the public requires, as a consideration for its grant, of an exclusive right to the inventor, that he shall fully disclose his invention to the public, so that the public may freely use it when the patentee's exclusive right is at an end. The specification of which the drawing is a part, is the paper wherein the patentee undertakes to make his disclosure; and, if he does not do so fully and clearly, he does not give the consideration which the public demands, and the public, acting through its courts, declares the bargain (that is, the patent) null and void. This defect is known, in legal phrase, as ambiguity in the description—or insufficiency of description.

The object of the requirement that the patentee shall accurately claim his invention is, "that, while the patent is in force, others may be informed of the precise claim of the patentee, and may not ignorantly infringe his exclusive right." ²

The defect arising from not accurately claiming an invention is known as ambiguity in the claim.

¹Parker v. Stiles, 5 McLean, 44.

B Ibid.

The question as to whether there is ambiguity in a claim is always a question of law, and for a judge to decide; while the question as to whether there is ambiguity in a description is a question of fact, and may be decided by a jury.

Sufficiency of Description. A description in a specification is insufficient when a person skilled in the art or science to which the invention appertains, or with which it is most nearly connected, can not, when working by the specification and drawings, and without invention or experiment of his own, put the invention in practice.¹

The law does not suppose a specification to be addressed to persons of the very highest skill in the art or business to which the invention relates, but to persons fairly skilled in such art or business. If, for instance, the invention is a machine such as finds its proper use in a machinist's shop, then a fairly skilled machinist is the person to whom the specification is supposed to be addressed; and if such machinist cannot, from the specification and drawings, construct the machine, without invention or experiment of his own, then the specification is ambiguous and uncertain.

The specification might be thus faulty, and yet a person of unusual mechanical and scientific attainments, as a thoroughly educated and experienced mechanical engineer, might be able, by his own skill and wide range of knowledge to remedy the defects of the specification,

¹Brooks v. Jenkins, I Fisher's Pat. Reports, 43; Parker v. Stiles, I Fisher's Pat. Reports, 319; Singer v. Walmsley, I Fisher's Pat. Cases, 558.

and construct from it the machine intended to be patented, and yet the specification might be insufficient. On the other hand a specification is not directed to the general reader but to him skilled in the art, and it is not a valid objection to a specification that it is incomprehensible to the former; nor need a specification describe any more of a machine than suffices to show the application thereto of the improvement in question. The inventor "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." ¹

It is not necessary that an inventor should understand or be able to state the scientific principles underlying his invention. "Some person not skilled in chemistry and not very well learned in mathematics will invent a process in one instance or a mechanical contrivance in another, without being able to state the chemical or mathematical rules with accuracy in the light of which learned men would solve the underlying principles scientifically considered. It is sufficient if his description will enable one skilled in the business to accomplish the desired result. Whether the inventor could stand a successful examination as to the speculative ideas involved is immaterial."

Even if the inventor undertakes to state the theory of his improvement and mistakes it, the patent is not invalidated.³

¹ Webster Loom Co. v. Higgins, 21 Of. Gaz. 2031; Mowry v. Whittney, I Of. Gaz. 492.

² St. Louis Stamping Co. v. Quinby, 16 Of. Gaz. 135; Andrews v. Cross, 8 Fed. Rep. 269.

⁸ Hamilton v. Ives, 3 Of. Gaz. 30.

To suggest that a new article can be made without disclosing how to make it does not warrant the grant of a patent for such an article.¹

The question as to whether a specification is ambiguous is generally attempted to be settled in patent suits by means of the evidence of experts, who are persons of more than ordinary skill and experience; the question, when put to such a person, is solely a matter of opinion, and this is probably the reason why the evidence of experts upon the opposing sides of a case is so often contradictory and conflicting upon this point. The expert is unable to place himself just in the position of the ordinary workmen, and hence his evidence is a mere matter of opinion.

If there are drawings attached to the patent, they form a part of the specification, and if the invention can be put in practice by means of the drawings and specification that is sufficient.² What was said under the head of "Drawings" is to be read in connection with the present topic.

A specification is not ambiguous simply because the name or title given to the invention is not strictly correct. We are to look into the whole description to find what the invention is, and the title given to it signifies but little.³ If, however, the name or title were to be one thing, as a sewing machine, and the real invention were

¹ Root v. Lamb, 7 Fed. Rep. 222.

² Singer v. Walmsley, I Fisher's Pat. Cases, 558; Pitts v. Wemple, 2 Fisher's Pat. Cases, 10; Hogg v. Emerson, I Fisher's Pat. Reports, 598.

³ Sickles v. Gloucester Mfg. Co., I Fisher's Pat. Cases, 222.

quite another thing, as a steam engine, that would probably be a fatal repugnancy.¹

If it is necessary to describe the whole of an old machine in order to show the operation of some new part or improvement which forms the invention, then the whole machine should be described; but a patentee is not required to describe in detail things which are old, well-known and within the knowledge of a person fairly skilled in the art to which the invention appertains. It is not necessary that the drawings should be to a scale, unless the exact relative size of the parts is absolutely essential to the working of the invention, nor need the exact dimensions of common mechanical elements, such as wheels, levers, racks, and pulleys, be given, if these are things which an ordinary mechanic can readily determine.

The elements of form, size, and number, though ordinarily unimportant, become important when form, size, and number are of the essence of the invention.⁴ An invention in plow-plates furnishes an instance where form may become important; a small rotary cutter for cutting glass furnishes an instance where both form and size may become important; and some varieties of grinding-mills furnishes instances where number or duplication of parts may become essential.

An inventor is required to specify and describe the best mode he knows of putting his invention in practice

¹ Goodyear v. New Jersey Central Railway Co., I Fisher's Pat. Cases, 626.

² Wintermute v. Redington, I Fisher's Pat. Cases, 239.

⁸ Brooks v. Jenkins, I Fisher's Pat. Reports, 43.

⁴ Schneider v. Lovell, 10 Fed. Rep. 666, Blatchford, 1882.

when several modes may be employed, and, if he describes an inferior mode when he knows and himself practices a better one, that creates an ambiguity in his description.¹

A patentee must not say in his specification that a whole class of substances, as acids, will answer a certain purpose, when, as a matter of fact, only some ones of that class will answer; and he must not make use of terms designed to mislead those who attempt to work from his specification.

The patentee must make a disclosure as open, full, clear, and honest as possible, of the best method he knows of putting his invention in practice. He is not entitled to the protection of a patent, if he does less than this.

If a patentee makes a mistake in a trivial matter, and the mistake is one that a properly skilled person would readily see and overcome, that does not create an ambiguity. If an invention were of so high an order and so intricate in its construction as to require a very highly skilled or scientific person to comprehend it and put in practice, then the specification must be taken to be addressed to such persons and not to mere mechanics of any grade. Babbage's calculating machine and the House and the Hughes printing-telegraph instruments furnish instances of such inventions; and it is always a thing of importance to determine to what class of persons a specification must be held to be addressed. Having determined to whom a specification is properly held to be addressed, the question then is, can such a person, working by the specification, and drawings, if any, put the

¹ Page v. Ferry, I Fish. P. Cases, 298.

invention in practice without invention or experiment of his own?

It must always be remembered, that to adjudge a specification ambiguous creates a forfeiture that the law does not favor, and it must be quite clear that a specification is ambiguous, insufficient, and uncertain, before a court will thus hold it.

It is well settled by the court that in the effort to ascertain the intention and meaning of the specification and claims that they are to be viewed in a liberal spirit, that, if possible, the object of the inventor or patentee may be carried out. Mere technicalities are to be set aside unless there is a clear legal necessity for sustaining them.

A glance at the following cases is not unprofitable in this connection.

In one case the inventor of a hard rubber packing decribed the ingredients of his compound as follows: "I mix the filings with the mass simultaneously with the sulphur and black lead or clay or other ingredients which are usually mixed with the crude rubber, and when the composition is made I vulcanize or cure the same in the ordinary manner. The quantity or proportion of filings to be mixed with the rubber is variable according to the nature of the work for which the rubber is to be used": the patent was held invalid for insufficiency of description.

In another case where the annealing of chilled car wheels was under consideration the patent stated as to the degree of heat applied in the annealing chamber, that the temperature of all parts of the wheels "may be raised

¹ Jenkins v. Walker, 1 Of. Gaz. 359.

to the same point (say a little below that at which fusion commences.)" The court held that a person skilled in the art would know that the degree of heat needed was that which would raise the temperature of the thin parts of the wheel to the degree at which the hurtful strain commences when the casting was cooling in the mold; and sustained the patent ¹

In another case the following language of the court makes the facts of the case and the court's action thereon fairly intelligible: "The objection that the specifications of the Rice patent are so imperfect that a working machine could not be made from them has given us much trouble. Various criticisms of the experts which assert the impracticability of the described machine, without certain readily perceived additions, are not among those which created doubt. The necessity for a spring, a weight, a slight difference of mere dimensions, or other quite obvious modifications which practical use may suggest to make the machine more efficient, would not render invalid otherwise sufficient specifications; certainly not if it would work without them. Here, however, an important device, without which it could not operate at all, is wholly omitted. An intelligent assistent and expert are unable to find it in either the specification or the photo-lithographic copies of the Patent Office drawings.

To this precise defect complainant's counsel directed the attention of neither of his expert witnesses, nor has he referred to it in argument.

It is rested upon the general unreasoned assertion of

¹ Mowry v. Whitney, 1 Of, Gaz. 492.

Renwick and Morgan, that from the specifications and drawings they could make an operative machine.

Four cams on the main shaft are indispensable. Stated in the order in which they occur, the first moves the presser-bar; the second the pasting-knife; the third gives the reciprocating motion to the pasting rollers and the devices connected with them; and the fourth, the severing-blade.

That which is required to give this motion to the pasting-rollers is wholly omitted. This error is accompanied by another, which refers to the cam which moves the presser-bar, as the one which is to perform the function of that which is not described at all. Such an office by it is impossible; another cam on the main shaft for this purpose is necessary. The specifications and drawings are to a scale. The exact reciprocating movement required for these bottom pasting-rolls and accompanying devices is given, and the location of the cam on the main shaft to impart it is in no degree doubtful. A hundred intelligent mechanics would all, necessarily, from data given, locate it in the same place. Its shape and dimensions result from mathematical calculations, well understood by all educated mechanics. The arms and connecting-rod, in order to enable it to perform its office, are among the most familiar devices, and we cannot agree with the experts who have sworn so pointedly that invention would be necessary to supply the omitted features. There is no other instrumentality, except this cam, arms, and connecting-rod, which would suggest themselves to a builder by which this omission could be supplied. are so common and obvious they would be inserted by a

mechanic as readily as a driver would put the fourth wheel on the naked axle of his coach."

In another case where the patent was for a machine for making pills, it was objected that glycerine, one of the coating materials mentioned, would not answer; this fact was held immaterial and the word "glycerine" was rejected as surplusage.²

Ambiguity in the Claim. This is a very different thing from ambiguity in the description. An invention may be fully, clearly, and perfectly described, so that a properly skilled person might, from the description, be able to put the invention into practice without any invention or experiment of his own, and yet in the summary at the end, technically called the claim, he may, by inadvertence or design, so loosely and inaccurately specify what he claims to be his invention, that there cannot be gathered from it what he means to claim; and, in this case, there is an ambiguity in the claim. A patentee is required to specify clearly and exactly in what his invention consists, that the public may be informed of the extent of his exclusive right, and may therefore know what infringes the patent and what does not.³

The courts have laid it down, in numerous cases, that the patentee must distinctly point out what is old or well known before, and then distinguish the old from the new; but it is now held that this is done by a properly worded claim, even if the patentee do not, in set terms,

¹ Union P. Bag Co. v. Nixon & Co., 4 O. G. 31

McKesson v. Carnrick, 9 Fed. Rep. 44.

³ Brooks v. Jenkins, I Fish. Pat. Reports, 43; Judson v. Moore, I Fish. Pat. Cases, 544.

say that such and such things are old; and that every part and thing not included in the technical claim, is, by the act of such omission, impliedly admitted to be old.1 This is the method now generally followed in drawing specifications, and it is legal and sufficient in this particular. If form, size, number, or quality are material and of the essence of invention, then it will not be sufficient to simply mention, in the claim, the thing having one of these attributes without the additional mention of such attribute; as, for instance, if it is material that a certain part shall be made of steel of a certain hardness or temper, then that part must be mentioned, in its place, in the claim, as of such hardness or temper: for if the part were mentioned simply as of steel, then the patent would seem to cover such part made of steel of any and all degrees of hardness; and the public would not be informed of what degree of hardness such part might be made without infringing the patent.

A claim is, however, to be construed in connection with the description in the specification; and if it is clear, from the claim and description, taken together, what the patentee intends to assert an exclusive right to, that is sufficient.²

The claim is ambiguous when there can not be gathered from it, in connection with the description, what it is to which the patentee intends to assert an exclusive right. For instance, in a patent for a horse-rake the patentee claimed: "The arrangement of the rake-head E and

¹ Winans v. New York & Erie Railway Co., I Fisher's Pat. Cases, 213.

² Hogg v. Emerson, I Fisher's Pat. Reports, 598; Pitts v. Wemple, 2 Fisher's Pat. Cases, 10.

foot-treadles H J, and G K, or either of them in relation to each other, and the axle B," and the claim was held void for ambiguity.

It is to be remembered in this connection that a court will not declare a claim fatally ambiguous where there is any reasonable way of escaping such a conclusion for no rule is better settled than that courts will construe patents liberally and with all reasonable endeavor to sustain them; mere technicalities and slight obscurities will be disregarded.

Nature of the Claim. It is required that, somewhere in the specification, the patentee shall state and define the extent and nature of that to which he means to assert an exclusive right. The statute says: "he shall particularly point out and distinctly claim the part, improvement or combination which he claims as his invention or discovery." This is usually done in a short summary at the end of the specification, and this summary is technically called the "claim," in distinction from the descriptive part of the specification. The claim is, so to speak, the vital part or soul of the patent. It must be confined to the patentee's exact invention, and include no more.

If the invention is a machine which is wholly new, a claim to the machine as such would be valid; but, if the invention be a new combination of old parts, then it must be claimed as such, and not otherwise. If the

 $^{^1}Edgarton$ v, F. & B. Mfg Co., 9. Fed. Rep. 450.

 $^{^{2}\}mathrm{Section}$ 4888, Chap, 1, Title LX. Rev. Stat.

Many v. Fagger, I Fisher's Patent Reports, 222.

combination be composed of elements some of which are new and some of which are old, the patentee may make a claim to each of the new parts specifically, and to the combination of the whole.¹

If the invention is only an improvement on some prior thing, then it should be so claimed. There is no limitation to the number of different clauses of claim in a patent, and the patentee may make as many clauses of claim as are necessary to fully protect and cover the invention. The rights of the patentee are measured by his claim; and, though he may have invented several different parts or combinations, another person does not infringe the patent who makes or uses or sells the parts or combinations which are not claimed,—so that, if the claim is not as broad as the invention, the patentee has to bear the consequences.² Defects of this kind can be cured by a speedy reissue, a subject hereinafter treated.

This defect is one that affects the patentee, and does not make the patent void; for the patent may be perfectly valid as to the claims it has, while the patentee may be entitled to make much broader claims.

If, however, the patentee claims as his invention more than he is legally entitled to, and if his claim is broader than his real invention, then the patent is void as to such claims or clauses of claim, though if there are different clauses of claim, the patent will be held valid as to those clauses which are not too broad, unless the defect is one

¹ Foss v. Herbert, 2 Fisher's Patent Cases, 31.

²Rich v. Close, 4 Fisher's Pat. Cases, 279; Kidd v. Spence, 4 Fisher's Pat. Cases, 37; Meissner v. Devoe Mfg Co., 5 Fisher's Pat. Cases, 285.

Blake v. Stafford, 3 Fisher's Pat. Cases, 294.

that was caused willfully by the patentee, and with the express design, to mislead and deceive the public as to the extent of his exclusive right. Where there are different clauses of claim, some of which are too broad, the defect may be cured by filing a disclaimer, of which more hereafter.

Although a patentee is not held to any technical forms in making his claim, the person who draws the claim should determine, in his mind, before drawing the claim, whether the invention is an art,—that is, a process.—a machine, a manufacture, or a composition of matter, and the claim should be drawn to correspond with the invention; for if he clearly claims a machine when the real invention is a process, or a process when the invention is a machine, the patent will be invalid. In an English case, where the real invention was a process for preparing flax for spinning, the patentee claimed the machine he made use of, which was old, and the patent was declared void.2 A claim can not be made to an abstract principle or for the discovery of a natural property of substance; but it must be for the principle as applied, or for a mode or manner of application.3 It cannot be for all ways of doing a thing, or for a result, no matter how produced.

Courts will support a claim, if it is possible to do so without doing violence to the meaning of language, but will do no more.⁴

¹ Ibid.

²Key v. Marshall, 2 Webster's Pat. Reports, 34-84.

³ Foote v. Silsby, I Fisher's Pat. Reports. 268.

⁴Parker v. Sears, I Fisher's Pat. Cases, 93; Ransom v. The City of New York, I Fisher's Pat. Cases, 252; Burden v. Corning, 2 Fisher's Pat. Cases, 470.

Joinder of Inventions. It is important to know how many and what different inventions may be properly covered and claimed in a single patent.

This question came up for discussion and decision before Judge Story in 1840. The patent under discussion covered two distinct machines,—one for marking ice into blocks of suitable size for cutting, and the other a machine for cutting the ice. The point was made by the defendants, that two machines could not be covered and claimed in one patent. With reference to this the judge said: "I agree that, under the general patent acts, if two machines are patented, which are wholly independent of each other, and distinct inventions, for unconnected objects, then the objection will lie in its full force. and be fatal. The same rule would apply to a patent for several distinct improvements upon different machines, having no common object or connected operation. Construing, then, the present to be a patent for each machine, but for the same purpose, and auxiliary to the same common end, I do not perceive any just foundation for the objection made to it."1

In the case of *Emerson* v. *Hogg*, tried in 1845, this question came up again. The plaintiff claimed, in his patent, three distinct and separable machines for use in propelling "either vessels in the water or carriages on the land."

He claimed (1) "substituting for the crank in the reciprocating engine a grooved cylinder, operating in the manner described, by means of its connection with the piston-rod," (2) a certain "spiral propelling wheel," and

¹ Wyeth v. Stone, I Story, 273.

(3) "the application of the revolving vertical shaft to the turning of a capstan on the deck of a vessel." The machine first claimed was not confined, in its use, to a boat or sailing vessel; it could be made use of in any steam engine. It was objected, that these distinct inventions could not be covered in the same patent. The judge said, after reviewing former cases, on this point: "The principle seems to be, that the inventions should be capable of being used in connection, and to subserve a common end, though their actual employment together does not seem to be required to sustain the validity of the patent in which they may be united.

Accordingly, the wrongful use of either separate machine is a violation of the patent right *pro tanto*. We think the specification in this case shows that these three separate machines were contrived with the view of being used conjointly, and as conducing to a common end, in the better propelling and navigating a ship; and, in our opinion, their capability of being used separately and independently of each other, does not prevent their being embraced in one patent.¹"

This patent came before the Supreme Court in 1859, and, with reference to the objection made, "that one set of letters-patent for more than one invention is not tolerated in law," the court said: "But grant that such is the result when two or more inventions are entirely separate and independent, though this is doubtful on principle, yet it is well settled, in the cases formerly cited, that a patent for more than one invention is not void, if they are connected in their design and operation. This

¹ Emerson v. Hogg, 2 Blatchford, I.

last is clearly the case here. They all, here, relate to the propelling of carriages and vessels by steam, and only differ, as they must on water, from what they are on land; a paddle-wheel being necessary in the former, and not in the latter, and one being used in the former, which is likewise claimed to be an improved one. All are a part of one combination when used in the water, and differing only as the parts must when used to propel in a different element."

In a later case a claim for a feed-cup for a bird cage and a claim for a mode of sustaining the bands of the cage were permitted to be embraced in one patent.²

It is clear, that any number of separable inventions, capable of co-operating toward a common end, as well as several improvements of different parts of a machine, manufacture, or composition of matter, are claimable in one and the same patent; ³ and it is equally clear, on principle, that a process, a machine, and a product, concurring to a common result, are properly claimable in the same patent.

The Patent Office, however, for the sake of convenience in examining inventions by classes, at the time of this writing, refuses to grant such patents. It requires that a separate patent shall be taken for each distinct machine, process, manufacture, or composition of matter, even for distinct improvements upon the same structure or machine.

¹Hogg v. Emerson, 11 Howard, 587.

² Maxheimer v. Meyer, 9 Fed. Rep. 460.

⁸ Bates v. Coe, 8 Otto, 31, 48, Sup. Ct.; Parks v. Booth, 17 Of. Gaz. 1089, Sup. Ct. 1879.

The Patent Office has held that improvements in a post-office box and also in a lock for the box cannot be joined; that a machine and its product cannot be joined; that a die and its product cannot be joined; that a cut-off and mechanism for operating it cannot be joined, etc.

It would seem from the cases already cited that a United States court would hardly sustain such actions of the Office. The Office does not always and steadily adhere to the line of action indicated in the Office cases just cited, for there are many different Examiners of applications and each Examiner is a law unto himself in the first instance in this regard.

Though different inventions may be joined in the same patent such joinder is not required by law. "Separate patents for several parts of the same invention may be granted although the whole invention is fully described in each of them to explain the purpose and mode of operation of the parts covered by the claims in such patents." ⁵

Joinder of Inventors. Whenever an invention is the joint product of different minds, a joint patent must be applied for by all the inventors, and if a patent for such an invention is taken by any number of such inventors less than the whole number, such patent is void. An invention is essentially a product of mind and not of hands, and he who suggests an essential feature or fea-

¹ Yale ex parte, C. D. 1869, p. 110.

²Murray & Wuterich ex parte, C. D. 1873, p. 96.

⁸Birun ex parte, C. D. 1874, p. 52.

⁴ Gillies ex parte, C. D. 1876, p. 195.

⁵ McMillan v. Rees, I Fed. Rep. 722.

tures of an art, machine, manufacture, or compound, is the inventor thereof, although another person may embody such suggestions in tangible materials.

It is often difficult to determine whether an invention is joint or single; but, when two or more persons are engaged together in the making of an invention, and an invention results as the effect of their joint consultations, such invention is joint, and the courts will not go into all the minutiæ of the case, although, and of course, one or the other of the persons must have been the first to specify this or that part, or the whole of the invention, in words, or by drawings, or by a model, or by actual reduction to practice.

When, however, one person is clearly the inventor of a distinct part of a device, and another person is clearly the inventor of another distinct part of such device, distinct patents may be taken by each for his part, though a joint patent would, probably be valid.

When a patent has been granted for an invention alleged to be joint, no evidence short of that which is conclusive and indisputable, will be held to prove such invention to be other than joint.

"To overthrow the presumption of joint invention created by the filing of a joint application upon a joint oath the evidence should be clear and unequivocal. It is true that where a device or combination is claimed to have been the joint invention of two or more parties and the question arises for determination upon evidence, it must appear that it was the product of their mutual suggestions and joint efforts, for joint invention is the result of the mutual contributions of the parties; and if one suggests an idea in a general way and the other falls in

with it and by his aid develops it and gives it definite practical embodiment, the two may be considered joint inventors."

"To constitute two persons joint inventors it is not necessary that exactly the same idea should have occurred to each at the same time, and that they should work out together the embodiment of this idea in a perfected ma-Such a coincidence of ideas would scarcely ever occur to two persons at the same time. If an idea is suggested to one and he even goes so far as to construct a machine embodying this idea, but it is not a completed and working machine, and another person takes hold of it, and by their joint labors, one suggesting one thing and the other another, a perfect machine is made, a joint patent may properly issue to them. If, upon the other hand, one person invents a distinct part of a machine and another person invents another distinct and independent part of the same machine, then each should obtain a patent for his own invention."2

In a case where a patent had been granted as for the joint invention of Jordan and Smith, the latter being dead, the former made affidavit that he was the sole inventor and furnished slight corroberating evidence, but the court held the evidence insufficient to overthrow the patent: ³ in this same case, the patent to joint inventors being for a nut under the step-plate of a monkey-wrench, it was shown that before the two inventors came together one of them made a wrench wherein the step-plate was

¹ Gottfried v. P. Best Brewing Co., 17. Of. Gaz. 675.

² Worden v. Fisher, 11 Fed. Rep. 505.

⁸ Collins Co. v. Coes, 8 Fed. Rep. 517.

supported by a lateral set-screw. The court held that such a wrench was within the patent and if it had been made and successfully used it would have limited the scope of the claim just that much, but that it was a mere "experiment on the way to the completed invention and has no effect at all."

In another case evidence of certain loose statements and admissions tending to impeach the joint nature of the invention was held insufficient to overcome the patent.¹

In another case the taking of a caveat as for a sole invention afterward patented to the caveator and another, as their joint invention, was held not to impeach the patent.²



¹ Coburn v. Schroeder. 8 Fed. Rep. 519..

² Hoe v. Kahler, 12 Fed. Rep. 111.

CHAPTER XII.

DISCLAIMERS.

THE statute enacts: "Sec. 4817. 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.

Sec. 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 bona fide his own, if it is a material and substantial part of the thing patented, and definitely distinguishable from the parts claimed without right, notwithstanding the specifications may embrace more than that of which the patentee was the first inventor or discoverer. But in every such case in which a judgment or decree shall be rendered for the plaintiff no costs shall be recovered unless the proper disclaimer has been entered at the Patent Office before the commencement of the suit. But no patentee shall be entitled to the benefits of this section if he has unreasonably neglected or delayed to enter a disclaimer."1

The government fee for filing a disclaimer is ten dollars.

Who May Disclaim. A disclaimer may be filed by the owner or owners of the whole patent, or the grantee of a sectional interest. Licensees cannot, probably, disclaim, though it would seem, on principle, that an assignee of an undivided part of the patent might. A disclaimer affects the rights only of those who join in it,

¹Rev. Stat. Title LX. Chap. 1.

though an assignee or grantee would take the rights and position of his assignor or grantor. The disclaimer must state the interest in the patent held by the party disclaiming.

Unreasonable Delay in Filing. If a party, entitled to file a disclaimer, unreasonably neglects or delays to file a disclaimer, when the same is necessary, his patent is void, so far as his interest in it is concerned; and it makes no difference, in considering this question, whether the disclaimer is filed before or during the pendency of a suit brought upon the patent.3 The delay commences when knowledge of the need of the disclaimer is first brought home to a party entitled to file it, though a patentee could hardly be expected to take any opinion other than that of a judge having jurisdiction, as satisfactory evidence of the invalidity of a part of his patent, although, if the fault were a very glaring one, it might be held otherwise. The Supreme Court has said, that, where a claim has received the sanction of the Patent Office, and has been held valid by a Circuit Court, the patentee has the right to insist on the validity of the claim till the Supreme Court has passed upon it.⁵ In another case, the Supreme Court held, that, where a patent was obtained in 1845, and there were numerous suits on

¹ Potter v. Holland, I Fisher's Pat. Cases, 327.

² Brooks v. Bicknell, 4 McLean, 70; Silsby v. Foote, 14 Howard, 221.

³ Wyeth v. Stone, I Story, 295; Reid v. Cutter, I Story, 600; Brooks v. Bicknell, 4 McLean, 70.

⁴ Singer, v. Walmsley, I Fisher's Pat. Cases, 558; Parker v. Stiles, I Fisher's Pat. Reports, 319.

⁵O'Rielly v. Morse, 15 Howard, 62.

the patent up to 1854, when a question arose as to whether a clause of the claim in the patent was not invalid for want of novelty, but such question was not an issue in the case on trial; and such case coming, in 1856, to a higher court, the clause in question was declared void, yet there had been no unreasonable delay in filing a disclaimer.¹

In a later case, where the patent had been allowed by the examiners-in-chief on appeal, and the questions involved in construing the claims in issue, were questions of law, and not of fact, the court held that complainant was entitled to repose upon the claims as valid "until the decisions of a court holding otherwise."²

Again: "When a patent contains several claims, and the invention covered by one of them is not new, or is absolutely void, the patentee may maintain an action for the infringement of the patent, so far as it regards the valid claims, although he did not make or record a disclaimer of the invalid or void claim before the commencement of the action." 3

The Supreme Court held, in the case last referred to, as being in that court, that the question of unreasonable delay in filing a disclaimer, is a question of law, and this decision has been followed in other cases, though it had been formerly held that such question is a mixed question of law and fact, and in another case it has been held to

¹ Seymour v. McCormick, 19 Howard, 106.

²Burdett v. Estey, 15 O. G. 877.

³ Carhart v. Austin, 2 Fisher's Pat. Cases, 549; See Hall v. Wiles, 2 Blatchford, 194; Vance v. Campbell, 1 Black, 429.

⁴ Singer v. Walmsley, I Fisher's Pat. Cases, 558; Parker v. Stiles, Fisher's Pat. Reports, 319.

⁵Brooks v. Bicknell, 4 McLean, 70,

be a question of fact, which it would seem to be, though the opinion of the Supreme Court is not to be gainsaid. If a party defendant would avail himself of an unreasonable delay to file a disclaimer, he must set up the charge in his answer.

Disclaimer During Suit. Although a party entitled to file a disclaimer may not have unreasonably delayed in filing the same, yet, if he has occasion to file one during the pendency of a suit brought by him on the patent, he cannot recover the costs in the suit, though it will not affect his recovery of damages.

A disclaimer that did not affect the finding was held not to deprive the complainant of his costs, the court saying: "As the plaintiff filed his disclaimer after suit brought, he would not ordinarily be entitled to any costs in the suit.

But in this case disclaimer was not necessary to sustain the patent to the extent it is held valid, was inoperative in the view taken of it upon the patent, and has had no effect in maintaining the suit. Under these circumstances, it does not come within the provision of the statute denying costs."²

When costs are cut off by a disclaimer filed during suit, the costs accruing after the filing of the disclaimer as well as those accruing before, are affected alike.³ And this is a somewhat serious matter where a long accounting in damages is had afterward. It was held, in

¹Burden v. Corning, 2 Fisher's Pat. Cases, 477.

² Sharpe v. Tifft, 2 Fed. Rep. 697.

³ Burdett v. Estey, 3 Fed. Rep. 566,

one case, that a perpetual injunction would not be granted, if a necessary disclaimer had not been filed previous to the commencement of the suit; but it has since been held differently, and the later decision is now followed.

Courts now agree in requiring a disclaimer where the same is called for, before an injunction will issue, or an accounting be ordered,³ and interest will not run on defendant's profits till after disclaimer filed.⁴

Nature of a Disclaimer. A disclaimer is, when filed, to be considered as a part of the specification, in considering the rights of the party filing it. It may strike out one or more clauses of claim, or it may modify all or a part of the claim, and, when there is but a single clause of claim, it may modify that.

There is no limitation to the number of disclaimers which may be filed. After a disclaimer is filed the party filing it is bound by it, though it may embody a mistake in fact. A disclaimer in the body of the patent may embody an error in fact as to prior use, which error makes against the complainant, but: "the courts have no authority to disregard such a disclaimer." A claim first made in a reissue may be disclaimed."

The correction of a mistake in the description is not

¹ Wyeth v. Stone, I Story, 295.

² Myers v. Frame, 4 Fisher's Pat. Cases, 493.

³ Atwater Mfg Co. v. The Beecher Mfg Co., 8 Fed. Rep. 608.

⁴Burdett v. Estey, before cited.

⁵ Collins Company v. Coes, 3 Fed. Rep. 225,

⁶ Schellinger v. Gunther, 16 O. G. 905; Tyler v. Galloway, 12 Fed. Rep. 567.

the office of a disclaimer, but of a reissue.¹ Perhaps the most difficult question connected with disclaimers is to determine to what extent a disclaimer may modify, change, or re-state the claim in distinction from blotting it out. In one case the claim in a patent was for "the use and application of glue or glue composition in the tubing substantially as described for the purpose of making flexible tubing gas tight, whether of cloth or rubber or other gums."

Pending a suit for infringement of this patent, a disclaimer was filed to that part of the claim "which claims 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." Held to be a valid disclaimer.²

In another case the claim covered: "The employment or use of the deflecting plates, one or both," etc. While suit was pending, and prior to the hearing the complainants filed a disclaimer; "to amend the first claim by striking out the words 'one or' before the word * ." Complainants also made a corresponding amendment in the specification. The court said: "Authority to make such a disclaimer is beyond question if it be made in writing, and is duly attested and recorded in the Patent Office * * . Pending suits may proceed, but the disclaimer when recorded becomes a part of the original specification and must be taken into account in considering the patent and in ascertaining the rights of the parties to the suit unless it appears that the

¹ Schillinger v. Gunther, 14 O. G. 713.

² Taylor v. Archer, 4 Fisher's Pat. Cases, 449; See Myers v, Frame, 4 Fisher's Pat. Cases, 493.

effect of the disclaimer is to enlarge the nature of the invention, and prejudice the rights of the respondents. Where the effect of the disclaimer is to diminish the claims of the patent without prejudicing the rights of the respondent, the suit may proceed * * * Matters properly disclaimed cease to be a part of the invention, and it follows that the construction of the patent must be the same as it would be if such matters had never been included in the description of the invention or the claims of the specification."

In another case the claim of the patent in suit was: "A concrete pavement laid in detached blocks or sections substantially in the manner shown and described." The disclaimer was to the effect that it "disclaims the forming the blocks from plastic material without interposing anything between their joints while in the process of formation." Of this the court said: "The sole claim of the patent left under the disclaimer is this: 'the arrangement of tar paper or its equivalent between adjoining blocks of concrete substantially as and for the purpose set forth.' Unsound is the view urged by the defendant, that the disclaimer takes out of a patent the entire first claim of the reissue. It takes out of that claim only so much thereof as claims a concrete pavement made of plastic material laid in detached blocks or sections, without interposing anything between their joints in the process of formation. The first claim originally included concrete pavement made of plastic material laid in detached blocks or sections without interposing anything between their joints in the process of formation.

¹Dunbar v. Myers, 11 O. G. 35.

The first claim as amended by the disclaimer, claims a concrete pavement made of plastic material laid in detached blocks or sections, when free joints are made between the blocks by interposing tar paper or its equiv-. In the present case, a proper disclaimer was entered after the suit was commenced. It disclaims certain words in the body of the specification, but it also disclaims a part of what was claimed in the first claim of the reissued patent. What is disclaimed in the body is the foundation of so much of the first claim as is disclaimed * * * . What is not disclaimed is definitely distinguishable from what he claimed without right. * * * . It is true that strictly section 4917 contemplates only a disclaimer of some claim, or part of a claim, but in connection with a disclaimer of some claim or part of a claim, it is not improper to eliminate or withdraw by the same writing the parts of the body of the specification on which the disclaimed claim or part of a claim is founded

The reissued specification is to be thereafter read as if the disclaimer were incorporated in it." ¹

Excerpt from another case: "While the causes were pending in the court below, and after the testimony in chief of the defendants had been taken, to wit: on October 26, 1880, the patentee and the complainants filed in the Patent Office a disclaimer, disclaiming the word "preferably" where inserted in the specification of the reissued patent, and also any process described and claimed by which meat is to be compressed into the packages in any other than a warm or heated condition.

¹ Schillinger v. Gunther, 14 O. G. 713; See 16 O. G. 905.

On the same day the patentee and complainants filed another disclaimer, whereby they disclaimed any interpretation or legal construction of the words of the specification of the reissued patent broader than is conveyed by the words 'the meat is first cooked thoroughly by boiling it in water, so that all the bone and gristle can be removed and the meat yet retain its natural grain and integrity.' The effect of this disclaimer was to restore the claims of the reissued patent to what they were in the original patent, except that the claim of the original patent is limited by the second disclaimer to the packing of meat cooked by boiling."

It would seem from these cases that while a brand new claim cannot be made by disclaimer, yet a claim may be modified and practically restated when the effect of the disclaimer is to diminish and narrow the breadth of the claim.



¹ Wilson Packing Co. v. Chicago Packing and Provision Co., 21 O. G. 1689.

CHAPTER XIII.

REISSUES.

The Reissue Statutes. "Sec. 4895. The statute enacts: Patents may be granted and issued or reissued to the assignee of the inventor or discoverer; but the assignment must first be entered of record in the Patent Office. And in all cases of an application by an assignee for the issue of a patent, the application shall be made and the specification sworn to by the inventor or discoverer; and in all cases of an application for a reissue of any patent, the application must be made and the corrected specification signed by the inventor or discoverer, if he is living, unless the patent was issued and the assignment made before the eighth day of July, eighteen hundred and seventy." ¹

"Sec. 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

¹Rev. Stat, Title LX. Chap. 1,

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 reissue for each of such reissued letters-patent. specification and claims in every such case shall be subject to revision and restriction in the same manner as original applications are. Every patent so reissued, together with the corrected 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 or 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

The government fee required by law is thirty dollars which must be paid with the application for the reissue: in case the reissued patent is to be separated into different divisions this fee must be paid for each of such divisions.

¹Rev. Stat. Title LX. Chap. 1.

A reissue is for the purpose of correcting any actual bona fide mistake in either the specification or drawings of a patent, or both.

Ambiguity in the description or claim may be cured by a reissue; also clerical mistakes and wrong dates; the claim in a reissued patent may be broader than it was in the original patent, provided that the original lacks in breadth through a genuine mistake; also provided that the application for the reissue is made without any unreasonable delay after the issue on the original patent; and that the expansion by reissue is not made for the purpose of bringing within the scope of the reissued claim, modifications and improvements which were not covered by the original claim, and which have been originated by others than the patentee since the issue of the original patent. As a rule, a claim may at any time be narrowed by a reissue, subject to the qualification that the reissued patent must in all cases be for the same invention as the original patent; it is not probable that courts will permit the ground of invention to be changed, even though the claim be technically narrowed. A patentee cannot include in his reissue improvements he has. made since his application for the original patent. The wording of the description and claim in a specification may be altered at will in a reissue, subject to the qualification that the reissued patent be for the same invention as the original, and subject to the further qualification that no new matter be interpolated. New matter is that which is not contained or shown in either the original specification, model, or drawings, and, in the case of a

¹Chicago F. H. Co. v. Busch, 4 Fisher's Pat. Cases, 395; Buerk v. Valentine, 5 Fisher's Pat. Cases, 366.

machine patent, the model and drawings cannot be amended by the original specification, but only by each other.

The rule formerly was, that the patentee is entitled to describe, show, and claim in his reissued description and drawings, anything that he might have legally shown, described and claimed at the time he made his original application, such rights to be based upon the model and drawings filed with his original application; but such is not the present rule, as will be shown more at length in a coming part of this chapter. A patent may be reissued with proper intent any number of times, and may be reissued as well during an extended term as during an original term.

Where the inventor is also the owner of the original patent, he, of course, signs and makes oath to the application for the reissue; in the case where the original patent has been assigned away since July, 1870, the inventor must, if living, sign and make oath to the application for reissue; but in the case where a patent was assigned prior to July 8, 1870, the owner of the patent can make the application for reissue without any action by the inventor: where the patent has been assigned, and the application is made by the inventor, the owner of the patent must assent to the application for reissue, and all owners of undivided interests in the patent must join in a surrender.

It is not in the power of a patentee, by a reissue of his patent, to affect the rights of other parties, to whom an

¹ Swift v. Whisen, 3 Fisher's Pat. Cases, 343.

² Potter v. Holland, I Fisher's Pat. Cases, 327.

⁸ Gibson v. Harris, I Blatchford, 167.

REISSUES. 167

interest in the whole or a part of the patent has previously passed, without their consent; but such consent can be given before or after the reissue. A person to whom an interest in the original patent has passed, as a licensee or a grantee, is entitled to the same rights under a reissue that he had under the original; but he may choose to retain his rights under the old patent, and the law gives him the right so to do, but he can not have different rights under both the original and the reissue.¹

It was formerly held that although a patentee did not reissue his patent for years, yet when he did so reissue it, and claimed in the reissue things not claimed in the original patent, or which were shown in the original specification, drawings, or model, he could not be held to have forfeited his right to the things thus newly claimed under a charge of public use and abandonment; ² but the rule is now otherwise.

The action of the Commissioner in reissuing a patent is *prima facie* evidence that the original and reissue patents are for the same invention; but if the two patents are clearly upon their faces for different inventions, that overcomes the force of such evidence.³

It is said in different cases, and not very clearly, that the Commissioner's action in reissuing a patent is conclusive as to this thing, and as to that thing, and not re-examinable elsewhere: the true rule as to this doubtless is, that the Commissioner's action is conclusive as to all matters which are mere formalities, such as the presentation of a proper petition and legal oath or the like; that

¹Potter v. Holland, I Fisher's Pat. Cases, 327.

² Mossit v. Gaar, I Fisher's Pat. Cases, 610.

⁸ Graham v. Mason, 5 Fisher's Pat. Cases. 1.

in no event can the reissued patent be impeached in a collateral proceeding, but it may be impeached in a proceeding brought for that purpose by reason of fraud, and it may be held invalid in an action for infringement because of non-identity of invention in the original and reissued patents.¹

Patents can only be reissued to cure defects which happened by accident, inadvertence, or mistake, but if defects were introduced designedly into the original patent, with fraudulent and deceptive intention, that destroys the right to a reissue.

The law of reissues had constructions given to it by the United States Supreme Court early in 1882, which are practically new and of very great importance. The first of the cases entering upon these practically new constructions was that of Edward Miller and Co. v. Bridgeport Brass Co., decided January 9th, 1882:2 prior to that time it was accepted law that a patentee might at any time during the life of his original patent reissue it, and not only amend mistakes in the drawings and specifications or ambiguity in the claim, but he might broaden the claim and cover anything which was shown or described in the original patent, or in the model accompanying application, even though he had not indicated in his original patent that the matter claimed in the reissue was his invention. It was all this while, however, well settled that a reissue could not be for a different inven-

¹Giant Powder Co. v. Cal. Vigorit Powder Co., 4 Fed. 720; Flower v. Rayner, 5 Fed. Rep. 797; Giant Powder Co. v. Cal. Vigorit Powder Co. 5 Fed. Rep. 197; Smith v. Merriam, 6 Fed. Rep. 713.

^{9 21} O. G. 201.

tion from that described in the original patent; for instance, a patentee invented an automatic lubricator, in which the active agent was hydrostatic pressure, assisted to a slight extent by steam pressure; the inventor supposing the latter to be the active agent, so described it, and subsequently discovering his mistake, he took a reissue, describing the true action of the device, and practically claiming the hydrostatic pressure, which reissue was held invalid as being for a different invention from that described in the original patent.¹

Again: "The original Miller patent made the invention to consist of a stopper with a handle or bail hinged or jointed to the top of the stopper. " " " . The reissue covers a device in which the bail is attached to the stopper in any manner." Reissue was held void.²

Again: An original patent covered the combination of nitro-glycerine with any explosive, porous absorbent, but its reissue covered the combination of nitro-glycerine with any porous substances explosive or inexplosive, and was held void.³

Again: An original patent describing printing upon sheet tin with metallic paints, afterwards fixed by heat, but the reissue made the process applicable to cans, boxes, and other articles; it omitted the limitation to the use of "metallic" colors, and the reissue was held void.⁴ And again: An original patent claimed a *series* of dies, with a disclaimer of individual dies, while the

¹ Siebert Cyl. Oil Cup Co. v. Harper Steam Lubricator Co., 4 Fed. Rep. 328.

² Putnam v. Tinkham, 4 Fed. Rep. 411.

⁸ Giant Powder Co. v. Cal. Vigorit Powder Co., 4 Fed. Rep. 720.

⁴Flower v. Raynor, 5 Fed. Rep. 791.

reissue claimed the individual dies, omitting the disclaimer, and was held void.¹

Up to the time of the decision made by the Supreme Court in the case of Edward Miller and Co. v. Bridge-port Brass Co., early in 1882, while reissued patents had not rarely been set aside on the ground that the reissue claimed a different invention from that set out in the original patent, it had never been held that a patentee might not enlarge his claim at any time by reissue, or that he abandoned to the public any features of the invention described, and not claimed in his original patent.

The following resumé of reissue decisions rendered by the Supreme Court, made by a learned judge,² who is now a member of that court, fully illustrates the position of the Supreme Court upon this question, prior to the decision in the case of Edward Miller and Co. v. Bridgeport Brass Co.

"In Batten v. Taggert, 17 Howard, 74, a patentee invented an apparatus for breaking coal, and combined it with an apparatus for screening coal, which he did not invent, and took a patent for the combination only. Afterwards he took a patent for the said breaking apparatus. Afterwards he surrendered both patents and took a reissue of the first one for the breaking apparatus alone. It was held that, although he had in the first patent described the breaking apparatus without claiming it by itself, and although he had surrendered the second patent the reissue was valid. The reissue described essentially the same machine as the first patent, but claimed,

¹Atwater Mfg Co. v. Beecher Mfg Co., 8 Fed. Rep. 608.

²Judge Blatchford.

as the thing invented, the breaking apparatus only. The court said: 'And this the patentee had a right to do. He had a right to restrict or enlarge his claim so as to give it validity, and to effectuate his invention.' In that case the description in the specification of the first patent was sufficient for the claim of that patent, and that claim was sustainable in a suit on that patent; yet that claim did not effectuate the real invention, which was the breaking apparatus alone, out of combination with the screen: and the case was held to be one proper for a resissue.'

"In Burr v. Duryee, I Wall. 53I, it was held that the Boyden machine did not infringe the Wells reissue, and that if it did, the reissue was void. The claim of the reissue claimed 'the mode of operation, substantially as herein described, of forming bats of fur fibres of the required varying thickness, from brim to tip, which mode of operation results from the combination of the rotating picking mechanism, or the equivalent thereof, and the means for directing the fur-bearing current, or the equivalent thereof; as set forth.' The court held that the invention of Wells was an improvement in a machine having certain peculiar devices, and that the Boyden machine had none of those peculiar devices, nor any substantial identity with them; and that the original patent claimed the whole of Wells' invention—no more, no less."

"In Seymour v. Osborn, 11 Wall. 516, 544, it is said that the Commissioner of Patents may, on a reissue, 'allow the patentee to re-describe his invention and to include in the description and claims of the patent not only what was well described before, but whatever else was suggested or substantially indicated in the specification or drawings which properly belonged to the invention as

actually made and perfected. Interpolations of new features, ingredients, or devices which were neither described, suggested, nor indicated in the original patent or Patent Office model are not allowed, as it is clear that the Commissioner has no jurisdiction to grant a reissue unless it be for the same invention as that embodied in the original letters-patent. * Corrections may be made in the description, specification, or claim, where the patentee has claimed as new more than he had a right to claim, or where the description, specification, or claim is defective or insufficient; but he cannot under such an application, make material additions to the invention which were not described, suggested, nor substantially indicated in the original specifications, drawings, or Patent Office model.' These remarks were made in regard to section 13 of the Act of 1836, and they recognize that an insufficient description, or an insufficient claim, or both, may be amended in particulars substantially indicated in the original specification, or drawings, or model. They give no countenance to the view that this cannot be done if the claim of the original patent is a good one, on a description sufficient to sustain it."

"The case of Gill v. Wells, 22 Wall. 1, arose under the Act of 1836, on a reissue in 1868, of the same patent that was involved in Burr v. Duryee. In that case the specification of the reissue differed from that of the original in leaving out the whole description of the chamber or tunnel, and its appendages, and substituting a full description of other devices different from the chamber, in form at least, to perform the functions of the chamber and its appendages, as described in the original. Material matters were left out of the specification of the reissue, when compared with the original, and

new features were introduced in the description of the devices to be employed in guiding the fibres of the fur when taken from the feeding mechanism by the rotating brush or picker, such devices being different in form and with different names from those described in the original specification as to the means to accomplish the same end. It was held that this made the reissue invalid. said in the opinion of Gill v. Wells that was unnecessary to the decision in that case, and what was so said, seems to have been disregarded by the same court in the subsequent case of The Corn Planter Patent, 13 Wall. 181, which there sustained reissued patents on the sole ground that the reissues were for things contained within the machines and apparatus described in the original patents, against the dissenting opinion of the judge who delivered the opinion of the court in Gill v. Wells, and who sought to apply to the corn planter case the views he had set forth in Gill v. Wells. These cases are commented on in Herring v. Nelson, 14 Blatchf. 293, and in Christman v. Rumsey, 17 Blatchf. 148."

"In Russell v. Dodge, 93 U. S. 460, the original specification as appears from Klein v. Russell, 19 Wall. 433, made it essential that the fat liquor should be heated to or near the boiling point, and then compounded with the other substances named, and then applied to the skins. The description to that effect was clear. The claim claimed 'the process substantially as herein described of treating bark-tanned lamb or sheepskin by means of a compound composed and applied essentially as specified.' The specification of the reissue stated that it was desirable to heat the fat liquor to or near the boiling point, and that it was preferred to use the same in connection

with other ingredients, which other ingredients were The mode of application was set forth, and was to be by applying either the fat liquor or the compound to the skin. The claims of the reissue were these: '(1) The employment of fat liquor in the treatment of leather substantially as specified. (2) The process, substantially as herein described, of treating bark-tanned lamb or sheepskin by means of a compound composed and applied essentially as specified.' In Russell v. Dodge the court held that the reissue was (1) for the use of fat liquor in any condition, hot or cold, in the treatment of leather, and (2) for a process of treating the skin by means of a compound in which fat liquor is the principal ingredient; that thus the reissue covered the use of the fat liquor, hot or cold, and when used alone or in a compound with other ingredients; that the reissue omitted important particulars, so as to enlarge the scope of the invention; and that the change made, by eliminating the necessity of using the fat liquor in a heated condition, and by making its use in that condition a mere matter of convenience, enlarged the character and scope of the invention, and make the reissue a patent for a different invention. This decision may well be a precedent for a case like it in its facts. General observations by a judge or a court, in deciding a case, must always be read in view of the facts of the case that was sub judice, and are not necessarily authoritative, ex vi termini, in another case where the facts are not the same, although entitled to consideration as are the views of a text-writer of experience and repute. This case of Russell v. Dodge is often cited, as it has been in the present case, as authority for the proposition that where the claim of a patent

is valid, and the descriptive part of a specification is sufficient to support it, the patent cannot be reissued. The reissue in that case was invalid for other reasons assigned, and the case does not lay down the above proposition, nor does any case yet decided by the Supreme Court announce such a proposition to be the law. It will be a sad day for inventors and patentees when the highest tribunal does make an authoritative decision to that effect in those terms. Large numbers of patents have been reissued and sustained in suits, and vast sums of money have been invested and expended in reliance on the reissues, where they were worthless if the fact that the claims of the original patents were valid and sustainable, on the descriptions and drawings appended to them, rendered the reissues invalid."

"In Powder Co. v. Powder Works, 98 U. S. 126, the original patent was for different processes and appliances for exploding nitro-glycerine, while the reissues were for compositions of matter. The Supreme Court held that the processes described in the original had no connection with the compounds patented in the reissues; that they were not processes for making these compounds; that, in describing the processes, the compounds were not mentioned; and that the invention of the one did not involve the invention of the other."

"In Ball v. Langles, 18 O. G. 1405, recently decided by the Supreme Court, the original specifications and drawings showed an oven so constructed that the products of combustion did not and could not pass directly into it. In the reissue the oven was made a part of the passageway for the products of combustion, and it was held bad."

¹ Wilson v. Coon, 6 Fed. Rep. 611.

The position taken by the United States Supreme Court in the case of the Edward Miller and Co. v. The Bridgeport Brass Co., and other cases of like import which have followed it, is a long stride in advance of its previous position. The present position of the Supreme Court is, in substance, that a patentee shall not broaden his patent by a reissue unless the application for reissue is made with diligence, and with no unreasonable delay after the issue of the original patent, and before other parties are in the field with modifications or improvements which the reissue will cover; that such improvements as a patentee describes in his original patent, and does not claim, he must claim in a separate application, or else he abandons them to the public; and that after the lapse of years a patentee may not change the ground of his invention by reissue, even though he technically and literally narrows his claim.

In the case of *Miller v. The Brass Co.*, the Supreme Court said: "Nothing but a clear mistake or inadvertence and a speedy application is admissible when it is sought merely to enlarge a claim." "The right to have it corrected is abandoned and lost by unreasonable delay." "An omission to claim other devices and combinations apparent on the face of the patent are in law a dedication to the public of that which is not claimed." "It is competent for the courts to decide whether the delay was reasonable, and whether the reissue was therefore contrary to law and void." In the case of *James v. Campbell*, which immediately followed the case last referred to, the Supreme Court proceeded as follows upon the

^{1 21} O. G. 337.

same topic: "If he was the author of any other invention, than that which he specifically describes and claims though he might have asked to have it patented at the same time and in the same patent, yet if he has not done so, and afterwards desires to secure it, he is bound to make a new and distinct application for that purpose and make the subject of a new and different application." "When a patent fully and clearly, without ambiguity or obscurity describes and claims a specific invention complete in itself so that it cannot be said to be inoperative or invalid by reason of a defective or insufficient claim, a reissue cannot be had for the purpose of expanding and generalizing the claim, so as to make it embrace an invention not described and specified in the original." "If by actual inadvertence, accident, or mistake, innocently committed, the claim does not fully assert and define a patentee's right in the invention specified in the patent, a speedy application for its correction before adverse rights have accrued, may be granted." In the case of Race v. Matthews, 21 O. G. 349, which followed soon after the case last mentioned, the Supreme Court said: "It was not necessary for the patentees, Race and Matthews, to enumerate all the known functions of these frost jackets in their original patent, and as no claim was based upon them it could not be hurtful to enumerate them in the reissued patent. But the complainants in their reissued patent have split up and divided the elements of their invention and claimed them separately. and not as a combination. Of course this enlarges the scope of their patent; the separate claims embracing fewer elements in combination than were embraced in the claim of the original patent. No one could infringe

the original patent unless he used all the elements of the combination.

Any one will infringe the reissue who uses any of those elements which are now separately claimed. It cannot be denied that each of these separate claims is broader than he claimed in the original patent, as they are put forth in the reissue fourteen years after the original patent was granted. The latter showed on its face that these broad claims were not made, and if the patentees were really the inventors of an independent jacket standing loosely on the elbow of the main, when apprised that it was not claimed in the patent, they ought to have used all diligence in surrendering it and having the mistake corrected." "There is a wide departure from the original invention, in this; that the subject of the latter was a jacket or casing whose top was enclosed in and covered by a flange projecting from the hydrant, which effectually prevented the removal of the jacket without removing the hydrant also, and which caused the hydrant to be raised when the jacket was lifted by the frost. In the reissued patent nothing is said of this arrangement of the top of the jacket and the claims ignore it altogether, so that, as already intimated, the patent as it now stands would cover such a jacket as that described and claimed in the complainant's patent of 1869, which slides like a sleeve over the hydrant at the top as well as the bottom. The reissue is not only for a broader claim made many years after the original was granted, but is for a different invention; therefore so far as the jacket is concerned, we think it cannot be sustained."

In the case of Heald v. Rice,1 which followed soon

¹21 O. G. 1443.

after the case last mentioned, the original patent was for an improvement in return flue boilers with a casual mention of a straw-feeding attachment for the furnace, and in the reissue a claim was procured for a combination of the straw-feeding attachment with a return flue boiler: the Supreme Court held the reissue void as being for a different invention from the original and said: present case the extent of the identity of the invention in the original and reissued patents is to be determined from their face by mere comparison notwithstanding what was said in Batten v. Taggart, (17 Howard, 74), and consistently with Bischoff v. Wetherelt (9 Wallace, 812), according to the rule laid down in Seymour v. Osborne (11 Wallace, 545), and the Powder Co. v. Powder Works (19 U. S. 134), that is, if it appears from the face of the instrument that extrinsic evidence is not needed to explain the terms of art or to apply the description to the special matter so that the court is able from mere comparison to say what are the inventions described in each, and to affirm from such mere comparison that they are not the same but different, then the question of identity is one of pure construction, and not of evidence, and consequently is matter of law for the court without any auxiliary matter of fact to be passed upon by a jury if the action be at law."

The Supreme Court has not specifically said, as it cannot specifically say, how long a patentee shall be allowed to wait, after the issue of his original patent before making application for a reissue which shall broaden his claim, and has said in substance that unreasonable delay will not be permitted. What constitutes unreasonable delay, in any particular case will depend upon the facts

of that case; and a time which would be permissible under one set of circumstances obviously will not be permissible under another and different set of circumstances; for instance, it is obvious that a longer time would be allowed for the procurement of the reissue in the case where no interfering interests arise in the meantime, than in that case where the reissue is obviously desired for the sake of covering modifications or improvements which have been introduced into the market by others since the issue of the original patent. One or more of these decisions of the Supreme Court make an allusion to the two years allowed by law wherein an inventor may permit his invention to go into public use without invalidating his right to the original patent, but it is not to be inferred therefrom that the same delay of two years is to be allowed in all cases for procuring reissues of original patents: a circuit judge in speaking of this question says that the Supreme Court "does not seem to hold that two years are to be allowed in which to reclaim what is so described," and another circuit judge, in speaking of what Justice Bradley said in Miller v. Brass Co., says: "He intimates that two years, in analogy to the law of forfeiture, would be the utmost limit of time, but as I understand the opinion that anything like two years would be inadmissible in ordinary cases."2

It does not follow that a reissue is valid from the fact that its claim is narrowed as compared with the original claim, for in the reissue in question in the case of *Heald*

¹ Mackay v. Jackman, 12 Fed. Rep. 615.

² Jones v. Barker, 11 Fed. Rep. 597.

v. Rice, before mentioned, the claim was of that class; the original claim being for an improvement in a return flue boiler, the reissue claim was narrowed by making it to cover a combination of the return flue boiler and a straw-feeding attachment, yet the claim was held void as being a claim for a different invention from that described in the original patent: and the point is one easily understood, for the original patent set out that the improvement pertained to a return flue boiler, mention of the straw-feeding attachment being merely incidental and casual; and when the patentee brought in the straw-feeding attachment as a feature of the invention, he departed by a palpable interval from the statement of his original.



CHAPTER XIV.

EXTENSION.

The Extension Statute. The statute enacts:-"Sec. 4924. 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 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 term.

Sec. 4925. Upon the receipt of such application and the payment of the fee required by law, the Commissioner shall cause to be published in one newspaper in the city of Washington, and in such other papers pub-

lished 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.

Sec 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.

Sec. 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. 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 vears.

Sec. 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.

Sec. 4934. The following shall be the rates for patent fees:

* * * * * * * * *

On every application for the extension of a patent, fifty dollars.

On the granting of every extension of a patent, fifty dollars." 1

That part of the statutes relating to extensions was formerly of great importance; but, aside from design patents, it has no present application to any existing patents, for the statute allowing extensions refers only to patents granted prior to March 2, 1861, which ran for fourteen years only, and the last of them expired March 2, 1875. Patents, are, however, sometimes extended by virtue of special acts of Congress; and in such cases, the applicant is generally sent to the Commissioner of Patents to have the merits of his case tried under the old law: for this reason, and for the additional reason that the statute allowing extensions may possible be applicable to design patents granted for fourteen years prior to the Act of July 8th, 1870, the matter is yet of interest.

Extensions in the Patent Office. It is impracticable here to more than indicate from the past record of the Patent Office its action upon an application for extension, for that office has never had the stability of a court

¹Rev. Stat. Title LX. Chap. 1.

as to any matters, and has practically held that an application for extension is a purely equitable proceeding, wherein each case stands on its own footing, with but little regard to precedent. It is, however, well settled, that when a patent is before the Patent Office for extension, any claim found to lack novelty must be disclaimed before the patent will be extended; it is tolerably well settled that reissued patents unduly expanded will not be extended, and that the inventor must hold either the whole or a substantial interest in the extension.

It is also settled that lack of novelty, or the presence of but slight novelty coupled with less than large utility, is a bar to extension. On the question of adequate remuneration the Office holds that small remuneration is adequate in the case of an unimportant invention, \$7,000 having been held adequate in a case where the patented thing was a nipple shield; but that very much larger remuneration is inadequate in the case of a valuable invention, \$73,000, and probably more, being held inadequate in the case of a tuck marker. On the question of public policy the Office holds that to extend an American patent when a foreign patent on the same thing has ex-

¹Humiston's Ext. C. D. 1869, p. 47; Stone's Ext. C. D. 1869, p. 48; Williams' Ext. C. D. 1871, p. 93; Munger's Ext. C. D. 1871, p. 203; Robbins' Ext. C. D. 1873, p. 46.

² Krake's Ext. C. D. 1869, p. 100; Hunt's Ext. C. D. 1870, p. 29; Lyman's Ext. C. D. 1872, p. 262; Floyd's Ext. C. D. 1874, p. 104.

⁸Hayes' Ext. C. D. 1870, p. 77; Boynton's Ext. C. D. 1870, p. 125; Gleason & Crossman's Ext. C. D. 1870, p. 158; Mason's Ext. C. D. 1871, p. 182; Baker's Ext. C. D. 1872 p. 127.

⁴ Needham's Ext. C. D. 1871, p. 3.

⁵Fuller's Ext. C. D. 1874, p. 54.

pired, and thus subject home manufacturers to a tax not imposed on the foreign, makes against extension, and at different times has refused to extend patents which control improvements of general importance where the right was not very clear.

Constructions of the Extension Statute. Patents can be extended upon an application of the executors or administrators of deceased inventors for the benefit of the heirs.²

"Congress have not only secured to the inventor this absolute and indefeasible interest and property in the subject of the invention for the fourteen years, but has also agreed that upon certain conditions occurring and to be shown, before the expiration of this period, * * * *, this right of property in the invention shall be continued for the further term of seven years. Subject to this condition, the right of property in the second term is as perfect to the extent of the interest, as the right of property in the first," A patent extended by special Act of Congress, stands upon the same footing as if extended by the Commissioner of Patents under the statute.4 When a patent has been extended by the Commissioner of Patents, his action is conclusive as to all the facts he is required to find, and cannot afterward be disputed except on proof of fraud in the allowance of the exten-

¹ Bessemer's Ext. C. D. 1870, p. 9.

²Brooks v. Bicknell, 3 McLean, 436; Woodworth v. Wilson, 4 How. 716.

³ Wilson v. Rousseau, 4 How. 646.

⁴Evans v. Eaton, 3 Wheaton, 518.

sion.1 An extended patent cannot be impeached at all collaterally; that is, for instance, as a defence to an infringement suit; but the impeachment must be by a suit specially brought for that purpose.2 No assignment, grant, or license, made during the existence of the original term will have any force or effect upon an extended term, unless the instrument expressly applies to the extended term, or unless the instrument contains a strong implication to that effect.3 "The right of an owner of a patented machine, without any conditions attached to his ownership, to continue the use of his machine during an extended term of the patent, is well settled." 4 Where a person has the right to use a machine under restrictions during the original term of a patent, he has a right to continue the use of the machine during the extended term of the patent under the same restrictions unless there is some express provision to the contrary.⁵

Extension of Design Patents. The Patent Office has decided that design patents granted subsequent to the Act of March 2, 1861, and prior to the Act of July 8, 1870, are not, since the passage of the latter Act, extensible. The statute of March 2, 1861, enacts:

¹Colt v. Young, 2 Blatch. 473; Clum v. Brewer, 2 Curtis, 518; Goodyear v. P. R. Co., 2 Fisher's Pat. Cases, 499.

² Tilghman v. Mitchell, 4 Fisher's Pat. Cases, 615; Rubber Co. v. Goodyear, 9 Wall. 788.

³ Woodworth v. Sherman, 3 Story, 174; Brooks v. Bicknell, 4 McLean, 66; Day v. Candee, 3 Fisher's Pat. Cases, 9.

⁴ Union Pap. Bag Machine Co. v. Nixon, 21 O. G. 1275; Chaffee v. Belting Co., 22 How, 217.

⁵ Day v. Union Rubber So., 3 Blatch. 491.

⁶ Sperry's Ext. C. D. 1870, p. 139.

Sec. 2. "And be it further enacted, * * * * * 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 patents shall expire, upon the same terms and restrictions as are now provided for the extension of letters patent."

This Act of March 2, 1861, was repealed by the Act of July 8, 1870, with the following saving clause in Sec. 3. "Provided, however, that the repeal hereby enacted shall not affect, impair, or take away any right existing under any of said laws." As a patent is a bargain between the patentee and the public; 1 as one of the considerations moving from the public to the patentee of a design under the Act of March 2, 1861,—and prior to the Act of July 8, 1870—was, that such patents should be, under the usual conditions, extensible; as there is no express prohibition in the Act of July 8, 1870, against such extensibility, but rather a preservation of the right; and as the Supreme Court has expressly decided that the right to extension, when the proper conditions are fulfilled, is indefeasible,2 the decision of the Patent Office is probably erroneous. If erroneous, any design patent granted prior to the Act of July 8, 1870, still in life, is regularly extensible. As some of those design patents were granted for a term of fourteen years, this question will not cease to be of interest until July 8, 1884. Design patents granted since the passage of the Act of July 8, 1870, are clearly not extensible.

¹Page v. Ferry, 1 Fisher's Pat. Cases, 298.

² Wilson v. Rousseau, 4 How. 646.

CHAPTER XV.

THE TITLE.

THE statute enacts: "Sec. 4898. Every patent or any interest therein shall be assignable in law by an instrument in writing; and the patentee or his assigns or legal representatives may, in like manner, grant and convey an exclusive right under his patent to the whole or any specified part of the United States. 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"

There are three instruments conveying, interests in patents, specified in the above quoted section,—assignments, grants, and mortgages; there is a fourth instrument, conveying an interest in a patent, not specified in the statute, but born of the common law,—a license. This chapter will be devoted to the discussion and explanation of these instruments, the interests acquired by them and kindred matters.

An Assignment is an instrument in writing-not

¹Rev. Stat. Title LX. Chap. 1.

excluding print—conveying either the whole interest in the entire patent, or an undivided part thereof.

"An assignee is one who has transferred to him in writing the whole interest of the original patent, or an undivided part of such whole interest in every portion of the United States, and no one, unless he has such an interest transferred to him, is an assignee." An assignment must convey to the assignee all, or an undivided part of all, the rights which were before vested in the original patentee. These rights are, the right to make, the right to use, the right to vend to others to use, the right to convey any and all of the first three rights mentioned, by assignment, grant, and license, to other parties, and such rights of reissue as pertain to the owner of a patent. Any instrument which does not convey all, or any undivided part of all, these rights, and put the assignees into the shoes of the patentee in all these particulars, is not an assignment. An assignor must place an "assignee upon equal footing with himself for the part assigned. The assignment must undoubtedly convev the entire and unqualified monopoly which the patentee held in the territory specified, excluding the patentee himself as well as others. assignment short of this is a mere license." 2 From this. it follows that if a patentee convey to another the exclusive right to make, vend, and use under a patent, and yet does not give such other persons the right to convey any and all of these rights to others, freely and unqualifiedly, or retains his reissue rights, then the conveyance is a mere license.

¹ Potter v. Holland, I Fisher's Pat. Cases, 327.

² Gaylor v. Wilder, 10 How. 477.

No particular form of words is necessary to constitute either an assignment or a grant; if the meaning is clear. that the maker intended to convey either of the interests defined herein as constituting an assignment or a grant, the courts will construe the writing accordingly. though the statute specifies an instrument in writing, an instrument which is partly written and partly printed, or wholly printed with a written signature, will suffice. An assignment, grant, or license does not need sealing, witnessing, or acknowledging, to make it valid; but witnesses to such a paper are always advisable. A party must be the sole owner of the whole patent, or a grantee under the patent, to be able to bring a suit in his own name for infringement. A mere licensee can not bring such suit. A grantee can only bring such suit for infringement in the district owned by him.

An assignment, and probably a grant, can be made as well before the issue of a patent as after, and, if the conveyance contains a request to that effect, the patent will issue in the name of the assignee. A contract to assign future inventions in a given field is a contract that the courts will enforce.

When an assignment or grant of a patent has been made, it extends to the end of the original term of the patent, and includes all reissues of the patent during that term.² But an assignment of a patent will not include the right to an extension of the same beyond the original term, without the presence of the clearest wording to that effect.³ To assign the patent for the "term

¹Nesmith v. Calvert, I Wood and Minn., 34.

² Wyeth v. Stone, 1 Story, 273; Brooks v. Bicknell, 4 McLean, 64.
⁸ Brooks v. Bicknell, 4 McLean, 64.

for which the said letters-patent are or may be granted," is sufficient.¹

An assignment which covers and includes "improvements to be subsequently invented or patented * * in or of, or in aid of, the inventions and improvements patented" does not cover subsequently invented devices which are not infringements of the original patent. He to whom a patent issues is to be deemed to be the owner of the patent in the absence of evidence to the contrary. The absence of the seal of a corporation from an assignment made by it, does not invalidate the assignment, for such an instrument does not require a seal. "The mere assignment of a patent would give the assignee no right to damages or profits already accrued.

Assignment by Insolvent. Almost or quite all the States have insolvent laws; and, as persons owning patents sometimes come under the operation of such laws, it becomes important to know whether an assignment of the patent of an insolvent person, signed by his assignee or trustee by the court, will pass the legal title. Judge Blatchford held that a receiver can not give an assignment of a patent owned by him for whom he is receiver. In Massachusetts, the insolvent law authorized the the judge, "by an instrument under his hand, to assign and convey

¹ Thayer v. Wales, 5 Fisher's Pat. Cases. 448; Nicolson Pavement Co. v. Jenkins, 5 Fisher's Pat. Cases, 491.

² Stebbins H. E. Mfg Co. v. Stebbins, 4 Fed. Rep. 445.

⁸ W. & M. Mfg Co. v. Haish, 4 Fed. Rep. 900.

⁴ Gottfried v. Miller, 21 O. G. 711.

⁵ Merriam v. Smith, 11 Fed. Rep. 588.

Gordon v. Anthony, 16 O. G. 1135.

to the assignee all the estate, real and personal, of the debtor"; and it also provides that such "assignment shall vest in the assignee all the property, real and personal, which he could lawfully have sold, assigned, or conveyed, or which might have been taken in execution upon a judgment against him." Judge Shepley held that an assignment of an insolvent debtor's patent by the assignee in insolvency, under such law, does not pass the legal title to such patent, but that the debtor must be made by the court to make an assignment in person.¹ There would seem to be no good reason why the same course would not be necessary with a bankrupt patent owner under a general United States bankrupt law, unless such law itself specifically provided otherwise.

Undivided Interests in Patents. The relations that exist at law between joint owners of patents is a matter of importance. Assignments of undivided interests are very common, but a knowledge of their effect is not so common. Joint owners of undivided interests in a patent are not partners, in any sense, merely from the fact of their joint ownership of the patent. owner can sell the whole of his share without the consent of the other, or he can work the patent without any liability to contribute any part of his profits to another owner; and it would seem, on principle, that either of the joint owners can grant all the licenses he pleases and keep all the money he gets therefor. Neither of the joint owners of a patent, nor any number of them short of the owners, can grant or give an exclusive right of any kind.

¹ Ashcroft v. Walworth, 5 Fisher's Pat. Cases, 528.

The relative rights of joint owners of a patent are those of tenants in common: one joint owner has as good right to use and license others to use the thing patented as another joint owner. Neither has a superior right over another, and one such owner can not prevent another from using the patented thing or licensing others to use it.¹

In commenting on this question a learned judge said: "None of the parties interested has any right to control the action of the other parties or to exercise any supervision over them. It is difficult to see how an equitable right of contribution can exist among any of them, unless it includes all the parties interested and extends through the whole term of the patent right. And if there be a claim for contribution of profits, there should also be a correlative claim for losses, and an obligation upon each party to use due diligence in making his interest profitable. It is not and cannot be contended that these parties are copartners; but the idea of mutual contribution for profits and losses would require even more than copartners." In one place it was held that a joint owner of a patent can not use a device differing from the device described in the patent but covered by its claim; it is difficult to see how such a decision is reconcilable with the previous decisions carrying the weight of authority.3

A Grant is an instrument, in writing, conveying the whole monopoly and rights, as to a patent, originally

¹Clum v. Brewer, 2 Curtis, 524.

² Vose v. Singer, 4 Allen, 226: Mass. 1862.

[&]quot;Herring v. Gas Consumers' Association, 9 Fed. Rep. 556.

vested in a patentee, throughout a specified portion of the United States. A grant is practically a territorial assignment, and a grant must convey the same rights as an assignment, as to the territory specified; otherwise the conveyance is only a license. Assignments and grants. are generally spoken of indiscriminately as assignments; but the law recognizes a technical difference. terms assignee and grantee are not used in the patent law as synonomous terms, though courts, without having their attention particularly called to the subject, have sometimes used them indiscriminately and in their popular The distinction between an assignee and a grantee is this: "An assignee is one who has transferred to him, in writing, the whole interest of the original patent, or an undivided part of such whole interest, in every portion of the United States. And no one, unless he has such an interest transferred to him, is an assignee. A grantee is one who has transferred to him, in writing, the exclusive right, under the patent, to make and use, and to grant to others to make and use, the things patented, within and throughout some specified part or portion of the United States."2

When a grantee of a territorial right under a patent sells the patented articles to another, without any restrictions, such other person may take the articles outside the grantee's territory and sell or use them, without he or the seller being liable as an infringer.³ This decision is a most important one, as affecting the interests of patent owners; all grants should be made upon the express

¹ Potter v. Holland, I Fisher's Pat. Cases, 327.

² Potter v. Holland, I Fisher's Pat. Cases, 327.

³ Adams v. Burke, 4 Fisher's Pat. Cases, 392; Adams v. Burke, 17 Wall. 414.

condition, that the grantee shall not sell the patented article to be sold again or used outside his territory, and that the grantee shall, when selling the patented article, sell with the restriction that such articles shall not be sold outside his territory. On principle, no distinction can be seen, as regards this point, between a territorial grantee, and a territorial licensee.

A License is a conveyance of an interest in a patent, less than an assignment or grant. It need not, necessarily, be in writing, though otherwise it might be very hard to prove; and it does not need to be recorded.2 It is not a creature of the statute, but of the common law. A license is usually a permit to make, or use, or sell the thing patented, or to do two or more of these three things; and it may be an exclusive right to do all these things throughout the whole United States, and yet not amount to assignment, unless it convey the right to convey all of these rights to others, and all rights of reissue. A conveyance, to amount to an assignment or grant, must put the person to whom a right is thereby conveyed into the very standing and shoes of the patentee, as to the portion of the patent conveyed. Anything that conveys a less right is a license. No particular form of words is necessary to constitute a license; the expressed intent of the maker of the conveyance will suffice, no matter what words he uses, though it is customary and proper to use the word "license" in distinction from "assign" or "grant," as the operating word in

¹ Potter v. Holland, I Fisher's Pat. Cases, 327.

² Chambers v. Smith, 5 Fisher's Pat. Cases, 12,

a license. A licensee cannot bring a suit for infringement in his own name, while the grantee of a particular district, or the assignee of the whole patent can.

By means of licenses, a patent owner may erect many distinct and separable interests under a patent. He may give one person the exclusive right to *make* the patented article in a certain district or through the whole United States; he may give to another the exclusive right to *use*, and to still another the exclusive right to *sell*; or he may give to different persons a common right to *make*, or to *use*, or to *sell*, one or all, in a certain territory or through the whole United States.

A license to a party which does not, in terms, or by equivalent words, showing that it was meant to be assignable, give the right to the licensee to assign the same, is a mere personal privilege and not transferable by the act of the licensee. A license which is not expressed to be for the whole term of the patent, is revocable by the maker, and, being so revoked, the right of the licensee comes to an end; but if the license is expressed to be for the whole term of the patent, then it is not revocable, and, if a shop-license is paid for, in advance, by a gross sum of money, then the license would not be revocable, unless expressly stated to be.

Licenses may be granted with conditions of forfeiture attached, such as the payment of a royalty or the use of due diligence in carrying on business under the patent; and, if such condition is broken by the licensee, he forfeits his right to the license, and he may be proceeded

¹ Troy Iron and Nail Factory v. Corning, 14 How, 216,

against like any other infringer subject to conditions expressed shortly hereinafter.¹

A licensee is not estopped, merely by his action in taking a license, from denying the validity of the patent or setting up any defense that any other person might make,² but he is bound and estopped by recitals and covenants contained in the license.³

If an inventor, before procuring a patent, allows another person to make the article afterward patented, or acquiesce in such making or in a use of the invention, this the law construes as a license, from the inventor to such other person, to use the patented thing after the grant of the patent. Assignees of patents take the patents assigned subject to all prior licenses; in the case of a revocable license, the assignment of the patent works a revocation of license.

A license to use an invention by a person only at "his own establishment" does not authorize a use at an establishment owned by the licensee and another.⁷

If a party who has a license repudiates it he cannot afterwards, when sued as an infringer, justify under the license.⁸

¹ Woodworth v. Cook, 2 Blatch. 160; Bell v. McCullough, I Fisher's Pat. Cases, 380.

²Burr v. Duryee, 2 Fisher's Pat. Cases, 275.

⁸ Wooster v. Taylor, 8 O. G. 644.

⁴McClurg v. Kingsland, I Howard, 202.

⁵McClurg v. Kingsland, 1 Howard, 202.

⁶Faulks v. Kamp, 3 Fed. Rep. 898; Shaw v. Colwell Lead Co., 11 Fed. Rep. 711.

Rubber Co. v. Goodyear, 9 Wall. 788.

⁸ Cohn v. Nat'l Rubber Co., 15 O. G. 829.

When a license contains a condition the breach of which works a forfeiture of the license, the mere breach does not of itself work the forfeiture or revocation, but a court must pass upon the question, and decide that the breach has occurred, and that the forfeiture or revocation is consummated; if, however, a license contains an express provision that the mere breach of a condition or the mere happening of an event, shall work a forfeiture or revocation of the license, in that case the decision of a court might not be requisite to the perfection of the forfeiture or revocation: in the case where a license is forfeitable or revocable, a suit for infringement will not lie against a license after the breach of a condition until a court, in a suit instituted for that purpose has decreed that the forfeiture has been consummated; unless, as before stated, the express terms of the license are such that the breach itself works and perfects the forfeiture.1

A license which authorizes the licensee to use the patent "for his own proper business" does not authorize the licensee to permit another to use the patent.²

Where the license is granted to use a certain machine the patented part whereof is a combination, parts of the machine which become worn out may be replaced, and the use of the machine continued under the license. If the patented part had been a single part of the structure, and that part had worn out, the user would have no right to replace it.³

¹Pentlarge v. Beeston, I Fed. Rep. 862; White v. Lee, 3 Fed. Rep. 222; Hartell v. Tilghman, 99 U. S. 547; Adams v. Meyrose, 7 Fed. Rep. 208; Adams v. Meyrose, 10 Fed. Rep. 671.

² Putnam v. Hollender, 6 Fed. Rep. 882.

³ Gottfried v. C. S. Brewing Co., 8 Fed. Rep. 322.

A decree for damages, where the complainants have an established license fee, for the amount of such fee, gives the defendants—in some cases—a license to use the invention during the life of the patent.¹

Mortgage of Patents. Although the statute does not expressly state that patents may be legally mortgaged, it is clear, from the reference, in the section quoted at the beginning of this chapter, to "a mortgagee for a valuable consideration," that a mortgage, properly made and recorded at the Patent Office, would be held valid by the courts. As no specific formula is necessary to constitute an assignment, or grant, or license, the same is, on principle, true as to a mortgage, and any instrument clearly expressing the idea that the maker intended to give a mortgage on his patent, would probably be held sufficient. It is probable that, if any form, which is legal and proper funder the practice of any of the states, were followed, that would answer the requirements of the law. As an assignment does not need to be sealed, witnessed, or acknowledged, it would seem that a mortgage, which conveys a less interest, would not need these formalities; yet, in the absence of any statutory directions or adjudications upon this point, it might be advisable, and certainly not harmful, to follow the formalities prescribed for mortgages by the laws of the state where the patent mortgage is executed, and, in case an acknowledgement is taken, to have it taken by the clerk of a court of record having a seal. The mortgage would need to be recorded at the Patent Office.

¹ Emerson v. Simm, 3 O. G. 293.

Warranty. If an assignment, grant, license, or any other conveyance under a patent contains no warranty of title, and no warranty as to the validity of the patent, it would seem that the assignee would take the interest pretended to be conveyed at his own risk as to the title of the assignor or grantor, and as to the validity of the patent. In the case where the paper simply transfers the right, title, and interest of the assignor, it is certainly a paper in the nature of a quit-claim, and if the title fail, or the patent prove invalid, the assignee or grantee can not recover back any money paid for the assignment or grant. But it has been held—in the absence of a special warranty—that "whosoever assumes to sell a patent assumes to sell that property and assumes that he has it to sell."

Recording. The statute directs that an assignment or grant shall be recorded within three months from its date. This clause is merely directory. An assignment or grant is good and valid, as against the assignor or grantor, and all other persons whatever, except a subsequent bona fide purchaser or mortgagee for a valuable consideration, not having notice or knowledge of the prior assignment or grant, even if never recorded; though it would not, probably, be held valid, if unrecorded, against a creditor proceeding against the assignor or grantor by means of the insolvent or bankrupt laws. If a patentee were to assign his patent to a

¹ Jolliffe v. Collins, 21 Missouri, 341; McClure v. Jeffrey, 8 Indiana, 83.

² Faulks v. Kamp, 17 O. G. 851.

³ Turnbull v. Weir Plow Co., 7 O. G. 173.

person who did not, within three months, put the same upon the Patent Office records, and then the patentee should sell the patent to a second purchaser who knew nothing of the prior assignment, and the second purchaser should have his assignment properly recorded, he would take a legal title, and the first purchaser would have no interest in the patent; but, if the second purchaser knew, at the time he took his assignment, of the prior assignment, then the second purchaser would get no title.1 Licenses do not need to be recorded,2 and it is of no legal avail to record any paper which is not required to be recorded by statute. Judge Blatchford said upon this topic: "Fees are prescribed * for recording every assignment, agreement, power of attorney, or other paper; but it does not follow from this that the record of every paper which may happen to be recorded is to be taken as constructive notice of its contents to every person subsequently dealing with a party to it with respect to its subject-matter. The record of an instrument is not constructive notice to a subsequent purchaser unless the statute requires the instrument to be recorded." 3

Employer and Employee. An employer is not necessarily entitled to an invention made by a workman in his employ. It would require a distinct contract or

¹Holden v. Curtis, 2 N. H. 63; Brooks v. Byam, 2 Story, 542; Pitts v. Whitman, 2 Story, 615; Boyd v. McAlpin, 3 McLean, 429; Case v. Redfield, 4 McLean, 527; Gibson v. Cook, 2 Blatchford, 148.

² Hamilton v. Kingsbury, 4 Fed. Rep. 428.

⁸ Wright v. Randel, 8 Fed. Rep. 591.

understanding to that effect, to entitle the employer to the patent. A simple contract for the labor of a man at any ordinary trade, profession, or occupation, does not include a right to the inventions made by the employee whether relating to the business at which the person is employed or not; but if a man is employed for the purpose, wholly or partially, of making improvements in any branch of trade or manufacture, then his inventions would belong to the employer. Where, in the absence of any specific understanding or contract, a man makes an invention in the time of his employer, using his tools and materials in experiments and construction, this would furnish strong evidence that the improvement was intended to be for the benefit of the employer. In any case, the application for patent must be made by the inventor, and, if it belongs to the employer, assigned to him. an employee, after making an invention which would equitably belong to the employer, were to refuse to apply for a patent and to assign the same, the employer's remedy would lie in an application to a court of equity, to compel the inventor to take these steps. In one case it was held that where an inventor practically developed his improvement in the employ of another, and saw such other put the improvement in practice without objection and without demand for consideration, the acts of the inventor amounted to a license to the other party which remained in force after the inventor procured the patent.1

In another case it was held that where an ordinary employee, not hired to invent, made and patented an improvement during his employment at the expense of

¹McClurg v. Kingsland, I How, 202.

the employer, that such employer did not thereby acquire a title to the patent; also that if this state of facts constitute a license, such a license was not transferable; and in case such license was a corporation, the right would die with the dissolution of the corporation.¹

Various Points Relating to Title. Upon the question as to whether patents may be directly attached and sold in execution the Supreme Court said: "There would certainly be great difficulty in assenting to the proposition that patent and copyrights held under the laws of the United States are subject to seizure and sale on execution. Not to repeat what is said in 14 Howard, 531, it may be added that these incorporal rights do not exists in any particular state or district, they are co-extensive with the invention. There is nothing in any Act of Congress, or in the nature of the rights themselves. to give them locality anywhere, so as to subject them to the process of courts having jurisdiction limited by a line of states and districts."2 But the Supreme Court afterward held that a patent right may be ordered by a court of equity to be sold, and the proceeds applied to the payment of a judgment debt of the patentee; 3 a patent can not only be made available in this way for the payment of a debt, but under the insolvent law of a state, or a general bankrupt law, the insolvent or bankrupt may be compelled by the court having jurisdiction to assign the patent to the trustee for the benefit of the creditors.

¹ Hapgood v. Hervett, 11 Fed. Rep. 422.

² Stevens v. Gladding, 14 How. 447.

³ Ager v. Murray, 21 O. G. 1196.

The fact that a machine is patented does not prevent its being levied upon and sold under state laws; but such a levy only passes right to the *materials* of which the machine is composed; it gives no right to work the machine.¹

"Patented implements or machines sold to be used in the ordinary pursuits of life become the private individual property of the purchasers, and are no longer specifically protected by the patent laws of the state where the implements or machines are owned and used. Sales of the kind may be made by the patentee with or without conditions, as in other cases, but where the sale is absolute, and without any conditions, the rule is well settled that the purchaser may continue to use the implement or machine purchased until it is worn out, or he may repair it or improve upon it as he pleases, in same manner as if dealing with property of any other kind."

"The right of an owner of a patented machine, without any conditions attached to his ownership, to continue the use of his machine during an extended term of the patent, is well settled."²

Skilled Aid to Inventors. It is not irrelevant to the general topic now under consideration to inquire to what extent a person, who has conceived the main principle or characteristic of an invention, is entitled to employ the services of scientific men or skilled workmen in putting his ideas into practice, without violating his right to a patent for the resultant product.

¹ Sawin v. Guild, 1 Gall. 487; Stevens v. Cady, 14 Howard, 530.

² Union P. B. Machine Co. v. Nixon, 21 O. G. 1275.

Upon this point, Chief Justice Taney, speaking for the Supreme Court, said in a case where Morse's telegraph. patent was under consideration: "Neither can the inquiries he made, or the information or advice he received from men of science, in the course of his researches, impair his right to the character of an inventor. No invention can possibly be made, consisting of a combination of different elements of power, without a thorough knowledge of the properties of each of them, and of the mode in which they operate on each other; and it can make no difference in this respect, whether he derives his information from books or from conversation with men skilled in the science. If it were otherwise, no patent in which a combination of different elements is used, could be obtained; for no man ever made an invention without having first obtained this information. unless it was discovered by some fortunate accident. And it is evident, that such an invention as the electromagnetic telegraph could never have been brought into action without it; for a very high degree of scientific knowledge and the nicest skill in the mechanic arts are combined in it, and were both necessary to bring it into successful operation. And the fact that Morse sought and obtained the necessary information and counsel from the best sources, and acted upon it, neither impairs his rights as an inventor, nor detracts from his merits."1

The following excerpt from the decision of Judge Betts, in another case, gives the facts, and the law applied to them: "It is contended that Berry was the inventor, and not the plaintiffs; which position, if established,

^{10&#}x27; Reilly v. Morse, 15 Howard, 62.

would be a good ground to dissolve the injunction. The defendants lay before the court the declaration of Berry, in connection with his working without any draft, design, or model before him, which, the defendants insist, proves him to be the inventor. But, on the other hand, Mr Kelsey details very minutely the suggestions he made his superintendence, his suggesting alterations in a design got up, his disapproving that, and the adoption of his views in the design now patented. And Mr. Berry gives his own account of the matter, and explains the declarations attributed to him, as referring to his working without a copy before him, and to the design being an original and not a copy. He does not intimate that he did not receive suggestions, alterations, and directions from Mr. Kelsey, which were carried out in his design. To constitute an inventor, it is not necessary he should have the manual skill and dexterity to make the drafts. If the ideas are furnished by him, for producing the result aimed at, he is entitled to avail himself of the mechanical skill of others, to carry out practically his contrivance. Here the devising of the pattern, in this sense, appears to have been by the plaintiffs." Excerpt from a Supreme Court case: "Where a person has discovered an improved principle in a machine, manufacture, or composition of matter, and employs others to assist him in carrying out that principle, and they, in the course of experiments arising from that employment, make valuable discoveries ancillary to the plan and preconceived design of the employer, such suggested improvements are in general to be regarded as the property of the party

¹ Sparkman v. Higgins, I Blatchford, 205.

who discovered the original improved principle, and may be embodied in his patent as a part of his invention.

Suggestions from another, made during the progress of such experiments, in order that they may be sufficient to defeat a patent subsequently issued, must have embraced the plan of the improvement, and must have furnished such information to the person to whom the communication was made that it would have enabled an ordinary mechanic, without the exercise of any ingenuity and special skill on his part, to construct and put the improvement in successful operation.

Persons employed, as much as employers, are entitled to their own independent inventions; but where the employer has conceived the plan of an invention and is engaged in experiments to perfect it, no suggestions from an employee, not amounting to a new method or arrangement, which, in itself, is a complete invention, is sufficient to deprive the employer of the exclusive property in the perfected improvement. But where the suggestions go to make up a complete and perfect machine, embracing the substance of all that is embodied in the patent subsequently issued to the party to whom the suggestions were made, the patent is invalid, because the real invention or discovery belonged to another." ¹

From these and other cases, it appears that, when a person has in his mind the main features of an invention, or has grasped the general principles upon which it is to operate, he is entitled to the aid, counsels, and experiments of scientific men, and to the efforts and suggestions of skilled mechanics in reducing his invention to

¹ Agawam Company v. Jordan, 2 Whitman, 202.

practice, and in embodying it in tangible materials, without forfeiting his right to the title of inventor. In one, and that a leading case, it was held, that, to invalidate a patent, suggestions made to the patentee by others, must furnish all the information necessary to construct the improvement, and that, if such suggestions fall short of suggesting a complete machine or other invention they are only suggestions and not inventions.¹



 $^{^1}Pitts$ v. Hall,2 Blatchford, 236; $\it Treadwell$ v. $\it Parrott,$ 3 Fisher's Pat. Cases, 124.

CHAPTER XVI.

DESIGN PATENTS.

THE statute enacts: "Sec. 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 woolen, silk, cotton, or other fabrics; any new and original impression, ornament, patent, [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 fee prescribed, and other due proceedings had, the same as in cases of inventions or discoveries, obtain a patent therefor." 1

The Patent Office does not require that models shall accompany applications for design patents. Design patents are granted for three and a half years upon a fee

¹Rev. Stat. Title LX. Chap. 1.

of ten dollars, or for seven years upon a fee of fifteen dollars, or for fourteen years upon a fee of thirty dollars, as the applicant, in his application, may elect.¹

Design patents granted prior to March 2, 1861, are made extensible, like other patents, by section 4932 of the Act of June 18, 1874. The Patent Office has decided that design patents granted subsequent to, and under the Act of March 2, 1861, are not, since the passage of the Act of July 8, 1870, extensible; but this is believed to be a mistake. Design patents granted since and under the Act of July 8, 1870, are clearly not extensible.

Design patents are subject to the same provision, as to allowance of two years' public use, as other patents.⁴

Patentable Design The law creating design patents is of later origin than, and in some sort supplementary to, the law creating other patents. The first design patent law was the Act approved August 29, 1842. Such other patents, in view of the purposes they serve, may, not inappropriately, be called *utility* patents in distinction from these design patents, for it is evident that the design patent law is directed to the end of the protection of the appearance of a thing rather than the utility it is designed to subserve; the Supreme and other courts have agreed upon this much. It is true that the Act hereinbefore quoted specifies as patentable "any new, useful,

¹Sections 4930 4931, 4934, Chapter 1, Title LX. Rev. Stat.

²E. W. Sperry's Case, Commissioner's Decisions, 1870, p. 139.

⁸ See Chapter on "Extension."

⁴ Root v. Ball, 4 McLean, 177; Booth v. Garelly, I Blatch. 247.

and original shape or configuration of any article of manufacture," but it is not at all unreasonable to suppose that the legislator who drafted the clause, meant that the word "useful" should have substantially the same meaning here that it has in the part of the Act creating utility patents, this is, that the things presented for patent shall be designed for some useful purpose in distinction from a hurtful, frivolous, or immoral purpose.

For a time it was the practice of the Patent Office to grant these design patents for almost any subject matter presented, and with little or no inquiry as to whether any degree of patentable origination had been exercised. It is now tolerably well settled that design patents stand on as high a plane as utility patents, and require as high a degree of exercise of the inventive or originative faculty. In patentable designs a person can not be permitted to select an existing form, and simply put it to a new use, any more than he can be permitted to take a patent for a mere double use of a machine; but the selection and adaptation of an existing form may amount to patentable design, as the adaptation of an existing mechanical device may amount to patentable invention.

As most mechanical devices are combinations of mechanical elements, so designs are in general terms, combinations of the simpler elements of form; and as mere union of mechanical elements, where no resulting co-operation is brought into play, is not a patentable combination but a lifeless aggregation, so in designs, the mere juxtaposition of old forms or elements of form with no resulting harmony or unity does not give patentability. But the parallel between utility patents and design patents does not obtain in all directions; for instance, in

mechanical devices it is a vital matter in the determination of the question of substantial identity, that the same result is attained by substantially the same mechanisms; two mechanisms are not substantially the same, unless they use substantially the same means, operating in substantially the same manner, while in the case of designs result is the vital matter; if the things have substantially the same appearance it is not a vital matter that different things are used in the compared things to produce the sameness of result. Again, in determining substantial identity, the opinion of an expert is the test of substantial identity in mechanisms, while the eye of an ordinary observer is the test in designs.

Illustrative cases: Of a case where the patent was for a design for a reel, the court said: "Now, although it does not appear that any person ever before applied this particular shape to this particular article, I cannot think that the Act quoted above was intended to secure to the complainant an exclusive right to use this wellknown figure in the manufacture of reels. The act, although it does not require utility in order to secure the benefit of its provisions, does require that the shape produced shall be the result of industry, effort, genius, or expense, and must also, I think, be held to require that the shape or configuration sought to be secured, shall at least be new and original as applied to articles of manufacture. . Its selection can hardly be said to be the result of effort even; it was simply an arbitrary, chance selection of one of many wellknown shapes, all equally well adapted to the purpose. To hold that such an application of a common form can be secured by letters-patent, would be giving the Act of

1861 a construction broader than I am willing to give it."

The Supreme Court said in another case:

"The Acts of Congress which authorize the grant of patents for designs, were plainly intended to give encouragement to the decorative arts. They contemplate not so much utility as appearance, and that not an abstract impression or picture, but an aspect given to those objects mentioned in the acts." * * * * *

"The thing invented or produced, for which a patent is given, is that which gives a peculiar or distinctive appearance to the manufacture or article to which it may be applied or to which it gives form. * * * * * . Manifestly, the mode in which these appearances are produced has very little, if anything, to do with giving increased salableness to the article. It is the appearance itself which attracts the attention and calls out favor or dislike. It is the appearance itself, therefore, no matter by what agency caused, that constitutes mainly, if not entirely, the contribution to the public which the law deems worthy of recompense."

"The appearance may be the result of peculiarity of configuration, or of ornament alone, or of both conjointly; but, in whatever way produced, it is the new thing or product which the patent law regards. I speak of the invention as a combination or process, or to treat it as such, is to overlook its peculiarities." * * * *.

"We do not say that in determining whether two designs are substantially the same, differences in the lines, the configuration, or the modes by which the aspects they exhibit are not to be considered; but we think the controlling consideration is the resultant effect."

¹ Wooster v. Crane, 2 Fish. P. C. 583.

² Gorham Mfg Co. v. White, 14 Wall. 511.

Another court said in another case: "It is now well understood that the same degree of originality is required in both design and functional patents. That is, the claim must not be for a copy or imitation of what is already in existence. If, for instance, the applicants should manufacture their iron ware with a figure of the statue of the Three Graces, it might improve the appearance of the article, but would scarcely entitle them to the benefits of To manufacture it with enamel is a change of a patent. the same kind, for the same thing has been performed with metals from time immemorial. To give the enamel any particular color is a matter of ordinary skill and taste. The coloring substances have always been fused with the enamel in the heat of the furnace. We can, therefore, observe nothing in the present specification to which the term invention can be applied."1

Another court, in another case, speaking of the sections of statute which create utility and design patents, said:

"The same general principles of construction extend to both. To entitle a party to the benefit of the Act, in either case there must be originality and the exercise of the inventive faculty. In the one, there must be novelty and utility; in the other, originality and beauty. Mere mechanical skill is insufficient. There must be something akin to genius—an effort of the brain as well as the hand. The adaptation of old devices or forms to new purposes, however convenient, useful, or beautiful they may be in their new role, is not invention." * * * * . "If a combination of old designs be patentable at all, of

¹Niedringhaus Case, 8 O. G. 279.

which I have some doubt, the combination must be such as to produce a new appearance. If the effect produced be simply the aggregation of familiar designs, it would not be patentable. For example, if one should paint upon a familiar vase a copy of Stuart's portrait of Washington it would not be patentable, because both elements of the combination, the portrait and the vase, are old; but if 'any new and original impression or ornament' were placed upon the same vase, it would fall within the express language of the section."

In this last case the patented design for a cheese-safe consisted of an ordinary wooden safe, with ordinary wire cloth panels, the only novelty being an ogee moulding about the top and bottom, the combination of this with the paneled sides being claimed as the invention: the so-called design was held destitute of patentable novelty.

In another case where a design for stoves was in question, the court said: "Upon these similarities it is argued for the defendant that the patentees have only taken those parts of the other designs and put them together, in mere aggregation, to produce their design, and that in so taking them and putting them together they did not accomplish anything patentable. It is quite clear that anyone who should take pages or leaves from several books and put them together into a new book, or take parts of several musical compositions and put them together in a composition by themselves, would not be entitled to a copyright for these productions. (Reed v. Carusi, Dist. of Md. 1845, 8 Law Rep. 410.) And if all the patentees did was to take the legs of the Smith stove, the base of the Lighthouse, the ash-pit and

¹Northrup v. Adams, 12 O. G. 431.

mica sections of the Smith stove, the reservoir and top of the American, and the urn of the Oriental, and join them together, it is also clear that they did nothing entitling themselves to a patent. (Binns v. Woodruff, 4 Wash., 48; Wooster v. Crane, 2 Fisher, 584.) they did no more than to join them together with such adaptations to each other as would be made by the exercise of the ordinary skill of workmen in that trade, probably they did not. But the evidence shows that they did much more than either. Although the legs of the Argand and of the Smith stove are cyna reversa in general form, those of the Argand are quite different from the others in proportion and style. The base of the Argand is not exactly like that of the Lighthouse. The curves of its ash-pit section are different from those of that section of the Smith stove. The lower mica section of the Smith stove is convex below and concave above in outward form, while that of the Argand is slightly convex throughout. The lines and curves of the mica section of the Argand are different from those of the Smith stove, and in the Argand the rear extension, to include the exit-pipe, is carried upward on that section, while in the Smith stove it is not. And the top and the urn of the Argand differ somewhat from those of either the Lighthouse or the Oriental."

. "All these parts were made symmetrical of themselves and in respect to each other, and connected together with appropriate devices, and formed into a harmonious whole, in a manner that could not be done without creative genius and inventive skill. The result was different from anything used or known before."

¹Perry v. Starrett, 14 O. G. 600.

Infringement of Designs. In determining whether two mechanisms are substantially identical, the testimony of experts as to their opinion in the matter is admissible evidence, while in determining the identity of two designs expert testimony is not admissible, the test of sameness being the eye of an ordinary observer giving such attention as he would ordinarily give, such, for instance, as that of a casual purchaser of the goods bearing the design; if the ordinary observer, giving ordinary attention, would mistake one design for the other, the two are substantially identical, otherwise not.

Cases in point:

In the first design patent case ever tried in this country, where a design for a stove was in question, the court said: "To infringe a patent right, it is not necessary that the thing patented should be adopted in every particular; but if, as in the present case, the design and figures were substantially adopted by the defendants, they have infringed the plaintiff's right. If they adopt the same principle the defendants are guilty. The principle of a machine is that combination of mechanical powers which produces a certain result; and, in a case like the present, where ornaments are used for a stove, it is an infringement to adopt the design so as to produce, substantially, the same appearance."

In a Supreme Court case already referred to in this chapter the court said: "We are now prepared to inquire what is the true test of identity of design. Plainly it must be sameness of appearance; and mere difference of lines in the drawing or sketch, a greater or smaller

¹Root v. Ball & Davis, 4 McLean, 177.

number of lines, or slight variances in configuration, if insufficient to change the effect upon the eye, will not destroy the substantial identity. An engraving which has many lines may present to the eye the same picture and to the mind the same idea or conception as another with much fewer lines. The design, however, would be the same. So a pattern for a carpet or a print may be made up of wreaths of flowers arranged in a particular manner. Another carpet may have similar wreaths arranged in a like manner, so that none but very acute observers could detect a difference; yet in the wreaths upon one there may be fewer flowers, and the wreaths may be placed at wider distances from each other; surely, in such a case the designs are alike."

"The same conception was in the mind of the designer, and to that conception he gave expression."

"If, then, identity of appearance, or, as expressed in McCrea v. Holdsworth, sameness of effect upon the eye is the main test of substantial identity of design, the only remaining question upon this part of the case is, whether it is essential that the appearances should be the same to the eye of an expert. The court below was of opinion that the test of a patent for a design is not the eye of an ordinary observer. The learned judge thought there could be no infringement unless there was 'substantial identity, 'in view of the observation of a person versed in designs in the particular trade in question; of a person engaged in the manufacture or sale of articles containing such designs, of a person accustomed to compare such design, one with another, and who sees and examines the articles containing them side by side.'

There must, he thought, be a comparison of the features which make up the two designs. With this we can not concur. Such a test would destroy all the protection which the Act of Congress intended to give.

There never could be piracy of a patented design, for human ingenuity has never yet produced a design, in all its details, exactly like another, so like that an expert could not distinguish them.

No counterfeit bank note is so identical in appearance with the true that an experienced artist cannot discern a difference. It is said an engraver distinguishes impressions made by the same plate. Experts, therefore, are not the persons to be deceived.

Much less than that which would be substantial identity in their eyes, would be undistinguishable in the eyes of men generally, of observers of ordinary acuteness, bringing to the examination of the article upon which the design has been placed that degree of observation which men of ordinary intelligence give.

It is persons of the latter class who are the principal purchasers of the articles to which designs have given novel appearances; and if they are misled and induced to purchase what is not the article they suppose it to be; if, for example, they are led to purchase forks or spoons, deceived by an apparent resemblance into the belief that they bear the 'Cottage' design, and, therefore, are the production of the holders of the Gorham, Thurber, and Dexter patent, when, in fact, they are not, the patentees are injured, and that advantage of a market which the patent was granted to secure, is destroyed.

The purpose of the law must be effected, if possible; but plainly, it cannot be if, while the general appearance

of the design is preserved, minor differences of detail in the manner in which the appearance is produced, observable by experts, but not noticed by ordinary observers, by those who buy and use, are sufficient to relieve an imitating design from condemnation as an infringement.

We hold, therefore, that if, in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same—if the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other—the first one patented is infringed by the other."

It has been held that claims may be made for parts of a design and for the whole combination in the same patent and it has been said "it might be questionable whether the first claim could stand for the parts of a design separately, as a design, from its nature, is an entirety, if it is anything." 2

There would seem to be no reason why a part of a design, which is itself an entirety, cannot be claimed by itself as well as in a combination of other parts: for instance, where a figure in the panel of a stove is, separately considered, complete and ornamental, it would seem to be claimable by itself as well as a factor in the design of the stove, as a whole.

It has been intimated that the claim in a design patent may cover a genus or class of ornaments,³ but it is

¹Root v. Ball, 4 McLean, 177, A. D. 1846.

² Perry v. Starret, 14 O. G. 601, Wheeler, 1877.

⁸ Booth v. Garelly, I Blatchford, 247, Nelson, 1847.

not readily to be seen how this can be done except in the sense that the originator and patentee of a design is entitled to have treated as infringements all other designs which are in appearance so much like his as to deceive an ordinary observer.



CHAPTER XVII.

INFRINGEMENT.

It is an infringement of a patent, to either make, or sell, or use, without legal permit, anything which forms the subject-matter of any claim or clause of claim in a valid patent; for a patent conveys to the patentee the exclusive right to do each and all of these three things during the existence or life of the franchise.

A person cannot *make*, for his own use or for exportation from the country, without infringing. Judge Story once intimated that a person might make a patented thing for the purpose of philosophical experiment merely, or to verify the correctness of the specification, but not for profit without being held an infringer. There seems to be no other excuses which would thus avail.¹

The intent to infringe is not even necessary,² and the patentee need not notify an infringer before bringing suit;³ for the patent is, in the eye of the law, notice of the patentee's rights, to all the world.

A mere workman for the real party in interest is not an infringer, though, if one party were to hire another

¹ Whittemore v. Cutter, I Gallatin. 429.

² Parker v. Hulme, I Fisher's Pat. Cases, 44.

⁸Ames v. Howard, I Sumner, 482.

^{*}Delano v. Scott, I Gilpin 489.

to make or use patented things, both would be held infringers.¹

The sale of the *materials* of a patented machine, as such, and with no license, express or implied, to use the machine as a machine, is not an infringement.²

An assignee, grantee, or licensee can be sued for infringement as well as any one else, if he attempts to exercise rights under the patent not contained in his assignment, grant, or license.³

The use of patented articles upon foreign vessels coming into our ports, when such articles were acquired with proper intent at foreign ports, does not constitute infringement.⁴

Sales of patented articles by persons acting as agents for other real owners, the salesmen having no interest, does not make the salesmen infringers.⁵

It has been held, that a purchase, from a wrongful seller, of a patented article, by the patentee or for his account, does not constitute an infringement.⁶

To constitute an infringement, it is not always necessary that a person should technically infringe the claim. Where a party had a patent for a combination of a lamp-burner and a lamp-chimney, another party made and sold only the burner,—the judge held such makers of the burners

¹ Keplinger v. De Young, 10 Wheaton, 358; Woodworth v. Hall, 1 Wood & Min. 248.

² Sawin v. Guild, I Gallatin, 485.

³ Judson & Goodyear v. Union Rubber Co., 4 Blatchford.

⁴Brown v. Ducherne, 19 Howard, 183.

⁵ Potter v. Crowell, 3 Fisher's Pat. Cases, 112.

⁶ Sparkman v. Higgins, 2 Blatchford, 30; Byam v. Bullard, 1 Curtis, 102.

infringers; and, where one party had a patent on a cartridge, and another party made and sold guns designed for firing this cartridge, the gun-maker was held an infringer. In these and similar cases, the *intent* is of importance.

Where a product is claimed as made by a certain process another similar product not made by such process is not an infringement.³ Where infringing articles are made during the life of the patent their use, can be enjoined after the expiration of the patent.⁴ A father is liable for the infringement of a patent by his non-emancipated minor son where the infringement is with the father's knowledge even if it be not with his consent.⁵ "Where it is obvious that defendant's device was intended for an entirely different purpose and was not intended as an evasion of the plaintiff's patent, the infringement, if any exists, being purely accidental * the evidence of actual infringement should be so clear as to admit of no other reasonable construction." ⁶

A salesman on commission—of infringing articles—can be enjoined and his profits recovered. A suit against the salesman's employer is no bar to a suit against the salesman.⁷

A mere variation in the use of the patented device will

¹ Wallace & Son v. Holmes, Booth & Haydens, 5 Fisher's Pat. Cases, 37.

² Renwick v. Pond, 5 Fisher's Pat. Cases, 569.

⁸ Dittmar v. Rix, I Fed. Rep. 342.

⁴Am. Diamond Rock Boring Co. v. Sheldon, 1 Fed. Rep. 870; Am. Diamond Rock Boring Co. v. Rutland Marble Co., 2 Fed Rep. 356.

⁵Dunks v. Grey, 3 Fed. Rep. 862.

⁶Nat'l Car Brake Shoe Co. v. D. L. & N. R. Co., 4 Fed. Rep. 224.

⁷ Steiger v. Heidelberger, 4 Fed. Rep. 455.

not avoid infringement; for instance, where the patent was for a ratchet-wrench and the defendant used the ratchet-wheel with the spring, pawls, and lever, precisely like those of the patented wrench, in a bit-stock adapted to various tools, the defendant was held to infringe; "the patent grants to plaintiff the exclusive right to use the improvement patented for any purpose"; in one case defendants sought to escape the charge of infringement by showing that they had not used the patented lock in the way contemplated by the patent; the lock had the capacity of use contemplated by the patent and defendants were held to infringe.

It seems that where a patent owner causes a party to specially order from a manufacturer, whom the patent owner holds to be an infringer, the intermediate party cannot be held as an infringer. A man who employs a workman to make an infringing article cannot escape responsibility by attempting to throw it upon the workman. Where a structure was not, when originally made, an infringement but become such through use and wear, the party making it cannot be held to be an infringer.

A "patent secures the combination or machine therein described without regard to the purposes for which the patented thing is intended," though the claim may, in terms, cover it for a specific purpose. When a license is granted to use a certain machine the patented part

¹ Sinclair v. Bacus, 4 Fed. Rep. 539.

² Fischer v. Hayes, 6 Fed. Rep. 76.

⁸ Yale Lock Mfg. Co. v. Norwich Nat'l Bank, 6 Fed. Rep. 377.

⁴ Tucker v. Dana, 7 Fed. Rep. 213.

⁵ Andrews v. Creegan, 7 Fed. Rep. 477.

⁶ Woven Wire Matt. Co. v. Simmons, 7 Fed. Rep. 723.

⁷Zinn v. Wiess, 7 Fed. Rep. 914.

whereof is a combination, parts of the machine which become worn out may be replaced and the use of the machine continued under the license. If the patented part had been a single part of the structure and that part had worn out the user would have no right to replace it. It was held in one case that the owner of an undivided interest in a patent cannot use a machine different from that described in the patent, but covered by it; but this decision does not seem to be reconcilable with the general course of decisions upon the same general topic.

The Supreme Court has doubted that a suit for infringement of a patent can be sustained against a public officer who has acted "only for and in behalf of the government." 3

In proceeding to determine whether a certain article is an infringement of a patent it must be compared separately with each clause of claim in the patent; for if any clause of claim is infringed the patent is infringed.

The claim is the vital part of the patent and no matter whether the actual invention be greater or less the question of infringement is to be determined upon the claim, for the patentee must stand or fall by the claim he makes.⁴

A patent is infringed by making, using, or selling the thing as described and claimed in the patent; and the thing described and claimed and another thing are held to be substantially identical when the same result is attained by the same means or equivalents for them.

¹Gottfried v. C. & S. Brewing Co., 8 Fed. Rep. 322.

²Herring v. Gas Consumers' Ass'n, 9 Fed. Rep. 556.

⁸ James v. Campbell, 21 Of. Gaz. 337.

Meissner v. Devoe Mfg Co., 5 Fisher's Pat. Cases, 285.

A claim will generally, if not always, be either to a specific thing or to a combination of different elements, whatever be the actual wording; and this whether the invention be an art, a machine, a manufacture, or a composition of matter; and having determined what the claim is for, it must then be determined whether the thing to be compared with the patent has all the parts or qualities which the claim makes essential; and if such thing has not all these parts then it does not infringe. Form, size, and materials, are not generally essential; but they may be.¹

But in any case it matters not what names are given to parts of a device,² the real question is: Do the parts compared perform the same office in substantially the same way?

It is not an infringement of the claim for a combination, to make, or use, or sell any of the elements of the combination less than the whole, though this proposition has sometimes been qualified by courts as follows: "It is not necessary in order to constitute infringement of a combination, patented as such, that the whole combination should be used. If a part of it only, that, separate from the rest, was new and patentable to the inventor, is used, taking that part is an infringement pro tanto. *

Here the whole of this part of the patented invention is taken for one purpose but not for all. It is none the less taken, however, and the taking is none the less an infringement because it is not taken for all purposes."

¹Adams v. Edwards, I Fisher's Pat. Cases, I.

² Graham v. Mason, 5 Fisher's Pat. Cases, 1.

⁸ Cahoon v. Ring, I Fisher's Pat. Cases, 397.

⁴Adair v. Thayer, 4 Fed. Rep. 441.

Additions to a combination will not avoid infringement,¹ and a man cannot use another's patented invention simply because he has made an improvement upon it. That a device works better or worse than the patented device is not always, nor generally, decisive of substantial difference.² A device may embody a very high degree of ingenuity and yet not be substantially unlike some prior patented thing.

Suppose a person to have invented and patented a machine having four distinct parts or elements; another person, desiring to effect the same result, might make another machine having none of the exact parts of the first, but having four other parts which are mechanical equivalents for the four parts used by the patentee. the selection and arrangement of his parts, the latter person may have shown great ingenuity, especially if he has, as is often the case, been all the while aiming to avoid the appearance of the prior machine; yet, if the parts of the latter machine operate upon the same principle as the parts of the prior machine,—are equivalents for them.—then, no matter how unlike the two machines may be in appearance, the latter is substantially identical with the former, and is not patentable, unless it should happen to produce a better or cheaper product than the prior machine, and then only as an improvement on the former; and, in such case, the later patent would be tributary to the earlier, and could not be put in practice without the permission of the owner of the former patent.

¹ Johnson v. Root, I Fisher's Pat. Cases, 351.

²McCormack v. Talcott, 20 Howard, 405.

The question of substantial identity is presented in a patent suit in a different aspect from the presentation of the question of novelty in the Patent Office when an applicant seeks a patent; a device may be patentable and yet be an infringement of a prior patent. When a man makes a new and useful invention, he is entitled to a patent for it. Another man may improve upon the same invention so as to produce a better result of the same kind or a cheaper result, or he may simplify the invention, so that he will be entitled to a patent for the improvement. In such case the later patent is subordinate and tributary to the earlier, and can not be worked except by license from the earlier patentee. Whether a man has made a patentable improvement on a former patent, is often a question at the Patent Office; but the question does not come up in this shape in infringement suits in the courts, —there the question is, whether two things are substantially identical, without reference to whether one works better or worse than the other.

Mere change of form in a machine or its parts does not destroy the substantial identity of the parts changed, if such part still performs the same duty or function as before; and it must not be supposed that because one machine looks entirely unlike another, they are therefore substantially different. After one man had invented a steam engine and patented it, another man undertook to evade the patent; he produced an engine which *looked* entirely unlike the first,—yet, when some one thought to turn the later machine "upside down," the resemblance came out at once. When one recalls the scores, if not hundreds, of different styles of steam engines, all operating on the same general principle,—that is by the ex-

pansive force of steam,—he can readily comprehend, that though things may be very unlike in appearance, yet they may be the same in operating principle.

There are certain things in mechanics and in chemistry, known to the patent law as equivalents,—that is, different mechanical or chemical elements which will accomplish the same result. On looking into a book containing a compilation of mechanical movements, --and there are such books,-one part will be found devoted to a class of devices for converting rotary into regular rectilinear reciprocating motion: another part will be devoted to devices for converting regular reciprocating motion into intermittent reciprocating motion, —and so on; each of these parts or chapters contains a number of different devices for effecting the same purpose. All the devices in the same part or chapter are equivalents for each other, known and recognized as such. Now if, in a patented machine, one of these devices is made use of to accomplish a certain movement or purpose, it is not a substantially different thing to use another of the devices which is a known and recognized substitute for the device shown in the patent.

A learned judge says that: "By equivalents in machinery is usually meant the substitution of merely one mechanical power for another, or one obvious and customary mode for another, of effecting a like result."

Another judge says: "A mechanical equivalent, I suppose, as generally understood, is where one may be

¹ Smith v. Downing, I Fish, P. Cases, 87.

adopted instead of the other, by a person skilled in the art, from his knowledge of the art;" 1

Another judge says: "When, in mechanics, one device does a particular thing, or accomplishes a particular result, every other device known and used in mechanics, which skillful and experienced workmen know will produce the same result or do the same particular thing, is a known mechanical substitute for the first device mentioned for doing the same thing or accomplishing the same result. It is sufficient to constitute a known mechanical substitute, that when a skillful mechanic sees one device doing a particular thing, that he knows the other device, whose use he is acquainted with, will do the same thing." ²

The same rules, by which may be determined what constitutes an equivalent in machinery, are applicable in determining what constitutes an equivalent in an "art," or, in other words, in a "process," in a "manufacture," or a "composition of matter." Where a process consists of a single step or a succession of steps, it is an equivalent for one of these steps to substitute another step, or way, or manner of action, that a person, skilled in the branch of business to which the process appertains, knows, simply from past experience or accumulated knowledge, will effect the same result.

And in "composition of matter"—or, generally speaking, in medicinal, chemical, and food compounds—it is an equivalent to use, in the place of one of the substances, of which the preparation is composed, another

¹ Johnson vt Root, I Fisher's Pat. Cases, 363.

² Carter v. Baker, 4 Fisher's Pat. Cases, 409.

substance which a person of competent knowledge (in this case generally a chemist) knows, from his knowledge of ingredients, will serve the same purpose. Upon this subject a learned judge says: "Where a patent is granted for a composition made of several ingredients, it covers and embraces known equivalents of each of the ingredients. An equivalent of any substance is another substance having similar properties and producing substantially the same effect."

In comparing "manufactures,"—that is, generally speaking, two finished products,—it is to be determined whether or not they are identical, by ascertaining if they have similar parts or properties, if they will answer the same end, and if they answer the same end by means of similar properties. If they do, then they are substantially identical; otherwise not.

In proceeding to determine the question whether a claim of a patent is infringed, regard is to be had not only to actual wording of the claim but also to the state of the art to which the invention under consideration appertains as it existed at the time the patented invention was made; for although a thing may come within the terms of a claim, yet the prior art may be such that the terms of the claim must be so narrowed by construction that the thing under inquiry may not really be an infringement; for courts pay all possible attention to the question of what constitutes a patentee's real invention as compared with such prior art, and having found in

¹ Matthews v. Skates, 1 Fisher's Pat. Cases, 609.

what the actual invention resides, will, if possible, construe the claim so as to give the claim life and vitality and yet restrict it to the actual invention.

It is a settled rule of construction that where an inventor is the first, the pioneer in a certain field, his claim shall receive the broadest construction consistent with the language of the claim, but that if the patented invention be one in a field which has been before worked, if it be only a step in a preceding series, then his claim is to be construed, if its language will possibly permit, so as to cover and include just what the invention is and nothing more.

"If one inventor precedes all the rest and strikes out something which excludes and underlies all they produce, he acquires a monopoly and subjects them all to tribute.

But if the advance toward the thing desired be 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 them."

Illustrative cases:

Complainant's invention was a whip-tip provided with a screw-socket by which it was attachable to the whipstock, and the claim was: "As a new article of manufacture, a whip-tip provided with a socket, so as to be attached to the stock proper, as and for the purposes set forth."

¹Railway Co. v. Sayles, 97 U. S. 555. See also Worth v. Browning, 17 Of. Gaz. 624; Whitnum v. Seaman, 17 Of. Gaz. 626; Garneau v. Dozier, 19 Of. Gaz. 62; Stebbins H. E. M. Co. v. Stebbins, 17 Of. Gaz. 1351.

Defendant's [patented] device was a whip-tip having a socket provided with teeth to be pressed into the stock. The idea of making separate tips for whips was original with complainant and its practical merits were great. Fishing rods had previously been made with socketed joints, and whips had been made in sections for transportation. Held, that if complainant could hold a broad claim to the independent tip there was no doubt of the infringement, but that the patent was for little more than the application of an old art to a new but analogous use and that it must be confined to the screw-threads, the defendant's device not being an infringement.¹

In another case the court said of complainant's patented self-closing faucet that "the valve is pushed downward, from its seat, against a spring, by a steep, quick-threaded screw turned by hand with a swivel to prevent turning the valve with the screw, which lets the valve back when the screw is released." In some prior self-closing faucets "the valves were lifted from their seats by stems, having projections on the upper ends working against steep inclines, as cams." "In the faucet of defendant the valve is lifted against a spring by a stem, with projections near the valve working against inclines inside the shell of the faucet." Hela, to be no infringement in view of the narrow construction of claim—a combination of the screw and valve—necessitated by the prior art.²

In another case the complainant patented a machine for "closing the seams of metallic cans" which, in mak-

Am. Whip Co. v. Hampden Whip Co., I Fed. Rep. 87, Lowell, Feb. 1880.

² Zane et al v. Loffe, 2 Fed. Rep. 229.

ing a can with corners, or angles, had the stock notched at the corner so that there was no excess of metal at that point to be disposed of in the operation. In the reissue he inserted a clause looking toward a method of use which would operate on stock not thus notched. Defendant's machine came within the terms of the claim, but, as a matter of fact, seamed the cans without notching the stock, having a recess to dispose of the excess of stock. Held, that if the claim were construed to cover defendant's machine it would be invalid, and if limited to complainant's real invention defendants did not infringe.¹

In another place complainant's patent was for a combination of parts in a machine for applying flock to belt-rubber goods. A prior patent showed a machine for the same purpose, having a corresponding number of parts, performing the same functions, but differing in form. *Held*, that complainant could "hold only the improvement in form of the different parts and that defendant's machine, differing in the form of the parts, was not an infringement." ²

In another case, coal scuttles being old, complainant patented an improvement thereon, consisting of a bottom stamped out of one piece and extending upwards outside of the body. Defendant made a scuttle substantially the same way except that the bottom extended inside the body. Defendant's structure *held* not to be an infringement.³

¹Covell v. Pratt et al, 2 Fed. Rep. 359.

² Williams v. Barker et al, 2 Fed. Rep. 649.

⁸ Whitnum v. Seaman et al, 4 Fed. Rep. 436.

Where the patented invention is a combination of old elements courts hold that if a person substitutes for an element of the combination—which of itself was old another element, which was not known at the date of the patent, as a substitute for the element the place of which it takes, in such case the structure containing such substituted element, is not an infringement: the Supreme Court has stated this doctrine thus: "Inventors of a combination cannot suppress subsequent improvements which are substantially different, whether the new improvement consists in a new combination of the same ingredients, or of a substitution of some newly discovered ingredient, or of some old one performing some new function, not known at the date of the letters-patent as a proper substitute for the ingredient withdrawn." In a case where this doctrine was applied, complainant's bolt for window-catch had a plain round stem at the rear end reciprocating in a round bolt in the rear end of the case which held the holt: defendants used a stem which did not pass out of the rear end of the case but was furnished with short radial arms extending to and reciprocating upon the inside of the case; defendant's stem was held to be a newly discovered substitute and the whole structure, therefore, not an infringement.2

It will thus be seen that in attempting to settle the question whether a thing infringes a claim of the patent

¹ Seymour v, Osborn, II Wall, 516. See also Gould v. Rees, 15 Wall. 187; Gill v. Wells, 22 Wall. I.

² Babcock v. Judd, I Fed. Rep. 408,

one important question is whether or not it comes within the terms of the claim, (understanding the words "or its equivalent" to be inserted after the mention of each part,) fairly and candidly read: if it does not, then of course there is no question of infringement. If the thing does come within the terms of a claim the next question to be considered is the construction to be given to the claim in view of the prior art; that is, to determine whether the invention is broadly new so that a broad construction must be given to the claim or whether the invention is one of small degree as compared with the prior art. And in considering this question the closer the prior art approaches the patent the narrower the construction of the claim must be. Of course, if the prior art fully anticipates the claim there is an end to the whole question, for the claim is then without validity. If the prior art is such that the invention is found to be broadly new then the claim will have a construction broad enough to cover all manner of equivalents; but if the invention be narrowed down by the prior art, then the claim must receive a correspondingly narrow construction and only those things will be found to infringe which are either identical with what is described and claimed in the patent or were at the date of the patent known substitutes.

It is also to be understood that courts will sustain patents where they reasonably can; that they will construe claims in such a manner as to give them life and vitality, if this can be done without doing violence to language or to reason; and that mere technicalities will never avail to destroy the force of a claim or to permit him who really uses the substance of an invention of another, to do so with impunity.

The question of substantial identity is to be determined by ascertaining whether the two things compared attain the same result by substantially the same means operating in substantially the same manner: results are to be compared and the means used and the manner of their operation are to be compared; and if all are found to be the same in substance the things compared must be found to be substantially identical.



CHAPTER XVIII.

INFRINGEMENT SUITS.

SUITS for infringement may be either on the case at law or by bill of complaint in equity. Such suits are now almost always brought to the equity side of the court for the reason that the complainant can in an equity suit recover defendant's profits as well as damages while in a suit at law damages only are recoverable, and for the reason that complainant is not compelled to go into the question of damages until the court has settled the question of the validity of the patent and the question of infringement; it is exceedingly inconvenient to complicate the trial of a case, as is necessary in actions at law, with the question of damages.

Jurisdiction of Patent Suits. The statute enacts: "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."

All suits for infringement, all suits in the nature of interferences, and all suits to vacate or repeal patents, mus

¹Rev. Stat. Title 13, Chap. 7.

be brought in the United States courts, as must ordinarily all suits intended to pass upon the validity of patents, though state courts have authority to enforce contracts relating to patents, such as contracts to assign or covenants contained in a license; and it would seem that, where a state court has parties properly before it, and a patent comes in question collaterally, its validity may be inquired into.¹

A question arising under a contract relating to a patent does not ordinarily give a federal court jurisdiction. It is very clear that a state court has jurisdiction of questions of contract relating to patents unless the question is one which concerns the scope of the patent or its validity, and even when the question at issue does concern the scope or validity of the patent a state court may try and decide such questions if they are simply collateral to the main issue in the case although it has been held that questions of title to a patent are questions "which arise under the patent laws and give a United States court jurisdiction.²

In a suit brought to a federal court the complainant alleged that he had assigned his patent under an agreement of the assignee to render certain accounts and pay certain royalties, that his accounts had not been properly rendered nor the royalties properly paid: he sought relief in both these particulars and also sought for a construction of the question whether certain articles made by him from whom the royalty was due, came within the scope of the patent: the court held that the questions at

¹ Meserole v. Union Paper Collar Co., 3 Fisher's Pat. Cases, 483.

²Campbell v. James, 2 Fed. Rep. 338.

issue were not such as gives a federal court jurisdiction. The court in this case went over the ground of jurisdiction so thoroughly that it is transferred bodily to these pages. The court said: "Looking carefully into the second section of the act, which sets forth the causes that are removable from the state to the federal courts, it is clear that the removal cannot be justified unless the matter in dispute between the parties has arisen 'under the laws of the United States.' The character of the controversy must be determined by the record. Turning to that, I find that the suit was commenced by filing a bill in the Court of Chancery of New Jersey for an account of business transactions growing out of a written contract between the parties. This contract embraced the transfer or assignment of certain patents from the complainant to the defendants. Cahoone and Albright, and their agreement to pay a specified royalty from the profits of their business on all goods manufactured and sold which embraced the patented improvements. The gravamen of the action was the failure of the defendants to perform their personal covenants, and was not to vindicate any rights which had been vested in the complainant under a law of the United States. All rights that men have in patents are secured to them by federal laws, and all controversies which directly involve the validity of patents, or which are for the recovery of damages and profits for their infringements, are exclusively cognizable in the federal This is elementary knowledge. But when a patentee sells out all his interest in the patent, how can any right remain which is secured to him by an act of Congress? Some confusion on this subject has doubtless arisen from the fact that the courts of the United States

have often exercised jurisdiction over contracts for license to use patented inventions, granting relief to licensers where the licensees have failed to perform their covenants; but it will be found in all such cases that not only has the ownership of the patent been retained by the licenser, but the right of the licensee to use the patent has been conditioned on his performing certain acts or paying certain royalties. Brooks & Morris v. Stolley (3 McLean, 523) affords a good illustration of a case of this kind. The complainants were the assignees of the Woodworth planing patent for Hamilton county, State of Ohio, and as such licensed the defendants to run a machine in that county under a sealed contract, in which the licensee's right to use the machine was expressly conditioned on his paying one dollar and twentyfive cents for every thousand feet of boards planed, to be paid on Monday of each week; and further, that he should render an account, if required, under oath, and also keep books to which the complainants should have access, and in which all boards planed should be entered. After complying with the contract for some time by paying according to its terms, the licensee refused to make any further payments, although he continued to use the machine. The bill was filed for an injunction restraining its further use. Objection was raised to the jurisdiction of the court, but Mr. Justice McLean overruled the objection on the ground that the suit was not to enforce the contract but to secure to the licenser the rights in the patent which he had reserved on the failure of the licensee to perform his covenants: that his only authority for using the machine grew out of the contract, and that the court could not allow him to repudiate the contract and still use the machine.

'If [he added] the object of the bill were merely to enforce a specific execution of the contract, the Circuit Court of the United States could exercise no jurisdiction in the case.'

In Hartell v. Tilghman (99 U. S. 555) an intimation is thrown out that Mr. Justice McLean went too far in this case in maintaining the jurisdiction of the courts of the United States; but we may safely concede all that is claimed and then find ample ground for denying the jurisdiction in the present case.

There is no pretence in the present suit that the complainant reserved any interest, absolute or contingent, in the patents which he assigned. He only retained certain royalties in the profits, and a bill is filed to have an account taken of them.

The case cannot be distinguished in principle from those of Goodyear v. Day (1 Blatchf. 565) and Goodyear & Judson v. The Union Rubber Company, (4 Blatchf. The last named case was very similar to the one under consideration in all its facts and aspects, except that the defendants were licensees and not grantees. The owner of a patent granted a license, with covenants that the licensee should pay certain tariffs and keep correct accounts and permit his books to be examined; but there was no express provision that, if the covenants were broken, the rights granted should revert to the licenser. A bill was filed by the licenser against the licensee, praying for a decree that the covenants should be performed, and for a injunction to prevent the use of the patent under the license until the covenants should be performed. The citizenship of the parties not giving the court jurisdiction, the question was raised and argued whether the action could be maintained.

It was held that the subject-matter did not give a federal court jurisdiction; that the suit was not one to prevent the violation of any right of the licenser secured by any laws of the United States, but to prevent the violation of the rights secured by the covenants of the license, and that the court had no jurisdiction of the case. The reasoning of the learned judge seems quite conclusive.

'If, [says he] in the use of the thing granted, the licensee does not perform his covenants, although there is by such non-performance a violation of the rights of the patentee, such violation is not a violation of the rights of the patentee as secured by a law of the United States, but a violation of his rights as secured by the covenants. He has, by the license or grant, parted with a portion of that which was secured to him by the laws of the United States, and has, in lieu thereof, taken a right secured by a covenant. If a patentee parts with the whole right secured by his patent, either for cash or upon the purchaser's entering into a covenant to pay him a certain sum of money, or to do certain other things, the patentee has, after such sale, no right vested in him secured by any act of Congress. A suit to enforce the covenant would not be a case arising under a law of the United States.

The use of the whole thing sold cannot be a violation of any rights of the patentee secured by the laws of the United States so long as the deed of sale remains in full force, for he has parted with all such rights; and, when a portion of the right is parted with, the rule must be the same as it respects such portion.'

See also Blatchford v. Sprague, (1 Cliff. 289) and Merserole v. The Union Paper Collar Company, (6 Blatchf. 356,) in which the ground is distinctly taken that the subject-matter of contracts made in relation to patent rights does not give the courts of the United States jurisdiction in suits to enforce them. But without dwelling upon

these cases, determined in the subordinate courts of the United States, the Supreme Court, in Wilson v. Sanford, (10 How. 99) put the question at rest by refusing to entertain jurisdiction of a suit which was brought by the grantor of a license to avoid a license on the ground that the grantee had not complied with the terms of the contract. As neither the citizenship of the parties nor the amount involved in the litigation gave the court jurisdiction, the only question was whether it was 'a case arising under any law of the United States granting or confirming to inventors the exclusive right to their inventions or discoveries.' The court, speaking by Chief Justice Taney, said it was not such a case; that the dispute did not arise under act of Congress, nor did the decision depend upon the construction of any law in relation to patents.

'It arises [he continues] out of the contract stated in the bill, and there is no act of Congress providing for or regulating contracts of this kind. The rights of the parties depend altogether upon common law and equity principles.'

The ground for the removal alleged in the petition to the chancellor was that—

'The suit arose under the patent laws of the United States, and that the substantial controversy was one depending upon the construction of said laws'

This view was doubtless taken because the pleadings and the evidence tend to reveal that the dispute between the parties arose about the manufacture and sale of certain saddle-trees and gig-saddles, the complainant insisting that they embraced the inventions and improvements of the letters-patent which he had assigned to the defendants, and they in their turn maintaining that they

were not subject to the royalties and percentages of the agreement because they were constructed under other letters-patent in which the complainant never had an interest. Questions of infringement and the construction of the claims of patents were thus necessarily involved, and it was assumed that they could only be adjudicated by the courts of the United States. But the decision of the courts do not justify any such assumption. Rich v. Atwater, (16 Conn. 409,) where a bill was filed for a discovery, account, and an injunction, and where the question of the validity of the Woodworth patent was raised by the pleadings, the Supreme Court of Errors of Connecticut held that though the validity of a patent, when directly involved, was within the exclusive jurisdiction of the federal courts, yet when it came in question collaterally it was the proper subject of inquiry and adjudication in the state courts.

In Middlebrook v. Brodbent, (47 N. Y. 443,) the Court of Appeals of New York, after a very full argument, decided that a state court had jurisdiction of an action founded upon a contract although the validity of a patent was involved therein. And in Merserole v. The Paper Collar Company, supra, Judge Blatchford held that a state court had jurisdiction to decree a license under a patent to be void, and if, in the investigation, that court was obliged to inquire collaterally into the novelty and validity of the patent as a consideration for the license, such inquiry would not deprive the state court of jurisdiction or confer it on a court of the United States.

Being, then, clearly of the opinion that the removal here was without the authority of law, I remand the cause to the state court."

¹ Teas v. Albright et al, 22 O. G. 2069.

Parties to an Infringement Suit. Suits for infringement can only be brought in the name of the owner or owners of a patent-right for the district or territory where the infringement is committed. Patentees, assignees of the whole patent, or grantees of particular districts, may bring suits in their own names but licensees cannot. The licenser is the proper person to bring suit for an injury in the nature of infringement to the right of the licensee.

While a licensee cannot bring a suit for infringement in his own name against infringers generally, he can maintain a suit in equity substantially in the nature of an infringement suit against the licenser for any injury in the nature of infringement of the licensee's right in the patent by the licenser. A court has said that: person to whom a part of a patent has been assigned may maintain the suit alone for the protection of his own interests.1 The right of a partial owner will not be disputed subject, nevertheless, to the limitation that in such a case he must make his co-partners in the ownership defendants in the suit."2 A married woman may bring suit in equity in a United States court for infringement of her patent without joining her husband, in states the laws of which permit a married women to hold property of all sorts the same as an unmarried women.³ A patent owner who has assigned his patent to others in trust need not be joined as co-complainant in a suit for infringement of the patent.4

¹Kerr Inj. 404.

² Spring v. Domestic Sewing Machine Co., 13 Fed. Rep. 446.

⁸ Lorillard v. Standard Oil So., 2 Fed. Rep. 902.

⁴ Wescott v. Wayne Agr'l Works, 11 Fed. Rep. 298.

"The right to recover for infringement of a patent, like other choses in action, is assignable in equity and the real owner of the right is entitled to maintain a suit upon it in equity in his own name." This language refers to the profits and damages recoverable on account of infringement.

A tolerably full specification of parties who may be sued as infringers was made in the first part of the chapter upon "Infringement," to which there is but little to be added.

A city is liable in its corporate capacity for infringing acts committed by its officers; ² and a corporate board, forming a part of a city government, like the Board of Education, or the Fire Department of the city of New York, may properly be made a defendant in an infringement suit. ³ A postmaster is not an "officer of the revenue," within the meaning of Sec. 989, of the Rev. Statutes, and is not entitled to receive the certificate provided for in that section, making the government responsible for the payment of the recovery for infringement of patent had against the postmaster. ⁴ Members of a partnership can be sued individually as infringers. ⁵ The secretary of a voluntary association, in the nature of a co-partnership, who is not a shareholder in the associa-

¹ Shaw v. Colwell Lead Co., 11 Fed. Rep. 711.

² Munson v. Mayor of New York, 3 Fed. Rep. 338.

⁸Brickell v. New York, 7 Fed. Rep. 479; Allen v. New York, 7 Fed. Rep. 483.

⁴ Campbell v. James, 3 Fed. Rep. 513.

⁵ Tyler v. Galloway 13 Fed. Rep. 477.

tion, is not individually liable for an infringement committed by the partnership.¹

Perpetual Injunctions. When in the course of an equity suit, the court, on final hearing upon pleadings and proofs, finds that the patent is valid, and that it has been infringed, the court grants, as a matter of course, a perpetual injunction against the infringer, enjoining and restraining him from any further infringement, and, if the party thus enjoined does further infringe in defiance of such injunction, he can be committed to jail for contempt of court or fined, or both. The same kind of injunction will be issued by the equity side of a court when a like finding has been made in a suit at law.

Provisional Injunctions. There is another kind of injunction, other than the perpetual, which is often applied for by the plaintiff or complainant in a patent suit, and which may be granted or withheld, as the judge in his sound discretion may decide. These injunctions are asked for at the commencement or during the progress of a suit, with the intent that the defendant may be restrained from infringing until the final determination of the case and the plaintiff's right to a perpetual injunction is determined.

Strictly speaking, there are no such things as precedents in the practice of granting or withholding provisional injunctions; ² for every petition for one is addressed to the sound discretion of the judge, as applied to the

¹ Ibid.

² Earth Closet Co. v. Fenner, 5 Fisher's Pat. Cases, 15.

facts of the case, yet there are some recognized and general rules with regard thereto. Courts will not, as a rule, grant a provisional injunction, unless—

First,—There has been some previous adjudication on (and sustaining) the patent, where the same points of validity and infringement were in issue, or unless—

Second,—There has been a long and undisputed enjoyment of the patent privilege under the patent, and the plaintiff is able to make it appear that the defendant's device and his own are substantially identical. Where there has been no previous adjudication on the patent, and the defendant is able to raise a doubt in the mind of the judge as to the validity of the patent, or as to whether his device is substantially identical with the plaintiff's (questions of fact, for the court can at one time as well as another, determine questions of law) a provisional injunction will be refused.

When a provisional injunction would operate unjustly upon the defendant, or when it would cause him irreparable injury, while the plaintiff could have ample satisfaction in money damages, the provisional injunction will be refused.¹

In a case where such reasons were urged against the grant of a provisional injunction, the court said: "We decline to grant this motion therefore; first, because upon the character of the evidence furnished, we are not prepared to determine the extent or validity of complain-

¹Earth Closet Co. v. Fenner, 5 Fish. Pat. Cases, 15; Thayer v. Wales, 5 Fish. Pat. Cases, 130; Union Paper Bag Co. v. Binney, 5 Fish. Pat. Cases, 166; Fales v. Wentworth, 5 Fish. Pat. Cases, 302; Miller v. Andoscoggin Pulp Co., 5 Fish. Pat. Cases, 340; Cook v. Ernest, 5 Fish. Pat. Cases, 396; Movery v. Grand Street & North River Railroad Co., 5 Fish. Pat. Cases, 586.

ant's patent or their infringement; second, because there is, in our judgment, no case presented of such threatened immediate and irreparable damages as would warrant us in depriving the defendant before final hearing of the use of the cars it has built; and third, because, in the judgment of the court, whatever damages the complainants may suffer between the filing of this bill and a final decree can easily be ascertained upon reference, for which damages, when determined, the defendant company is abundantly responsible."¹

Where the plaintiffs are in the habit of granting licenses, under their patent, the court will sometimes refuse a provisional injunction, unless the defendants refuse to take and pay for a license.²

As a lesser hardship upon the defendants, and especially when a provisional injunction would work great harm to the defendants, or when the court is not clear that an injunction should issue, the court will sometimes order that the defendants keep an account of profits, and give bond for payment of damages, pending the continuance of the suit.

"Whether restraining orders come out in patent cases or any other cases, they are framed according to the circumstances of each case, to wit: in one case there may be such circumstances as require an injunction *simpliciter*, but ordinarily a bond and order for accounting suffices and sometimes simply an order for accounting." ³

Defenses. The statute enacts: "Sec. 4920. In any

¹Pullman v. B. & O. Railroad Co., 5 Fed. Rep. 72.

²Baldwin v. Bernard, 5 Fish. Pat. Cases, 442.

^{*}Kirby Bung Mfg Co. v. White, I Fed. Rep. 604.

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 defenses may be pleaded in any suit in

equity for relief against an alleged infringement; and proofs of the same may be given upon like notice in the answer of the defendant, and with the like effect." ¹

The defense permitted by the second clause is that of "prior invention," that of the third clause "prior patent or publication," that of the fourth clause "prior use," and that of the fifth clause "public use for more than two years prior to application," and "abandonment,"—all of which topics have been discussed in preceding chapters.

There are other defenses that can be set up. The defendant may charge that the specification is uncertain and ambiguous in the description or the claim or both, that a combination claimed is a mere aggregation, that he has a license, that the plaintiff has unreasonably delayed to file a disclaimer, that there is a total lack of utility in the alleged invention, that the patent, if a reissue, is void because not for the same invention as the original, and any other special defense.

It would seem, on general principles, proper for a defendant, under the general issue—in an action at law—or under a general denial of the validity of the patent and of infringement thereof—in a suit in equity—to make any defense not mentioned in the statute last quoted (barring of course matters proper for abatement or demurrer)² subject to the exception that any defense consistent with the allegations of the declaration or bill of complaint, should be set up specially in defendant's plea

¹ Rev. Stat. Title LX. Chap. 1.

²Blanchard v. Puttman, 3 Fisher's Pat. Cases, 186; 8th Wall. 420; 2d Bond, 84; Evans v. Hettick, 3 Wash. C. C. 408; 7th Wheaton, 453; Gray v. James, Peters C. C. 394.

or answer; but the courts are not in harmony in this matter and the safer mode of pleading is for defendant to specially mention all his defenses in his answer or plea.

The above statute does not compel a defendant at law to plead the general issue and give notice, for he may plead specially. Evidence as to the state of the art in question, prior to the patentee's invention, may be taken without notice; but such evidence can only be considered in construing the patent, that is, in determining how broad a construction can be given to the claim. The statute does not call for the names of witnesses who are to testify but only for the names, &c., of those persons who had the prior knowledge.³

Questions of Law and Fact. As between a judge and a jury, it is the province of the judge to pass on questions of law, and that of the jury to pass on questions of fact, although in equity cases (which comprise the great majority of all patent cases) it is customary for the judge to pass on questions of fact as well as of law.

Without attempting anything fine and subtle in distinction, the following is a classification in a general way of the questions which usually arise in patent causes.

Questions of Law. It is for the court to say what

¹Evans v. Eaton, 3d Wheaton, 454.

² Brown v. Piper, 91 U. S. 37.

⁸ Wilton vRailroad Co., I Wall. Jr. 195.

the patentee claims and what he does not claim, and it follows that it is for the court to say whether the claim is so drawn that there can be gathered from it what is meant to be claimed; or, in other words, to determine whether there is ambiguity in the claim. It is for the court to say whether or not two patents—originals or reissues—claim the same thing upon their faces, and it is for the court to say whether the actual invention is one kind of patentable subject-matter, as a process, while another kind, as a machine, is claimed; and, also, whether the invention has statutory utility,—that is, any utility, in contradistinction from being frivolous, or insignificant, or pernicious in its purpose.

Questions of Fact. Abandonment is a question of fact.⁵ It is a question for the jury, whether two things are substantially identical, and this question may arise when it is attempted to show that the patented thing is anticipated by some prior thing, or in determining whether one thing infringes a certain patent.⁶ It is for the jury to say whether a specification is in such full, clear, and exact terms as to enable a properly skilled person to put the invention in practice, working by the specification,—that is, to determine whether there is ambiguity in the description.⁷ It is for the jury to say, under the issue

¹ Washburn v. Gould, 3 Story, 122.

²Davis v. Palmer, 2 Brockway, 388; Emerson v. Högg, 2 Blatchford, 6.

⁸Kay v. Marshall, 2 Webster's Pat. Cases, 34.

⁴Langdon v. Degroot, I Paine's C. C. Reports, 203; Lowell v. Lewis, I Mason, 182.

⁵ Whittemore v. Cutter, I Gallatin, 482.

⁶ Smith v. Higgins, I Fisher's Pat. Cases, 537.

⁷ Wood v. Underhill, 5 Howard, 4.

of "prior patent or publication," whether the patent or publication is a full anticipation. It is a question of fact, to determine the meaning of technical terms or words of art in a specification; also whether one device has superior utility over another.

Novelty is a question of fact as it is also to determine whether a concealment or a redundancy in a specification is with fraudulent intent; ² also whether an original and a reissued patent are for the same invention when facts not disclosed by the patents affect that question.³

Whether an alleged inventor ever conceived, and when he conceived an invention, whether he ever reduced it to practice, and when, whether the alleged invention was ever in public use, or whether in public use for more than two years prior to application, and whether an invention was sole or joint,—are all questions of fact.

Limitation of Infringement Suits in Equity. Formerly the weight of authority, so far as the United States Circuit Courts were concerned, was overwhelmingly in favor of the rule that an equity suit will lie to recover damages and profits after the expiration of a patent, the basis of the rule usually being that an infringer is to be considered as a trustee of the profits which he has received through his infringement of the patent; ¹ but this

¹ Washburn v. Gould, 3 Story, 122.

² Gray v. James, Peters' C. C. Reports, 476.

³ Carver v. Braintree Mfg Co., 2 Story, 441.

⁴Nevins v, Johnson, 3 Blatchford, 80; Vaughan v. E. Tenn. Va. & Ga. R. R. Co., 9 Legal News, 255; Vaughan v. South & North Alabama R. R. Co., Middle Dist. of Ala.; Vaughan v. Wallace, Northern Dist. of Georgia; Sayles v. Dubuque & Sioux City R. R. Co., 5 Dillon, 562; Sayles v. South Carolina R. R. Co., Southern Dist. So. Carolina; Sayles v. Lake Shore & Michigan Southern R.

matter came to be argued before the Supreme Court which held otherwise and said:—

"Our conclusion is that a bill in equity for a naked account of profits and damages against an infringer of a patent cannot be sustained; that such relief ordinarily is incidental to some other equity, the right to enforce which, secures to the patentee his standing in court; that the most general ground for equitable interposition is to insure to the patentee the enjoyment of his specific right by injunction against the continuance of the infringement; but that 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 particular circumstances as furnishing a clear and satisfactory ground of exception from the general rule."1

Limitation of Infringement Suits at Law.— The statute of limitations contained in the 55th section of the Act of July 8, 1870, and preserved by section

R. Co., Northern Dist. of Ill.; Stevens v. Kansas Pacific R. R. Co., 5 Dillon, 486; Gordon v. Anthony, 16 Blatchford, 234; Sayles v. Mobile & Spring Hill R. R. Co., South. Dist. of Ala.; Root v. Denver & Rio Grande R. R. Co., Dist. of Col.

¹Root v. L. S. & M. S. R. R. Co., 21 O. G. 1112.

5599 of the Revised Statutes, means that actions for infringement must be brought within the original term of the patent, or within six years thereafter: or—in case of an extended term and infringement occurring thereon within said extended term or within six years thereafter.¹

Costs.² It will be remembered, as mentioned in the chapter on Disclaimers, that where a claim of the patent in suit is put in issue and is found invalid for lack of novelty—no disclaimer thereto having been made before the suit was brought—no costs are to be allowed although the party suing prevail upon other claims in the patent;³ and this loss of costs applies to the whole case even though the complainant files a suitable disclaimer during the progress of the suit; "the provision is not that no cost shall be recovered until after disclaimer but it is as extensive as the whole existence of the case and prohibits the recovery of any costs at all in the case"⁴: this provision has considerable importance for when an equity suit goes to an accounting in damages the costs are often considerable.

Although it is the general rule in equity to allow costs to the prevailing party it is not a rule without exceptions, and whenever the allowance of costs would be inequit-

¹ Sayles v. L. C. R. R. Co., 9 Fed. Rep. 512; Same v. L. S. & M. S. R. R. Co., 9 Fed. Rep. 515; Same v. Dubuque & Sioux City R. R. Co., 9 Fed. Rep. 516.

² The fees allowed to Attorneys, Solicitors, Clerks of Courts, Marshals, Commissioners, &c., may be found in Chapter 16, Title 13, Revised Statutes.

⁸ Section 4922, Chapter 1, Title LX. Rev. Stat.; Seymour v. Mc-Cormick, 19 How. 96.

⁴Burdett v. Estey, 3 Fed. Rep. 566.

able the court will exercise its sound discretion as to granting, or refusing, or dividing, or denying them.¹

"Costs, generally, in proceedings in equity, do not follow as matter of right as in proceedings at law, but are subject to the discretion of the court and are to be awarded as a part of the decree or they cannot be recovered although they may be and generally are, taxed after the decree. The determination as to costs must ordinarily be made upon the hearing in chief. * . The costs cannot be taxed fully and no execution can properly issue until after the final decree. * . They are awarded as issued unless there are special circumstances to govern them"²

"The statute does not mean that claims not in issue should be contested for the mere purpose of settling the costs," and a case will not be reviewed on appeal by the Supreme Court merely to settle the question of costs.

The fees of a master who attends to an accounting in damages are to be borne in the first instance by complainant; ⁵ and this rule applies to all costs which accrue to the court and its officers.

In a case where the complainant brought a suit upon two patents, prevailed upon one and was defeated as to the other, the court said: "As the complainant succeeds as to one patent and is defeated as to the other, I sup-

¹Hovey v. Stevens, 2 Robb. 567; Hathaway v. Roach, 2 W. & M. 63; Smith v. Woodruff, 4 O. G. 635; Coburn v. Schroeder, 20 O. G. 1085.

² Coburn v. Schroeder, 8 Fed. Rep. 521.

⁸ American Bell Telephone Co. v. Spencer, 8 Fed. Rep. 509.

⁴ Union Paper Bag Mach. Co., v. Nixon, 21 O. G. 1275.

⁵ Macdonald v. Shepard, 10 Fed. Rep. 919.

pose it will be fair that neither party shall recover costs." 1

In an another case where the complainant insisted on an accounting after the defendants offered to pay the net profits realized by defendants through their infringement the court said: "The conclusion is justified by the record that the defendants were willing at the outset, and through their attorney offered to pay to the complainant the amount of the net profits realized by them, but the plaintiff was desirous of mulcting them in damages under circumstances not calling for such a course. Costs have been unnecessarily accumulated and I think it just that the parties be required to pay their own costs, and each party must pay one-half of the master's fee."

The cost of models generally does not seem to be taxable even though made by order of court; but models of the invention described in the complainant's patent and procured by the defendant in good faith may be included in the taxation of costs.

It seems that in computing the mileage of a witness the distance is to be computed by an air line; ⁵ it has been held that mileage may be allowed even for travel of a witness outside of the district; ⁶ but in a later case it was held that witnesses in civil cases who live out of the district and more than one hundred miles from the place of holding court, cannot be lawfully summoned and that their attendance is necessarily voluntary even if a sub-

¹ Elfelt v. Steinhart, 11 Fed. Rep. 896.

² Ford v. Kurtz, 12 Fed. Rep. 789.

³ Parker v. Bigler, I Fisher's Pat. Cases, 285.

⁴ Woodruff v. Barney, 2 Fisher's Pat. Cases, 244.

⁵ Parker v. Bigler, I Fisher's Pat. Cases, 285.

⁶ Woodruff v. Barney, 2 Fisher's Pat. Cases, 244.

pæna is in fact served: and the principle of this decision goes to the extent that the fees of a witness living within the district, who voluntarily attends without a subpœna, cannot be taxed; but in the case last referred to where the court was that for the district of California, and the parties for their mutual convenience entered into an agreement to take testimony for both parties residing in Vermont and New Hamshire before a commissioner in the city of New York without the formality of a commission, wherein many witnesses voluntarily attended and testified, the court allowed the prevailing party reasonable compensation for traveling expenses of his witnesses and adopted the amount fixed by the Act of 1853 as the measurement of the compensation; and in this same case (referring to 1st Blatchford, 17) the court held that costs cannot be allowed for printing testimony; however, at the present writing Circuit Courts generally make rules requiring such printing and allow costs therefor.

In a case before the Supreme Court where the decree of the lower court was confirmed as to injunction and reversed as to the accounting, the costs in the Supreme Court were taxed against the appellee.²

In a case where the master made a finding of substantial profits and damages in complainant's favor, but the court refused to confirm the master's finding and held that only nominal damages should be awarded, costs were allowed to the complainant except as to the reference before the master, and the costs accruing on the reference were allowed to defendant.³

¹ Spaulding v. Tucker, 4 Fisher's Pat. Cases, 633.

²McLean v. Fleming, 13 O. G. 913.

³ Ingersoll v. Musgrove, 13 O. G. 966; see also Fisk v. The W. B. & C. Mfg Co., 19 O. G. 545.

Where complainant commences his case with a non-joinder of parties, only those costs accruing after such non-joinder is cured, will be allowed.¹

The right to tax the docket fee, where the case is one of the number embraced by stipulation in a single hearing, the decree in that one case to stand for the decree in all, has been judicially said to be clear; also that if, after the issue of an interlocutory decree involving a decision upon the merits, the case is finally dismissed by final decree upon motion of complainants, the docket-fee is to be taxed; but it is also held that the docket-fee is not to be allowed unless the case goes to final hearing.

When costs are equitably taxed and consented to by both parties, neither party can be allowed to withdraw its consent upon the coming in of the master's report.*



¹ Frese v. Bachof, 13 O. G. 635.

² Goodyear Dental Vulcanite Co. v. Osgood, 13 O. G. 325.

³ Coy v. Perkins, 13 Fed. Rep. 111.

⁴ Holbrook v. Small, 17 O. G. 55.

CHAPTER XIX.

DAMAGES AND PROFITS.

THE statute enacts: "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."

Section 4921. The several courts vested with jurisdiction of cases arising under the patent laws shall have power to grant injunction according to the course and principles of courts of equity, to prevent the violation of any right secured by patent, on such terms as the court may deem reasonable; and upon a decree being rendered in any such case for an infringement, the complainant shall be entitled to recover, in addition to the profits to be accounted for by the defendant, the damages the complainant has sustained thereby; and the court shall assess the same or cause the same to be assessed under its direction. And the court shall have the same power to in-

crease 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." ¹

On comparing these two sections of the statute it is to be seen that the money recovery in an equity suit may be something different from that in a suit at law. In the case of a suit at law damages only are recoverable while in an equity suit the complainant may recover defendant's profits as well as any damages in excess of such profits. Courts have sometimes spoken of damages and profits as if they were convertible terms, but such is not the case; courts have now come to distinguish clearly between the two.²

The whole subject is a difficult and abstruse one; each case stands to a great extent, upon its own circumstances although there are general rules of substantially universal application.

Defendant's Profits. The law intends to give to him whose patent is infringed, the profits actually made by the infringer, through his infringement, without any addition thereto in the shape of punishment; and means that the patentee shall prove what these profits are, giving him to that end a power which is substantially inquisitorial over the infringer—after a court has pronounced him such—and over his papers and books of account.

In an equity suit, after the court has decided that the defendant has infringed the complainant's patent, the

¹ Rev. Stat. Title LX, Chap. 1.

² Goodyear D. Vulcanite Co. v. Van Antwerpt, 9 O. G. 497.

court makes an interlocutory decree stating that the patent is infringed and referring the case to a master in chancery to ascertain and report to the court the gains and profits which the defendant has made through his infringement as well as the damages which the complainant has sustained thereby. The mode of procedure—substantially alike in all courts—which Judge Lowell of the first district has approved, is as follows: "The master appoints a day for proceeding with the reference and gives notice by mail or otherwise to the parties or their We think the solicitor should be notified whether the party is or not; though probably under rule 75 notice to the party is a good notice. If the defendant does not appear the master proceeds ex parte and makes out the profits and damages, if he can, from the evidence produced by the plaintiff. If it appears that the account of profits is necessary to a just decision of the cost and is desired by the plaintiff he makes an order that the defendant furnish an account by a certain day and adjourns the hearing to that day.

The defendant should be served personally with a notice of this adjournment and of the order to produce his account if it is intended to move for an attachment in case he fails to appear. The service may be made by any disinterested person and need not be by the marshal. If the defendant then fails to appear and account he will be in contempt." ¹

When the master is ready he makes a report called a "draft report" which is submitted to the counsel of both parties for their objections and suggestions after which

¹Kerosene L. Heater Co. v. Fisher, 1 Fed. Rep. 91.

the master prepares the report in form and files it in court: then the parties may take exceptions thereto and upon the hearing for a confirmation of the report the exceptions are argued before the court which then confirms or otherwise acts upon the report in its sound discretion.

The following references to adjudicated cases will give a general idea of the principles involved in arriving at defendant's profits.

In a case which came before the Supreme Court, where the patented invention was a process for annealing chilled cast iron car wheels, the master awarded to the complainant substantially the whole profits which defendant had made upon the manufacture and sale of its wheels; the court refused its assent to such a finding and said: "The question to be determined in this case is, what advantage did defendant derive from using complainant's invention over what he had in using other processes then open to the public and adequate to enable him to obtain as clearly beneficial result. The fruits of that advantage are his profits. * . They are all the benefits he derived from the existence of the * invention. That advantage is the measure of the profits. * The patent is for an entire process made up of several constituents. The patentee does not claim to have been the inventor of the constituents. The exclusive use of them singly is not secured to him. What is secured is their use when arranged in the process. Unless one of them is employed in making up the process, and as an element of it. the patentee cannot prevent others from using it. well might the patentee of a machine, every part of which is an old and well known device, appropriate the

exclusive use of each device though employed singly and not combined with the others as a machine." ¹

In another case where the patent before the Supreme Court was for an apparatus for repairing railroad rails, the court authorized the finding of profits on the basis of the savings made in using the patented apparatus compared with the cost of using the common apparatus.²

The following excerpt from another case gives the facts and the court's action thereon; "The decree directed the master to report the profits received by the defendant from the manufacture, use, or sale of the patented improvement. It is those profits alone which the plaintiff can recover. He cannot recover anything more as profits. He cannot recover the profits of the manufacture, sale or use of anything but the patented improvement. He cannot recover the profits of the manufacture, use, or sale of anything found in the pavement or of any part of the pavement except the patented improvement. Whatever distinctive profits belongs to the use of 'the arrangement of tar paper or its equivalent between adjoining blocks of concrete, substantially as and for the purpose set forth' in the patent, is the profit to be recovered. If he fails to show it, he can recover nothing as profits. The plaintiff has proved no license fee as showing the value of the patented improvement. No evidence on the subject was given before the master. The reference proceeded on principle that all the value as usefulness there was in the pavement laid by the defendant was due to the permanent or temporary interpo-

¹Mowry v. Whitney, 14 Wallace, 620.

^{*}Railroad Co. v. Turrill, 12 O. G. 709.

sition in the joint during the process of laying of something external to make a separation into blocks or sections. This was clearly a mistake. The plaintiff's invention contributed but a small part of the usefulness of the pavement, As a concrete pavement, with all the advantages due to the smoothness and durability of such pavement, it was a valuable pavement, without being in blocks or sections made by the use of the patented improvement. The advantage of being in blocks made by the use of the patented improvement was an advantage which does not give to the plaintiff the right to recover the profits of laying the entire pavement. These principles are well settled. (Mowry v. Whitney, 14 Wallace, 620, 649; Philip v. Knock, 17 Wallace, 460; Gould's Mfg Co. v. Cowing, 12 Blatch. C. C. R. 243; Gould's Mfg Co. v. Cowing, 12 Of. Gaz. 942; Black v. Munson, before Mr. Justice Hunt in the Circuit Court of the United States for the Northern District of New York, June. 1877: Buerk v. Imhaueser, 10 Of. Gaz. 907; Blake v. Robertson, 4 Otto, 728; Garretson v. Clark, 14 Of. Gaz. 285.) Exceptions 19, 20 and 22 are allowed so far as they claim that the master should not have reported any sum as profits under the interlocutory decree."1

In another case "complainant's patent was for the combination of a swing truck with a locomotive;" the judge held that "in estimating profits the comparison of advantages should be made between complainant's invention and an engine having a rigid truck and forward driving wheels without flanges" which last structure had never been used by defendant but was open to the public to use: thus compared the court then found no advantage in the patented structure and awarded no profits; and as to

¹ Schillinger v. Gunther, 14 O. G. 713.

the character of the evidence by which savings were to be determined, the court said: "Some witnesses it is true have given estimates of savings made by the use of a swing truck. But an examination of their testimony convinces me that their estimates are mere guesses without any reliable basis."

In another case the court said: "It is now well settled that if the complainant in a suit for an injunction and profits fails to show that the use of his invention in connection with other machinery of which his invention is an improvement, has produced a definite part of the whole profits his recovery must be nominal only." In this same case the master gave complainant "the entire profits of the business on the ground that the defendant failed to separate the profits traceable to the complainants from the general profits"; but the court held that the complainant must offer proof properly apportioning the profits due to the use of the invention as distinguished from the other profits, or have only a nominal award.

It will be seen from these cases that in ascertaining defendant's profits the breadth of the claim infringed is not necessarily a matter of great weight, the real question to be determined in that regard being what the patented invention really is as compared with the prior art; it is also to be seen that defendant's profits are to be computed not upon the whole structure made and sold by defendants—unless the whole structure is new and is so patented to complainant—but only upon that part of the structure which is new; also that complainant must fur-

¹Locomotive S. T. Co. v. P. K. Co., 2 Fed. Rep. 677.

²Kirby v. Armstrong, 5 Fed. Rep. 803.

nish evidence to properly apportion the profits so as to separate those which are due to the invention from those which are due to the remainder of the structure, failing which complainant will have a nominal award only; and that this evidence must not be in the nature of conjecture or estimate but must have a solid basis of fact. Furthermore, the profit to be awarded is not the gross profit but the net profit, making proper allowances for such matters as rent, clerk hire, bad debts, royalties paid under other patents, improvements made by defendant, and the other legitimate expenses incidental to the carrying on of defendant's business.¹

As to interest to be allowed upon defendant's profits "it is doubtless the general rule that interest prior to the final decree is not to be allowed upon profits or damages, because until the decree they are unliquidated;" though this rule is not invariable; for instance, interest may be allowed on profits realized by defendant through infringement committed while defendant had knowledge of complainant's patent. When interest on defendant's profits is allowable it does not begin to run till after disclaimer filed in a case where a disclaimer is necessary.

Neither is the rule that an invention of a part of a structure will not carry with it the profits on the whole structure an invariable rule, the Supreme Court having held in a case where a patented pump for oil wells—new only in part—had only a local and very limited market,

¹Hitchcock v. Tremaine, 5 Fish. Pat. Cases, 310; Troy Factory v. Corning, 3 Fish. Pat. Cases, 497; Am. Pavement Co. v. Elizabeth, 6 O. G. 764.

² Mowry v. Whitney, 14 Wall. 620.

⁸ Burdett v. Estey, 3 Fed. Rep. 566.

⁴ Ibid.

and controlled that market, that defendant's whole profits should be allowed, saying: "This is an exceptional case."

"The right to recover for infringement of a patent like other choses in action, is assignable in equity and the real owner of the right is entitled to maintain a suit upon it, in equity, in his own name." 2

Damages. In a suit at law damages only are recoverable. In a suit in equity both profits and damages are recoverable but complainant can only recover such damages as are in excess of the amount of the profits.

The general principles for the ascertainment of damages will be understood from the following resumé of cases.

Upon this point the Supreme Court said in one case: "Actual damages must be actually proved, and cannot be assumed as a legal inference from any facts which amount not to actual proof of the fact. What a patentee 'would have made, if the infringer had not interferred with his rights, is a question of fact and not a judgment of law.' The question is not what, speculatively, he may have lost, but what he actually did lose. It is not a 'judgment of law' or necessary legal inference, that if all the manufacturers of steam engines and locomotives who have built and sold engines with a patented cut-off, or steam whistle, had not made such engines, that therefore all the purchasers of engines would have employed the patentee of the cut-off, or whistle; and

¹ Goulds Mfg. Co. v. Cowing, 21 O. G. 1277.

² Shaw v. Colwell Lead Co., 11 Fed. Rep. 711.

that, consequently, such patentee is entitled to all the profits made in the manufacture of such steam engines by those who may have used his improvement without his license. Such a rule of damages would be better entitled to the epithet of 'speculative,' 'imaginary,' or 'fanciful,' than that of 'actual.'

If the measure of damages be the same, whether a patent be for an entire machine or for some improvement in some part of it, then it follows that each one who has patented an improvement in any portion of a steam engine or other complex machine, may recover the whole profits arising from the skill, labor, material and capital employed in making the whole machine, and the unfortunate mechanic may be compelled to pay treble his whole profits to each of a dozen or more several inventors of some small improvement in the engine he has built. By this doctrine even the smallest part is made equal to the whole, and 'actual damages' to the plaintiff may be converted into an unlimited series of penalties on the de-And again: "The measure of the damages fendant."1 to be recovered against infringers, prescribed by the Act of 1836, as well as by the Act of 1870, is the actual damages sustained by the plaintiff. In arriving at these conclusions, the profit made by the defendant and that lost by the plaintiff are among the elements which the jury may consider. When the infringement is confined to a part of the thing sold, the recovery must be limited accordingly. It cannot be as if the entire thing were covered by the patent."2

¹ Seymour v. McCormick, 16 Howard. 480.

³Phillp v. Nock, 17 Wallace, 460.

In a later case: The master, after computing defendant's profits, arrived at complainant's damages by multiplying complainant's net profit by the number of infringing watches sold by defendant. The court, in rejecting the master's report, said: "It is only actual damages which are proved to have been sustained by the plaintiff that he can in any event recover. It is not enough that he may have suffered loss, for he cannot have compensation for conjectural losses; the losses must be proved and not guessed at. (*Philp v. Stark*, 17 Wall. 462.)

It was not made to appear that the plaintiff could have sold his watches to the persons who purchased from the defendants. The watches have been adjudged to be identical in principle, but they differ in structure and appearance, and it cannot be known that those who bought the infringing article would have bought the plaintiff's watches, under any circumstances. The difference in structure, as well as the difference in price, enter into that question, and no means are afforded for determining it by the proofs. (Smith v. O'Connor, 6 Fisher, 469; Carter v. Barker, 4 Fisher, 410.)

The inquiries suggested by these cases, as pertinent to the assessment of a plaintiff's damages, do not warrant the adoption of the result stated in the report. The damages in such a case must be confined to the direct and immediate consequences of the infringement, and not embrace those which are both remote and conjectural.

There is another error involved in this assessment of damages, and that is that the estimated profit of the patentee embraces not only that derived from the sale of the patent privileges, but also the whole manufacturer's profits upon the materials and workmanship of the whole article. * * * .

In cases where the patent is for a distinct improvement, separable from the rest of the article, as in the case put by the plaintiff's counsel, of a wagon with a patent pole, the rule is admitted and settled. (Seymour v McCormick, 16 How. 491; Gould Mfg Co. v. Cowing, 8 Of. Gaz. 277; Mowry v. Whitney, 14 Wall. 620; Amerivan N. P. Co. v. Elizabeth, 6 Of. Gaz. 764; Littlefield v. Perry, 21 Wall. 228.) The same principle is, I think, applicable to a case of this kind. The watch is open to the manufacture of every one, and it is common to both the plaintiff's patented article and to the infringing article of the defendant. The wrong which the case shows the plaintiff to have sustained is the use of his invention in the making by the defendants of the infringing watches.

They have taken his invention and used it in making the infringing watches; and it is the value of that use the right to which belonged to the plaintiff that they have appropriated to themselves. For this the plaintiff is entitled to recover in damages; but this rule has been disregarded, and the case does not furnish any evidence which can either support the actual finding or form the basis for a correction in this respect by the court. The burden in this respect was upon the plaintiff." 1

In another case the master reported that the complainant was compelled to reduce his prices through defendant's competition; also that complainant was entitled to the profit he would have made if he had sold the infringing articles which defendant sold; and of this find-

¹Buerk v. Imhaeuser, 10 O. G. 907.

ing the court said: "The question whether the prices which the plaintiff received for his cuspadores were less than those which he would have received but for the infringements by the defendants is a question of fact.

Such also is the question as to the amount of the reduction, and as to how much much of it was occasioned by the acts of the defendants; and as to how much of it was attributable to the fact that the infringing articles contained the patented feature of the plaintiff's patented cuspadores. Such also is the question as to whether, if the infringing cuspadores had not been sold, the plaintiff would have sold any greater number of the patented cuspadores than he did sell, and what profit he would have made on them, and what part of such profit is to be assigned to the defendant's patented feature of the cuspadores.

It is for the plaintiff to establish, by satisfactory evidence, not only that a reduction of his prices was caused by the infringements, but how much such reduction was; and how much of it was occasioned by the acts of the defendants; and how much was due to the fact that the infringing articles contained the patented feature of the plaintiff's patented cuspadores.

I am not satisfied with the conclusions of the master on this subject. The evidence on which those conclusions were reached was in the shape of estimate, and conjecture, and opinion, and afforded no proper basis for a report of actual damages by a forced reduction of prices. The allotment of thirty per cent. of such reduction to the infringements by the defendants, and to the fact that the infringing articles contained the patented features of the plaintiff's patented cuspadores, and of

seventy per cent. of such reduction to other causes, is founded only on the conjectures, estimates, and assertions of witnesses, and not on any sound and safe basis of calculation. * * * * *

So, also, it is for the plaintiff to establish, by satisfactory evidence, that he would have sold more of the patented cuspadores than he did sell if the infringing cuspadores had not been sold; and what profit he would have made on them; and what part of such profit is to be assigned to the distinctive patented features of the cuspadores. I see no proper foundation in the evidence for the conclusion that, if the defendant in the first case had not sold the 1,003 infringing cuspadores, the plaintiff would have sold 1,003 more of the patented cuspadores than he did sell. The conclusion has no other basis than conjecture and speculation. Only nominal damages should have been reported in each case."

The same court made substantially the same finding in another case which followed shortly after the one last cited,² and in still another case following shortly after, the court said: "The master also reports that 'the complainant is entitled to recover from the defendant a further sum as special damages, on account of the laying of the pavement for Andrew Dold, which pavement was laid in the same manner as the City Hall pavement, above referred to, the proofs showing that said pavement was contracted for and laid by the defendant in October, 1876, but is not included in any of the accounts tendered by him, and that it is shown that the complainant gave

¹Ingersoll v. Musgrove, 13 O. G. 966.

² Garretson v. Clark, 14 O. G. 485.

Dold a bid or estimate for the said work, and that he was underbid by the defendant, and thus was damaged to the amount of \$900.' Exception 21 excepts to the report because it finds 'that the complainant is entitled to recover from the defendant special damages on account of the laying of a pavement for Andrew Dold, and that the proofs show that said pavement was laid in the same manner as the City Hall pavement.' So much of exception 21 as excepts to the report of the \$900, as special damages, is allowed. Exception 22, before cited, is broad enough to be an exception to the report of the \$900, as damages. The remarks before made as to the allowance of profits, apply to this \$900. If entitled, in any event, to any allowance of damages in respect to the Dold pavement, the plaintiff must show the value of the patented invention as distinct from the value of the rest of the Dold pavement, and can in no event recover as damages the entire \$900."1

In a case which followed the one last mentioned the same court said: "The plaintiff excepts to the finding of the master that the testimony of the witnesses, Munger and Cady, does not form a basis upon which the master can make a computation of the money value of the device which the defendant should pay to the plaintiff, for the reason that the estimate and opinion of experts is competent evidence of the value in cases like the present. The plaintiff also excepts, in that the master * * does not take into consideration not only the same circumstance, but the opinions of the witnesses, Munger and Cady, and the other circumstantial evidence in the case

¹ Schillinger v. Gunther, 14 O. G. 713.

relating to the requirements of the market, the effect of the plaintiff's picking of the defendant's lock, the impossibility of substituting any other device except the patented device, to serve the same purpose, during the period when said patented device was used by the defendant, and all the other evidence introduced by the plaintiff. * * * I think the master was right in rejecting the estimate of the witness, Munger, and the general evidence of the witness Cady." ¹

It is to be seen from this resumé of cases upon damages that it cannot be presumed that those who purchased goods from defendant would have purchased the same goods from complainant if defendant's had not been in the market; complainant must make actual proof on this point: nor can it be presumed that a decrease in complainant's sales is caused by defendant's competition. It is also to be seen that it cannot be presumed that a lowering of complainant's prices is caused by defendant's competition. It is also to be seen that where the patented thing is a mere improvement in part of the device. the proof of resulting damages must be apportioned as to that part and complainant must furnish that proof: it is also to be seen that opinions and estimates, even of experts, cannot be accepted as evidence upon any of these points.

In view of the general rules deduced from the foregoing $resum^{\acute{e}}$ of cases upon damages there are two or three cases to which some little attention may not be inadvisable. In one case where the patented improvement was a series of perforations in a circular saw, the

¹ Sargent v. Yale Lock Mfg Co., 17 O. G. 106.

circuit judge gave complainant as damages the defendant's entire profit; this case is not entirely reconcilable with the other decisions but it proceeded upon the ground "that there was or should be only one perforated saw in the art."

In another case where the patented invention was a design for carpets² the same circuit judge who decided the last case gave to complainant as damages a product arrived at by multiplying defendant's sales by complainant's profits; in this case, however, the patented thing was new as an entirety, the defendants took it as an entirety, and the infringement was willful.

Where complainant has a settled and fixed royalty or license fee for the use of his invention, courts will accept that as a measure of damages to be awarded.³ The same rule as to interest prevails with damages as with profits; that is, in general, interest does not begin to run until after the decree fixing them; for, until that time, they are unliquidated; an exception to this rule, in the case of damages, would be where a royalty is settled upon as the basis therefor, the interest in such a case beginning with the infringing use.⁴ The statute authorizes an increase of damages to triple the amount of actual damages (which is not the case with profits), but such an increase is only presumable in case that the infringement is wanton or malicious; in a case where this point arose the

¹Am. Saw Co. v. Emerson, 8 Fed. Rep. 806.

² Bigelow Carpet Co. v. Dobson, 10 Fed. Rep. 385.

^{*}Locomotive S. T. Co. v. Penn. Railroad Co., 2 Fed. Rep. 677.

⁴ Ibid.

court said: "The infringement by defendants of complainant's patent was neither willful nor malicious. The case does not justify a decree against them beyond the net profit realized from the manufacture and sale of the patented article."



¹ Ford v. Kurtz, 12 Fed. Rep. 789.

CHAPTER XX.

MISCELLANEOUS MATTERS.

Marking Patented Articles. The statute enacts: "Section 4900. 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 articles so patented."

Formerly the statute affixed a direct penalty for an omission to duly mark patented articles with the date of the patent, but under the present statute the only penalty is a loss of damages previous to actual notice in a suit for infringement. This omission does not affect the patentee's right to an injunction either perpetual or provisional.²

¹Rev. Stat. Title LX, Chap. 1.

² Goodyear v. Allyn, 3 Fisher's Pat. Cases, 374.

In putting on the patent stamp the day of the month as well as the year must appear, but the word "patented" may be abbreviated. The burden of proof is upon defendant to show that complainant has failed to mark the patented articles as required by law; but that being shown, the burden of proof is then on complainant to show that before the suit was brought the defendant was notified of his infringement and thereafter continued to infringe. ²

Where there are different owners in the patent, each having right to bring suit for infringement, and one of them fails to duly mark the patented articles sold by him, his failure in this respect does not affect the other patent owners.³

Fraudulent Patent Marks. The statute enacts: "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,

[&]quot;Hawley v. Bigley, Mss. Bates. Jr. N. Y.

² Goodyear v. Allyn. 3 Fisher's Pat. Cases, 374; but see contra Mc-Comb v. Brodie, 5 Fisher's Pat. Cases, 384.

³ Goodyear v. Allyn, 3 Fisher's Pat. Cases, 374,

Who, in any manner, marks upon or affixes to any unpatented article the word 'patent' or any word importing that the same is patented, for the purpose of deceiving the public, shall be liable, for every such offense, to a penalty of not less than one hundred dollars, with costs; one-half of said penalty to the person who shall sue for the same, and the other to the use of the United States, to be recovered by suit in any district court of the United States within whose jurisdiction such offense may have been committed." ¹

The action provided for in this statute "must be prosecuted by an informer, or if the name of the United States can be properly used, it must be in connection with a person to be named as informer who shall be responsible in case the action is not sustained, for costs or other consequences resulting from its failure." 2 It was held in this case just quoted from that "although the statute, without much show of reason, on any ground of public policy, affixes a penalty for placing the word 'patented' on an unpatented article, yet it must be construed to mean that such article, if not patented, was patentable. As the statute, under which this action is brought is highly penal it must receive a strict construction or cannot be held to embrace any act which, though within the strictness of its letter, is against reason and common sense. It would be doing injustice to the framers of this law to suppose they intended to include in its prohibitions, and to visit with a penalty the mere act of putting the word 'patented' on an article not patented nor patentable. * . And it is clear to my mind

¹ Rev. Stat. Title LX, Chap. 1.

² United States v. Morris, 3 Fisher's Pat. Cases, 72.

that to justify a judgment for a penalty for putting the word patented on an article, the declaration must allege and there must be proof on the trial, that it was legally the subject of a patent."

In order to prevail in a suit of this kind the plaintiff must prove beyond a reasonable doubt that the defendant affixed the word "patented" to his article; also that defendant had no patent; also that such use was with the intent to deceive; for if defendant affixed the word "patented" to his articles without that intent, as, for instance, under a well founded expectation of a patent to be obtained then the penalty would not be incurred. This action may be brought at any time within five years after the offense is committed.²

Maintaining upon articles a stamp denoting a patent and its date after the expiration of a patent does not make the party thus acting liable to the penalty inflicted by the statute.

Rights of States as to Patents. As already mentioned in discussing the topic of jurisdiction in the chapter upon Infringement Suits, the State courts have no direct jurisdiction in patent suits pure and simple, although such courts have jurisdiction in questions of contracts and the like affecting patents, and may inquire into the scope and validity of patents when such questions come in question collaterally to the main issue in a case.

While the United States have the dominent power as to patents when exercised within that clause of the Consti-

¹ Nichols v. Newell, I Fisher's Pat. Cases, 647.

Stimpson v. Pond, Cuitis, 502.

tution which gives Congress power "to promote the progress of science and the useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries," the States have important powers relating to patents outside of this grant for this clause does not take away from the States the right to grant patents—of course effectual only within the State making the grant—so long as the grant does not come in conflict with a grant made by the United States or with any of the patent laws of the United States warranted by the clause quoted from the constitution. Within such limitations the States may grant patents, or may enlarge the terms of those granted by the United States. In one respect the States have a larger power than the federal government, for while the latter can grant patents only to inventors, the States may, if they please, grant patents to introducers of inventions.1

While the States may not, as we shall shortly see more at length, make laws intended to have special restrictive application upon patents granted by the United States, yet articles made under such patents come within the operation of State laws which are of general application; and it does not follow that because a person has a patent for a thing, he may use that thing without regard to State laws; for instance, if a man patent a machine for use in drawing lotteries, he cannot use that machine in a State which forbids lotteries; or if a person has a patent for a particular medicine that patent does not give him the right to practice as a physician in contravention of the

¹ Gibbins v. Ogden, 9 Wheaton, 186; Livingston v. Van Ingen, 9 Johnston, 560.

State law.¹ And property in patents is doubtless subject to State taxation provided the tax law does not discriminate against patents.

State Restrictive Laws. It is not uncommon for States to attempt to pass laws which have special restrictive application as regards patents granted by the United All such State laws are null and void. form which these State restrictive laws generally take is to provide that certain formalities shall be observed before a man may sell a patent-right within the State, or that a promisory note given for a patent shall express upon its face such fact or be invalid. A single case will answer upon this point. The legislature of Indiana provided by statute as follows: "That it shall be unlawful for any person or persons to sell or barter or offer to sell or barter any patent right, or any right which such person shall allege to be a patent right, in any county within this State, without filing with the clerk of the court of such county, copies of the letters-patent duly authenticated, and at the same time swearing or affirming to an affidavit before such clerk that such letters-patent are genuine, and have not been revoked or annulled, and that he has full authority to sell or barter the rights so patented; which affidavit shall also set forth his name, age, occupation, and residence, and if an agent, the name, occupation, and residence of his principal. A copy of this affidavit shall be filed in the office of said clerk, and said

¹Gibbins v. Ogden, 9 Wheaton, 186; Jordon v. Overseer of the Poor, 4 Ohio 310; Thompson v. Staats, 15 Wend. 395; Van Namie v. Paine, 1 Harrington, 68.

clerk shall give a copy of said affidavit to the applicant, who shall exhibit the same to any person on demand.

- Sec. 2. Any person who may take any obligation in writing, for which any patent right, or right claimed by him or her to be a patent right, shall form the whole or any part of the consideration, shall, before it is signed by the maker or makers, insert in the body of said written obligation above the signature of said maker or makers, in legible writing or print, the words 'given for a patent right.'
- Sec. 3. Any person who shall sell or barter or offer to sell or barter within this State, or shall take any obligation or promise in writing, for a patent right, or for what he may call a patent right, without complying with the requirements of this act, or shall refuse to exhibit the certificate when demanded, shall be deemed guilty of a misdemeanor, and on conviction thereof before any court of competent jurisdiction, shall be fined in any sum not exceeding one thousand dollars, or be imprisoned in the jail of the proper county not more than six months, at the discretion of the court or jury trying the same; and shall be liable to the party injured, in a civil action, for any damages sustained."

The federal court said of this Act: "This is an attempt on the part of the legislature to direct the manner in which patent rights shall be sold in the State; to prohibit their sale altogether if these directions are not complied with, and to throw burdens on the owners of this species of property which Congress has not seen fit to impose upon them. I have not time to elaborate the subject, nor even to cite the authorities bearing on the question, and shall, therefore, content myself with stating the conclusion which I have reached.

It is clear that this kind of legislation is unauthorized. The Congress is given, by the constitution, the power 'to promote the progress of science and the useful arts by securing, for limited times, to authors and inventors, the exclusive rights to their respective writings and discoveries.' This power has been exercised by Congress, who have directed the manner in which patents shall be obtained, and when obtained how they shall be assigned and sold.

The property in inventions exists by virtue of the laws of Congress, and no State has a right to interfere with its enjoyment, or to annex conditions to the grant. If the patentee complies with the law of Congress on the subject, he has a right to go into the open market anywhere within the United States and sell his property. were not so, it is easy to see that a State could impose terms which would result in a prohibition of the sale of this species of property within its borders, and in this way nullify the laws of Congress, which regulate its transfer, and destroy the power conferred upon Congress by The law in question attempts to punthe constitution. ish, by fine and imprisonment, a patentee for doing, with his property, what the national legislature has authorized him to do, and is therefore void."1

¹ Robinson ex parte, 4 Fisher's Pat. Cases, 186.



Assignment of Entire Interest Before Issue of Patent.

KNOW ALL MEN that I, John Doe, of Hartford, in the County of Hartford and State of Connecticut, for the consideration of one dollar, the receipt whereof is hereby acknowledged, do hereby sell, and assign to Richard Roe, of New Haven, in the County of New Haven and State of Connecticut, the whole right and title in and to an invention of an improvement in plows described in my application for letters-patent of these United States therefor, executed by me January 1, 1883 (if application has been filed add, "and filed in the Patent Office on or about January 2, 1883,") together with all the rights and privileges granted by said letters-patent to be issued.

I authorize and request the Commissioner of Patents to issue said letters-patent to said assignee for the sole use and behoof of said assignee, his heirs and assigns.

I promise to and covenant with said assignee, his heirs and assigns, that I will, whenever the legal counsel of said assignee, his heirs or assigns, advises me, that a reissue of said letters-patent is lawful and desirable, sign

all papers, take all rightful oaths, and do all acts necessary or convenient to the procurement of such reissues without charge to said assignee but at his expense.

I, for myself, my heirs and assigns, covenant with said assignee, his heirs and assigns, that I have the lawful right to assign said invention and letters-patent in manner and form as herein expressed and that the interest herein conveyed is free from all prior assignment, grant, mortgage, license, or other incumbrance whatever.

In witness whereof I hereto set my hand as of and for the third day of January, A. D. 1883.

JOHN DOE.

Witnesses:

JOHN SMITH, CHARLES BROWN.

(If it is not desired that the patent shall issue to the assignee the request to that effect can be omitted. Likewise the warranty of title can be omitted.)

Assignment of Undivided Interest Before Issue of Patent.

KNOW ALL MEN that I, John Doe, of Hartford, in the County of Hartford and State of Connecticut, for the consideration of one dollar, receipt whereof in full is hereby acknowledged, do hereby sell and assign to Richard Roe, of New Haven, in the County of New Haven, and State of Connecticut, one undivided half of the whole right and title in and to an invention of an im-

provement in plows described in my application for letters-patent of these United States therefor, executed by me January 1, 1883, (if application has been filed, add, "and filed in the Patent Office on or about January 2, 1883,") together with one undivided half of the whole right and title in and to said letters-patent to be issued.

I authorize and request the Commissioner of Patents to issue said letters-patent to said assignee and myself jointly for the sole use and behoof of said assignee and myself and our heirs and assigns.

I, for myself, my heirs, and assigns, covenant to and with said assignee, his heirs and assigns, that I have full right to sell and assign said invention and letters-patent in manner and form as herein written and that the interest herein conveyed is free from all prior assignment, grant, mortgage, license or other incumbrance whatever.

This assignment is made upon the following express condition forming an integral part of this assignment, to which condition I, for myself, my heirs and assigns, assent, and to which said condition said assignee for himself his heirs and assigns, assents by his acceptance of this assignment, said condition being as follows, to wit.:

Neither he nor I have or shall have any right or power to grant any license under or relating to said patent unless both and all the owners of said patent join in the same in writing and neither he nor I have or shall have separately the right to make, or sell, or use any part of the invention claimed in said letters-patent without that the party thus making, or selling, or using, shall secure and pay to the other party or parties part owners of said patent, such part of the net profits arising from such manufacture, sale, or use as the part of the said patent

owned by such other party or parties last mentioned bears ratio to the whole patent.

In witness whereof I hereto set my hand as of and for the third day of January, 1883.

JOHN DOE.

Witnesses:

JOHN SMITH, CHARLES BROWN.

(Of course, the last provision can be omitted if desired.)

Assignment of Entire Interest After Issue of Patent. By the Inventor.

Know all men that I, John Doe, of Hartford, in the County of Hartford and State of Connecticut, for the consideration of one dollar, the receipt whereof is hereby acknowledged, do hereby sell and assign to Richard Roe, of New Haven, in the County of New Haven and State of Connecticut, the whole right and title in and to an invention of an improvement in plows, described in letterspatent of these United States, No. 100,000, issued to me and dated January 4, 1883, and in and to all the rights and privileges granted and secured by said letters-patent, the same to be held and enjoyed by said assignee, his heirs and assigns, for his and their sole use and behoof.

I promise to and covenant with said assignee, his heirs and assigns, that I will, whenever the legal counsel of said assignee, his heirs and assigns, advises me that a reissue of said letters-patent is lawful and desirable, sign all papers, take all rightful oaths, and do all acts necessary or convenient to the procurement of such reissues, without charge to said assignee his heirs or assigns but at his or their expense.

I, for myself, my heirs and assigns, covenant with said assignee, his heirs and assigns, that I have the lawful right to assign said invention and letters-patent in manner and form as herein expressed, and that the interest herein conveyed is free from all prior assignment, grant, mortgage, license, or other incumbrance whatever.

In witness whereof I hereto set my hand as of and for the fifth day of January, A. D. 1883.

JOHN DOE.

Witnesses:

JOHN SMITH, CHARLES BROWN.

Assignment of Undivided Interest After Issue. By the Inventor.

Know all men that I, John Doe, of Hartford, in the County of Hartford and State of Connecticut, for the consideration of one dollar, receipt whereof in full is hereby acknowledged, do hereby sell and assign to Richard Roe, of New Haven, in the County of New Haven and State of Connecticut, one undivided half of the whole right and title in and to an invention of an improvement in plows, described in letters-patent of the United States No. 200,000, issued to me and dated January 4, 1883, and together with an undivided half of all the rights and privileges granted by said letters-patent.

I, for myself, my heirs and assigns, covenant to and

with said assignee, his heirs and assigns, that I have full right to sell and assign an interest in said invention and letters-patent in manner and form as herein expressed, and that the interest herein conveyed is free from all prior assignment, grant, mortgage, license or other incumbrance whatever.

This assignment is made upon the following express condition forming an integral part of this assignment, to which condition I, for myself, my heirs and assigns, assent, and to which said condition said assignee, for himself his heirs and assigns, assents by his acceptance of this assignment, said condition being as follows, to wit: neither he nor I have or shall have any right or power to grant any license under or relating to said patent unless both and all the owners of said patent join in the same in writing, and neither he nor I have or shall have separately the right to make or sell, or use, any part of the invention claimed in said letters-patent without that the party thus making or selling, or using, shall secure and pay to the other party or parties, part owners of said patent, such part of the net profits arising from such manufacture, sale or use as the part of the said patent owned by such other party or parties last mentioned, bears ratio to the whole patent.

In witness whereof I hereto set my name as of and for the fifth day of January, 1883.

JOHN DOE.

Witnesses:

John Smith, Charles Brown.

Assignment Without Warranty or Protective Provision.

Know all Men that I, John Doe, of Hartford, in the County of Hartford and State of Connecticut, for the consideration of one dollar, the receipt whereof is hereby acknowledged, do hereby sell and assign to Richard Roe, of New Haven, in the County of New Haven and State of Connecticut, one undivided half of the whole right and title in and to an invention in plows, described in letters-patent of these United States, No. 300,000, dated February 1, 1883, issued to William Williams and subsequently assigned to me, together with one undivided half of all the rights and privileges granted and secured by said letters-patent. The same to be held and enjoyed by said assignee for the sole use and behoof of said assignee, his heirs and assigns.

In witness whereof I hereto set my hand as of and for the first day of March, 1883.

JOHN DOE.

Witnesses:

JOHN SMITH, CHARLES BROWN.

Grant of a Territorial Right.

Know all men that we, John Doe and Richard Roe, of Hartford, in the County of Hartford and the State of Connecticut, for the consideration of one dollar, receipt whereof in full is hereby acknowledged, do hereby sell and grant—upon the condition hereinafter expressed—to William Williams, of New Haven, in the County of

New Haven and State of Connecticut, the whole right, title and interest in and to all the rights and privileges granted and secured to us by letters-patent of these United States, for an improvement in plows, No. 200,000, issued to us and dated January 1, 1883, within and for the State of Connecticut, and in no other place or places, the same to be held and enjoyed by said assignee, for the sole use and behoof of himself, his heirs and assigns.

We, for ourselves, our heirs and assigns, covenant to and with said grantee, his heirs and assigns, that we have the lawful right to make a grant under said letters-patent in manner and form as herein expressed, and that the interest herein conveyed is free from all prior assignment, grant, mortgage, license or other incumbrance whatever.

This grant is made upon the following express condition, a willful infraction of which by said grantee, his heirs, assigns, grantees, or licensees, shall work a forfeiture to the present grantors, their heirs and assigns, of all rights and privileges under or relating to said letters-patent possessed by the person or party guilty of such infraction; to wit.: Said grantee, his heirs, assigns, grantees, and licensees, shall not knowingly sell or part with any article, bearing or embodying any material part of the invention forming the subject-matter of said patent. which is to be carried, sold, or used without the territory covered by this grant, and said grantee, his heirs, assigns, grantees, and licensees, shall use their utmost endeavor to comply with the spirit of this condition, and to prevent any infraction thereof; and a gift, lease, loan, or sale of any such patented article, to a person or party whom said grantee, his heirs, assigns, grantees, or licensees, being such seller or giver, knows to have once car-

ried, or used, or sold such patented article without the territory covered by this grant, in violation of the spirit of this condition, shall be conclusive evidence of a willful violation of this condition on the part of such seller or giver

In witness whereof we hereto set our hands as of and for the first day of March, 1883.

John Doe. Richard Roe.

Witnesses:
JOHN SMITH,
CHARLES BROWN.

Mortgage of Patent.

Know all men that I, John Doe, of Hartford, in the County of Hartford and State of Connecticut, for the consideration of one dollar, receipt whereof is hereby acknowledged, do hereby sell and assign to Richard Roe, of New Haven, in the County of New Haven, and State of Connecticut, the whole right and title in and to all the rights and privileges granted and secured by letterspatent of these United States, No. 200,000, issued to me and dated January 1, 1883, for improvement in plows.

I promise to and covenant with said assignee, his heirs and assigns, that I will, whenever the legal counsel of said assignee, his heirs or assigns, advises me that a reissue of said letters-patent is lawful and desirable, sign all papers, take all rightful oaths, and do all acts necessary or convenient to the procurement of such reissues, without charge to said assignee, but at his expense.

I, for myself, my heirs and assigns, covenant with said assignee, his heirs and assigns, that I have the lawful right to assign said invention and letters-patent, in manner and form as herein expressed, and that the interest herein conveyed is free from all prior assignment, grant, mortgage, license or other incumbrance whatever.

The condition of this assignment and mortgage is such that whereas I am justly indebted to said Richard Roe in the sum of \$1,000, as evidenced by my promisory note of even date herewith, payable to said mortgagee or order, one year from date, without interest; now if said note shall be well and truly paid according to its tenor, this assignment shall be null and void, but otherwise to be of full force and effect.

In witness whereof I hereto set my hand as of and for the second day of April, A. D. 1883.

JOHN DOE.

Witnesses:

JOHN SMITH, CHARLES BROWN.

(If the laws of the State wherein such a mortgage is executed require an acknowledgement of a mortgage of personal estate it is advisable to append such acknowledgement.)

License-Shop-Right.

Know all Men that I, John Doe, of Hartford, in the County of Hartford and State of Connecticut, in consideration of five hundred dollars, the receipt whereof in full is hereby acknowledged, do hereby sell to the Hartford

Manufacturing Company, a joint stock corporation organized under the laws of the State of Connecticut, and located at New Britain, in the County and State aforesaid, the right and license to make, at a single foundry and machine shop in said New Britain, and in no other place or places, the improvement in harrows, for which letters-patent of the United States, No. 200,003, dated January 1, 1883, were granted to me, with the right and license to sell the same throughout these United States to the full end of the term of said patent.

And I, for myself, my heirs and assigns, covenant to and with said corporation, that I have full right and title to make this license in manner and form as herein expressed, and that there is no prior assignment, grant, mortgage, license or other conveyance incumbrance under or relating to said patent, that can prevent said licensee from enjoying the privileges conveyed by this license to the full extent herein stated.

In witness whereof I hereto set my hand as of and for the second day of April, 1883.

JOHN DOE.

Witnesses:

JOHN SMITH, CHARLES BROWN.

License-(Shop-Right)-Assignable and Limited.

KNOW ALL MEN that I John Doe, of Hartford, in the County of Hartford, and State of Connecticut, for the consideration of one dollar, the receipt whereof is hereby acknowledged, do hereby license and empower Rich-

ard Roe, of New Haven, in the County of New Haven, and State of Connecticut, and his heirs and assigns, to manufacture at a single foundry and machine shop, the improved seed-sower, for which letters patent of these United States, No. 75,603, dated December 26, 1870, were granted to me, to the number of 500 of said patented seed-sowers in each year, to the full end of the term for which said letters-patent were granted, and to sell such seed-sowers throughout the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut, and in no other place or places.

And, I for myself, my heirs and assigns, do covenant to and with said assignee, his heirs and assigns, that I have full right and title to make this license in manner and form as herein expressed and that there is no prior assignment, grant, mortgage, license or other conveyance under or relating to said patent that can prevent said licensee from enjoying the privileges conveyed by this license to the full extent herein given and stated.

In witness whereof I hereto set my hand as of and for the second day of April, 1877.

JOHN DOE.

Witnesses:

JOHN SMITH, CHARLES BROWN.

Exclusive Territorial License.

Know all men that I, John Doe, of Hartford, in the County of Hartford, and State of Connecticut, for the consideration of one dollar, receipt whereof in full is

hereby acknowledged, do hereby sell and grant to Richard Roe, of New Haven, in the County of New Haven, and State of Connecticut, the exclusive license to make and use and vend to others to use, within and throughout the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut, and in no other place or places, the improved seed-sower, for which letters-patent of these United States, No. 75,603, dated December 26, 1870, were granted to me; this license to extend to the full end of the term for which said letters-patent were granted.

I, for myself, my heirs and assigns, covenant to and with said licensee, his heirs and assigns, that I have full right and title to make this license in manner and form as herein expressed, and that there is no prior assignment, grant, mortgage, license or other conveyance under or relating to said patent that can prevent said licensee from enjoying the privileges conveyed by this license to the full extent herein given and stated.

This license is given to said licensee upon the express condition that neither he nor his heirs or assigns, shall sell any of said patented seed-sowers, to be used outside the six New England States hereinbefore mentioned; that said licensee, his heirs and assigns, shall use their utmost endeavors to prevent any infraction of this provision; and that a gift, lease, loan, or sale of any such to patented article by said licensee, his heirs or assigns, to a person or party whom said licensee, his heirs or assigns, knows to have once carried, or used, or sold, any such patented seed-sower without the territory covered by this license, in violation of the spirit of this condition, shall be conclusive evidence of a willful violation of this con-

dition on the part of such licensee, his heirs and assigns; and an infraction of this condition by said licensee, his heirs or assigns, shall, of itself and without the adjudication of a court, work a revocation of this license to said licenser his heirs and assigns.

In witness whereof I hereto set my hand as of and for the second day of April, 1874.

JOHN DOE.

Witnesses:

JOHN SMITH, CHARLES BROWN.

License (Not Exclusive) with Royalty.

This agreement, made this twelfth day of September, 1868, between A. B., party of the first part, and C. D., party of the second part, witnesseth: that whereas, letters-patent of the United States for an improvement in horse-rakes were granted to the party of the first part, dated October 3, 1865; and whereas the party of the second part, is desirous of manufacturing horse-rakes containing said patented improvement,—now, therefore, the parties have agreed as follows:

I. The party of the first part hereby licenses and empowers the party of the second part to manufacture, subject to the conditions hereinafter named, at their factory in (——), and in no other place or places, to the end of the term for which said letters-patent were granted, horse-rakes containing the patented improvements, and to sell the same within the United States.

- II. The party of the second part agrees to make full and true returns to the party of the first part, under oath, upon the *first* days of *Fuly* and *Fanuary* in each year, of all *horse-rakes* containing the patented improvements manufactured by them within the half year last past.
- III. The party of the second part agrees to pay to the party of the first part, one dollar as a license fee upon every horse-rake manufactured by said party of the second part, containing the patented improvements; provided that, if the said fee be paid upon the days provided herein for semi-annual returns, or within ten days thereafter, a discount of fifty per cent. shall be made from said fee for prompt payment.
- IV. Upon a failure of the party of the second part to make returns, or to make payment of license fees as herein provided, for thirty days after the days herein named, the party of the first part may terminate this license, by serving a written notice upon the party of the second part; but the party of the second part shall not thereby be discharged from any liability to the party of the first part for any license fees due at the time of the service of said notice.

In witness whereof the parties above named have hereunto set their hands the day and year first above written.

A. B.

C. D.

Exclusive License with Contract for Royalty.

This agreement, made this tenth day of June, 1871, between George B. Matthewson, of Hartford, Connecticut, party of the first part, and The Excelsior Iron Works, a corporate body under the laws of said State, located and doing business at New Britain, in said State, party of the second part, witnesseth:

That whereas letters patent of the United States, were, on the twenty-ninth day of January, 1871, granted to said party of the first part, for an improvement in stove-hooks which said patented article said party of the second part is desirous to make and sell; now, therefore, the parties have agreed as follows:

- I. The party of the first part hereby gives to the party of the second, the exclusive right to manufacture and sell said patented improvements, to the end of the term of said patent, subject to the conditions hereinaster named.
- II. The party of the second agrees to make full and true returns, on the first days of January, April, July, and October in each year, of all of said patented stovehooks, made by them in the three calendar months then last past; and, if said party of the first part shall not be satisfied, in any respect, with any such return, then he shall have the right, either by himself or his attorney, to examine any and all of the books of account of said party of the second part, containing any items, charges, memoranda, or information relating to the manufacture or sale of said patented stove-hooks, and, upon request made, said party of the second part shall produce all such books for said examination.
- III. The party of the second part agrees to pay the party of the first part, two cents as a license fee upon

every one of said patented stove-hooks made by them; the whole of said license fee for each quarterly term of three months, as hereinbefore specified, to be due and payable within fifteen days after the regular return day for that quarter. And said party of the second part agrees to pay to the party of first part at least fifty dollars, as said license fee, upon each of said quarterly terms, even though they should not make enough of said patented stove-hooks to amount to that sum at the regular royalty of two cents apiece.

- IV. Said licensee shall cast or otherwise permanently place upon every such stove-hook, made under this license, the word "Matthewson," and in close relation thereto the word "Patented" and the date of said patent.
- V. Said licensee shall not, during the life of his license, make or sell any article which can compete in the market with said patented stove-hook; and said licensee shall, through its officers and agents, use its utmost reasonable endeavors to create and maintain as large a trade as is possible in said patented stove-hooks.
- VI. Upon the failure of said licensee to keep each and all of the conditions of this license, said licensor may, at its option, terminate this license, and such termination shall not release said licensee from any liability due at such time to said licensor.
- VII. I, said to be of the first part, do covenant to and with said party of the second part, its successors and assigns, that I have full right and title to make this license in manner and form as above written and that there is no prior assignment grant, mortgage, license, or other conveyance, under or relating to said patent, that can pre-

vent said licensee from enjoying the privileges conveyed in this license to the full extent herein given and stated.

In witness whereof, the above named parties (the said Excelsior Iron Works, by its president) have hereunto set their hands the day and year first above written.

GEORGE B. MATTHEWSON,

Excelsior Iron Works:
By John Hartshorn, President.

Power of Attorney to Sell Rights. By the Patentee.

I, John Haight, of Hartford, Connecticut, patentee and owner of letters-patent of the United States, No. 100,001, for an improvement in mouse-traps, dated May 25, 1870, do hereby appoint Hiram Handsome, of said Hartford, my attorney, with full power to make assignments, grants, or licenses, of any kind, under said patent, with full power to sign my name to all such instruments, and to receive and receipt for all considerations received in exchange for any of said rights, but with no power to bind me in any manner further than to make binding and legal all such assignments, grants, and licenses.

This power to remain in force till a revocation in writing shall be duly recorded upon the records of the United States Patent Office, where this power of attorney will be found duly recorded.

Witness my hand this fourteenth day of June, A. D. 1871.

JOHN HAIGHT.

Witnesses:
CHARLES HAWSER,
HENRY CABLE.

Power of Attorney with Restrictions. By the Assignees of Entire Right.

We, William Noble and Hugh Ransom, of Hartford, Connecticut, assignees and owners of the entire right in and to letters-patent of the United States, No. 100,666, for an improvement in garden hoes, dated May 24, 1873, do hereby appoint Robert Roberts, of said Hartford, our attorney, with full power to make assignments, grants, or licenses of any kind, under said patent, with full power to sign our names to all such instruments, and to receive and receipt for, in our name, all considerations received in exchange for any of said rights, but with no power to bind us, or either of us, further than to make binding all such assignments, grants, and licenses; he to exercise all power herein conferred, under the following conditions, without which no act of his under this authority shall be valid:

I. He shall sell at no less than the following prices: For the whole patent, twenty thousand dollars;

For any State, such part of twenty thousand dollars as the population of the State in question bears ratio to the whole population of the United States,—this result to be doubled to find the price for said State; For any county, such part of the price for the State, as determined by the foregoing directions, as the population of the said county bears ratio to the population of the State,—this result to be doubled to find the value of said county;

For any town, such part of the price of the county in which it is situated, determined as hereinbefore directed, as the population of the town bears ratio to the population of the county,—this result to be doubled to find the value of said town.

All sales of licenses, and all territorial sales at less than the prices given above, to be subject to our approval by letter or telegram.

II. All payments for rights thus sold shall be made either in cash wholly, or in not less than one-half cash and one-half in good promisory notes, to mature within six months from day of sale, and either signed or endorsed by a person or persons of ample pecuniary responsibility. All such cash shall be deposited by the payer thereof with the nearest bank or responsible private banker, payable to the joint order of our said attorney and ourselves, and all such promisory notes shall be made in three notes of equal amount, payable to the joint order of ourselves and our said attorney, and delivered to him. Any payment aforesaid in anywise deviating from these provisions, to be subject to our approval by letter or telegram.

This power shall remain in force till a written revocation thereof shall be recorded on the records of the Patent Office of the United States, where this power will be found recorded. Witness our hands, this tenth day of June, A. D., 1871.

WILLIAM NOBLE, HUGH RANSOM.

Witnesses:

SAMUEL SIMMONS,
THOMAS TOMPKINS.

Private Agreement to Accompany Power of Attorney.

This agreement made this tenth day of June, 1874, between William Noble and Hugh Ransom, party of the first part, and Robert Roberts, party of the second part, all of Hartford, Connecticut, witnesseth:

I. That the party of the second part agrees to use his best endeavors to sell rights under letters-patent No. 100,-666, dated May 24, 1871, for the party of the first part, under the terms and conditions of a power of attorney of even date herewith, from the party of the first part to the party of the second part; such endeavors to continue until said power of attorney is revoked, or until the party of the second part notifies the party of the first part, in writing, that he no longer wishes to be bound by this agreement.

II. The party of the first part agrees to pay to the party of the second part, one-third part of all the proceeds from said sales, as remuneration for his services in this behalf, and this remuneration shall be due and payable from cash received, as soon as deposited as provided

in said power of attorney, and from promissory notes received, as soon as they are delivered to the party of the second part, the party of the second part to retain as his property one of the three said equal promissory notes, and to immediately forward the other two to the party of the first part. This allowance to be in full of all charges whatsoever in this behalf against the party of the first part; and the said party of the second part is to bear his own expenses, of whatever nature.

In witness whereof, the said parties have hereto set their hands this tenth day of June, A. D. 1871.

WILLIAM NOBLE.
HUGH RANSOM.
ROBERT ROBERTS.

Witnesses:
Samuel Simmons,
Thomas Tompkins.

Revocation of Power of Attorney.

Having, on the tenth day of June, 1871, appointed Robert Roberts, of Hartford, Connecticut, our attorney to sell rights, under letters-patent No. 100,666, dated May 24, 1871, for us, we do hereby revoke said power of attorney to him, and declare his authority to act for us in any manner to be at an end.

Witness our hands, this fourth day of July, A. D. 1871, at Hartford, Connecticut.

WILLIAM NOBLE. HUGH RANSOM.

Witnesses:

SAMUEL SIMMONS,
THOMAS TOMPKINS.

Power of Attorney to Sell Rights-C. O. D.

I, William M. Bjoerkman, of Bridgeport, Connecticut, owner of letters-patent of the United States, No. 135,543, dated February 30, 1873, hereby authorize William H. Marsh, of Bridgeport, to sell assignments, grants and licenses under said patent, such sales to be approved by me before becoming valid, upon which approval, in each case, I will send the necessary assignment, grant, or license, duly executed by me, by express to said Marsh, accompanied with instructions to the carrier to allow said Marsh, and the buyer or buyers of any such right, to examine such conveyance, and upon delivery of the same, to collect for return to me such money, notes, or articles as I am to receive in consideration of such sale.

Signed and sealed by me, this thirty-first day of June, A. D. 1873.

WILLIAM M. BJOERKMAN.

Contract for Future Grant.

Whereas letters-patent of the United States, for improvements in ox-yokes, No. 49,695, dated May 6, 1869, were issued and granted to Isaac Johnson; and whereas Henry Henderson, of Chicago, Illinois, desires to acquire all the rights granted by said letters-patent within the State of Illinois: now in consideration of the present payment to me of five hundred dollars in current funds, and in further consideration of the delivery to me of three promissory notes of even date herewith for five hundred dollars each, made and signed by the said Henderson, payable to my order, one due three months from date, one due six months from date, and one due nine months from date,—all with interest:

I, the said Isaac Johnson, do hereby grant to the said Henderson, but not to his assigns, for the term of nine months, from the date hereof, the exclusive license to make, to use, and to vend to others to use, within said State of Illinois, the articles forming the subject-matter of said letters-patent; provided, that if either of the two notes, coming due at three and six months respectively, shall not be paid at maturity, then, when said default of payment is made, this license shall immediately determine, without notice or action on my part;

But, if payment of each and all of the said three notes shall be made at the time of their maturity, then, by such payment, the said Henderson shall become the sole owner of each and all of the privileges and rights granted and secured by said patent, within and for the whole of the State of Illinois, without further action on my part.

And I covenant and agree, that, when all three of said notes are fully paid at maturity, I will execute and de-

liver to said Henderson a full and complete grant and transfer of the whole interest in said patent, within and for the State of Illinois; and I hereby make this agreement a lien and mortgage upon said interest in said patent for the faithful performance of my contract herein contained.

(Insert here covenant of title from previous form.) In witness whereof, I hereto set my hand, this eighth day of June, A. D. 1874.

ISAAC JOHNSON. By Amos Ames, Agent.

BILL OF COMPLAINT-IN EQUITY.

United States Circuit Court.

DISTRICT OF CONNECTICUT.

To the Honorable the Judges of the United States Circuit Court, within and for the Second Circuit and the District of Connecticut:

John Doe and Richard Roe, citizens of the State of Connecticut, and residents of the city of Middletown, in the County of Middlesex, in said State, partners in business at said Middletown under the style of John Doe & Company, bring this their bill of complaint against Charles Brown and John Smith, citizens of the State of Connecticut, and residents of the city of New Britain, in the County of Hartford, in said State, partners in business in said New Britain, under the style of Brown & Smith, and thereupon your orators complain and say:

That prior to the 29th day of September, A. D. 1868, said John Doe, a citizen of these United States was the original and first inventor of a certain new and useful improvement in a Window Spring Catch, not known or used by others before his invention thereof, and not in public use or on sale with his knowledge or allowance for more than two years prior to his hereinafter mentioned application for letters-patent therefor; and thereupon said John Doe made proper and lawful application for letters-patent of these United States for said invention, whereupon such due and legal proceedings were had that letters-patent of these United States, signed, countersigned, and sealed, dated September 29, A. D. 1868, and numbered 82,580, were granted and delivered to said John Doe for said invention, whereby there was granted and secured to said John Doe, and his heirs or assigns, for the term of seventeen years from and after the 29th day of September, A. D. 1868, the exclusive right to make, use, and vend the said invention throughout these United States and the territories thereof. And said John Doe, by written assignment, dated September 29, A. D. 1868, and duly recorded in the Patent Office, assigned and conveyed to said Richard Roe, an undivided half part interest and ownership in and to said invention and letters-patent, and the rights and privileges granted and secured by said letters-patent; and your orators have ever since remained the sole and exclusive owners of said letters-patent and of all the rights and privileges granted and secured thereby.

Your orators further show that, they, for good and lawful cause, surrendered said letters-patent to the Commissioner of Patents, and made due application for reissued letters-patent in lieu thereof, and having in all things complied with the requirements of the Acts of Congress in such case made and provided, they did obtain new and reissued letters-patent, in lieu of said surrendered letters-patent, for the same invention, but upon an amended description, which said reissued letters-patent were granted and dated and delivered to your orators July 20, A. D. 1880, and are numbered 9,301, duly signed, countersigned and sealed, for the residue of said term of seventeen years, as by said reissued letters-patent, or a duly authenticated copy thereof, ready in court to be produced, will fully appear.

Your orators further complain and say that said invention is of great value and utility and that they have made it profitable to themselves and to the public by making and selling large numbers of window spring catches embodying said invention.

Your orators further complain and say that said defendants have, since the grant of said reissued letterspatent, at said New Britain, within said district and at other places within these United States, unlawfully infringed upon said letters-patent and your orators' exclusive rights thereunder by making, using, and vending without your orators' leave or license, large numbers of window spring catches embodying the construction and improvement described and claimed in said reissued letters-patent; whereby said defendants have unlawfully realized large profits, and your orators have unlawfully suffered large damages, all of which said doings of said defendants are contrary to equity.

In consideration whereof, and for as much as your orators can only have adequate relief in this court of

FORMS. 321

equity; to the end therefore that said defendants may, if they can, show why your orators should not have the relief herein prayed and, may, upon their corporal oaths, and, to the best and utmost of their knowledge, remembrance, information and belief, full, true, direct and proper answer make to all the matters and things stated and charged:

And that said defendants may answer the premises, and that they may be decreed to account with and pay over to your orators their said unlawfully realized profits and your orators' said unlawfully suffered damages, with the costs of this suit.

May it please your Honors to grant unto your orators the writ of injunction of this court, provisionally enjoining and restraining said defendants and their clerks, attorneys, agents, servants and workmen from making, and using, and vending, any window spring catches embodying said patented improvements, during the pendency of this suit, and also the writ of injunction of this court perpetually enjoining and restraining said defendants and their clerks, attorneys, agents, servants and workmen from making, and using, and vending any window spring catches embodying said patented improvements; and that your orators may have such other or further relief as the nature of the case may require and to your Honors may seem meet.

May it please your Honors, to grant unto your orators not only the writ of injunction conformable to the prayer of this bill, but also a writ of subpœna directed to said defendants commanding them on a day certain, therein to be named, to be and to appear in this court, then and there to answer the premises and to stand to, perform,

and abide by such further order, direction and decree as may be made against said defendants.

And your orators, as in duty bound, will ever pray, &c.

WM. H. MARSH, Complainants' Solicitor and of Counsel. John Doe Richard Roe.

DISTRICT OF CONNECTICUT, COUNTY OF HARTFORD.

At Hartford, in said County of Hartford and State of Connecticut, personally appeared said John Doe and Richard Roe, and severally deposed that they are the said complainants named in the foregoing bill of complaint; that they have read said bill and know the contents thereof, and that the allegations thereof are true of their own knowledge, except as to those matters therein stated on information and belief, and as to such matters they believe it to be true.

Before me this 5th day of July, A. D. 1883.

SEAL.

Albert C. Tanner,

Notary Public.

DEFENDANTS' ANSWER-IN EQUITY.

United States Circuit Court.

DISTRICT OF CONNECTICUT.

JOHN DOE & COMPANY,

vs.

BROWN & SMITH.

In Equity.

The Answer of Charles Brown and John Smith, Defendants, to the Bill of Complaint of John-Doe and Richard Roe, Complainants.

These defendants, saving and reserving to themselves all and all manner of benefit of exception which may be had or taken to said Bill of Complaint, on account of its errors and insufficiencies, make answer to said Bill of Complaint, as follows:

These defendants admit that pretended letters-patent of these United States, No. 82,580, and dated September 29, A. D. 1868, for an alleged improvement in Window Spring Catches, were issued to said John Doe, and that said pretended letters-patent were surrendered and reissued in and by pretended reissued letters-patent No. 9,301, dated July 20, A. D. 1880, but whether an interest in said letters-patent was ever assigned to said Richard Roe, these defendants are not informed save by the allegations of said bill of complaint, and these defendants leave said complainants to make due proof thereof.

These defendants, on information and belief, deny that said John Doe was the first or original inventor of any patentable improvement forming the subject-matter of either said original or said reissued letters-patent, and aver that said original letters-patent and said reissued letters-patent were and are therefore null and void.

These defendants, on information and belief, and in view of the state of the art in question, as that art existed at the time said John Doe made his said alleged improvements, deny that either of the matters or things said to have been originated by said Doe and now claimed in said reissued letters-patent, amounts to a patentable invention, and aver that the said alleged improvements were the product of mere mechanical skill; and that said reissued letters-patent are, therefore, null and void.

These defendants, on information and belief, deny that there is any utility whatever, in any matter or thing, described and claimed as an invention in said reissued letters-patent, and aver that said reissued letters-patent are, therefore, null and void.

These defendants, on information and belief, aver that each of the alleged combinations claimed in said reissued letters-patent is not a legal, actual and patentable combination, but is a mere aggregation of mechanical features; and that each clause of claim of said reissued lefterspatent is, therefore, null and void.

These defendants, on information and belief, aver that said original letters-patent were not inoperative or invalid by reason of such a defective or insufficient specification as was or could be lawfully corrected or amended by the surrender and reissue thereof as aforesaid; that said original letters-patent were not surrendered to correct any error which had arisen by inadvertence, accident or mistake; that new matter, not constituting any substantial part of the alleged invention for which said original letters-patent were granted, was introduced and interpolated into the specification and claim of said reissued letters-patent; that said reissued letters-patent are not for the same invention as were said original letterspatent; that said reissued letters-patent contain broader claims of invention than were contained in said original letters-patent; that said reissued letters-patent were not applied for with due diligence after the issue of said original letters-patent; and that therefore said reissued letters-patent are null and void.

These defendants, on information and belief, aver that said reissued letters-patent and said original letters-patent are and were null and void because that the alleged improvement forming the subject-matter thereof was in public use and on sale in this country more than two years prior to said Doe's application for said original letters-patent, by the following mentioned persons and parties, at the following mentioned places, to wit.:

Alfred Harkness, of Bristol, Connecticut, at said Bristol.

Thomas Jones, of Winsted, Connecticut, at said Winsted.

These defendants, on information and belief, aver that said reissued letters-patent are null and void because that said Doe was not the true and first inventor of the alleged improvement therein described and claimed, but that the same and all the material and substantial parts thereof were, long prior to any supposed invention thereof by said Doe, patented and described in and by the following mentioned printed publications and letterspatent, to wit.:

United States patent No. 42,411, to James Sheridan, granted and dated April 19, 1864.

Letters-patent of the Kingdom of Great Britain and Ireland, No. 10,000, to Thomas Thomas, granted and dated March 3, 1867.

These defendants further assuming, on information and belief, aver that said reissued letters-patent are null and void because that said Doe was not the original and first inventor of the alleged improvements set forth and claimed therein, but that the same and all the material and substantial parts thereof were, long prior to any supposed invention thereof by said Doe, known to and in public use by the following named persons and parties, at the following mentioned places to wit.:

Henry Adams, of Plainville, Connecticut, at said Plainville.

William Friday, of East Hartford, Connecticut, at said East Hartford.

These defendants, on information and belief, aver that

FORMS. 327

said original letters-patent, No.82,580, and said reissued letters-patent, were and are null and void because that the said original letters-patent, No. 82,580, were surreptitiously and unjustly obtained for that which was in fact invented by another and by others who were using, and did use, reasonable diligence to adapt and perfect the same, to wit.:

Charles Clark, of Southington, Connecticut, at said Southington.

Alfred Smith, of Stonington, Connecticut, at said Stonington.

These defendants, on information and belief, aver that said original letters-patent, No. 82,580, and said reissued letters-patent are and were null and void because that the alleged inventions described therein were not originated or discovered by said Doe, but were communicated to him by other persons.

These defendants, on information and belief, further answer and say, that said original letters-patent, No. 82,580, and said reissued letters-patent are and were null and void because that said Doe, prior to his making his said application for his said original letters-patent, abandoned and dedicated to the public his said alleged invention.

These defendants, on information and belief, further answer and say that said complainants have no right to recover any damages from these defendants by reason of any infringement by these defendants of said original letters-patent, No. 82,580, or of said reissued letters-patent because that said complainants have made and sold window spring catches, such as are described in the two patents last mentioned, but have never given sufficient

notice to the public that said window spring catches are patented, by fixing thereon or upon the packages containing the same the word "patented" together with the day and year the patent was granted, and have never notified these defendants that these defendants infringe said original letters-patent No. 82,580, or said reissued letters-patent.

These defendants further answer, on information and belief, and say that the window spring catches made and sold by these defendants are made under the sanction and by the permission of the owners of letters-patent of these United States, as hereinafter mentioned, which describe and claim inventions which are substantially different from the said alleged inventions of said Doe, to wit:

Patent to C. C. Elliot, No. 62,535, granted and dated March 5, 1867.

Patent to G. A. Otis, No. 78,537, granted and dated June 2, 1868.

These defendants further answering, on information and belief, deny that they have ever infringed said reissued letters-patent; deny that they have ever infringed upon any rights whatever of said complainants; deny said complainants' right to any account of damages, of profits, or costs to be recovered from these defendants; deny said complainants' right to any injunction, provisional or perpetual, against these defendants; and deny that said complainants are entitled to any other or further relief whatever against these defendants.

All of which matters and things these defendants are ready to aver, maintain and prove, as this Honorable Court shall direct, and they hereby pray to be hence dismissed with their reasonable costs and charges wrongfully sustained in this behalf.

And, as in duty bound, these defendants will ever pray, &c.

CHARLES BROWN, JOHN SMITH.

THOMAS HASTINGS,

Solicitor and of

Counsel for Defendants.

STATE OF CONNECTICUT, COUNTY OF NEW HAVEN.

Charles Brown and John Smith, being sworn, severally depose and say that they are the defendants named in the foregoing answer; that they have read the same and know the contents thereof, and that the same is true of their own knowledge, except as to those matters therein stated on information and belief, and as to such matters they believe it to be true.

Before me, at New Haven, in the county of New Haven, and State of Connecticut, this 7th day of July, 1883.

Edwin F. Dimock, U. S. Commissioner.

EQUITY REPLICATION.

United States Circuit Court.

DISTRICT OF CONNECTICUT.

John Doe and Richard Roe,

vs.

Charles Brown and John Smith.

These repliants saving and reserving to themselves, now and at all times hereafter, all and all manner of benefit and advantage of exception which may be had or taken to the manifold errors and insufficiencies of the said answer, for replication thereunto, say that they will aver, maintain, and prove their bill of complaint to be true, certain and sufficient in the law to be answered unto; and that the said answer of the said defendants is uncertain, and untrue, and insufficient to be replied unto by repliants without this; that any other matter or thing whatsoever in the said answer contained, material or effectual in the law to be replied unto and not herein and hereby null and sufficiently replied, confessed, and avoided, traversed, or denied, is true; all which matters and things these repliants are, and will be ready to aver, maintain, and prove as this Honorable Court shall direct, and pray as in and by their said bill they have already prayed.

WILLIAM H. MARSH.

Solicitor for Complainants.

NOTICE FOR TAKING TESTIMONY.

United States Circuit Court.

DISTRICT OF CONNECTICUT.

John Doe and Richard Roe,

vs.

Charles Brown and John Smith.

SIR:

You will please take notice that said complainants desire the evidence, which is to be adduced in this cause, to be taken orally under the 67th Rule of the United States Supreme Court, in equity, as amended: and you will further take notice that by an order, made in said cause by Charles Harper, Esq., one of the examiners of said court, the examination of witnesses on the part of said complainants will take place before said examiner, at No. 2 Central Row, (Room No. 22) in the City of Hartford, within the State of Connecticut, on the 16th day of July, A. D. 1883, at ten o'clock in the forenoon and proceed as said examiner may direct.

Dated at Hartford, Connecticut, July 7th, 1883.

WILLIAM H. MARSH,

Solicitor for Complainants.

To Thomas Hastings, Esq.,

Solicitor for Defendants.

ANOTHER FORM OF NOTICE FOR TAKING TESTIMONY.

United States Circuit Court

DISTRICT OF CONNECTICUT.

John Doe and Richard Roe,

vs.

In Equity.

CHARLES BROWN AND JOHN SMITH

To Thomas Hastings, Esq.,

Defendants' Solicitors,

No. 500 Main St.,

Hartford, Conn.

SIR:

Take notice that on the 16th day of July, A. D. 1883, beginning at 10 o'clock in the forenoon, at No. 2 Central Row, (Room No. 22) in the city of Hartford and the State of Connecticut, evidence will be taken in behalf of said complainants under the 67th Rule in equity of the United States Supreme Court, as amended.

You have the right to attend and cross-examine. Dated at Hartford, Connecticut, July 7, 1883.

Respectfully,
WM. H. MARSH,
Solicitor for Complainants.

EXAMINER'S FORM FOR TAKING TESTIMONY.

United States Circuit Court.

DISTRICT OF CONNECTICUT.

John Doe and Richard Roe,

vs.

Charles Brown and John Smith.

Testimony taken on the part of the complainants in the above entitled cause, before Charles Harper, an examiner of said court, at Room No. 22, No. 2 Central Row, Hartford, Connecticut, pursuant to the annexed notice, commencing on the 16th day of July, A. D. 1883, at ten o'clock in the forenoon.

Present— Thomas Jones, Esq.,

Counsel for Complainants.

HENRY HARRISON, Esq.,

Counsel for Defendants.

WILLIAM OSGOOD, being called and sworn as a witness in complainants' behalf, deposes as follows in answer to interrogatories proposed to him by complainants' counsel.

(Certificate at end.)

I, Charles Harper, an examiner of said court, do hereby certify that on the several days named in the depositions hereto annexed, I was attended at Room No 22, in the building No. 2, Central Row, at Hartford, in the State of Connecticut, by the counsel and witnesses aforesaid; that the said witnesses were each duly sworn and examined, and the deposition of each witness was reduced to writing and read to him by me and by him subscribed in my presence; and that the following exhibits, to wit.:

Defendants' Exhibit, Hodge's Patent,
Defendants' Exhibit, Smith's Patent
were introduced in evidence and identified by my
signature.

Dated at Hartford, Connecticut, this 21st day of August, A. D. 1883.

CHARLES HARPER,

Examiner.

INTERLOCUTORY DECREE-IN EQUITY— REFERRING CAUSE TO MASTER FOR AN ACCOUNTING.

At a stated term of the Circuit Court of the United States of America, for the District of Connecticut, held at Hartford on the third Tuesday of September, 1883.

Present-

Hon. Jarvis Johnson,

District Judge.

John Doe and Richard Roe,

vs.

Charles Brown and John Smith.

This case having been heard on the pleadings and proofs and arguments by counsel for the respective parties, and the court having considered the same, doth hereby order, adjudge, and decree:

First. Complainants' reissued letters-patent, No. 9,301, on which this suit is brought, are good and valid letterspatent, and are owned by the complainants as charged in the bill of complaint

Second. Said defendants have infringed upon said reissued letters-patent by making and selling window spring catches such as are described in said reissued letterspatent and referred to in the first claim thereof. Third. Complainants are entitled to have the perpetual injunction of this court, restraining said defendants, their agents, servants, clerks, attorneys, and workmen from making, vending, or using window spring catches such as are described in said reissued letters-patent, and referred to in the first claim thereof, and said injunction is hereby ordered to issue.

Fourth. This case is hereby referred to Charles Harper, Esq., a master in chancery of this court, to ascertain and report the use, gains, and profits which said defendants have realized through their unlawful infringement of said reissued letters-patent and the damages which complainants have sustained through defendants' said unlawful infringement of said reissued letters-patent.

Jarvis Johnson,

District Judge.

THE MASTER'S REPORT-IN EQUITY.

United States Circuit Court.

DISTRICT OF CONNECTICUT.

John Doe and Richard Roe,

71 C

In Equity.

CHARLES BROWN AND JOHN SMITH.

To the Honorable the Judges of said Court:

The above entitled cause having been referred to me

as master by a decreetal order, made at the stated term of said court, held on the third Tuesday in September, 1883, with instructions to ascertain and report to the court an account of the gains, profits, and advantages which said defendants have realized through their unlawful infringement of complainants' reissued letters-patent No. 9,301, together with the damages which the complainants have sustained thereby, I beg leave to report:

All of which is respectfully submitted.

CHARLES HARPER,
Dated July 17th, 1884.

Master in Chancery.

EXCEPTIONS TO MASTER'S REPORT-IN EQUITY.

United States Circuit Court.

DISTRICT OF CONNECTICUT.

John Doe and Richard Roe, vs. Charles Brown and John Smith.

Exceptions taken by defendants to the report made herein, dated July 17, 1884, by Charles Harper, Esq., master in chancery of this court, to whom this cause was referred by an order of this court, made at a stated term

43

of this court, held the third Tuesday of September, 1883.

First Exception. For that the master in his report *

THOMAS HASTINGS,

Dated Dec. 25, 1884.

Defendants' Solicitor.

FINAL DECREE-IN EQUITY.

At a stated term of the Circuit Court of the United States of America for the District of Connecticut, in the Second Circuit, held at New Haven on the fourth Tuesday of April, 1885.

Present— The Hon. Jarvis Johnson,

District Fudge.

John Doe and Richard Roe,

vs.

In Equity.

CHARLES BROWN AND JOHN SMITH.

This cause having been heard upon the report of Charles Harper, Esq., master in chancery of this court, to whom it was referred to ascertain and report to the court an account of the gains, profits, and advantages which said defendants have realized as well as the damages which complainants have suffered through the unlawful infringement by defendants of the complainants' reissued letters-patent, No. 9,301, which report bears date the 25th day of December, 1884, and also upon ex-

FORMS. 339

ceptions taken to said report by said defendants and the said cause having been argued by counsel, and due deliberations having been had thereon:

It is adjudged and decreed, and this court doth hereby adjudge and decree that said exceptions of the defendants be and the same hereby are overruled, and said report of the said master be and the same is hereby accepted; and that the complainants recover of the said defendants their damages as stated and assessed in said report of said master, to wit.: "The sum of four thousand two hundred and fifty-nine dollars and seven cents and their costs."

It is further ordered, adjudged, and decreed that said defendants pay to the said complainants the sum of four thousand two hundred and fifty-nine dollars and seven cents and their costs in this suit, to be taxed, and that said complainants have execution therefor, and that the injunction heretofore granted in said cause be continued and made perpetual.

Jarvis Johnson, District Judge.

EQUITY-APPEAL TO THE U.S. SUPREME COURT.

John Doe and Richard Roe, vs. Charles Brown and John Smith. $In \ Equity$

To the Honorable, the Supreme Court of the United States:

The Appeal of Charles Brown and John Smith, co-

partners, under the name of Brown & Smith, said defendants and appellants, respectfully showeth:

That on the 7th day of May, 1881, John Doe, and Richard Roe, co-partners, under the name of John Doe & Company, said complainants, filed their bill of complaint in the Supreme Court of the United States for the District of Connecticut, against the above named defendants and appellants therein alleging that on the 20th day of September, 1868, said John Doe obtained letterspatent of these United States, bearing that date, and numbered 82,580, for a new and useful improvement in window spring catches, securing to him and his heirs and assigns the exclusive right to said improvement for the term of seventeen years from and after said date last mentioned: that a one-half interest and ownership in said letters-patent and all its rights and privileges, were assigned to said Richard Roe September 30, 1868; that said original letters-patent, were lawfully surrendered to the Commissioner of Patents and reissued in and by reissued letters-patent of these United States, No. 9,301, dated July 20, 1880, and further alleging that said defendants had unlawfully infringed upon the exclusive rights secured to said complainants by said reissued letters-patent and praying for a decree of injunction and account as by reference to said bill of complaint will more fully appear. And said defendants, on the 7th day of June, 1881, filed their answer to said bill of complaint admitting the issue of said letters-patent to said Doe, as alleged in said bill of complaint, not denying that an interest in the same was assigned to said complainant, Richard Roe, but denying that said reissue was a lawful reissue, and also denying that said Doe was the original and first inventor of the improvement described in said

FORMS. 341

letters-patent, and denying that the said improvement had patentable novelty, and denying that said defendants had infringed said reissued letters patent, as by reference to said answer will more fully appear. To which answer said complainants filed their replication, and the cause being at issue, the parties proceeded to take testimony in support of their respective allegations, and at the September term of said Circuit Court, A. D. 1883, were fully heard by their counsel, and at the said September term of said court a decreetal order for an injunction and account was rendered referring said cause for the taking of the account to a master, and the cause was continued for the master's report and thereafter at the April term of said Circuit Court, A. D. 1885, the master's report came in. To which said report said defendants made exceptions, which exceptions were duly argued before said Circuit Court. That at said stated term of said Circuit Court, held at New Haven on the fourth Tuesday of April, 1885, a final decree was made and pronounced in the case wherein it was ordered, adjudged, and decreed as follows:

"That said exceptions of the defendants be and the same are hereby overruled, and said report of the said master be and the same is hereby accepted, and that the complainants recover of the said defendants their damages as stated and assessed in the report of the said master, to wit.: The sum of four thousand two hundred and fifty-nine dollars and seven cents and their costs. It is further ordered, adjudged, and decreed that the said defendants pay to the said complainants the sum of four thousand two hundred and fifty-nine dollars and seven cents and their costs in this suit, to be taxed, and that said complainants have execution therefor, and that the

injunction heretofore granted in said cause, be continued and made perpetual." Whereupon said appellants appeal from the whole of said final decree of said Circuit Court, and respectfully pray that the decree of said Circuit Court and the bill, answer, pleadings, depositions, evidence, and proceedings in the cause may be sent to the Supreme Court of the United States without delay, and that the said Supreme Court will proceed to hear the said cause anew, and that the said decree of the Circuit Court and every part thereof may be reversed and a decree made reversing said decree with costs, or such other decree as to the said Supreme Court may seem fit.

Dated at Hartford, Conn., this 18th day of May, A. D. 1885.

Thomas Hastings,
Solicitor, and of Counsel for said
Defendants and Appellants.

SUPERSEDEAS BOND.

Supreme Court of the United States.

IN EQUITY.

JOHN DOE AND RICHARD ROE,

US.

CHARLES BROWN AND JOHN SMITH.

Know all men by these presents, That we, Charles

Brown and Pliny Olmstead, of Hartford, in the state and district of Connecticut, are held and firmly bound unto John Roe and Richard Roe, partners, under the name of John Doe & Company, in the sum of nine thousand three hundred and fifteen dollars and twenty-eight cents, to be paid to the said John Doe & Company, their heirs and assigns, to which payment well and truly to be made, we bind ourselves, and each of us, jointly and severally, and our heirs, and each of our heirs, executors, and administrators firmly by these presents.

Sealed with our seals and dated this 18th day of May, 1885.

Whereas, Charles Brown and John Smith, co-partners under the name of Brown & Smith, the said defendants in the above entitled cause, have taken an appeal to the Supreme Court of the United States to reverse the decree rendered in said cause by the Honorable Circuit Court of these United States, for the District of Connecticut, at its April term, 1885:

Now, therefore, the condition of this obligation is such that if the above named Brown & Smith shall prosecute said appeal to effect and answer all costs and damages, if they shall fail to make good their plea; and shall pay to said obligees the money decreed to be so paid in the final decree of said Circuit Court in this cause, including just damages for delay and costs and interest on this appeal, then this obligation shall be void; otherwise it shall remain in full force and virtue.

CHARLES BROWN, L. S.
PLINY OLMSTEAD. L. S.

United States of America, District of Connecticut, at Hartford, in said District, on this 18th day of May, 1885, personally appeared the said Charles Brown and Pliny Olmstead and acknowledged the execution of the foregoing bond as their free act and deed.

HENRY HARRINGTON,

United States Commissioner.

Jarvis Johnson,

District Fudge.

Approved:

INTERFERENCE-BILL OF COMPLAINT-IN EQUITY.

TO THE JUDGES OF THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF MASSACHUSETTS.

In Equity.

Horace G. Butler, of the town of West Hartford, in the County of Hartford, and State of Connecticut, a citizen of said State of Connecticut, and the Eureka Farm Machine Company, a joint stock corporation organized under the laws of the State of Vermont, and located at Bellows Falls, in said State of Vermont, bring this their bill against Jane H. Shaw, of Rockland, in the State and district of Massachusetts, a citizen of said State of Massachusetts, and thereupon your orators com-

plain and say: that in the month of November, 1876, your orator, said Horace G. Butler, became and was the first and original inventor of certain new and useful improvements in milk cans, or vessels, and thereafter, to wit, on or about the 20th day of November, 1878, your orator, Horace G. Butler, made application, in due form of law, for letters-patent of these United States, upon and for said improvements in milk cans or vessels, which said invention and all rights of patent for the same were assigned to said Eureka Farm Machine Company by said Butler's written assignment, dated December 16, A. D. 1878, and duly recorded in the Patent Office; and while said application was pending in the Patent Office, your orator, Horace G. Butler, made certain specific claims of invention therein, to wit.:

"I claim:

- "I. A milk vessel having an adjustable faucet that can be set to automatically discharge any predetermined quantity of milk, to leave in the vessel a certain quantity of cream, and provided with a glass pane to ascertain the degree or place of adjustment of the faucet."
- "3. A can for milk and cream separation having an 'adjustable automatic discharge faucet, and a transpar'ent pane by which the place or degree of faucet 'adjustment may be determined,"—and your orator's said application for a patent upon said improvements, containing said claims, was finally refused and rejected by the Commissioner of Patents, on or about the 28th day of December, 1881, on the ground that Thomas Shaw (deceased at the date last mentioned) was the prior inventor of said improvements in milk cans or vessels de-

scribed in your orators' said application for letters-patent and referred to in said two clauses of claim.

Your orators further show to your Honors that said Thomas Shaw, in his life time, filed with the Commissioner of Patents, on or about the 4th day of February. 1878, an application for letters-patent for improvements in apparatus for separating cream from milk, which eventuated in the issue of letters-patent of these United States, dated September 10, 1878, and numbered 207.-822; that in response to a notification from the Commissioner of Patents made while your orators' said application was pending in the Patent Office, an application for reissue of said Shaw's original patent was filed in the Patent Office, on or about April 5th, 1880, wherein the said Jane H. Shaw, appeared as the owner by mesne assignment, of all of said Thomas Shaw's rights in the premises; that an interference was declared and had in the Patent Office, between your orators' said application for letters-patent and said application for said reissued patent upon an issue stated by the Commissioner of Patents, as follows, to wit.:

"A can for milk and cream separation having an adijustable automatic discharge faucet, and a transparent pane by which the place or degree of faucet adjustment may be determined,"—and thereupon priority of invention was awarded to said Thomas Shaw.

Your orators further show unto your Honors that the said refusal of the Commissioner of Patents to allow your orators' said application for patent containing the said two clauses of claim, was based upon said decision, by the Commissioner of Patents, awarding priority of invention as aforesaid, to said Thomas Shaw.

FORMS. 347

And your orators, on information and belief, aver that said Thomas Shaw was not the original or first inventor of said improvements in milk cans or vessels, described in your orators' said application for letters-patent and referred to in either or both of said two clauses of claim contained therein; but that your orator, Horace G. Butler, was the original and first inventor of the same, that the same are patentable, and that your orators are entitled to letters-patent of these United States therefor.

And your orators, on information and belief, aver that neither said original patent to Thomas Shaw, No. 207,-822, dated September 10th, 1880; nor the application therefor; nor any model filed with said application last referred to, describes, shows, or suggests the improvements described in your orators' said application for letters-patent, and referred to in either of said two clauses of claim therein contained.

And your orators, on information and belief, aver that the Commissioner of Patents erred and made a wrongful and unlawful decision in refusing your orators' said application for letters-patent as aforesaid; also that the Commissioner of Patents erred and made a wrongful and unlawful decision in awarding priority of invention to said Thomas H. Shaw, as aforesaid.

Your orators further show unto your Honors that said application for the reissue of said Shaw's said original patent eventuated in the grant and issue to said Jane H. Shaw, of letters-patent, No. 9,899, dated October 18th, 1881; and your orators, on information and belief, aver that said Shaw's original patent, No. 207,822, dated September 10th, 1878, did not contain any claim to the improvements in milk vessels described in your orators'

said application for letters-patent, and referred to in either of said two clauses of claim therein contained: that said application for said reissued letters-patent was not warranted by law; that said reissued letters-patent are not warranted by law and are null and void because they describe and claim as the invention of said Thomas Shaw matters and things which were not described or claimed in said Shaw's original patent, and because said reissue was not applied for with due diligence; and that nothing contained in said Shaw's said original patent lawfully warranted an application for reissue thereon, at the time said reissue was applied for, containing any claim to any invention or improvement which could or might lawfully interfere with your orators' said application for letters-patent, and said interference was therefore unlawful and wrongful.

And your orators pray your Honors to enquire into the premises and thereupon order, adjudge, and decree, your orators are entitled to have letters-patent of these United States for the said improvements in milk vessels described in your orators' said application for letters-patent and referred to in said two clauses of claim; and to grant to your orators such other relief, or such further relief, as the nature of the case may equitably require.

In consideration whereof, and to the end that Jane H. Shaw may, if she can, show cause why your orators should not have the order, judgement, and decree of this court, as hereinbefore prayed, and that your orators may have such other, or such further relief in the premises as the nature of the case may require, and shall be agreeable to equity; and that said defendant may answer all and singular the premises: may it please your Honors to

grant unto your orators the writ of subpœna to be directed to said defendant commanding her by a day certain, and under certain penalty, to be and appear before the Judges of the United States Circuit Court, in and for the District of Massachusetts, and then and there to answer the premises and further to stand to, and abide by, such order and decree herein, as shall be agreeable to equity and good conscience, and your orators will ever pray, &c.

HORACE G. BUTLER.

JAMES VAN ALSTINE,

Solicitor and of Counsel.

EUREKA FARM MACHINE COMPANY,
By CHARLES WORK,
Secretary.

OATH.

DISTRICT OF CONNECTICUT, COUNTY OF HARTFORD.

Personally appeared, Horace G. Butler, and made oath that he is the person of that name mentioned in the foregoing bill; that he has read the same and knows the contents thereof; and that the same is true of his own knowledge except as to those matters therein stated on information and belief, and as to all such matters he believes it to be true.

Before me at Hartford, in the County of Hartford, and State of Connecticut, on the 15th day of August, 1882.

CHARLES L. BURRAGE,

Notary Public.

[SEAL]

DEFENDANT'S EQUITY ANSWER TO FOREGOING BILL OF COMPLAINT.

Circuit Court of the United States.

DISTRICT OF MASSACHUSETTS.

THE ANSWER OF JANE H. SHAW TO THE BILL OF COMPLAINT OF HORACE G. BUTLER AND THE EUREKA FARM MACHINE COMPANY.

This defendant, now and at all times saving and reserving to herself all benefit and advantage of exception, which can or may be had or taken to the many errors, uncertainties and other imperfections in the said complainants' bill of complaint contained, for answer thereunto, or unto so much and such parts thereof as she is advised it is material or necessary for her to make answer unto, answering says:

She admits the citizenship and residence of the parties complainants and defendant, as in said bill of complaint set forth.

FORMS. 351

She also admits that the said complainant, on or about the 20th day of November, 1878, claiming to be the first and original inventor of certain new and useful improvements in milk cans or vessels, made application for letters-patent therefor as in said bill of complaint set forth; but she denies, on information and belief, that he was in fact the first and original inventor of the subject matter claimed by him in said application, as set forth in said bill of complaint.

She also admits that said application, containing said claims in said bill of complaint set forth, was finally refused and rejected by the Commissioner of Patents on or about the 28th day of December, 1881, on the ground that Thomas Shaw, deceased, was the prior inventor of the improvements in milk cans or vessels, described in said complainant's said application and claimed in said two clauses of claim set forth in said bill of complaint.

And this defendant, further answering, admits that the said Thomas Shaw in his lifetime, filed with the Commissioner of Patents, on or about the 4th day of February, 1878, an application for letters-patent for improvements in apparatus for separating cream from milk, which eventuated in the issue of letters-patent of the United States, dated September 10, 1878, and numbered 207,822, as in said bill of complaint alleged, and that in response to a notification from the Commissioner of Patents, made while said complainants' said application was pending in the Patent Office, an application for reissue of said Shaw's original patent was filed in the Patent Office on or about the 5th day of April, 1880, by this defendant, who was then the owner, by assignment, of the said letters-patent originally granted to the said

Thomas Shaw as aforesaid, who was then deceased: that an interference was declared and had in the Patent Office between the said complainants' aforesaid application and said application of this defendant for the reissue of said original patent granted to the said Thomas Shaw in his lifetime, upon an issue stated by the Commissioner of Patents as in said bill of complaint set forth: and thereupon it was decided that said Thomas Shaw was the prior inventor of the subject-matter in issue as aforesaid; and thereupon said original patent was reissued to this defendant October 18, 1881, with claims embracing the subject-matter of said issue.

And this defendant avers, that in said interference cause a decision that the said Thomas Shaw was the prior inventor as aforesaid was first rendered by the Examiner of Interferences, which decision was affirmed by the Board of Examiners-in-Chief and by the Commissioner of Patents in person, respectively on successive appeals to them by the said complainants.

And this defendant, further answering, avers, on information and belief, that the said Thomas Shaw was the original and first inventor of the subject-matter put in issue, as aforesaid, in said interference cause, and all of the invention claimed in said reissued patent, and denies that the said complainants was the original and first inventor of the subject-matter involved in said issue, or in the said two clauses of claim set forth in their said bill of complaint, or either of them, or any part thereof; and she avers, on like information and belief, that the said Thomas Shaw was the original and first and prior inventor of all the invention embraced or described in said two clauses of claim, or either of them, or any part thereof.

FORMS. 353

And this defendant further answering avers, on information and belief and advice of counsel, that said original patent No. 206,822, granted to the said Thomas Shaw on the 10th day of September, 1878, and the specification and drawings of the same clearly describe and show all the inventions and improvements claimed by the said complainants in said two clauses of claim set forth in their said bill of complaint, or the full equivalents thereof: and that neither of said clauses of said claim embraces any patentable invention not described or shown in the specification and drawings of said original patent.

And this defendant further answering denies, on information and belief and advice of counsel, that the Commissioner of Patents erred or made a wrongful or unlawful decision in refusing the complainants' said application for letters-patent or in awarding priority of invention to the said Thomas Shaw, as aforesaid.

And this defendant further answering admits that said original patent, No. 207,822, did not contain any sufficient claims to the improvements in milk vessels described in the complainants' said application and referred to in said two clauses of claim therein contained, but avers that the specification and drawings of said original patent did fully and clearly describe and show said improvements and invention, and that the failure to make sufficient claims thereto arose from inadvertence and mistake, and without any fraudulent intention.

She further avers that said reissue was applied for as soon as she was advised that the claims of said original patent were defective, in not being commensurate with the invention described and shown in the specification and drawings thereof; and in fact said reissue was ap-

plied for within one year and seven months from the grant of said original patent.

She further states that she was first advised of the insufficiency of the claims of said original patent by a letter from the Commissioner of Patents, after which she lost no time in filing her said application for reissue. She denies that said reissued letter patent were not warranted by law, or are null and void, and avers that the same are good and valid in law.

And this defendant further answering says, on information and belief, that after a decision in the Patent Office in her favor, in the aforesaid interference cause, to wit., on the 8th day of November, 1881, the said complainants filed in the Patent Office another application for letters-patent describing and showing the same alleged invention described and shown in said application so put in interference as aforesaid, and on said application letters-patent were granted and issued to them January 31, 1882, with a claim fully covering and embracing all the patentable invention of the said complainants, described and shown in said application, or in said prior application so put in interference as aforesaid, and she is advised by counsel, learned in the law, that by applying for and accepting said last mentioned letters-patent, the said complainants were estopped from claiming, as against this defendant, any invention that was involved or embraced in said interference; and she prays the same benefit and advantage as if the said matter had been specially pleaded in estoppel.

And now having fully answered said bill of complaint, this defendant submits to this Honorable Court, that the said complainants are not entitled to the relief prayed for, nor to any other relief, in the premises, and she prays to be hence dismissed with her reasonable costs and expenditures in this behalf most wrongfully sustained.

JANE H. SHAW.

HENRY HALE,

Solicitor and Counsel for Defendant.

STATE OF MASSACHUSETTS, COUNTY OF PLYMOUTH.

Jane H. Shaw, the above named defendant, being duly sworn, deposes and says, that she has heard read the foregoing answer and understands the same, and that all the several matters and things therein alleged as of her own knowledge are true, and all alleged and set forth as on information and belief, she believes to be true.

JANE H. SHAW.

Sworn to and subscribed before me this 20th day of October, 1882.

C. W. HARRINGTON,

[L. S.]

Notary Public.

REPLICATION TO FOREGOING ANSWER.

(Substantially same as the last Replication.)

INDEX.

Abandoned Experiments, Prior	,											PAGE 53
Abandonment of Invention to		. p.	ablic		٠		•		•		•	100
			ibiic	•		•		•		•		
Abandonment, The Evidence		•	•		•		•		٠		•	119
Aggregation, Combination and	•		•	•		٠		•		•		47
Applications, Continuity of .											•	141
Application for Patent .												124
Application for Patent, Statute	ory :	Req	uirei	ne	nts							124
Art, An												16
Assignment, An			-									189
Assignment by Insolvent .												192
Caveats												120
Claim, Ambiguity in the .												141
Claim, Nature of the												143
Combination and Aggregation												47
Composition of Matter												19
Conception of an Invention												83
Contract, A Patent is a												10
Costs												259
Damages												272
Damages and Profits												264
Defenses												252
Description, Sufficiency of .												133
Design Patents												210
Design Potents Extension of												187

1	NDEX.		357

Design, Patentable. ,	211
Designs, Infringement of	218
Diligence, Reasonable	86
Disclaimers	153
Disclaim, Who may	154
Disclaimer, Unreasonable Delay in Filing	155
Disclaimer During Suit	157
Disclaimer, Nature of a	158
Double Use	32
Drawings, The	127
Employer and Employee	202
Equivalents - Mechanical and Chemical	231
Experiments, Prior Abandoned	53
Extension	182
Extension of Design Patents	187
Extension Statute, Constructions of the	186
Extensions in the Patent Office	184
Form, Number and Size	39
Fraudulent Patent Marks	283
Grant, A	194
History and Nature of the Patent Law	I
Infringement	223
Infringement Suits	240
Injunctions, Perpetual	250
Injunctions, Provisional	250
Insolvent, Assignment by	192
Interference - Patent Office Procedure	87
Invention	29
Invention, Sufficiency of	41
Improvements	20
Joinder of Inventions	146
Joinder of Inventors	149
Jurisdiction of Patent Suits	240
License, A	196
Limitation of Infringement Suits at Law	258
Limitation of Infringement Suits in Equity	257
Machine, A	18
Manufacture A	To

358 INDEX.

									PAGE
Marking Patentable Articles .					•				282
Mechanical Skill, Mere .									30
Model, The									129
Mortgage of Patents									200
Novelty—In General									28
Novelty — Prior Invention .									70
Novelty - Prior Patent or Publi	catio	n'							64
Novelty — Prior Use									51
Number and Size, Form, .									39
Oath, The									129
Parties to an Infringement Suit			. ,						2 48
Patentable Subject Matter .									13
Petition, The	1								126
Policy of the Patent Law, The									6
Principle be Patented? Can a									21
Prior Abandoned Experiments									53
Prior Existence, Accidental .									57
Prior Invention, Novelty						÷			70
Prior Patent or Publication, No	velty	<i></i>							64
Prior Use Must be Public .									58
Prior Use Must be Successful U	Jse.								56
Prior Use Requires Full Proof									62
Prior Use, Novelty —									51
Profits, Defendant's									265
Public Use, Definition of .				١					106
Public Use, Qualities of .									101
Public Use Not Proved by Price	or Pa	atei	nt						106
Public Use Requires Clear Prod									108
Public Use Statute, History of									96
Public Use - Two Years .									96
Questions of Law and Fact .									255
Ouestions of Fact	;								256
Questions of Law									255
Recording									201
Reduction to Practice									84
Reissues									163
Rights of States as to Patents									285
Size Form Number and .									39

INDEX.		359
Skilled Aid to Inventors.		PAGE 205
Specification, The	•	130
States as to Patents, Rights of		285
	•	287
		284
Suit, Parties to an Intringement Suits at Law, Limitation of Infringement	•	258
Suits in Equity, Limitation of Infringement		257
Suits, Infringement	-	240
Suit, Jurisdiction of Patent		240
Sufficiency of Description	•	133
Sufficiency of Invention		41
mu i mi	•	189
mil II i Dir Dir Dir		204
TT 11 11 1 T	Ė	193
Undivided Interests in Patents		92
Utility, Absolute	•	92
		-
Utility, Comparative Warranty of Title	٠	94 201
* * *		
FORMS.		
		PAGE
Answer to Bill of Complaint		323
Answer to Interference Bill of Complaint		350
Appeal to the Supreme Court	٠	339
Assignment of Entire Interest, After Issue		296
Assignment of Entire Interest, Before Issue	•	293
Assignment of Undivided Interest, After Issue		291
Assignment of Undivided Interest, Before Issue		294
Assignment Without Warranty, &c		299
Bill of Complaint	٠	318
Contract for Future Grant		316
Examiner's Form for Taking Testimony . , .	•	333
Exceptions to Master's Report		337
Final Decree	٠	338
Grant of Territorial Right		299

INDEX.

	PAGI
Interference Bill of Complaint , , .	. 344
Interlocutory Decree	. 335
License — Exclusive Territorial	. 30
License (Exclusive) with Contract for Royalty	
License — Shop-Right	. 30:
License - Shop-Right - Assignable and Limited	. 30
License (Not Exclusive) with Royalty	. 300
Master's Report	. 330
Mortgage of Patent	. 30
Notice For Taking Testimony	331-33
Power of Attorney, Argreement to Accompany	. 31
Power of Attorney to Sell Rights	. 310
Power of Attorney to Sell Rights C. O. D	. 31
Power of Attorney, Revocation of	. 31
Power of Attorney with Restrictions	. 31
Replication	33
Supersedeas Bond	. 34

