effect of the law is, that no such consequence will necessarily follow from the invention being in public use or on sale, with the inventor's consent and allowance, at any time within two years before his application; but that if the invention is in public use or on sale prior to that time, it will be conclusive evidence of abandonment, and the patent will be void." The latter part of this statement is absolutely unwarranted by the statute or the cases. It is correct to the extent that under such circumstances the patent will be void. But it will not be void because the invention is conclusively deemed to have been abandoned. The statute does not authorize this conclusion and neither do the cases. The invention may possibly have been abandoned, to be sure, but the patent is void, as a matter of law, simply because the statute says it shall be void on account of the public use.244 This failure to distinguish between avoidance because of public use more than two years prior to the application, and avoidance because of abandonment as evidenced by public use, is found in very many of the decisions upon the point and has led to a deal of confused thought and expression. It probably accounts, also, for the part which the intent of the inventor plays in solving the question whether an open use is "public use" within the meaning of the statute, or merely "experimental" use. The intent of the inventor subsequently to apply for a patent does, as discussed above, have an influence upon the court's conclusion as to whether his use of the device is public or not. There is no logical reason why this should be so to be found in the definition of "public." It is as open to knowledge and as notorious, as fully shared in by the public, whatever be the intent of the inventor. But if the bar of public use be confused with that of intent to abandon, there is an obvious reason why

from certain circumstances is well illustrated in Kendall v. Winsor, 21 How. 322. The court says emphatically, as a matter of decision, that the question of abandonment is one for the jury, yet, as a matter of dictum, it says, an inventor may confer his invention upon the public, such intention being manifested expressly or by conduct, or he may forfeit his rights "by a willful or negligent postponement of his claims, or by an attempt to withold the benefit of his improvement from the public. . . ."

public use without an intent to abandon should not be treated as a bar.245

Failure to apply. The intent to abandon may be predicated upon circumstances other than public use, as well as on that. In one case²⁴⁶ it was found that the inventor had evinced an abandonment of his right to a patent because he had let eight years pass by, after his original application was withdrawn, without making any attempt to secure a patent. During this period other persons had taken out patents for similar devices. The court said, "An inventor, whose application for a patent has been rejected, and who, without substantial reason or excuse, omits for many years to take any step to reinstate or renew it, must be held to have abandoned any intention of further prosecuting his claim."

Delay in prosecuting an application not only may amount to abandonment as a reasonable conclusion of fact, but is specifically declared to be presumptive abandonment by the patent statute. This provides,247 "All applications for patents shall be completed and prepared for examination within one year after the filing of the application, and in default thereof, or upon failure of the applicant to prosecute the same within one year after any action therein, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the Commissioner of Patents that such delay was unavoidable." This phraseology leaves open the possibility of showing that the delay was not in fact due to intent to abandon, but it takes the burden of proof off from the party attacking the patent, where it ordinarily rests, and puts it upon the patentee himself. Commenting upon this, the court has said,248 "All this shows the intention of Congress to require diligence

²⁴⁵ Under the earlier statutes, by which public use within two years of the application would bar the right to a patent as well as public use more than two years before it, there was a greater justification for injecting the element of intent into the definition of public use than there is now. Shaw v. Cooper, 7 Pet. 319; Pennock v. Dialogue, 2 Pet. 1.

²⁴⁶ U. S. Rifle & Cartridge Co. v. Whitney, 118 U. S. 22.

²⁴⁷ § 4894 R. S.

²⁴⁸ Planing Mach. Co. v. Keith, 101 U. S. 479, 485.

in prosecuting the claims to an exclusive right. An inventor cannot without cause hold his application pending during a long period of years, leaving the public uncertain whether he intends ever to prosecute it, and keeping the field of his invention closed against other inventors. It is not unfair to him, after his application for a patent has been rejected, and after he has for many years taken no steps to reinstate it, to renew it, or to appeal, that it should be concluded 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 his inaction, he saw his invention go into common use, and neither uttered a word of complaint or remonstrance, nor was stimulated by it to a fresh attempt to obtain a patent. When in reliance upon his supine inaction during those years of his 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."249

But the court followed up this statement by the recognition that "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." 250

The application for a new patent to replace one already issued, and even a subsequent abandonment of effort to secure this reissue does not amount to an abandonment of the origi-

²⁴⁹ Acc. Gandy v. Marble, 122 U. S. 432.

²⁵⁰ Smith v. Goodyear Dental Vulcanite Co., 93 U. S. 486, 501, "And the proof respecting his health and pecuniary condition, together with his constant efforts to obtain the necessary means to prosecute his right, rebuts all presumption that he ever abandoned, actually or constructively, either his invention or his application for a patent. That he never intended an abandonment of his invention is perfectly clear; and it was not his fault that granting the patent was so long delayed." A dissenting opinion argues that the long delay in this case did amount to abandonment.

nal patent. That is still quite as valid and effective as when it was duly issued.²⁵¹

A different type of acquiescence, on which abandonment was predicated, arose in Hartshorn v. Saginaw Barrel Co.²⁵² Two men, Campbell and Hartshorn, had invented the same device at about the same time. Campbell supposed that he was the later inventor and let Hartshorn take out a patent, himself patenting only a part of his device. Many years later it developed that Campbell was in reality the first inventor, and within a reasonable time thereafter he applied for a patent. The lower court held this patent to be valid, under the circumstances. The Supreme Court said on the contrary, "Campbell contented himself with the narrow claim originally contained in his patent of 1867, and thereby acknowledged that he was not entitled to the broader claim which he now asserts under his reissue. He had the means and the opportunity at the time the application for his original patent was pending to have asserted his claim to priority of invention; he choose not to do so. He acquiesced in the claim of his adversary; he can not now claim what he then abandoned."

Omission from application. This is really only a variation of the well settled doctrine that when an inventor has applied for a patent and specifically described therein the invention for which he claims right of a monopoly, he is presumed to have claimed everything that he wants to protect. If he has omitted from the application some part of the invention which he would be expected to have claimed at that time, if at all, it is fair to assume that he did not intend to cover that particular part by patent, but has abandoned it to the public. In the words of the court, ²⁵³ "The statute requires the inventor to particularly point out and to claim distinctly the improvement or combination which he claims as his discovery. When, under this statute, the inventor has made his claims, he has thereby disclaimed and dedicated to the public all other combinations and improvements apparent from his specifica-

²⁵¹ McCormick Harvesting Machine Co. v. Aultman, 169 U. S. 606.

²⁵² 119 U. S. 664.

²⁵³ M'Bride v. Kingman, 97 Fed. 217, 223.

tion and claims that are not mere evasions of the device, combination, or improvement which he claims as his own. While the patent is notice of the claims which it contains and allows, it constitutes an estoppel of the patentee from claiming under that or any subsequent patent any combination or improvement there shown which he has not clearly pointed out and distinctly claimed as his discovery-or invention when he received his patent. It is a complete and a legal notice to every one—notice on which every one has a right to rely—that he may freely use such improvements and combinations without claim or molestation from the patentee." "The object of the patent law in requiring the patentee to particularly point out and distinctly claim the part, improvement or combination which he claims as his invention or discovery, is not only to secure to him all to which he is entitled, but to apprise the public of what is still open to them."254

The fair implication from these quotations would be that failure to claim all to which the applicant is entitled amounts ipso facto, as a matter of law, to an abandonment of the unclaimed part. But in both of the cases quoted from the issue was not at all whether or not any part of the invention had been in fact abandoned. It was merely one of interpretation of the patent as it stood. The decision was, that because the claim did not actually cover the matter alleged, it could not be made to cover such matter by judicial construction. This proposition that a patent could not be constructively extended so as to cover what had not in fact been claimed is logical as a rule of law. The other proposition, that failure to claim amounts to abandonment, is not logical as a rule of law, although it is justified as a rule of presumption. If the matter which the inventor failed to claim were something which did not necessarily need to have been included in the same patent as the matter which he did claim, it would be a possibility, at least, that he intended to claim it through another and separate application. Even if such an intent were unusual it would not be unreasonable. To hold as a matter of law that failure to

²⁵⁴ McClain v. Ortmeyer, 141 U. S. 419, 223.

claim in the first application constituted an abandonment, would be unreasonable and illogical. There could be, fairly, only a presumption of such intent. If the matter omitted were something which could have been patented only in conjunction with that claimed, the presumption is stronger. It could not have been omitted with the intent of patenting it separately, at a later time. The neglect to claim it, whether through actual intent not to, or mere indifference or carelessness, indicates with reasonable conclusiveness an intent to abandon. But it does not absolutely demonstrate such an intent. The omission might very possibly have happened through mistake, or lack of knowledge, or any form of inadvertence. If abandonment depends upon intent, as the courts have agreed it does, it can not logically be predicated upon omission to claim arising out of such a cause as mere inadvertence.

The actual decisions accord with what has just been said. and abandonment is not conclusively presumed from mere omission. The judicial view of it is forcefully expressed in Miller v. Brass Co.255 This suit was based on the re-issue of a patent which contained a claim not included within the original patent. The court held the new claim to be invalid because it had not been even described in the original patent and could not have been claimed therein. They recognized, however, that reissues are frequently made for the purpose of enlarging the claims of original issues under proper circumstances, and that the original claim is not absolutely conclusive upon the inventor as to the extent of his rights. In respect to the circumstances under which the expansion is allowable, it said, "If a patentee who has no corrections to suggest in his specification except to make his claim broader and more comprehensive, uses due diligence in returning to the Patent Office. and says 'I omitted this,' or 'my solicitor did not understand that,' his application may be entertained, and, on a proper showing, correction may be made. But it must be remembered that the claim of a specific device or combination, and an omission to claim other devices or combinations apparent on the

^{255 104} U. S. 350.

face of the patent, are, in law, a dedication to the public of that which is not claimed. It is a declaration that that which is not claimed is either not the patentee's invention, or, if his, he dedicates it to the public. This legal effect of the patent cannot be revoked unless the patentee surrenders it and proves that the specification was framed by real inadvertence, accident, or mistake, without any fraudulent or deceptive intention on his part; and this should be done with all due diligence and speed. Any unnecessary laches or delay in a matter thus apparent on the record affects the right to alter or reissue the patent for such cause. If two years' public enjoyment of an invention with the consent and allowance of the inventor is evidence of abandonment and a bar to an application for a patent, a public disclaimer in the patent itself should be construed equally favorable to the public. Nothing but a clear mistake, or inadvertence, and a speedy application for its correction, is admissible when it is sought merely to enlarge the claim." In short, the rule as laid down by this court is simply that omission to claim amounts to abandonment, as a matter of law, unless the patentee demonstrates, within a reasonable time, that it was not an abandonment. All of which is but a cumbersome way of saying that abandonment will only be presumed from omission.

The precise question came before the court in Miller v. Eagle Mfg. Co. ²⁵⁰ The patentee had taken out two patents, the descriptions and drawings of which were identical. The claims, however, differed, in that the later issued one claimed matter not included in the claim of the first. There was a valid reason for the making of this division, and the court distinctly held that "Where the second patent covers matter described in the prior patent, essentially distinct and separable from the invention covered thereby and claims made thereunder, its validity may be sustained." ²⁵⁷

²⁵⁶ 151 U. S. 186.

²⁵⁷ It is also, however, said quite as distinctly that a single invention may not be split and part of its features patented at one time and part at another. It might be commented that a single invention capable of being split into parts which are themselves patentable as inventions is an unillustrated paradox.

Correction of omissions. It might be supposed that whether an inventor intended to abandon or not, he must lose any part of his invention which he failed to claim when he should have done so, because the statute does not provide for a correction under such circumstances. It provides for the issue of a patent for an invention, but not for the issue of a second patent in case the first one has not been broad enough. Logically there seems to be no answer to such a position. The invention should be treated as lost, not by abandonment, but by failing to apply for a patent.

Practically, however, the courts have protected the inventor from such loss as a result of his mistake, by their interpretation of § 4916 R. S. This provides that, "Whenever any patent is inoperative or invalid, by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention or discovery more than he had a right to claim as new, if the error has arisen by inadvertence, accident, or mistake, and withou any fraudulent or deceptive intention, the Commissioner shall, on the surrender of such patent and the payment of the duty required by law, cause a new patent for the same invention, and in accordance with the corrected specification, to be issued to the patentee, or, in case of his death or of an assignment of the whole or any undivided part of the original patent, then to his executors, administrators, or assigns, for the unexpired part of the term of the original patent. Such surrender shall take effect upon the issue of the amended patent. The Commissioner may, in his discretion, cause several patents to be issued for distinct and separate parts of the thing patented, upon demand of the applicant, and upon payment of the required fee for a reissue for each of such reissued letters patent. The specifications and claim in every such case shall be subject to revision and restriction in the same manner as original applications are. Every patent so reissued, together with the corrected specifications, shall have the same effect and operation in law, on the trial of all actions for causes thereafter arising, as if the same had been originally filed in such corrected form; but no new matter

shall be introduced into the specification, nor in case of a machine patent shall the model or drawings be amended, except each by the other; but when there is neither model nor drawing, amendments may be made upon proof satisfactory to the Commissioner that such new matter or amendment was a part of the original invention, and was omitted from the specification by inadvertence, accident, or mistake, as aforesaid."258

DEDICATION OF AN INVENTION TO THE PUBLIC is not different from abandonment, in the ordinary speech of the courts. The words are often used indiscriminately. If judges were to make a distinction it would probably be in accord with the distinction of non-technical usage; abandonment carrying the idea of negative intent, of acts of omission; dedication implying positive acts and intent definitely to confer the right upon the public.

The foregoing discussion has dealt with abandonment or dedication to the public. There is a form of what might be called abandonment or dedication to particular individuals which, while it does not affect the inventor's right in respect to the public generally, does affect it in respect to these individuals. This is found in the statute itself²⁵⁰ which provides "Every person who purchases of the inventor or discoverer, or with his knowledge and consent, constructs any newly invented or discovered machine, or other patentable article, prior to the application by the inventor or discoverer for a patent, or who sells or uses one so constructed, shall have the right to use, and vend to others to be used, the specific thing so made or purchased, without liability therefor."

258 James v. Campbell, 104 U. S. 356; Electric Gas Lighting Co. v. Boston Elec. Co., 139 U. S. 481; Thomson-Houston Elec. Co. v. Elmira & H. Ry. Co., 71 Fed. 396; Ide v. Trorlicht, etc. Carpet Co., 115 Fed. 137. The Suffolk Co. v. Hayden, 3 Wall. 315, syll. 1, "Where a party having made application for a patent for certain improvements, afterwards, with his claim still on file, makes application for another but distinct improvement in the same branch of art, in which second application he describes the former improvement, but does not in such second application claim it as original, the description in such second application and non-claim of it there, is not a dedication of the first invention to the public."

²⁵⁹ R. S. § 4800.

CHAPTER VI

SECURING A PATENT

§ 1. FORM OF APPLICATION

The statute provides that 260 "Before any inventor or discovcrer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the Commissioner of Patents, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery. The specification and claim shall be signed by the inventor and attested by two witnesses.

"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.

"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.

"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 does verily believe himself to be the original and first inventor or discoverer of the art, machine, manufacture, composition, or improvement for which he solicits a patent; that he does not know and does not believe that the same was ever before known or used; and shall state of what country he is a citizen. Such oath may be made before any person within the United States authorized by law to administer oaths, or, when the applicant resides in a foreign country, before any minister, chargé d' affaires, consul, or commercial agent holding commission under the Government of the United States, or before any notary public, judge, or magistrate having an official seal and authorized to administer oaths in the foreign country in which the applicant may be, whose authority shall be proved by certificate of a diplomatic or consular officer of the United States.

"On the filing of any such application and the payment of the fees required by law, the Commissioner of Patents shall cause an examination to be made of the alleged new invention or discovery; and if on such examination it shall appear that the claimant is justly entitled to a patent under the law, and that the same is sufficiently useful and important, the Commissioner shall issue a patent therefor."

In amplification of these provisions of the statute, the Patent Office has made more definite and specific rules in regard to application for a patent and other proceedings to obtain it.²⁶¹ "The Commissioner of Patents, subject to the approval of the Secretary of the Interior, may from time to time establish regulations, not inconsistent with law, for the conduct of proceedings in the Patent Office." Copies of these rules will be furnished free of charge upon application to the Commissioner of Patents. As they are definite, and appertain only to

²⁶¹ This is authorized by R. S. § 483, "The Commissioner of Patents, subject to the approval of the Secretar, of the Interior, may from time to time establish regulations, not inconsistent with Law, for the conduct of proceedings in the Patent Office."

the undisputed and clear details of procedure, they need not be set out here nor discussed at length.

TITLE. The application must be by petition under oath, signed by the inventor, if he is alive and sane. It must be in the English language, as must be also the specifications and oath. The rules provide that the petition must "designate by title the invention sought to be patented." The form of this designation is, however, relatively unimportant, and it need. not be exact nor complete provided the petition properly adopts. by reference, a specification of the invention by which it is sufficiently set forth. This matter came before the court in the case of Hogg v. Emerson.262 The invention for which the patent issued was entitled. "a new and useful improvement in the steam engine." The suit itself was brought for violation of a patent for an "improvement in the steam engine and in the mode of propelling therewith either vessels on the water or carriages on the land." It was contended that the offer in evidence of the patent, as entitled, did not prove the existence of a patent such as set out in the suit. The court held that the identity of the patent need not be determined by the title alone, but that the specification annexed to the petition was a part of it and should be read in connection with it. The holding of the court and its reasons can not be set out more clearly than in its own language which is as follows: "Coupling the two last together, they constitute the very thing described in the writ. But whether they can properly be so united here, and the effect of it to remove the difficulty, have been questioned, and must therefore be further examined. We are apt to be misled, in this country, by the laws and forms bearing on this point in England being so different in some respects from what exist here. There the patent is first issued, and contains no reference to the specification, except a stipulation that one shall, in the required time, be filed, giving a more minute description of the matter patented. It need not be filed under two to four months, in the discretion of the proper officer. (Gods. Pat., 176.) Under these circumstances, it will be seen

^{262 6} How. 437.

that the patent, going out alone there, must in its title or heading be fuller than here, where it goes out with the minute specification. But even there it may afterwards be aided, and its matter be made more clear, by what the specification contains. They are, says Gods. Pat., 108, 'connected together,' and 'one may be looked at to understand the other.' See also 2 H. Bl. 478; I Webst. Pat. Cas., II7; 8 T. R., 95. There, however, it will not answer to allow the specification, filed separately and long after, to be resorted to for supplying any entire omission in the patent; else something may be thus inserted afterwards which had never been previously examined by the proper officers, and which, if it had been submitted to them in the patent and examined, might have prevented the allowance of it, and which the world is not aware of, seeing only the letters-patent without the specification, and without any reference whatever to its contents. 3 Brod. & B., 5. The whole facts and law, however, are different here. This patent issued March 8th, 1834, and is therefore to be tested by the act of Congress then in force, which passed February 21st, 1793. (I Stat. at L. 318.) In the third section of that act it is expressly provided, 'that every inventor, before he can receive a patent,' 'shall deliver a written description of his invention,' &c.; thus giving priority very properly to the specification rather than the patent. This change from the English practice existed in the first patent law, passed April 10th, 1790 (1 Stat. at L., 109), and is retained in the last act of Congress on this subject, passed July 4th, 1836 (5 Stat. at L., 119). It was wisely introduced, in order that the officers of the government might at the outset have before them full means to examine and understand the claim to an invention better, and decide more judiciously whether to grant a patent or not, and might be able to give to the world fuller, more accurate, and early descriptions of it than would be possible under the laws and practice in England. In this country, then, the specification being required to be prepared and filed before the patent issues, it can well be referred to therein in extenso, as containing the whole subject-matter of the claim or petition for a patent, and then

not only be recorded for information, as the laws both in England and here require, but beyond what is practicable there, be united and go out with the letters-patent themselves, so as to be sure that these last thus contain the substance of what is designed to be regarded as a portion of the petition, and thus exhibit with accuracy all the claim by the inventor. In this view, and under such laws and practice here, it will be seen that the contents of the petition, as well as the petition itself, became a very unimportant form, except as construed to adopt the specification, and the contents of the latter to be considered substantially as the contents of the former."

FILING OF PARTS. As suggested in the foregoing quotation, an application consists of "the first fee of \$15, a petition, specification, and oath; and drawings, model or specimen when required." "It is desirable," says the rules,263 "that all parts of the complete application be deposited in the office at the same time, and that all the papers embraced in the application be attached together; otherwise a letter must accompany each part, accurately and clearly connecting it with the other parts of the application." It is not absolutely necessary that all parts be filed together and, if identified with the other parts as provided, the petition may precede the specification and both may precede the model, etc. Inasmuch as the specification and drawings constitute the real description of the invention, which need not be set out at length in the petition, it is obvious that no examination can be made and no patent issue till the specification, etc., are filed, so as to complete the petition. Hence the rules very reasonably provide that an application for a patent will not be placed upon the files for examination until all its parts, have been recorded. The application must be completed and prepared for exhibition within one year²⁶⁴ after the filing of the petition. In default of such completion, or if the applicant shall have failed to prosecute the application within one year after any action upon it, of which notice shall have been mailed him or his agent, the ap-

²⁶³ Rule 32.

²⁶⁺ Two years until amendment of 1897.

plication shall be regarded as abandoned, unless it be shown to the Commissioner that such delay was unavoidable.²⁶⁵

§ 2. DESCRIPTION

Since the specification is the real description of the invention it is of exceeding importance. According to the rules, in this instance a paraphrase of the statute, "The specification is a written description of the invention or discovery and of the manner and process of making, constructing, compounding, and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make, construct, compound, and use the same. The specification must set forth the precise invention for which a patent is solicited, and explain the principle thereof, and the best mode in which the applicant has contemplated applying that principle, in such manner as to distinguish it from other inventions. In case of a mere improvement, the specification must particularly poing out the parts to which the improvement relates, and must by explicit language distinguish between what is old and what is claimed as new; and the description and the drawings, as well as the claims, should be confined to the specific improvement and such parts as necessarily co-operate with it. The specification must conclude with a specific and distinct claim or claims of the part, improvement, or combination which the applicant regards as his invention or discovery. When there are drawings the description shall refer to the different views by figures and to the different parts by letters or numerals (preferably the latter)."

Great care is necessary to set out exactly the device—the idea of means—for which the inventor desires a monopoly. He must describe and claim all that he has invented and wishes to protect and he should not claim anything outside the bounds of his own patentable invention.

The purpose of this description is, of course, to identify the

²⁶⁵ Rule 31.

invention and to delimit it, for purposes of protection, from all other knowledge, to which the inventor has no particular right. In Hogg v. Emerson²⁶⁶ this description is invested with a three fold purpose, "to enable the commissioner of Patents to judge correctly whether the matter claimed is new or too broad,—to enable courts, when it is contested afterward before them, to form a like judgment. . . . And so that the public, while the term continues, may be able to understand what the patent is, and refrain from its use, unless licensed."²⁶⁷

Must be definite. It sequentially follows that an inventor who has not described anything, can not be protected in anything, no matter what his claims are. If he has not set forth any definite idea of means of accomplishing a result he has contributed nothing definite to public knowledge, and is entitled to nothing definite by way of reward. Incandescent Light Patent²⁶⁸ is an illustration of this. The patent sued on purported to cover an invention appertaining to incandescent electric light. There had been considerable difficulty in this art owing to the fact that the carbon filaments in the lamps were subject to rapid disintegration. The improvement described by the patentees was the use "of an incandescent conductor of carbon made from a vegetable fibrous material in contradistinction to a similar conductor made from mineral or gas carbon." No especial description of making this conductor was given nor did the patent claim any definitely particularized substance which might be used for making it. The defendant used a certain kind of bamboo fibre which he had discovered as suitable for the purpose, quite by accident, after trying many . other kinds of wood fibres none of which could be made to work. The patentees, said the court, "supposed they had discovered in carbonized paper the best material for an incandescent conductor. Instead of confining themselves to carbonized paper, as they might have done, and in fact did, in their third claim, they made a broad claim for every fibrous or textile material, when in fact an examination of over six thousand

²⁶⁶ 6 How. 437, 483, citing other authority.

²⁶⁷ Accd. The Incandescent Light Pat., 159 U. S. 465, 474.

²⁶⁸ 159 U. S. 465

vegetable growths showed that none of them possessed the peculiar qualities that fitted them for that purpose. Was everybody then precluded by this broad claim from making further investigation? We think not," . . . "If the description be so vague and uncertain that no one can tell, except by independent experiments, how to construct the patented device, the patent is void." So the court held most strictly, "The claims of the patent, with the exception of the third, are too indefinite to be the subject of a valid monopoly."

In a somewhat similar case²⁶³ the plaintiff had discovered a new substance compounded of fusel oil and the mineral and carthy oils, which he denominated a "burning fluid." In describing it he said, "the exact quantity of fusel oil which is necessary to produce the most desirable compound must be determined by experiment." The defendants used a combination of the same ingredients described by the patentee. It was left to the jury to determine whether the defendant's proportions were substantially the same as those of the patentee's, and the verdict was adverse to the latter. The court in upholding the verdict and judgment said, "Now a machine which consists of a combination of devices is the subject of invention, and its effects may be calculated a priori, while a discovery of a new substance by means of chemical combinations of known materials is empirical and discovered by experiment. Where a patent is claimed for such a discovery, it should state the component parts of the new manufacture claimed with clearness and precision, and not leave the person attempting to use the discovery to find it out 'by experiment.' The law requires the applicant for a patent-right to deliver a written description of the manner and process of making and compounding his newdiscovered compound. The art is new; and therefore persons cannot be presumed to be skilled in it, or to anticipate the result of chemical combinations of elements not in daily use."270

²⁶⁹ Tyler v. Boston, 7 Wall. 327.

²⁷⁰ In view of this last sentence it would seem as though the court were evading a logical reversal of the case by a resort to mere technical language; that the description taken as a whole was in fact clear enough and should have been given a broader interpretation. In Minerals Separation

Must separate old and new matter. In order to describe an invention with such exactness and clarity as to satisfy the requirements, it is often necessary to give it a background, by describing other machines, arts, etc. When an invention embraces in itself an entire machine or device, separate as an entity from other devices, it can be described as an entity and there is no necessity of describing anything whatsoever outside of the actual invention. A particular shape of nail, for instance, could be described of itself without the necessity of representing other nails or anything else in connection with the nail. But even in such cases it is occasionally desirable to point out the essence of the inventive idea by comparison of the formal embodiment with other devices. More often the subject of the invention is not an absolute entity, totally unconnected with any other device. It may be something not at all novel in its absolute form, but, on the contrary, novel only in its connection with other devices and its use therewith. Such, for instance, would be the type of invention which, while necessarily complete in itself, is commonly known as an "improvement' upon an existing device. Differently expressed, the essence of the invention may be so related to an existing de-

Co. v. Hyde, 242 U. S. 261, the court said, "Equally untenable is the claim that the patent is invalid for the reason that the evidence shows that when different ores are treated preliminary tests must be made to determine the amount of oil and the extent of agitation necessary in order to obtain the best results. Such variation of treatment must be within the scope of the claims, and the certainty which the law requires in patents is not greater than is reasonable, having regard to their subject matter. The composition of ores varies infinitely, each one presenting its special problem, and it is obviously impossible to specify in a patent the precise treatment which would be most successful and economical in each case. The process is one for dealing with a large class of substances and the range of treatment within the terms of the claims, while leaving something to the skill of persons applying the invention, is clearly sufficiently definite to guide those skilled in the art to its successful application, as the evidence abundantly shows. This satisfies the law."

See also, Wood v. Underhill, 5 How. 1; Tannage Patent Co. v. Zahn, 66 Fed. 986; Schneider v. Lovell, 10 Fed. 666; The claim was alleged to be too vague but held sufficiently definite in Burke Elec. Co. v. Independent Pneumatic Tool Co., 232 Fed. 145.

vice, that both must be described if the invention is to be comprehensible. It is therefore both necessary and permissible for an inventor to set out in his specification, description which covers matter not included within the invention itself.²⁷¹ The validity of his patent is not affected by the mere fact that he has included extraneous matter in his description, provided he has not claimed it as part of his invention. But somewhere in the specification the line of distinction between this matter extraneous to the invention and what he claims as his invention must be clearly pointed out. If this separation of the invention itself from the described background is not clearly made, it is obvious that a valid patent can not be issued. The entire matter described could not be covered by patent because part of it is admittedly old. But if the inventor himself has not separated that part of the description which constitutes his invention from the description of what is old, neither the Commissioner of Patents nor the courts have power to do it for him. It has even been said specifically,272 "It is not enough to give such a description of the machine patented as to show, by comparing it with other machines, what part has been invented. . . . It is not enough that the thing designed to be embraced by the patent should be made apparent on the trial, by a comparison of the new with the old machine. . . . The specification must be complete. No defects can be obviated by extraneous evidence at the trial."273

271 Merrill v. Yeomans, 94 U. S. 568. "When a man supposes he has made an invention or discovery useful in the arts, and therefore the proper subject of a patent, it is, nine times out of ten, an improvement n some existing article, process, or machine, and is only useful in connection with it. It is necessary, therefore, for him, in his application to the Patent Office, to describe that upon which he engrafts his invention, as well as the invention itself; and, in cases where the invention is a new combination of old devices, he is bound to describe with particularity all these old devices, and then the new mode of combining them, for which he desires a patent. It thus occurs that, in every application for a patent, the descriptive part is necessarily largely occupied with what is not new, in order to an understanding of what is new."

²⁷² Brooks & Morris v. Jenkins & Bicknell, 3 McLean, 432, 442.

²⁷⁸ The acual holding of the case reads, "What is claimed as new and how is it distinguished from the old? There is nothing on the face of

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SUFFICIENCY OF DESCRIPTION, BY WHOM DECIDED. Whether or not the specification does set cut sufficiently the invention it is alleged to describe, appears to be a question of fact, to be left to the jury in actions of law, according to the opinion of many courts.²⁷⁴

Other judges have made a verbal distinction between the province of the jury, in this respect, and that of the court, which seems rather more in harmony with actual practice. Mr. Justice McLean charged a jury upon this point as follows,275 "A question is raised, whether the thing claimed to have been invented is sufficiently described in the patent, is a matter for the determination of the court or jury. In its nature it is a question of law, for it depends upon the construction of a written instrument. If technical terms be used peculiar to mechanics in describing the invention, evidence may be heard in explanation of those terms, and in such case a jury may be necessary. If this point were ordinarily referable to a jury, the decisions on the same instrument would be as variable as the names of the parties. To produce uniformity of decision, the courts must give a construction to all written instruments. In this mode, by the application of known rules of construction, the specifications of a patent are construed and settled as regards the thing invented. Whether the description is so particular as to enable a mechanic to construct the machine, is a question for the jury. But unless the thing claimed to be

the patent or specifications, which can enable any one to say, what is new and what is old. If he has added something to a machine which is new, and which he claims as his improvement, he must describe it. But no such description is given. . . . He can then have no shadow of ground on which to sustain his patent." Merrill v. Yeomans, 94 U. S. 568; Parks v. Booth, 102 U. S. 96.

²⁷⁴ Wood v. Underhill, 5 How. 1; Evans v. Eaton, 7 Wheat. 356, 428: "It is not disputed, that the specification does contain a good and sufficient description of the improved hopper-boy, and of the manner of constructing it; and if there had been any dispute on this subject, it would have been a matter of fact for the jury and not of law for the court." Tannage Patent Co. v. Zahn, 65 Fed. 986; Palmer v. McCormick, 2 Brock (Ch. J. Marshall's Decisions) 298.

275 Brooks & Morris v. Jenkins & Bicknell, 3 McLran 442.

invented, is so described as to be known, in the language of the statute, from every other thing, the patent is void. And this must be determined by the court." Probably the true distinction is that whether or not the description is actually comprehensible as delimiting a definite idea or device, is a question of fact; at just what point that device so described is marked off from all other devices, is a question of construction for the court. What it is that the description does set forth is also a question to be decided by the court; a question of construction of the patent and accompanying specifications. The seeming confusion of statement arises out of the failure of courts to distinguish, or their lack of precision in stating the distinction, between the invention as it is in formal expression and the invention as it is in inexpressible essence, which may include many substantial forms.

To the extent that the courts do themselves undertake to decide the formal sufficiency of a specification, the evident inclination is to be liberal toward the inventor. This is one of the issues in which the characterization of a patent as an odious monopoly or as something less repugnant to the law, as discussed at the beginning of this book, is of importance. Were it considered an objectionable monopoly, the patentee should be held to the strictest precision of description. On the contrary, he is in practice favored, on the principle that his patent is, at least, not an odious monopoly.²⁷⁷

NEED NOT BE CLEAR TO THE UNSKILLED. It is consistent with this that the courts do not require the description to be so full and clear and in such terms as to be understood by every intelligent reader. It is sufficient if it is comprehensible at least to persons particularly skilled in the branch of knowledge to which the alleged invention appertains. "The purpose of the specification,²⁷⁸ as contradistinguished from a claim, in letters patent, is to describe clearly the invention sought to be protected by them, and the manner of making, using, and con-

²⁷⁶ Merrill v. Yeomans, 94 U. S. 568, Further discussion under "protection."

²⁷⁷ Brooks & Morris v. Jenkins & Bicknell, 3 McLean 442.

²⁷⁸ Tannage Patent Co. v. Zahn, 66 Fed. 986, 988.

structing the same. The letters patent constitute a contract between the patentee and the public. On the one hand is granted an exclusive use of the invention for a specified term. On the other, by way of consideration, a full disclosure of the invention, in all its parts, must be made. It is through the instrumentality of the specifications that this disclosure is made, and the invention thereby, fully placed within the knowledge of the public. Necessarily, upon their thoroughness in that respect, and upon their accuracy in statement, depends the validity of the contract of the letters patent. If there be material failure in either respect, there necessarily results such failure of consideration as must vitiate the contract. It follows, then, that a specification failing in any material respect to make the invention fully known and accessible to the public must be held fatally defective, and the patent based upon it, ipso facto, becomes void. Wayne v. Holmes, 2 Fish. Pat. Cas. 20, Fed. Cas. No. 17,303. But it should be borne in mind, in judging of the sufficiency of the specifications of letters patent, that while the language and the methods of statement used by the inventor must be such as will fully place the invention in the intelligible possession of the public generally, it is not necessary that it should be so minutely and exactly described as to be readily understood by every person going to make up the public. The specifications of letters patent are addressed primarily to those skilled in the art to which the invention relates, and not to those who are wholly ignorant of the subject matter.

"In Plimpton v. Malcolmson, 3 Ch. Div. 531, Sir George Jessel, the master of the rolls, thus states the principle: 'In the first place, it is plain that the specification of a patent is not addressed to people who are ignorant of the subject-matter. It is addressed to people who know something about it. If it is mechanical invention, as this is, you have, first of all, the scientific mechanicians of the first class,—eminent engineers. Then you have scient'fic mechanicians of the second class,—managers of great manufacturies; great employers of labor; persons who have studied mechanics, not to the same extent as those of

the first class, the scientific engineers, but still to a great extent, for the purpose of conducting manufactories of complicated and unusual machines. . . . And then the third class, consisting of the ordinary workman, using that amount of skill and intelligence which is fairly to be expected from him,—not a careless man, but a careful man, though not possessing that great scientific knowledge or power of invention which would enable him by himself, unaided, to supplement a defective description or correct an erroneous description. Now, as I understand, to be a good specification it must be intelligible to the third class I have mentioned, and that is the result of the law. It will be a bad specification if the first two classes only understand it, and if the third class do not.' And in the case of Morgan v. Seward, 1 Webst. Pat. Cas. 174, Mr. Baron Anderson used this language: 'The specification ought to be framed so as not to call on a person to have recourse to more than those ordinary means of knowledge (not invention) which a workman of competent skill in his art may be presumed to have. You may call upon him to exercise all the actual existing knowledge common to the trade, but you cannot call upon him to exercise anything more. You have no right to call upon him to tax his ingenuity or invention.'

"From which it seems to follow that persons skilled in the art to which the specification is addressed are in fact those of ordinary and fair information, but not those having very great technical knowledge relating to the subject-matter of the invention. And if, to them, the specification sufficiently and well describes the invention or process, it is quite sufficient. Now, the courts have always been generous towards inventors, in their application of these principles of the law, and their consequent judgment of the validity of a specification. Although the specification may be in some degree incorrect, or vague or incomplete, if from it, taken in connection with accompanying drawings and models and plans and formula, and especially the rest of the letters patent, one skilled in the art, as above defined, can, by exercise of purely non-inventive powers, succeed in constructing a machine or in following the process, or in combining the ingredients of matter mentioned into one whole, it is sufficient. On the other hand, if experiment and inventive skill on the part of a skilled operator or user is necessary, in addition to the instructive statements of the specification, to render the invention available and the use successful, then the specification is fatally defective, and the patent based thereon is void. Lockwood v. Faber, 27 Fed. 63; McNamara v. Hulse, 2 Webst. Pat. Cas. 128; Tyler v. Boston, 7 Wall. 327."

The particular phraseology and syntax of the description do not affect its validity. If it is a full, clear and exact description, it is, so far as its language is concerned, sufficient. In one case²⁷⁹ it was actually "argued by the defendant that the specifications are ungrammatically expressed, prolix, misleading, and are erroneous in their statement of the scientific principles which govern the movements of the currents of air. Nevertheless," said the court, "I can see no reason why a skilled person, attempting to construct a kiln according to the specifications and the drawings of the patent should not be able to do it." The patent was accordingly upheld.

Statement of principle. A statement of the principle of the invention is required in the specification by rule No. 36 which reads, "The specification must set forth the precise invention for which a patent is solicited, and explain the principle thereof, and the best mode in which the applicant has contemplated applying that principle, in such manner as to distinguish it from other inventions." But where the principle is not an essential element in the differentiation of the device from other inventions, a statement of it is not necessary to constitute a sufficient description, and the fact that in such case it is not set forth does not invalidate the patent. If some principle is set forth, and is in truth incorrect, the mistake is immaterial; it can be treated as mere surplusage.²⁸⁰

²⁷⁹ Emerson Co. v. Nimocks, 99 Fed. 737.

²⁸⁰ Emerson v. Nimocks, 99 Fed. 737. An incorrect theory was actually assigned to account for the operation of the invention, but the court said, "The scientific principle is not part of the process, is not patentable and need not be set forth." Eames v. Andrews, 122 U. S. 40, 55, quoting Andrews v. Cross, 19 Blatch. 294, 305, "It may be that the inventor did not know what the scientific principle was, or that, knowing it, he omitted,

It is highly desirable, however, for the inventor, or, more particularly, the draftsman of the application, to know and understand the particular mechanical principle, or the principle of nature, involved in the invention. As we have seen, no matter what a man may have invented, he is protected only as to what he actually claims protection for. He can not claim either the mechanical principle on which his invention is based, nor the natural principle which it utilizes. But it must be remembered that both the mechanical principle and the principle of nature involved in a device may serve as the characteristic

from accident or design, to set it forth. That does not vitiate the patent. He sets forth the process or mode of operation which ends in the result, and the means for working out the process or mode of operation. The principle referred to is only the why and the wherefore. That is not required to be set forth. Under § 26 of the act of July 8, 1870, 16 Stat. 201, under which this reissue was granted, the specification contains a description of the invention and of 'the manner and process of making, constructing, compounding, and using it,' in such terms as to enable any person skilled in the art to which it appertains to make, construct, compound, and use it; and, even regarding the case as one of a machine, the specification explains the principle of the machine, within the meaning of that section, although the scientific or physical principle on which the process acts when the pump is used with the air-tight tube, is not explained. An inventor may be ignorant of the scientific principle, or he may think he knows it and yet be uncertain, or he may be confident as to what it is, and others may think differently. All this is immaterial, if by the specification the thing to be done is so set forth that it can be reproduced." "It is certainly not necessary that he understand or be able to state the scientific principles underlying his invention, and it is immaterial whether he can stand a successful examination as to the speculative ideas involved." Diamond Rubber Co. v. Consolidated Tire Co., 220 U. S. 428, "He must, indeed, make such disclosure and description of his invention that it may be put into practice. In this he must be clear. He must not put forth a puzzle for invention or experiment to solve but the description is sufficient if those skilled in the art can understand it. This satisfies the law, which only requires as a condition of its protection that the world be given something new and that the world be taught how to use it. It is no concern of the world whether the principle upon which the new construction acts be obvious or obscure, so that it inheres in the new construction." "Of course a mechanical device may be patentable although the true story of it is not understood." Steward v. Am. Lava Co., 215 U. S. 161, 166; Toch v. Zibell, etc., Co., 233 Fed. 993.

which above all other characteristics distinguishes it from other devices similar in mere tangible form. Therefore, while an inventor can not patent the particular principle--which he has not created—he may validly claim all devices involving that principle, which differ from the device described by him only as the result of mere mechanical skill. But a draftsman who does not understand the principle involved might so formulate the description and claims as unwittingly to eliminate the principle as a characteristic of the invention, and by the precision of his words confine the patent to the single tangible form characterized by the description. A very pointed illustration is the case of Steward v. American Lava Co.281 The patentee had described a form of tip for burning acetylene gas. As described, it was not materially different from those in use. At the trial, however, it was urged that the particular form of tip accomplished the purpose of the other forms by the utilization of an entirely different natural principle. Justice Holmes intimated that if this were true the patent would be upheld. But there was conflicting evidence as to whether the burner did really involve that principle, and the scale was turned against the patentee by the fact that he had indicated no realization of such a principle in his description. The court also said in criticizing the indefiniteness of the claim, "Vacillation in theory led to uncertainty of phrase."281*

²⁸¹ 215 U. S. 161.

281a A further, and very precise, illustration is found in the recent case of Minerals Separation Co. v. Butte, etc., Co., 39 Sup. Ct. Rep. 496 (June, 1919). The patent was for the process of separating minerals from the crushed ore by agitating the mass in a mixture of oil and water. The essence of the invention was the use of less than 1% of oil. The defendants in this case used more than 1% of oil, which was, superficially, not an infringement. But the oil which they used was a mixture of pine oil and petroleum oils. The pine oil itself was less than 1%. The patentees contended that the pine oil was the only kind that had any effect; that the petroleum oil was worse than useless and was added only to make a pretense of non-infringement through the apparent use of more than 1% of oil. The Supreme Court refused relief to the patentees on the ground that their patent did not refer to any particular kind of oil, but claimed only the use of less than 1% of "oils having a preferential affinity for metal-liferous matter" or "oily substance." They said that the petroleum product

Includes all descriptive parts. When it is said that the "specification" or "description" must set forth the invention, the words are not confined to the nominally descriptive part of the application only, but are used, evidently, as including all of the application from which an understanding of the invention can be obtained.282 "The word 'specification' when used separately from the word 'claim' in section 2916, means the entire paper referred to in section 4888, namely, the written description of the invention, 'and of the manner and process of making, constructing, compounding, and using it,' and the claims made. The word 'specification,' meaning description and claims, is used in that sense in sections 4884, 4895, 4902, 4903, 4917, 4920 and 4922. In some cases, as in sections 4888 and 4916, the words 'specification and claim' are used, and in section 4902 the word 'description' and the word 'specification' are used. But it is clear that the word 'specification,' when used without the word 'claim,' means description and claim." In the rules of practice 'specification' is undoubtedly used as inclusive of the claim. Indeed rule 37 reads, "The specification must conclude with a specific and distinct claim or claims of the part . . . which the applicant regards as his invention or discovery." It is a perfectly logical assumption therefore that the rule requiring the "specification" to set forth the invention includes the claim within the term, and that the latter may properly be looked to, if necessary, to aid in describing the invention and giving it the comprehensibility required. This is the view taken by the courts.²⁸³

was an "oily substance" and did not have a preferential affinity for the metallifferous matter, and thus met the terms of the patent. As it was used in quantities exceeding 1% its use did not infringe. The court's decision was that if the patentees had intended to patent the use in small quantities of particular kinds of oil, they should have specified those particular kinds in the description of their process. One gathers from the evidence that the reason the patent was not so limited is because the patentees did not themselves realize that there was a difference in effect of the different oils.

²⁸² Wilson v. Cocn, 6 Fed. 611, 615.

²⁸³ Electric Smelting & Aluminum Co. v. Carborundum Co., 102 Fed. 618, 629, "If a claim, uncertain when considered apart from the description,

Includes drawings. Even the drawings may be referred to for the purpose of rendering intelligible the verbal description of the invention and giving to it the exactness and clarity necessary to its validity. In Earle v. Sawyer.284 one ground of alleged error was "that the Court directed the jury, that the drawings annexed, and referred to in the specification, constituted a part thereof; and that they might be resorted to, to aid the description, and to distinguish the thing patented from other things known before. In point of fact, the drawings were annexed to the specification in the patent, and it made perpetual references to them, distinguishing thereby the new parts from the old, so that it was unintelligible without them. The Court, therefore, in the first part of the direction, did no more than state the fact, as it was; and the other part was correct, unless the description must be wholly in writing. The argument now is, that by the very terms of the patent act, there must be a written description (without any reference to drawings), in such full, clear, and exact terms, as to distinguish the things patented from all other things; and that, in case of a machine, the act requires drawings in addition

can by reference to the latter be rendered so clear as to satisfy the requirement of the statute, that the inventor "shall particularly point out and distinctly claim" his invention, by parity of reasoning a doubtful point in the description, when considered apart from the claims, can by reference to the latter, when in themselves unambiguous, be rendered so clear as to satisfy the other requirement of the statute that the inventor shall fully and clearly set forth his invention in the description. That under such circumstances a description uncertain or indefinite when considered alone, but not inconsistent with the claims, may be rendered certain and sufficient to meet the requirements of the statute by reading the whole specification together has frequently been recognized and is, we think, a sound rule of law. Battin v. Taggert, 17 How. 74 85, 15 L. Ed. 37; The Corn-Planter Patent, 23 Wall. 181, 224, 23 L. Ed. 161; Carver v. Manufacturing Co., 2 Story, 432, 446; Howes v. Nutes 4 Cliff. 173 174, Fed. Cas. No. 6,790; Ryan v. Goodwin, 3 Sumn. 514, 520, Fed. Cas. No. 12, 186; Myers v. Frame, 8 Blatchf. 446, 457, Fed. Cas. No. 9,991; Parker v. Stiles, 5 McLean, 44, 56, Fed. Cas. No. 10,749; Lowell v. Lewis, 1 Mason, 182, 188, Fed. Cas. No. 8,568; 1 Robb's Pat. Case 131." Am. Automotoneer Co. v. Porter, 232 Fed. 456.

^{284 4} Mason 1, 9.

thereto. For this position, the case, Ex parte Fox (1 Ves. & Beames, 67), before Lord Eldon, has been cited. It was a petition to the Lord Chancellor for the grant of a patent, against which a caveat had been entered. On hearing the parties, Lord Eldon granted the patent, and on that occasion is reported to have said, 'I take it to be clear, that a man may, if he chooses, annex to his specification a picture or a model, descriptive of it; but his specification must in itself be sufficient, or I apprehend it will be bad.' As I understand this language, it is not intended to assert the doctrine for which it is cited. It means, that the specification must in itself be sufficient, and that the mere annexation of a picture or model will not help any defect in the specification. This may be true, where such picture or model is not referred to, as constituting a part of the specification itself. But if the explanations of the specification call for drawings, and refer to them as a component part in the description, they are just as much a part of the specification, as if they were placed in the body of the specification. Indeed, in many cases it would be impracticable to give a full and accurate description of the form, adjustments, and apparatus of very nice and delicate machinery, without drawings of some of the parts, as everything might depend on size, position, and peculiar shape. Lord Eldon could not have meant, that if drawings and figures were necessary to a full description of a machine in the specification, there was still some stubborn rule of law prohibiting it. That would be to require the end, and yet to refuse the means. One of the objections in Boulton vs. Bull (2 H. Bl. 463) was, that the specification was imperfect, and it was pressed, that there ought to have been drawings to explain the machinery. How was this objection met? Not by stating, that by law no explanatory drawings would help a specification. even if referred to in it, but by showing the specification sufficient without them. Mr. Justice Rooke said (p. 480), 'As to the objection of a want of a drawing or model, that at first struck me as of great weight. I thought it would be difficult to ascertain, what was an infringement of a method, if there

was no additional representation of the improvement, or thing methodized.' 'If they (the jury) can understand it without a model, I am not aware of any rule of law, which requires a model or drawing to be set forth, or which makes void an intelligible specification of a mechanical improvement, merely because no drawing or model is annexed. It seems to me then there is no ground for this objection to the charge, even upon the law of patents in England, where the specification constitutes no part of the patent itself, but is required by a proviso in every grant, to be enrolled in the Court of Chancery, within a limited time, and particularly to describe and ascertain the nature of the invention, and in what manner the same is to be performed. But how stands our own law on this subject; for by this the question must, after all, be decided? The patent act requires, that the inventor 'shall deliver a written description of his invention, and of the manner of using, or process of compounding the same, in such full, clear, and exact terms, as to distinguish the same from all other things before known, &c., &c.; and in the case of a machine, he shall fully explain the principle and the several modes, in which he has contemplated the application of that principle or character, by which it may be distinguished from other invention; and he shall accompany the whole with drawings and written references, where the nature of the case admits of drawings,' &c. This is an explicit direction to annex drawings, where the nature of the case admits of them, with written references; and when so annexed, they become part of the written description required by the act. They may be indispensable to distinguish the thing patented from other things before known. Surely, then, the act could not intend studiously to exclude them as part of the written description. That would be to require the end and deny the means."285

285 Accd. Schneider v. Lovell, 10 Fed. 666; Banker v. Bostwick, 3 Fed. 517; Hogg v. Emerson. 11 How. 587, 606, "Under the instructions of the court the jury found that it (the description) was clear enough to be understood by ordinary mechanics, and that machines and wheels could be readily made from it, considering the specifications as a whole, and adverting to the drawings on file. This is all which the law requires in respect to clearness. . . ." Tannage Patent Co. v. Zahn, 66 Fed. 984, 990.

But while the drawings may be adverted to in connection with the written description to give it exactness sufficient to enable one skilled in the art to understand the invention and to construct or use it; while they may be used to explain and interpret it, they may not be considered for the purpose of amplifying or supplementing a description which is not in itself complete. They can not be used to extend the scope of the written description. The propriety of such use was explicitly denied in the case of Caverly v. Deere.286 The patent there sued on could be saved from a change of anticipation only by holding that the device described had certain knifeblade parts set at an angle of 45°. It was admitted that this at least might constitute patentable novelty. The drawings showed these parts set at that angle, but nothing whatever was said in the specification to indicate that the inventor intended them to be set especially at such an angle, or at any particular angle except such a one as would produce the best results, and the court held the patent invalid.287

§ 3. CLAIM

CLAIM AN IMPORTANT PART. The claim itself, while only a part of the whole application, is an extremely important part. By the claim the extent of the monopoly covered by the patent is determined.²⁸⁸ The statute provides, precisely, that the applicant must, in his specification, "particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery." The purpose of

²⁸⁰ 66 Fed. 305.

²⁸⁷ Tinker v. Wilber Eureka etc. Co., 1 Fed. 138, "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. But it can not supply an entire want of any part of a specification or claim in a suit upon a patent, although it might afford ground for a re-issue covering the part shown by it."

²⁸⁸ Description extraneous to the claim itself is necessary, because while, as said above, the claim may be used to explain the description, the claim can not be utilized for expanding the description. Nothing can, therefore be effectively claimed which is not described.

²⁸⁹ § 4888.

the statute is primarily to benefit the public, not the individual. It gives to the individual a monopoly for a limited time, as an inducement for him to reveal his invention to the public. If he chooses to give his invention to the public without the recompense of a monopoly he is as free to do so as ever he was, and he may make his revelation by describing it and making it public in any way he wishes. For him to describe it in a written instrument filed with the Commissioner of Patents has no other effect, so far as he is concerned, than if he had sent his writing to the editor of a magazine. He must ask for a patent to receive one, and his request is the claim. Without any claim, he asks for nothing; what he does ask for is what he has included in his claim. Only that which he claims, therefore, is granted to him by the patent. The descriptive part of the application may set out with clarity and exactness a device which constitutes an invention and would be patentable, but the patentee does not acquire by that particular part a monopoly of the described device unless he has claimed it. The phrase "by that particular patent" is inserted in the preceding sentence because it seems clear that he might later protect himself by a new application containing a proper claim. (This question, whether failure to claim a described device amounts to an actual loss of the right or merely to a presumptive abandonment which can be rebutted by a proper showing, is discussed above.) But, at any rate, no protection is given by the particular patent issued on the application. This is well illustrated by the case of Merrill v. Yeomans.200 The claimant sued for infringement of an improved manufacture of heavy hydro-carbon oils. The defendants were dealers in oils and not manufacturers of them. The court found as an issue that, "If the appellant's patent was for a new oil, the product of a mode of treating the oils of that character which he describes in his application, the defendants may be liable; for they bought and sold, without license or other authority from him, an oil which is proved to be almost if not quite identical with the one which he produced. If, however, appellant's

²⁹⁰ 94 U. S. 568.

patent is only for the mode of treating these oils invented and described by him,—in other words, for his new process of making this new article of hydro-carbon oil,—then it is clear the defendants have not infringed the patent, because they never used that process, or any other, for they manufactured none of the oils which they bought and sold." The appellant contended that his patent was in fact for the product. The defendant urged that it was for the process of manufacture only. It was admitted by all parties that the product as well as the process was sufficiently described in the specification, and the court found that on the description as it stood the inventor might have had a valid patent for both the product and the process. But the court came to the conclusion that he had not in fact claimed the product and that his patent, therefore, gave him no monopoly of anything but the use of the process of manufacture. Mr. Justice Clifford dissented on the ground that the claim, as properly construed, did cover the product as well as the process.²⁹¹

²⁹¹ It might be noted that the laborious and unsatisfactory reasoning of the decision as made was unnecessary; the same evidently desired result might have been reached on the ground that the oil sold by the defendants was not the same as the product which the complainants claimed to have patented. The cases consistently accord with the principle that the method of manufacture is one of the distinguishing elements of a product. In this case the court had distinctly found, "that the oils sold by defendants were produced by a process very different from that described by appellant." This being so, the claimant could not have hoped to cover it, no matter what his claim. Accord, that nothing is protected which is not claimed; "He cannot go beyond what he has claimed and insist that his patent covers something not claimed, merely because it is to be found in the descriptive part of the specification." Railroad Co. v. Mellon, 104 U. S. 112, 118; Stirrat v. Excelsior Mfg. Co., 61 Fed. 980; Wells v. Curtis, 66 Fed. 318; "The claims measure the invention," Paper Bag Patent Case, 210 U. S. 405, 419; Anderson, Foundry & Mach. Wks. v. Potts. 108 Fed. 379.

It is pertinent to note the remark of the court that, "no such question (of construction) could have arisen if the appellant had used language which clearly and distinctly points out what it is that he claims in his invention."

The necessity of determining just what it is that a patentee has claimed and been awarded thereon by the patent office, arises out of the question whether the idea of means, for the unauthorized use of which suit has MULTIPLICITY OF CLAIMS. Applications for patents, and the patents issued thereon, frequently contain more than one claim as to the part, improvement or combination which constitutes the invention. In part this arises from the recognized custom of joining two or more distinct inventions in one patent.

Several inventions. Whatever may be the theory, it is indisputably the fact that single patents are, in certain cases, issued for more than a single invention. As an illustration, a combination which is itself patentable as a means to an end may contain elements which are themselves inventions. An explosion turbine for instance might be patentable as a novel combination of parts, and the particular form of valves used, or the combination of parts of the rotor element, might in themselves be new. In such cases, a single patent can legitimately be issued to cover the entire combination, as an invention, and to cover also the new parts or sub-combinations as inventions. In the same way, an idea of static means for accomplishing a result, a peculiar shaped collar button for instance, might be of inventive quality, and the idea of dynamic means for making such a button might also be the novel result of inventive genius. Each of these ideas of means is an invention in itself, but the courts seem to permit the patenting of them both through one application and under a single patent.

The right to join distinct inventions in a single application

been brought, is covered by the claim. It is simply a way of stating the issue of infringement. If the alleged infringer has used a device precisely described in the claim, the infringement is evident, and there is no necessity for construing the claim. But the scope of the protection given by a patent is not limited to the precise substantial device described and claimed therein. As we have already said, it covers the idea of means set forth, as well as the particular substantial means actually described. It covers every thing which is essentially identical with the means described. When the alleged infringer has used a device different from the means particularly described in the patentee's claim, he is guilty of infringement only if his device was essentially described in the claim. It becomes, therefore, necessary to determine whether the claim does set out an idea of means broad enough to include the defendant's device. In a sense, the claim must be construed. A discussion of this construction and interpretation of claims will be found under the subject of infringement.

and patent is covered by rules of the Patent Office.292 "Two or more independent inventions can not be claimed in one application: but where several distinct inventions are dependent upon each other and mutually contribute to produce a single result they may be claimed in one application. If several inventions, claimed in a single application, be of such a nature that a single patent may not be issued to cover them, the inventor will be required to limit the description, drawing, and claim of the pending application to whichever invention he may elect. The other inventions may be made the subject of separate applications, which must conform to the rules applicable to original applications. If the independence of the inventions be clear, such limitation will be made before any action upon the merits; otherwise it may be made at any time before final action thereon, in the discretion of the examiner. A requirement of division will not be repeated without the written approval of a law examiner. After a final requirement of division, the applicant may elect to prosecute one group of claims, retaining the remaining claims in the case with the privilege of appealing from the requirement of division after final action by the examiner on the group of claims prosecuted."

These rules are discussed by the court in the case of Steinmetz v. Allen.²⁰³ At that time the rule of the Patent Office forbade the inclusion in a single patent of a machine and its product, or of a machine and the process in the performance of which it was used, or of a process and its product. The petitioner had been required by the Commissioner of Patents to eliminate certain claims from his application on the ground that they should be the subject matter of a separate application. The court's discussion of the law is worth quoting, and is as follows: "There is nothing in the language of the section (R. S. 4886) which necessarily precludes the joinder of two or more inventions in the same application. But the section does distinguish inventions into arts (processes), machines, manufactures and compositions of matter, and the earliest construction of the law denied the right of joinder.

²⁹² Rules of Practice No. 41 and 42.

²⁹³ 192 U. S. 543.

An exception, however, came to be made in cases of dependent and related inventions. In Hogg v. Emerson, 6 How. 437, it was said: 'The next objection is, that this description in the letters thus considered covers more than one patent and is therefore void. There seems to have been no good reason at first, unless it be a fiscal one on the part of the government when issuing patents, why more than one in favor of the same inventor should not be embraced in one instrument, like more than one tract of land in one deed or patent for land. Phil. Pat. 217. Each could be set out in separate articles or paragraphs, as different counts for different matters in libels in admiralty or declarations at common law, and the specifications could be made distinct for each and equally clear. But to obtain more revenue, the public officers have generally declined to issue letters for more than one patent described in them. Renouard, 293: Phil. Pat. 218. The courts have been disposed to acquiesce in the practice, as conducive to clearness and certainty. And if letters issue otherwise inadvertently to hold them, as a general rule, null. But it is a well established exception that patents may be united, if two or more, included in one set of letters, relate to a like subject, or are in their nature or operation connected together. Phil. Pat. 218, 219; Barret v. Hall, 1 Mason, 447; Moody v. Fiske, 2 Mason, 112; Wyeth et al. v. Stone et al., I Story, 283.'

"This language would seem to imply that not the statute but the practice of the Patent Office required separate applications for inventions, but the cases cited were explicit of the meaning of the statute. Mr. Justice Story, in Wyeth v. Stone. said: 'For, if different inventions might be joined in the same patent for entirely different purposes and objects, the patentee would be at liberty to join as many as he might choose, at his own mere pleasure, in one patent, which seems to be inconsistent with the language of the patent acts, which speak of the thing patented, and not of the things patented, and of a patent for invention, and not of a patent for inventions; and they direct a specific sum to be paid for each patent.' But he confined the requirement to independent inventions, and his il-

lustrations indicated that he meant by independent inventions not those which, though distinct, were 'for the same common purpose and auxiliary to the same common end.' Hogg v. Emerson came to this court again, and is reported in 11 How. 587. Of one of the objections to the patent the court said: 'It is that the improvement thus described is for more than one invention, and that one set of letters patent for more than one invention is not tolerated by law. 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 operations. This last is clearly the case here.' Many other cases are to the same effect."

The court went on to say that the line between independent and related inventions is vague and unplacable, and that "It is difficult, perhaps impossible, to lay down any general rule by which to determine when given inventions or improvements shall be embraced in one, two, or more patents. . . . It is often a nice and perplexing question. The discretion which must necessarily therefore, reside in the Commissioner of Patents. is not final, in him, but is reviewable." "The Patent Office has not been consistent in its views in regard to the division of inventions. At times convenience of administration has seemed to be of greatest concern; at other times more anxiety has been shown for the rights of inventors. The policy of the office has been denominated that of battledore and shuttlecock, and rule 41 as it now exists was enacted to give simplicity and uniformity to the practice of the office. Its enactment was attempted to be justified by the assumption that the patent laws gave to the office a discretion to permit or deny a joinder of inventions. But, as we have already said, to establish a rule applicable to all cases is not to exercise discretion. Such a rule ignores the differences which invoke discretion, and which can alone justify its exercise, and we are of opinion therefore that rule 41 is an invalid regulation." In this particular case the court held that a process and an apparatus might be such

related inventions as to be capable of inclusion in a single patent, and that inasmuch as the rule purported rigidly to preclude such a combination it was invalid.²⁰⁴

It is often desirable to take advantage of this right to join inventions, both because it is a monetary saving so to do, and because the failure to claim one of the inventions might be construed as showing an intent to abandon it.

Repetition of claims. Another cause for a multiplicity of claims is found in the difficulty of making clear to all minds. by mere words, precisely what it is that is claimed. As one court expressed it,²⁹⁵ "While, according to strict rules of law, two distinct claims for the same substantial matter, differing only in nonessentials, cannot both be sustained, yet, out of regard to the frailty of human methods of expression, and the variety of views among different legal judicial tribunals as to the construction of instruments of the character of letters patent, and conceding, also, the difficulty of always correctly defining what one's invention really is, the practice has become settled to allow the same substantial invention to be stated in different ways, very much as the same cause of action, or the same offense intended to be covered by indictment, are per-

294 Leeds & Catlin v. Victor Talking Machine Co., 213 U. S. 301, 318, "A process and an apparatus by which it is performed are distinct things. They may be found in one patent; they may be made the subject of different patents. So may other dependent and related inventions." Benet v. Fowler, 8 Wall. 445; DuBois v. Kirk, 158 U. S. 58; Thomson-Houston Elec. Co. v. Elmira & H. Ry. Co., 71 Fed. 396; Benj. Elec. Mfg. Co. v. Dale Co., 158 Fed. 617. Mérrill v. Yeomans, 94 U. S. 568. The patent in this case was for the process of making certain hydro-carbon oils. The defendants were charged with selling oils similar to those made by the patented process but in fact made by an entirely different process. The court held that the patent had not been infringed because the oils had not been made by the defendants, nor even by the same process and because the right to use and vend the oils as a product had not been covered by the patent. This case contains the strongest sort of intimation that two distinct things, namely, the process and the product, could have been and should have been claimed in the one patent. In another case, Rubber Co. v. Goodyear, 9 Wall. 788, syll. 7 reads, "A process and the product of a process may be both new and patentable, and are wholly disconnected and independent of each other."

²⁹⁵ Dececo Co. v. Geo. E. Gilchrist Co., 125 Fed. 293, 300.

mitted to be propounded in different counts, with a general verdict on all of them."

The fact that one or more of these claims covers matter to which the patentee is not, in the court's opinion, entitled, and is therefore void, does not necessarily invalidate the entire patent. A notable example of this is the patent issued for the Morse telegraph concept. 200 It contained eight claims, of which seven were keld valid and the eighth so broad as to be invalid. While the court would not go so far as to concede the contention that this void claim might be treated as a nullity and of no effect at all upon the patent, it did hold that it might, before or after the conclusion of the suit, be disclaimed, and the rest of the patent thereby be rendered valid and effective. In the later case of Carleton v. Bokee²⁹⁷ the fourth claim of the patent was held void because of anticipation. "One void claim, however," said the court, "does not vitiate the entire patent, if made by mistake or inadvertence and without any willful default or intent to defraud or mislead the public." It is evident from the case that the court did not consider the claiming of too much, under a real belief that he might be entitled to it all, to show an intent to defraud or mislead the public.298

It has grown, therefore, to be a legitimate practice to claim not only all that the inventor may seem entitled to, but, lest this be too much, or the claim be misunderstood, to claim also narrower and surer degrees of comprehensiveness.²⁰⁹

²⁹⁶ O'Reilly v. Morse, 15 How. 62.

²⁹⁷ 17 Wall. 463.

²⁹⁸ Leeds & Catlin v. Victor Talking Machine Co., 213 U. S. 301, syll. "Separate claims in the same patent are independent inventions, and the infringement of one is not the infringement of the others, and the redress of the patentee is limited to the injury he suffers; nor is the validity and duration of valid claims affected by the invalidity or expiration of any other claim."

The English rule seems to be otherwise. The United Horsenail Co. v. Stewart, 2 R. P. C. 132. Also 59 Law Times 561. 13 Att. Cases 401.

²⁹⁹ The course of "multiplying claims unnecessarily" was criticized by the court in Westinghouse Air-brake Co. v. N. Y. Air-brake Co., 112 Fed. 424. Criticism is justly due the too frequent practice of multiplying

A multiplicity of claims may be of value for its effect upon the courts under certain circumstances. A patent for a combination is of such narrow credit that its use, with the omission of a single element, is often held not to be an infringement. Technically the claimant of a combination, who has not expressly and explicitly limited himself to the one precise form, should be given a scope of equivalents appropriate to the deserts of his invention. This breadth of scope should be given him, theoretically, and in harmony with other decisions, whether he has mentioned the particular equivalents or not. In other words, if he has not explicitly limited himself, his invention entitles him to protection against all merely formal evasions of it; and if a later device is not a mere formal evasion, it could not properly have been included under the patent for the first invention had the patentee thought of including it. Therefore, the recital of various forms of the combination is, theoretically, either mere surplusage—such forms being included in the one combination as stated in its broadest form—or they are distinct and independent of the invention and not properly included in the patent.

It is possible, however, that such variant claims do have a practical value, owing to the effect upon the courts' opinions, of matters extraneous to the mere merits of the invention. A court which, because of the narrowness of an invention, might refuse it any range of unexpressed equivalents, may perhaps be induced to hold it broad enough to cover mere mechanically skillful variations which have been actually expressed in the patent.

claims because of the solicitor's own uncomprehension of the law. Many patent attorneys, as well as some courts, are still obsessed by the notion that nothing can be property that is not tangible, or represented by something tangible. They fail, therefore, to realize that it is the idea of means which is patented and not merely the means literally described. In order to secure the protection to which they feel the inventor is entitled, they literally describe as many variations in the *embodiment* of the idea as they can think of. The actual result is that they often, by the very extent and prolixity of their descriptions limit the scope of protection unnecessarily, and they always confuse the records of the patented art.

§ 4.. DISCLAIMER

With these possible exceptions, the necessity for including several claims, and even the value of so doing is dubious. The practice is not essential in preventing harm when it appears that too much has been claimed in the effort to get all that is allowable. The statute³⁰⁰ provides, "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 things 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." This is a specific statement to the effect that the "patent shall be valid for all that part which is truly and justly his own," without limitation to such part as has been stated in a separate claim, valid in itself. In the words of the statute, a claim would appear to be equally valid whether it is that part of a single claim which is left after pruning off the surplus and invalid parts, or is a claim, originally complete in itself, left after other excessive claims have been removed.301

³⁰⁰ R. S. \$ 4917.

^{301 &}quot;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

Even when a disclaimer has not been filed before suit, the statute provides³⁰² that "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 owr, 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."303

Failure to claim all that the patentee might have been entitled to can not be corrected by means of disclaimer. That is to say, a patentee can not under pretense of disclaiming

the invention or the claims of the specification." Dunbar v. Meyers, 94 U. S. 187; Schwartzwalder v. New York Filter Co., 65 Fed. 152.

An interesting instance in which the patentee, i fear of proof of anticipation, disclaimed the only feature on which his patent could be upheld, and thereby worked his own defeat is found in Brunswick, Balke, Collender Co. v. Klumpp, 131 Fed. 255. Disclaimer not allowed to be corrected account of mistake, Hillborn v. Hale & Kilborn Mfg. Co., 66 Fed. 958.

³⁰² R. S. \$4922.

of a court has shown it to be necessary. Seymour v. McCormick, 19 How. 96; O'Reilly v. Morse, 15 How. 62; Gage v. Herring, 107 U. S. 640.

part of his claim so alter the rest as to make it include more than it would have done in its original form.³⁰⁴

§ 5. Reissue

Such failure to claim all that the invention included can be corrected only by a reissue such as the statute provides for. 305 This provision is, "Whenever any patent is inoperative or invalid, by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention or discovery more than he had a right to claim as new, if the error has arisen by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, the Commissioner shall. on the surrender of such patent and the payment of the duty required by law, cause a new patent for the same invention, and in accordance with the corrected specification, to be issued to the patentee, or, in case of his death or of an assignment of the whole or any undivided part of the original patent, then to his executors, administrators, or assigns, for the unexpired part of the term of the original patent. Such surrender shall take effect upon the issue of the amended patent. The Commissioner may, in his discretion, cause several patents to be issued for distinct and separate parts of the thing patented, upon demand of the applicant, and upon payment of the required fee for a reissue for each of such reissued letters patent. The specifications and claim in every such case shall be subject to revision and restriction in the same manner as original applications are. Every patent so reissued, together with the corrected specifications, shall have the same effect and operation in law, on the trial of all actions for causes thereafter arising, as if the same had been originally filed in such corrected form; but no new matter shall be introduced into the specification, nor in case of a machine patent shall the model or drawings be amended, except each by the other; but when there is neither model nor drawing, amendments may be made

³⁰⁴ Albany Steam Trap Co. v. Worthington, 76 Fed. 966; Hailes v. Albany Stove Co., 123 U. S. 582; Collins Co. v. Coes, 130 U. S. 56; Carnegie Steel Co. v. Cambria Iron Co., 185 U. S. 403.

³⁰⁵ R. S. § 4916.

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."

It will be observed that this section provides for a reissue only when an existing patent is "inoperative or invalid," by reason of the deficiency in specification, etc. It does not, in terms, cover the case of a patent which is perfectly valid and effective, but which, because of the mistake in specification, etc., does not give the patentee all of the protection which he might have had if he had properly claimed it. The right to a reissue originated, however, prior to any specific statutory provision, as a judicial interpretation of the spirit of the law as a whole. This appears in the case of Grant v. Raymond. 306 Grant had secured a patent which, through inadvertency, was so vague and inaccurate in its specification as to be ineffective. On discovering this he petitioned the Secretary of State to issue a new patent, containing a correct description of his invention and a valid claim which should protect him for the unexpired part of his term, and to cancel the old patent. This the Secretary did although no part of the Patent Statute specifically authorized it. Grant then sued Raymond for infringement of his reissued patent, and the defense was that there was no authority for the second, the corrected patent, and that it was void. A number of very practical objections to even authorized reissue were also raised. The court held, however, that although there was no specific authority, the reissued patent was good. Chief Justice Marshall, in delivering the opinion, said, "If the mistake should be committed in the department of state, no one would say that it ought not to be corrected. All would admit that a new patent, correcting the error, and which would secure to the patentee the benefits which the law intended to secure, ought to be issued. And yet the act does not in terms authorize a new patent, even in this case. Its emanation is not founded on the words of the law, but is indispensably necessary to the faithful execution of the

^{306 6} Peters 218 (1832).

solemn promise made by the United States. Why should not the same step be taken for the same purpose, if the mistake has been innocently committed by the inventor himself? . . . The great object and intention of the act is to secure to the public the advantages to be derived from the discoveries of individuals, and the means it employs is the compensation made to those individuals for the time and labor devoted to these discoveries, by the exclusive right to make, use and sell, the things discovered for a limited time. That which gives complete effect to this object and intention, by employing the same means for the correction of inadvertent error which are directed in the first instance, cannot, we think, be a departure from the spirit and character of the act. . . . The communication of the discovery has been made in pursuance of law, with the intent to exercise a privilege which is the consideration paid by the public for the future use of the machine. If, by an innocent mistake, the instrument introduced to secure this privilege fails in its object, the public ought not to avail itself of this mistake, and to appropriate the discovery without paying the stipulated consideration. The attempt would be disreputable in an individual, and a court of equity might interpose to restrain him."307

The original patent in that case appears to have been actually inoperative and ineffective to give any protection. But the reasoning on which the court proceeded would equally well sustain the correction of a patent which, while in fact operative, did not protect the inventor as fully as his invention entitled him to be protected. And the courts do extend it to just such cases. Thus in Wilson v. Coon³⁰⁸ it was contended that the reissued patent was void because the original was in

for mistake would vest judicial power in the Secretary of State, and that the reissue would retroact upon persons who had lawfully taken advantage of the failure to protect the invention. That a reissue may be granted to correct a mistake of the Patent Office itself, as suggested in Grant v. Raymond, see, Railway Register Co. v. Railroad Co., 23 Fed. 593. In Hobbs v. Beach, 180 U. S. 383, a reissue was allowed to correct a mistake, not in the specification but in the drawings.

308 6 Fed. 611.

fact valid and operative. But the court rejected the proposition, saying, "a patent may be inoperative from a defective or insufficient description, because it fails to claim as much as was really invented, and yet the claim may be a valid claim, sustainable in law, and there may be a description valid and sufficient to support such claim. In one sense such patent is operative and is not inoperative. Yet it is inoperative to extend to or claim the real invention, and the description may be defective or insufficient to support a claim to the real invention, although the drawings and model show the things in respect to which the defect or insufficiency of description exists, and show enough to warrant a new claim to the real invention. It can never be held, as it never has been held, in a case where the point arose for decision; that a patent can not be reissued where a suit could be sustained on the specification and claim as they are."309

INADVERTENCE, ACCIDENT, OR MISTAKE are essential in the justification for a reissue. The whole theory of a reissue is the correction of such an error only. If the inventor has deliberately omitted matter which he knew belonged in his specification and claim, he will be presumed to have intended not to claim it and to have abandoned it to the public. "A clear mistake, inadvertently committed, in the wording of the claim is necessary." What amounts to inadvertence or mistake depends upon the circumstances. It should be noted however that the question will be much more strictly examined when the attempt is to expand the claim (as discussed in the follow-

wholly inoperative or invalid. It is sufficient if it fail to secure to the patentee all of that which he has invented and claimed," Hobbs v. Beach, 180 U. S. 383, 394; Miller v. Brass Co., 104 U. S. 350; American etc. Co. v. Porter, 232 Fed. 456.

310 For further discussion of this point see the topic Abandonment.

Parker, etc. Co. v. Yale Clock Co., 123 U. S. 87, 103; "Where it is apparent on the face of the patent, or by contemporary records, that no such inadvertence, accident, or mistake, as claimed in a reissue of it, could have occurred, an expansion of the claim cannot be allowed or sustained," James v. Campbell, 104 U. S. 356, 371; Stafford Co. v. Coldwell Co., 202 Fed. 744. See also the cases cited in the following paragraphs.

ing paragraphs) than when it is only to perfect, without broadening, an existing patent.³¹²

It seems to be a generally accepted rule that courts will not review the decision of the Commissioner of Patents that the defect was in fact the result of mistake and inadvertence, if the purpose of the reissue is only to perfect the protection which the original purported to grant and not to enlarge the scope of the protection. There is a great deal of conflict and more confusion upon the question of review. Many cases say specifically that the Commissioner's finding of mistake, etc., will not be reviewed; many more say that, on one ground or another, it will be reviewed. So far as the confusion can be cleared at all, the weight of opinion seems to be that where the reissue does not give any wider scope of protection than the original claimed, the decision will not be reviewed; but if the reissue enlarges the claimed protection the courts will review. the question of mistake, etc., if there seems to be any real doubt of the matter. 313

Purpose of reissue. The statute authorizes a reissue only in cases where the specification is defective or insufficient, or the claim is for more than the inventor is entitled to. But the reasoning of the decision in Grant v. Raymond, supra, that a reissue might be had independently of statute, justifies it for purposes other than those stated in the statute. It has become a settled rule that reissues may be had for the purpose of expanding original patents which, through mistake and inadvertence, claimed less than the inventor was entitled to. "If a patentee who has no corrections to suggest in his specification except to make his claim broader and more comprehen-

³¹² As to what constitutes mistake, etc., see Autopiano Co. v. American Player Co., 222 Fed. 276; Morey v. Lockwood, 8 Wall. 230; James v. Campbell, 104 U. S. 356; Yale Lock Co. v. James, 125 U. S. 477; American etc. Co. v. Porter, 232 Fed. 456; Moneyweight Co. v. Toledo Scale Co., 187 Fed. 826.

313 "This court will not review the decision of the Commissioner upon the question of inadvertence, accident or mistake, unless the matter is manifest from the record," Hobbs v. Beach, 180 U. S. 383, 395, quoting from Topliff v. Topliff, 145 U. S. 156, 171; Mahn v. Harwood, 112 U. S. 354.

sive, uses due diligence in returning to the Patent Office, and says, 'I omitted this,' or, 'my solicitor did not understand that,' his application may be entertained, and, on a proper showing, correction may be made."³¹⁴

It is this right to have a reissue for the purpose of enlarging the scope of protection afforded, as well as for perfecting that originally claimed, which has caused much of the confusion of statement in regard to reissues. If the original patent actually claimed a certain breadth of protection, but the specification upon which the claim was based was inaccurate, or described so much as to be vague, or had some such defect, there could not be the objection, and the necessity for close scrutiny in allowing a reissue, that there would be if the patentee were trying to secure something which he did not even attempt to claim in the original. In the latter case the courts will scrutinize the grounds for the reissue most carefully. To quote further from Miller v. Brass Co. "We think it clear that it was not the special purpose of the legislation on this subject to authorize the surrender of patents for the purpose of reissuing them with broader and more comprehensive claims, although, under the general terms of the law, such a reissue may be made where it clearly appears that an actual mistake has inadvertently been made. But by a curious misapplication of the law it has come to be principally resorted to for the purpose of enlarging and expanding patent claims. And the evils which have grown from the practice have assumed large proportions. Patents have been so expanded and idealized, years after their first issue, that hundreds and thousands of mechanics and manufacturers, who had just reason to suppose that the field of action was open, have been obliged to dis-

Miller v. Brass Co. 104 U. S. 350, 352; Topliff v. Topliff, 145 U. S. 156, 170; while it is clear that a reissue for the purpose of broadening claims would be permissible on the authority of Grant v. Raymond, supra, and this seems the real authority, the case of American etc. Co., v. Porter, 232 Fed. 456, brings such a re-issue under the statute by saying that "specification" includes "claim" and therefore a too limited claim is an "insufficient specification."

^{315 104} U. S. 350.

continue their employments, or to pay an enormous tax for continuing them. Now whilst, as before stated, we do not deny that a claim may be enlarged in a reissued patent, we are of opinion that this can only be done when an actual mistake has occurred; not from a mere error of judgment (for that may be rectified by appeal), but a real bona fide mistake, inadvertently committed; such as a Court of Chancery, in cases within its ordinary jurisdiction, would correct. Reissues for the enlargement of claims should be the exception and not the rule."

The reissue must be for the same invention as the original. It is not a new patent, but a correction of one already issued which did not protect the invention for which it was issued. "Two leading and imperative requirements stand in the path of a reissue; First, that the error must have arisen, 'by inadvertence, accident, or mistake'; and, second, that the new patent is to be for the 'same invention.' Consequently, it must appear, in some manner provided by law, that the invention for which the reissue is granted was in the contemplation of the patentee at the outset. . ."⁸¹⁶

That the new matter claimed in the reissue was really a part of the original invention must be shown, said the same court, by "clear and positive proof, in harmony with the universal rules of equity not to disturb the existing status except by proof of that character. No mere inferences can take the place of such proof. Ordinarily, what is called for by the words 'same invention' should appear in some way on the face of the original patent, and it cannot be gathered from mere inferences or suggestions with reference to what the patentee might or might not have conceived." To determine just what was the scope of the original invention, beyond what was originally claimed, is an extremely difficult proposition. The natural tendency of the human mind is to look at any invention in the light of later progress, and to ascribe to an inventor that which to later and more completely educated minds seems

³¹⁶ Stafford Co. v. Coldwell Co., 202 Fed. 744; McDowell v. Ideal Concrete Co., 187 Fed. 814; Parker v. Yale Clock Co., 123 U. S. 87, citing much authority.

so obvious that he could not but have known it. The inventor himself is still more inclined to believe that he knew and foresaw at the time of his invention all that subsequent experience has taught him. Therefore, "if enlargement is to come, not from evidence contained in the original patent (or in the proceedings to obtain it), but from what the inventor subsequently says (truthfully or untruthfully) was in his mind prior to filing the original application, a region of danger, of temptation to fraud and deception, would be opened wide. . . . "317 The statement of the court first quoted is, that "ordinarily" all that is covered by the reissue "should appear in some way on the face of the original patent." While there are a number of decisions which do not absolutely require this, the later Supreme Court decisions refuse to allow any claim in a reissue, the substance of which is not at least shadowed in the original application.318 A real workable understanding of what the

317 M'Dowell v. Ideal etc. Co., 187 Fed. 814, 821.

318 A full discussion of this matter is found in Parker v. Yale Clock Co. 123 U. S. 87; Yale Lock Co. v. James, 125 U. S. 447; "If the claims of the reissue are limited, as they must be, to the specific mechanism described in the specification . . ." Electric Gas Co. v. Boston Elec. Co., 139 U. S. 481. 503; Freeman v. Asmus, 145 U. S. 226; "It is settled by the authorities that to warrant new and broader claims in a reissue, such claims must not be merely suggested or indicated in the original specification, drawings or models, but it must further appear from the original patent that they constitute parts or portions of the invention which were intended or sought to be covered or secured by such original patent. It is also settled by the authorities that in applications for reissue the patentee is not allowed to incorporate or secure claims covering or embracing what had been previously rejected upon his original application," Corbin Lock Co. v. Eagle Co., 150 U. S. 38, 42; American etc. Co. v. Porter, 232 Fed. 456, "The further and last statutory condition is that the reissue must be for "the same invention." It is true that, for purposes of determining infringement, the identity of the patented invention is fixed by the claims; but to apply the same test to identity of invention as between original and reissue loses sight of the difference between the real invention and the originally patented invention, and unless there is such a difference, there is no occasion for reissue. To recognize that difference and permit it to be corrected is the whole purpose of the reissue statute; and so it seems quite destructive of the statute to assume that the identity of the actual invention is permanently declared and fixed by the form

courts will recognize as indicated in the original application, can be had only in study and comparison of the cases themselves, much more fully than can be set out in a text book. The presumption is in favor of the validity of the reissue, as it is in favor of the validity of any patent, and the original must be introduced in evidence as the basis of an attack.³¹⁹

THE TIME WITHIN WHICH A REISSUE MUST BE ASKED is not limited by the statute in any way, although of course there would be no point in a reissue after the term of the original had expired. Where the reissue is sought for the purposes specified in the statute, namely, to correct a defective or insufficient specification, or to narrow the claim, there could be no real objection to its being granted at any time.320 But as we have seen, the right to a reissue for the purpose of broadening a claim appears to be founded on judicial interpretation of the general law, not on specific statute. There might well be objection to broadening a patent after the lapse of time; and the same judicial authority which inaugurates the right can of course limit it. The Supreme Court, accordingly, has limited the time, within which a reissue for the purpose of broadening claims may be had, to what is reasonable under all the circumstances. In Miller v. Brass Co.,³²¹ the court says, "Reissues for the enlargement of claims should be the exception and not the rule. And when, if a claim is too narrow,—that is, if it does not contain all that the patentee is entitled to, the defect is apparent on the face of the patent, and can be dis-

which the original claims are inadvertently allowed to take. In the same way as with reference to mistake, the question of identity is submitted to the Patent Office, and for the same reason its conclusion is to be taken as prima facie right. The last sentence of section 53 even permits the Patent Office, in certain cases, to go entirely outside the record to determine what the original invention was. It follows that only when it is clear that the reissue is not for the same invention are the courts justified in reaching that conclusion; and we take this to be the rule of the decisions hereinafter cited."

³¹⁹ Seymour v. Osborne, 11 Wall. 516; Second reissue may be compared directly with the original, Hoskin v. Fisher, 125 U. S. 217; But cf. post. 520 Accord, Sewing-Machine Co. v. Frame, 24 Fed. 596.

⁸²¹ 104 U. S. 350.

covered as soon as that document is taken out of its envelope and opened, there can be no valid excuse for delay in asking to have it corrected. Every independent inventor, every mechanic, every citizen, is affected by such delay, and by the issue of a new patent with a broader and more comprehensive claim. The granting of a reissue for such a purpose, after an unreasonable delay, is clearly an abuse of the power to grant reissues, and may justly be declared illegal and void. It will not do for the patentee to wait until other inventors have produced new forms of improvement, and then, with the new light thus acquired, under pretence of inadvertence and mistake, apply for such an enlargement of his claim as to make it embrace these new forms. Such a process of expansion carried on indefinitely, without regard to lapse of time, would operate most unjustly against the public, and is totally unauthorized by the law. In such a case, even he who has rights, and sleeps upon them, justly loses them. The correction of a patent by means of a reissue, where it is invalid or inoperative for want of a full and clear description of the invention, cannot be attended with such injurious results as follow from the enlargement of the claim. And hence a reissue may be proper in such cases, though a longer period has elapsed since the issue of the original patent. But in reference to reissues made for the purpose of enlarging the scope of the patent, the rule of laches should be strictly applied; and no one should be relieved who has slept upon his rights, and has thus led the public to rely on the implied disclaimer involved in the terms of the original patent. And when this is a matter apparent on the face of the instrument, upon a mere comparison of the original patent with the reissue, it is competent for the courts to decide whether the delay was unreasonable, and whether the reissue was therefor contrary to law and void."322

Since the matter depends upon circumstance, it is obvious that there can be no arbitrary length of time after which the right to a reissue will be automatically lost. A rule of pre-

³²² Reiterated, Mahn v. Harwood, 112 U. S. 354.

sumption was stated, however, in Topliff v. Topliff,³²³ as follows: "due diligence must be exercised in discovering the mistake in the original patent, and, if it be sought for the purpose of enlarging the claim, the lapse of two years will ordinarily, though not always, be treated as evidence of an abandonment of the new matter to the public to the same extent that a failure by the inventor to apply for a patent within two years from the public use or sale of his invention is regarded by the statute as conclusive evidence of an abandonment of the invention to the public."³²⁴ But while it thus appears that the presumption of invalidity does not begin to run until two years have passed, a much shorter time than this may demonstrate such unjustified delay as will bar the right to a reissue.³²⁵

The inventive quality of the matter covered by the reissue will, as in the case of all inventions, be considered as of

323 145 U. S. 156, 171.

324 "Where a reissue expands the claims of the original patent, and it appears that there was a delay of two years, or more, in applying for it, the delay invalidates the reissue, unless accounted for and shown to be reasonable." Hoskin v. Fisher, 125 U.S. 217, quoting Wollensak v Reiher, 115 U. S. 56; American, etc. Co. v. Porter, 232 Fed. 456. "By the issue of a patent, the inventor dedicates to the public everything which he does not claim as his monopoly. Upon this dedication, the public has a right to rely, and if members of the public devote time and money to the manufacture of a device which the inventor has so dedicated, or to the devising, inventing and patenting of structures which embody such a feature, it may be presumed that this is done upon the faith of the dedication; and so the inventor may not be permitted thereafter to enlarge his monopoly to the prejudice of these new rights,—even though, except for them, the reissue would be permissible. The settled doctrine has come to be that from a delay of more than two years, and in the absence of any sufficient contrary evidence, these fatal intervening rights (public or private) will be presumed; in the presence of less delay, they must be proved. But see White v. Dunbar, 119 U. S. 47, 52, 7 Sup. Ct. 72, 30 L. Ed. 303, and Milloy Co. v. Thompson Co. (C. C. A.) 148 Fed. 843, 847, 78 C. C. A. 533."

as they appear to be. In many cases in which it is said that too long a time has been allowed to pass, it is specifically held that the reissue is not for the same invention, and it would, therefore, have been invalid even if applied for within two hours. Cf. Haines v. Peck, 26 Fed. 625.

As instance of what will excuse a long delay, see Whitcomb v. Coal Co., 47 Fed. 658; Cf. Wollensak v. Sargent, 151 U. S. 221.

the date of the invention. Since the reissue is only a correction of the original patent and covers only the original invention, the date must be that of the original invention. Also since the reissue is considered not as a new patent, standing by itself, but as a correction of the old patent, the fact that the device involved has been in public use or on sale more than two years prior to the application for reissue does not necessarily bar the reissue, as it would bar an original patent. That fact will, however, have an important bearing on the question of whether or not a reissue is lost through undue delay in applying for it.³²⁶

§ 6. AMENDMENT

When the defect is discovered before the patent has actually been issued, it may be corrected by amendment of the application. There is no express provision of the statute upon this subject, but it seems to follow as a matter of course. The rules of practice of the Patent Office provide that³²⁷ "the applicant has a right to amend before or after the first rejection or action; and he may amend as often as the examiner presents new references or reasons for rejecting." The rules also provide when and how the amendment shall be made.

The patentee can not by amendment make the application cover a different device than the one claimed in his original application. He may so correct the description, or even add to it as to make it cover the entire invention, but he can not describe what would amount to another invention. He is restricted to the remedying of defects in the description thereof and in the claims.³²⁸

. ³²⁷ Rule No. 68.

³²⁶ Grant v. Raymond, 6 Peters 218, 244; Stimpson v. Railroad Co., 4 How. 380; Coffield Co. v. Howe Co., 172 Fed. 668.

Hobbs v. Beach, 180 U. S. 383, 395—holding the defense that the claims had been unlawfully expanded before issue of the patent not sustained. Eagleton Mfg. Co. v. West, etc. Mfg. Co., 111 U. S. 490; Kirchberger v. Am. Acetylene Burner Co., 128 Fed. 599; Cleveland Foundry Co. v. Detroit Vapor Stove Co., 131 Fed. 853; American Lava Co. v. Steward, 155 Fed. 731.

If the change desired is such as would amount to the description of another idea of means, a different invention, than the one actually though incompletely described and claimed, a new application under oath must be made, as for a new and distinct invention.

§ 7. NEW APPLICATIONS

ABANDONED APPLICATIONS. All applications for a patent must be completed so as to be ready for examination by the Commissioner within one year from the time the application is filed.³²⁹ An application consists³³⁰ of the petition, specification, oath, fee of \$15.00, and when required, drawings, model and specimen. It is not complete until all these parts are received by the Patent office.³³¹ If it is not so completed within the year it will be regarded as abandoned, unless it be shown to the satisfaction of the Commissioner of Patents that such delay was unavoidable.³³²

When the application is completed, if it has been acted upon unfavorably and the applicant has been notified thereof, it is his duty to take some further action to secure his patent. If he fails to prosecute his application within one year from the date of the adverse action³³³ he is presumed to have abandoned it just as in case of failure to complete it.

The right to a patent may be abandoned to the public by the inventor regardless of his actions in respect to securing a patent. Such abandonment is a matter of his real intent as evinced by his conduct. The abandonment of an application, and consequent possible loss of his patent, is quite another matter, in that it has nothing whatever to do with his real

³²⁹ R. S. § 4894. Until amendment of 1897 the time limit was 2 years. 330 Rule No. 30.

³³¹ "It is desirable that all parts of the complete application be deposited in the office at the same time, that all the papers embraced in the application be attached together; otherwise a letter must accompany each part, accurately and clearly connecting it with the other parts of the application."

³³² R. S. \$4894.

³³³ Two years prior to amendment of 1897.

intent. The abandonment of an application, is an arbitrary condition fixed by statute, and resulting from the mere lapse of time. There is the ameliorating provision, however, that this condition of abandonment shall not be deemed to exist if the delay is excused to the satisfaction of the Commissioner. This possibility of excuse should not be confounded with the fact that when certain circumstances give rise to an appearance of real intent to abandon, it is possible to refute that appearance by a showing of other facts which nullify the inference from the first ones. The arbitrary conclusion decreed by the statute, and the conclusion of intent deduced from the facts, are, however, often enough confused in the opinion to make some seeming conflict.³³⁴ Real abandonment arising from apparent intent thereto has already been discussed.³³⁵

New applications. An important difference between abandonment of the invention, and abandonment of the application is, that when the former is satisfactorily shown by the circumstances it is irretrievable. The abandonment of the application, however, even if the delay be not excused, does not ipso facto preclude the inventor from later securing a patent. He may file another application and does not lose his right to a patent unless, and until, such time has elapsed before the filing of that application that the device has been in public use or on sale more than two years prior thereto. 337

The two years dates from the filing of the new application and not from the filing of the original one. This question has come squarely before the court.³³⁸ In 1894 an inventor filed an application which was rejected, and notice given to him, the same year. He failed to take further action for more than a year. This delay he attempted to excuse, but the reasons given were not satisfactory to the Commissioner. Accordingly

³³⁴ Beverly v. Henderson, Fed. Cas. No. 1379, 9 Blatch. 50.

³³⁵ Commissioner's decision against sufficiency of excuse held to be final. Hayes-Young Tire Plate Co. v. St. Louis Transit Co., 137 Fed: 80.

³⁸⁶ Western Electric Co. v. Sperry Elec. Co., 58 Fed. 186.

³³⁷ Western Elec. Co. v. Sperry Elec. Co., 58 Fed. 186; Hayes-Young Tire Plate Co. v. St. Louis Transit Co., 137 Fed. 80.

³³⁸ Hayes etc. Co. v. St. Louis Transit Co., 137 Fed. 80.

he filed a new application in 1901. A question of pleading raised the issue whether the patent would be valid if the invention had been in public use more than two years before this later application, though not before the date of the first application. The court said that the two years would date from the application of 1894 if that of 1901 could be considered a mere amendment and continuation of the former. But they held that, "the abandonment of an application destroys the continuity of the solicitation of a patent. After abandonment a subsequent application institutes a new and independent proceeding, and the two years public use or sale which may invalidate the patent issued upon it must be counted from the filing of the later application." ³³⁹

As the public use or sale is effective to defeat patentability regardless of the inventor's consent therein, it is wise, where the time on which abandonment is predicated has passed, unless the inventor is certain there has been no such use with or without his consent, to present excuse, if possible, for the delay, rather than to let the original application go and file a new one.

Failure to pay final fee. If after an application has been allowed and a patent ordered to issue, the patentee fails to pay the final fee within six months after the sending of notice to him, a new application becomes necessary. It has been held that such new application may contain more in breadth of claim than the original one did, so long as the invention itself is not exceeded. A new application, in the sense of a new petition, oath, description, etc., while it is apparently allowable, is not necessary. The statute provides that in such case of non-payment, "Any person who has an interest in" the invention, "whether as inventor, discoverer or assignee" may make an application for a patent. It logically follows that the statute does not here use "application" with

³³⁰ Citing, Beverly v. Henderson, Fed. Cas. No. 1379, 9 Blatch. 50; Mowry v. Barber, Fed. Cas. No. 9892; Lindsay v. Stein, 10 Fed. 907; Lay v. Indianapolis Brush & Broom Mfg. Co., 120 Fed. 831.

³⁴⁰ R. S. \$4897.

³⁴¹ Bowers v. San Francisco Bridge Co., 69 Fed. 640.

the same meaning it has elsewhere, and requires only an application for the issue of the patent already adjudged.³⁴²

§ 8. Appeal in Case of Rejection

The statute³⁴³ provides "Whenever, on examination, any claim for a patent is rejected, the Commissioner shall notify the applicant thereof, giving him briefly the reasons for such rejection, together with such information and references as may be useful in judging of the propriety of renewing his application or of altering his specification." The applicant may then, if he chooses, alter his claims so as to eliminate therefrom matter which has in the opinion of the Commissioner been anticipated and offer the altered claims for approval. If they are again rejected as too broad, he may again correct them, and this rejection, correction and resubmission may continue until limited by the subject matter itself. When, at any stage in this procedure, the applicant does not believe that the earlier patents, referred to by the Commissioner as anticipations, necessitate a change in his claims, the statute provides, "And if, after receiving such notice, the applicant persists in his claim for a patent, with or without altering his specifications, the Commissioner shall order a re-examination of the case."

If upon this re-examination, the application is again rejected, the applicant may then, and then only, appeal. Although the statute reads as though these examinations and rejections were made by the Commissioner, they are in fact the work of "preliminary examiners," and the appeal is made from their decisions to a group of examiners, also subordinate to the Commissioner, called the board of examiners-inchief.³⁴⁴ If the applicant is dissatisfied with the decision of this board he may, on payment of the fee prescribed,³⁴⁵ appeal to the Commissioner in person.³⁴⁶ If he is still dissatisfied,

³⁴² Ex parte Livingston, 20 O. G. 1747.

³⁴³ R. S. § 4903.

³⁴⁴ R. S. § 4909. The course of procedure is described by the court in Butterworth v. Hoe, 112 U. S. 50.

^{345 \$20.00,} Rule 140.

³⁴⁶ R. S. § 4910.

after the decision of the Commissioner he may carry his appeal to the Court of Appeals of the District of Columbia.³⁴⁷ A favorable decision by this court affects only the right to have a patent issued and does not in any way determine the validity of the patent after it has been issued.³⁴⁸

The rules of procedure of appeals, the time for filing papers, notices to be given, forms, etc. can be found in the Rules of the Patent Office and in books upon the detail work of soliciting patents, and are too technical to be discussed here.³⁴⁹

If the decision of the Court of Appeals is adverse to the claimant, or if he does not choose to appeal to that court at all, he has still a further proceeding to compel issue of a patent to him. 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

was to the Supreme Court of the District of Columbia, R. S. § 4911. It was changed by § 9 of the act. By the act of March 3, 1911 (Judicial Code § 250) the decision of the Court of Appeals is declared to be final except in certain cases which do not include patent matters, subject to certiorari by the Supreme Court of the United States or certificate to it. If the examiner or the Commissioner should refuse to act at all, a writ of mandamus would undoubtedly be proper. Steinmetz v. Allen, 192 U. S. 543.

348 R. S. § 4914, Rousseau v. Brown, 21 App. D. C. 73.

349 It has been held that there is no appeal from the Commissioner to the Secretary of the Interior on his finding as to patentability. Butterworth v. Hoe, 112 U. S. 50. The multiplicity of appeals and difficulty of acquiring a patent is severely criticized by U. R. Lane, in Dilatory Patent Procedure, 20 Green Bag 503.

350 R. S. § 4915. By § 24 of the Judicial Code, the action is within the primary jurisdiction of the United States District Courts. In Butterworth v. Hill, 114 U. S. 128, it was held, without deciding where the action should be brought, that it could not be brought in any other district than the one of which the Commissioner was an inhabitant.

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." This right has been held to be available only when the application has been rejected on the ground that the alleged invention is not, on its merits, entitled to a patent.350a

This proceeding must be brought within the one year limited for the prosecution of applications after adverse action,³⁵¹ unless the delay is satisfactorily excused,352 and to secure a decision in its favor the alleged invention must not only be prior in time to the one specifically set up in anticipation by the Commissioner, but must also be patentable on its own merits.353

§ 9. Interferences

Whenever an application is filed, setting out an alleged invention which the Commissioner feels is anticipated by an unexpired patent or earlier application for a patent, and there is a contention that the device for which application was last made was in fact invented before the one already patented or for which patent was first asked, the Commissioner is required by the Statute to give notice to the parties and to try the question of priority of invention.354 The statute reads, "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 Com-

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350a Butterworth v. Hoe, 112 U. S. 50.
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³⁵¹ R. S. § 4894.

³⁵² Gandy v. Marble, 122 U. S. 432.

³⁵³ Hill v. Wooster, 132 U. S. 693.

³⁵⁴ R. S. § 4904.

missioner 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 examinersin-chief, as the case may be, within such time, not less than twenty days, as the Commissioner shall prescribe." Literally taken, this covers all cases where the later application is, in the opinion of the Commissions, anticipated by an earlier one, for in all such cases one would interfere with the other. But it is obvious that a question of priority does not arise, so as to be triable, in all such cases. Even if the opinion of anticipation is not acquiesced in, the controversy may be solely over the essential identity of the two devices, and priority of one or the other be admitted. In such circumstance the statute would not require notice and trial. When a trial as to priority is had under the statute, the procedure, taking of testimony, etc., is governed by the statutes and the rules of the office. Appeal from the decision of the Commissioner is the same as in other cases of unfavorable decision upon an application.355

§ 10. PROTEST AGAINST ISSUE

One who is not a party in any way to a patent, may, on learning that a patent is pending in the patent office, file with the Commissioner a protest against its allowance, on the ground of public use or sale more than two years prior to the filing of the application.³⁵⁹

³⁵⁵ The question of what constitutes priority of invention is discussed supra.

³⁵⁹ In re National Phonograph Co., 89 O. G. 1669; U. S. ex. rel. v. Allen, 101 O. G. 1133; Ex parte Kephart, 103 O. G. 1914; Ex Parte Hartley, 136 O. G. 1767; Kneisely v. Kaisling, 174 O. G. 830; In re Lewthwaite, 176 O. G. 525.

CHAPTER VII

ACTIONS TO AVOID PATENTS

After a patent has once been issued by the patent office, in proper form, it is too late for that office to revoke it or otherwise actively to affect its validity. "It has passed beyond the control and jurisdiction of that office, and is not subject to be revoked or concelled by the President or any other officer of the Government." It has become the property of the patentee, and as such is entitled to the same legal protection as other property. The only authority competent to set a patent aside, or to annul it, or to correct it for any reason whatever, is vested in the courts of the United States, and not in the department which issued the patent."

Government action to invalidate. The government may bring an action in the courts to have a patent that has been issued annulled and set aside, and this may be done "not only when it has a proprietary and pecuniary interest in the result, but also when it is necessary in order to enable it to discharge its obligation to the public, and sometimes when the purpose and effect are simply to enforce the rights of an individual." Such suits must be based on the ground that the patent has been improperly issued on account of fraud, accident, mistake or the like, and the fraud or other matter on which invalidity is predicated must be clearly proved. 364

³⁶⁰ McCormick Machine Co. v. Aultman, 169 U. S. 606, citing U. S. v. Schurz, 102 U. S. 378; U. S. v. Am. Bell Telephone Co., 128 U. S. 315, 363.

³⁶¹ Citing Seymour v. Osborne, 11 Wall 516; Cammeyer v. Newton, 94 U. S. 225; U. S. v. Palmer, 128 U. S. 262, 271.

³⁶² Citing Moore v. Robbins, 96 U. S. 530; U. S. v. Am. Bell Telephone Co., 128 U. S. 315, 364; Mich. Land & Lumber Co. v. Rust, 168 U. S. 589, 593.

³⁶³ U. S. v. Am. Bell Telephone Co., 167 U. S. 224, 264; Id. 128 U. S. 315. ³⁶⁴ U. S. v. Am. Bell Telephone Co., 167 U. S. 224; in this case delay of

Interfering patents. When two patents have been issued, whether by oversight of the patent office, or for any other reason, which one of the patentees believes to cover the same invention, the question is ordinarily decided in the usual procedure of an infringement suit. The defense is made that the plaintiff's patent is invalid, or if valid does not include the device which the defendant is making, vending or using under the second patent. A decision in favor of the defense, sustains either the non-identity of the inventions or the invalidity of the plaintiff's patent. As the decision may be in the defendant's favor on either ground, it does not necessarily determine the validity or invalidity of the plaintiff's patent unless the court so specifies particularly. But a decision in the plaintiff's favor settles the identity of the patents and the priority of the plaintiff's patent, and thus indirectly, determines the defendant's patent to be invalid. The statute provides in addition to this procedure an action whereby one of the patents may be directly declared void. The section reads.356 "Whenever there are interfering patents, any person interested in any one of them, or in the working of the invention claimed under either of them, may have relief against the interfering patentee, and all parties interested under him, by suit in equity against the owners of the interfering patent; and the court, on notice to adverse parties, and other due proceedings had according to the course of equity, may adjudge and declare either of the patents void in whole or in part, or inoperative, or invalid in any particular part of the United States, according to the interest of the parties in the patent or the invention patented. But no such judgment or adjudication shall affect the right of any person except the parties to the suit and those deriving title under them subsequent to the rendition of such judgment."

It is to be noted that the result of the decision affects only the parties to the suit and those subsequently deriving title from them. Its practical advantage is therefore not much greater than that of the ordinary infringement action. The the patent office from the time of application in 1877 to an issue in 1891 without any intermediate action was held not to invalidate the patent.

³⁵⁶ R. S. \$4918.

statute also provides that both patents may be declared invalid on a proper showing, so that there is a certain risk in bringing the action to the plaintiff, unless he has, as in some actions, something to gain and nothing to lose. It was actually-held, in the case of Palmer Pneumatic-tire Co. v. Lozier, 357 that both patents were invalid. Counsel on both sides agreed that the court could decide nothing but the priority of one or the other of the patents and such had been the opinion of the court below, which decided that the patent later applied for and issued really represented the prior invention and was therefore the valid one of the two. "On the contrary," said the Appellate Court, "we think the court is bound to determine whether, upon identifying the subject matter of the interfering patents, the invention therein stated is patentable. If it is not, and the court should go on and pronounce a decree of nullity against one of the patents, it would do so at the instance of one who has no right to protect, and consequently no standing on which to assail his adversary. The parties would not stand on equal ground in such a litigation, and consequently the power of the court would be perverted to the determination of an unprofitable inquest as to who was the first discoverer of a nullity. The outcome would be that, while one pretender would be dislodged, the other would occupy the field unscathed. We think that if, upon inspection of the patents, or in the course of the investigation it must make in order to determine the nature of the alleged invention, the court should see that the patents are void for lack of patentable subject matter, it ought not to proceed to an inquiry as to who first discovered the thing which the court finds to be null, and decree thereon, but should dismiss the bill." The general state of the art as shown by evidence outside of the patents themselves is admissible in this action as it is in others.358

Insufficiency of remedies. It will be observed that neither of these actions gives any remedy to the individual who believes an existing patent to be void and unenforcible, but who is not certain of the fact. The statute authorizes an ac-

^{357 90} Fed. 732.

³⁵⁸ Simplex Ry. Appliance Co. v. Wands, 115 Fed. 517.

tion to question the validity of a patent only when the complainant is himself the owner of another patent, or otherwise interested in an existing patent. The action by the government, to have a patent declared void, may be started in the interest of an individual, but it appears to be maintainable only where the patent is attacked on the ground of fraud, or something more fundamental than the mere lack of invention in the thing patented. Yet these seem to be the only cases in which a patent can be attacked when the owner of the patent has not himself started the action and will not do so.

The only way, therefore, that the validity and effectiveness of a patent can be ascertained by one who wishes to enjoy the use of the thing patented without the permission of the patentee, is for him to make use of the invention and take his chances either of not being sued by the patentee, or, if he is sued, of being able to defeat the patent. But such a course involves unjust risk. Many inventions require the investment of considerable fixed capital for their utilization. If one should make such investments in a mistaken belief that the patent was void, and then be successfully restrained by the patentee from infringing what the courts should hold to be a valid patent, his loss, through inability to utilize his fixed capital, would be far in excess of the compensatory damages which might be recovered by the plaintiff. That is, he would not only have to pay damages to the patentee, but also would lose his own investment. Even if no great initial investment were required, men might hesitate to go into the manufacture of a patented article, even though advised by expert counsel that the patent was invalid, knowing that if the patent should be held good by the courts, all their profits would be swept away and a carefully built up business destroyed.

Even when capitalists are perfectly willing to take the risk of operating in contravention of what they are convinced is an improperly issued and worthless patent, they can not always do so, successfully, on account of the patent. The patentee may himself be too doubtful of the validity of his patent to go into court where it can be attacked, and yet he may nevertheless successfully prevent serious infringement. The Vac-

uum Cleaner Co., for instance, had patents covering certain elements of the usual construction of vacuum cleaners. The Electric Renovator Co. manufactured cleaners which the Vacuum Co. asserted infringed its patents. As the Renovator Co. denied that it was infringing a valid patent, the Vacuum Co. sent out circulars and threatening letters warning the wholesale houses and other customers of the Renovator Co., that the Renovator Co. had no license and that whoever handled its products would be prosecuted for infringement of the Vacuum Co.'s patents. For two years it continued this practice of frightening off the Renovator Co.'s customers, while at the same time persistently refusing to bring suit against anyone, in which the validity of its patents could be tried out. Finally, the Renovator Co., in the absence of any other remedy, sued for an order restraining the Vacuum Co. from continuing its unfair practice. The court granted the injunction on the ground that the allegation of infringement and the warnings sent out were not made in good faith, and that the lack of good faith was indicated by the refusal to bring suit in which the matter could be tried out. But even in this case the validity of the patent itself was not tried out; the defendant was merely enjoined from unfair practices. It is quite conceivable that, without going so far as to be demonstrably unfair, the owner of an invalid patent might make it almost impossible for any one successfully to invade his unjust monopoly.

It is a serious defect in the patent law that it does not furnish any practical method by which the individual public can protect itself against the menace and extortionate monopolies of invalid patents. It may be that in time an action of some form will be provided, whereby one who honestly doubts the validity of an existing patent can get the judgment of a court, without having to await the dangerous convenience of the patentee.^{364b}

³⁶⁴² Electric Renovator Co. v. Vacuum Cleaner Co., 189 Fed. 754, Accord, Adriance Co. v. National Harrow Co., 121 Fed. 827.

^{364b} For a discussion of "declaratory judgments" in general see the article by E. R. Sunderland in 16 Michigan Law Rev. 69. See also that of Borchard in 28 Yale Law Rev. 1. The state of Michigan now provides for such declaratory judgments, Pub. Acts of 1919, No. 150.

CHAPTER VIII

THE OWNERSHIP OF THE MONOPOLY

§ I. DURATION

The statute provides³⁶⁵ that the owner of a valid patent shall have the exclusive right, to make, use and vend the invention or discovery covered by it throughout the United States and its Territories. This exclusive right is given for a period of 17 years. The time begins to run from the date of issue of the patent, and is unaffected by the date of invention or the date of application. The right to acquire a monopoly dates from the time of the invention, and the first inventor alone is entitled to a patent, no matter if another has been the first applicant. The duration of the monopoly, however, dates from the time the patent is issued.^{305a} An extreme illustration of the materiality of this difference is found in the case of United States v. American Bell Telephone Co.³⁶⁰ From about 1878 that Company had been operating its phones with transmitters that were covered by patents issued at that time. In 1891 another patent

³⁶⁵ R. S. § 4884.

of the patent, the inventor has no monopoly until then. He can not prevent others from using his invention prior to the issue of his patent, nor can he recover anything as damage. "A patentee can not recover damages for the sale or use of his invention prior to the issuance of a patent but the fact that articles embodying the invention were manufactured before the patent was issued, unless by the patentee's consent, does not authorize their use thereafter." (Syl.) Columbia & N. R. R. v. Chandler, 241 Fed. 261. See also cases cited infra.

One who has applied for a patent may, however, mark his product "Patent Applied For" and this does have a practical deterrent effect, because it warns the user of the invention that his invested capital may be rendered worthless by the granting of the patent.

³⁶⁶ 167 U. S. 224. The "Oldfield Bill," H. R. 1700, April 1913, which failed of passage in Congress, contained a provision limiting the monopoly to a maximum period of 19 years from the date of application.

was issued to them for precisely the same invention. On investigation it appeared that the invention on which this latter patent was issued had been made prior to that of the patents under which the Company had been securing protection. Application for this patent had been made at the proper time, thus saving the right to a patent, but the whole matter had been neglected by the Patent Office, and no patent had been issued till 1891. On suit to set aside this long delayed patent the court decided that the delay was not the result of fraud in any form and that the patent was valid and operative from the time of its issue. The result was that the company, having operated for many years under a very effective appearance of monopoly, although without any actual right whatever thereto, now acquired a valid and actually enforcible monopoly for another 17 years longer.

Conversely, the inventor has no right to the exclusive enjoyment of his invention, no monopoly of it at all, until a patent has actually been issued to him.^{366*}

The patent must be issued by the Patent Office within three months from the date of payment of the final fee, which must itself take place not later than 6 months from the date on which notification that the application was passed and the patent allowed, was sent to the applicant. If this fee is not paid within the proper time the statute provides that the patent shall be withheld. A new application must then be made in order to secure the issue of the patent.³⁶⁷

THE MONOPOLY IS ABSOLUTE. After the patent has been

^{366*} Standard Scale Co. v. McDonald, 127 Fed. 709; D. M. Steward Co. v. Steward, 109 Tenn. 288.

or for 7 years, or for 14 years, as the applicant may in his application elect." \$4931 R. S. The statute prior to the amendment of March 3, 1897, provided that patents issued in this country for inventions already patented in a foreign country, should expire coincidentally with the expiration of the shortest of the foreign patents, but this phraseology was changed by the amendment, R. S. \$4887. See the statement, in 1915, in regard to this in Fireball Gas Co. v. Commercial Acetylene Co., 239 U. S. 156; and in Cameron Septic Tank Co. v. City of Knoxville, 227 U. S. 39.

issued the right which it confers is absolute. The right is not the invention nor the enjoyment of the invention. It is the monopoly of the right to enjoy it. The patentee may utilize the invention, may make, use and vend the things covered by it if he chooses, but whether he does exercise his privilege of enjoyment or not, his right to exclude others is absolute, and is not affected by his own non-use of the privilege. This is established beyond doubt by the cases. In the Paper Bag Patent case³⁶⁸ the question was passed upon in actual decision, not as mere dictum. It was contended in the case that a court of equity had no jurisdiction to restrain by injunction the infringement of letters patent, the invention covered by which. had "long and always and unreasonably been held in nonuse . . . instead of being made beneficial to the art to which it belongs." It was conceded, the court said, even by the claimant, that the monopoly was not defeated by the non-user of the privilege; that an action at law for infringement would still lie. The only contention was that the right to an injunction was lost; that, for the good of the public, unauthorized persons should be allowed to make, use and vend the invention without restraint by the courts, if the patentee would not exercise the privilege himself, and that the patentee should be left to his legal remedy of damages. This contention the court absolutely rejected, on the ground that Congress had given to a patentee not merely the right to make, use and vend his invention himself, but the absolute right of keeping others from so doing, and that this monopoly was not lost by neglect to put the invention into use.369

368 210 U. S. 405.

Button Fastener Cases, 77 Fed. 288, 35 L. R. A. 728, cited with approval Henry v. Dick, 224 U. S. 1, 28: "If he will neither use his device nor permit others to use it, he has but suppressed his own. That the grant is made upon the reasonable expectation that he will either put his invention to practical use or permit others to avail themselves of it upon reasonable terms, is doubtless true. This expectation is based alone upon the supposition that the patentee's interest will induce him to use, or let others use, his invention. The public has retained no other security to enforce such expectations. A suppression can endure but for the life of the patent, and the disclosure he has made will enable all to enjoy the

§2. Transfer of the right

The monopoly conferred by the patent may be transferred to others at the will of the patentee as freely as any other form of incorporeal personal property. It is personal property and descends to the personal representatives of a deceased owner, rather than to his heirs. The owner may also enter into agreements in respect to the enjoyment of the right, which agreements may, like other contracts, be either written or oral. The transfer of the title to the patent, that is to say, the complete ownership of the monopoly itself, can be made only by an instrument in writing, as the statute is interpreted. The statute provides that "every patent or any interest therein shall be assignable in law by an instrument in writing." and the conveyance, to be effective, is apparently limited to this method. The statute of the effective is apparently limited to this method.

fruit of his genius. His title is exclusive, and so clearly within the constitutional provisions in respect of private property that he is neither bound to use his discovery himself nor permit others to use it." Victor Talking Machine Co. v. The Fair, 123 Fed. 424. An attempt was made to change this rule by a bill introduced in Congress, April 7, 1913—H. R. 1700—called the "Oldfield Bill." It provided, among other minor changes, that when it should be proved that the owner of a patent was withholding or suppressing all benefit to the public, from the invention, he might be compelled, by court action, to license others to make use of it upon proper terms of recompense. The bill failed to pass and prominent patent attorneys and inventors were reported as having testified that deliberate suppression of marketable inventions was practically non-existant. The act of July 13, 1832 provided that in case of patents issued to aliens, they should become void in the event of failure to introduce the invention into public use within one year and to continue such use. This was repealed four years later.

A commendation, on economic grounds, of the fact that inventions need not be put into use in this country, is uttered by O. C. Billman in The Compulsory Working of Patents, 24 Green Bag 513, 21 Case & Com. 276.

369a Wilson v. Rousseau, 4 How. 646, 674; De la Vergne Mach. Co. v. Featherstone, 147 U. S. 209.

³⁷⁰ R. S. § 4898.

But see dictum, Paulus v. Buck, 129 Fed. 524. An oral contract to assign future inventions will be enforced in equity, Dalzell v. Dueber Mfg. Co., 149 U. S. 315.

Such a transfer of the ownership of the patent right vests in the assignee all the rights which the assignor has under the patent. It is in effect like any other sale of property. The new owner, by virtue of the transfer, may sue for infringement, may resell the monopoly, or in any other way exercise the same power that his assignor could have used.³⁷²

The transfer is, "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." Such recording is not obligatory and does not affect the validity of the assignment except as against subsequent purchasers without notice. The usual rules as to what constitutes actual notice are applicable in respect to these assignments.

Although the patent memopoly itself is created by Federal law, its sale, and other contracts concerning it, are subject to regulation by State law in the same way that other personal property is. A number of states have exercised this power in requiring such sales to be recorded, or in declaring promissory notes given for the purchase price to be void, unless they show on their face that they are so given. It behooves the purchaser, as well as the seller, of a patent right, therefore, to examine the statutes of the particular state upon the matter. 373*

No special form of assignment is set out or suggested by the statute, nor is any particular form requisite. Anything that would be sufficient at the Common Law to indicate a clear intention to transfer the patent right, properly executed, would

³⁷² Assignee may sue his assignor, if the latter infringes, just as he could any one else. Littlefield v. Perry, 21 Wall. (88 U. S.) 205. In short, he is the "owner" of the patent, in place of the original patentee.

³⁷³ R. S. § 4898. Compare, National Cash Reg. Co. v. New Columbus Co., 129 Fed. 114.

^{373h} A Kansas statute, (Gen. Stat. of 1901, 4356 ff.) requiring the seller to file affidavits of ownership, etc, was held valid, in Allen v. Riley, 203 U. S. 347; John Woods & Sons v. Carl, 203 U. S. 358. A somewhat similar statute had been held not valid in Hollida v. Hunt, 70 Ill. 109. Parish v. Smith, (Ark.) 204 S. W. 415.

This should not be confused with the power of the state, which also exists, to regulate the sale of articles embodying a patented invention.

undoubtedly be sufficient.³⁷⁴ A seal upon the assignment is not necessary to its validity.³⁷⁵

An acknowledgment before a notary or other official is unnecessary to the effectiveness of the instrument. It is however provided in the statute that "If any such assignment, grant, or conveyance of any patent shall be acknowledged before any notary public of the several States or Territories or the District of Columbia, or any commissioner of the United States circuit court, or before any secretary of legation or consular officer authorized to administer oaths or perform notarial acts under section seventeen hundred and fifty of the Revised Statutes, the certificates of such acknowledgment, under the hand and official seal of such notary or other officer, shall be prima facie evidence of the execution of such assignment, grant, or conveyance."377 It would seem a wise policy therefore to have it acknowledged and recorded, both because of the evidentiary effect of the acknowledgment and because of the protection which the record gives against a fraudulent second sale by the assignor.

EFFECT OF THE TRANSFER. The sale and transfer of a patent monopoly has the same effect, and creates only the same rights and liabilities as does the sale of any personal property. The seller, for instance, gives up all property interest in the monopoly. He has no lien upon the patent right for payment, and if the buyer resells, the sub-buyer is not liable to the original seller if the first buyer fails to pay. The recent English case of Barker v. Stickney,^{377*} although it arose out of the

374 Campbell v. James, 18 Blatch. 92; Siebert Cylinder Oil-Cup Co., 'v. Beggs, 32 Fed. 790; Delaware Seamless Tube Co. v. Shelby Steel Tube Co., 160 Fed. 928; Myers v. Turner, 17 Ill. 179; Hill v. Thuermer, 13 Ind. 351. Forms of assignment whose use is recommended are given in the Rules of Practice of the Patent Office.

375 Gottfried v. Miller, 104 U. S. 521.

376 R. S. § 4898.

³⁷⁷ It is not necessary that the acknowledgment be made at the same time the assignment is executed. It will be effective as *prima facie* proof of the execution whenever made. Lanyon Zinc Co. v. Brown, 115 Fed. 150; Murray Co. v. Continental Gin Co., 149 Fed. 989.

377* (1918)2 K. B. Div. 356, citing many other English decisions.

transfer of a copyright, is a precise analogy on this point. The plaintiff was author of a book. He had granted to a publisher the exclusive right to publish the book, and the ownership of the copyright when procured. The publisher agreed, in consideration, to pay a certain royalty and not to dispose of the copyright to others except, "subject to the terms of this agreement, so far as the same is applicable." This publishing company fell into financial difficulties, and a receiver was appointed, who sold the coypright, and other assets, to the defendant. The defendant knew of the terms on which the copyright had been sold by plaintiff to the publishing company, and, indeed, bought the assets from the receiver, "subject to all equities or other claims thereon." Plaintiff sued to recover the agreed royalties upon volumes published by the defendant, and also for the amount of royalties which had not been paid on volumes published by the first company. The court held, that the defendant was not liable either for unpaid royalties on volumes published by the first company nor on those published by itself; that such liability could be founded only on contract between the defendant and plaintiff, or on the theory of some sort of lien attaching to the property, i.e. the copyright; and that neither a contract nor a lien existed.3776

It is not impossible, that by express provisions in the contract of sale a right in favor of the seller could be attached to the patent, so as to bind subsequent purchasers with knowledge thereof. The court, in the decision just referred to, strongly intimates that it could be done, and, indeed, says as a matter of dictum, that "the assignment will create a vendor's lien for royalties if some of the provisions of the document fairly, though impliedly, point to a reservation of such a lien by the patentee or author, provided that the effect of such provisions is not negatived by the other terms of the bargain." 377°

^{377b} In Dancel v. United Shoe Mach. Co., 120 Fed. 839, it was held without discussion that the successor in ownership of the assignee of a patent right was not liable to the seller, in law, but that he might be liable, under certain conditions, in equity.

^{377c} In Bagot Pneumatic Co. v. Clipper Co. (1902), 1 Ch. Div. 146, 157, is a dictum to the effect that, "If you had notice of a contract between

The question of how far legal or equitable servitudes can be imposed upon personal property seems never to have been very positively settled, however. Instances are not infrequent of patentees having sold their patents, without payment in cash, to corporations which have later become bankrupt and whose assets, including the patent, have been sold to pay debts. By virtue of the rule just stated, the inventor, having transferred the title to his patent to the corporation, would have no right whatever against the purchasers from the corporation or from the trustee in bankruptcy. There is no doubt but that such transactions have occasionally been brought about with deliberate intent to "freeze out" the original owner of the patent. It is possible that the terms of the original sale might be so made as to provide for a revesting of title in the seller in case of the buyer's subsequent bankruptcy, etc. The safest method, however, for a patentee to protect himself against such a contingency would be to sell not to the corporation itself, but to a trustee to hold for the corporation on stated terms.

The seller having transferred the ownership of the right to the buyer, can not take it back again merely because the buyer fails to pay as agreed, or has become insolvent, nor because the buyer has failed to do other things agreed upon. But the actual fraud of the buyer, in the inducement of the contract, will, of course, permit the seller to rescind the contract, as against the buyer, and take back the title. And the parties may effectually provide by express stipulation that the title shall revert to the seller on the buyer's failure to perform certain conditions, or on the occurrence of certain extraneous events. 377h

the person under whom you claim property, real or personal, and a former owner of the property, whereby a charge or incumbrance was imposed upon the property of which you thus take possession, and have the enjoyment, you take the property subject to that charge or incumbrance, and can only hold it subject thereto." The real decision, however, was: that the sub-licensee of the right to enjoy a patent was not liable in any way to the owner of the patent.

³⁷⁷⁸ Morgan v. National Pump Co., 74 Mo. App. 155; Barclay v. C. R. Parmele Co., 70 N. J. Eq. 218; Comer v. Byers, 40 Tex. Civ. App. 239.

^{377h} Pierpoint Boiler Co. v. Penn etc. Co., 75 Fed. 289; Janney v. Pan-

coast etc. Co., 122 Fed. 535; Van Tuyl v. Young, 13-23 Ohio C. C. 15.

Conversely, it appears that, in the absence of fraud, the buyer can not rescind the agreement and get his money back, or refuse to complete his payment, merely because the patent turns out to be worthless.³⁷⁷¹ But, like any other contract of sale, it may be rescinded if it was induced by the fraud of the seller.³⁷⁷¹

Although a buyer of the title to a patent right is not affected by prior sales of which he has no knowledge, actual or constructive, he does take the monopoly subject to the prior rights of those to whom his seller has given *licenses*. And this seems to be true even though the buyer had not even constructive knowledge of the existence of such licenses.³⁷⁷⁴ But the buyer does not necessarily assume the personal obligations of his seller toward the licensee.^{377*}

Furthermore, the mere sale of the patent right, without also an assignment of the seller's contracts under it, does not vest in the buyer any right to the royalties due from licensees of his seller. Thus, in Carlton v. Bird³⁷⁷¹ it appeared that G. E. Carlton had been the owner of a certain patent and that while owner he had given the defendant a license to use the invention, for which the defendant had agreed to pay certain yearly royalties. Thereafter, he sold the patent to his wife. The sale

³⁷⁷¹ Nilsson v. De Haven, 47 N. Y. App. Div. 537, affd. 168 N. Y. 656; United States v. Harvey Steel Co., 196 U. S. 310; Eclipse Bicycle Co. v. Farrow, 199 U. S. 581.

Pratt v. Hawes, 118 Wis. 603; Holmes v. Bloomingdale, 76 N. Y. S. 182; Rose v. Hurley, 39 Ind. 77; Rice v. Gilbreath, 119 Ala. 424; Swinney v. Patterson. 25 Nev. 411. There is conflict on this point, however. Thus in Marston v. Swett, 66 N. Y. 206, the court says, by way of dictum, "It is the settled law of this and several other states that the invalidity of a patent is a defense to an action for the purchase price of the same, on the ground of a failure of consideration," citing, Dunbar v. Marden, 13 N. H. 311; Geiger v. Cook, 3 Watts & Serg. 266; Dorst v. Brockway, 11 Ohio 471; McClure v. Jeffrey, 8 Ind. 79; Mullikin v. Latchen, 7 Blatchf. 136.

3774 Fort Wayne etc. Rr. v. Haberkorn, 15 Ind. App. 479; Pratt v. Wilcox Mfg. Co., 64 Fed. 589; Whitson v. Phonograph Co., 18 App. D. C. 565; N. Y. Phonograph Co. v. National Phonograph Co., 144 Fed. 404; McClurg v. Kingsland, 1 How. 202, 206.

^{377°} Bradford Belting Co. v. Kisinger-Ison Co., 113 Fed. 811. 377° 94 Me. 182.

was of "all the right, title and interest I have in the above described invention. . . ." The grantee thereafter started this suit, as an action in debt for the royalties due since she had become owner of the patent. The court dismissed the action because "the case does not show any assignment of the contract (to pay royalties) to her, except in so far as the deeds of the patent rights, already quoted from, may have the effect of an assignment. . . . We are, therefore, of the opinion that a suit for the breach of a purely personal covenant, such as the one in suit, must be brought in the name of the convenantee, and that this action, for that reason can not be maintained."

These rules make it incumbent upon the buyer of a patent to examine the character of the seller as well as the value of the patent itself. If the seller has no title, this fact will show on the records of the Patent Office, or else the buyer will not be affected by prior sales. But if the seller has theretofore granted licenses to use the invention, these grants may not show on the records, but nevertheless will be effective even against the innocent buyer. It may happen therefore that instead of getting an absolute monopoly in respect to the invention the buyer will find himself subject to the competition of one or more licensees, from whom he is not even entitled to collect the royalties they have contracted to pay. His only safety lies in the honesty and financial reliability of the seller, although he may find some advantage in having the seller make affidavit that there are no licensees, or in taking from him an assignment of his rights against all possible licensees.

The sale of the monopoly transfers the ownership of the monopoly only, and does not invest the buyer with any right to recover damage suffered by the prior owner. The buyer, therefore, acquires no right to sue on account of infringement which took place before his purchase.^{377*}

Conditions and other provisions may be put into the assignment to the same extent as in any other instrument of sale, and will be given effect to the same extent, provided they

³⁷⁷k "Claims for damages for past trespasses do not pass by any conveyance of the thing trespassed upon." Superior Drill Co. v. Ney Mfg. Co., 98 Fed. 734.

do not so limit the quantity of the interest passed as to prevent the transaction from being in fact an assignment of the ownership of the patent right. In such case the transfer would not be entirely void, but the assignee could not sue in his own name, or otherwise act as owner.³⁷⁸

Partial assignments. It is occasionally said by courts, that the patent right can not be divided into parts.³⁷⁹ It is true that it can not be divided subjectively, as it were, so that a part of the invention is controlled by one person and a part by another, and the statements, in their context, really mean, though loosely expressed, that the *invention* can not be divided.³⁸⁰ This follows obviously from the fact that an invention is a unity—a single idea, existing only as an entirety—although the concrete embodiment of it may consist of many parts, and although it may have various applications or uses.

378 In Rude v. Westcott, 130 U. S. 152, an assignment was made by an instrument which the court found to be amply sufficient to convey the assignor's entire interest in and title to the patent. It contained, however, a provision that the net profits were to be shared with the assignor. It was contended that this so deprived the instrument of effect as an assignment that the complainants—the assignees—had not title under which to sue. The court denied this proposition, saying, "The concluding provision, that the net profits arising from sales, royalties, or settlements, or other source, are to be divided between the parties to the assignment so as to give the patentee one fourth thereof, does not, in any respect, modify or limit the absolute transfer of title. It is a provision by which the consideration for the transfer is to be paid to the grantor out of the net profits made; it reserves to him no control over the patents or their use or disposal, or any power to interfere with the management growing out of their ownership." Boesch v. Graff, 133 U. S. 697; Waterman v. Mackenzie, 138 U. S. 252. In this case the assignment contained a condition of defeasance upon performance of a condition and was in reality a mortgage.

³⁷⁹ Waterman v. Mackenzie, 138 U. S. 252, 255.

380 Pope Mfg. Co. v. Gormully, 144 U. S. 248; In this case the patentee had transferred to plaintiff all his right, title and interest in and to a patent on velocipedes so far as the patent related to the saddle part of the velocipede. It was contended that the plaintiff had not title on which to sue and the court upheld this contention on the ground that "the assignment was neither of an undivided interest in the whole patent, nor of an exclusive right within a certain territory."

But the ownership of the patent right may, it is well settled, be divided in a geographical apportionment. The patentee can not transfer the title to a part of the *invention*, but he may transfer title to a part of the *right* which the patent gives him. Thus, he may assign the right to the whole invention, to make, use and vend it, throughout a particular territory. The transferee of the right acquires by the transfer all the rights and privileges of the transferor, in the same degree as any assignee of the entire patent right, subject only to the restriction as to territory in which they may be exercised. Such assignee of the right in a particular district may sue as owner and otherwise comport himself as one having complete title within that territory.³⁸¹

381 Littlefield v. Perry, 21 Wall. 205; Gayler v. Wilder, 10 How. 477, "By the fourteenth section, the patentee may assign his exclusive right within and throughout a specified part of the United States, and upon such an assignment the assignee may sue in his own name for an infringement of his rights. But in order to enable him to sue, the assignment must undoubtedly convey to him the entire and unqualified monopoly which the patentee held in the territory specified,—excluding the patentee himself, as well as others. And any assignment short of this is a mere license. For it was obviously not the intention of the legislature to permit several monopolies to be made out of one, and divided among different persons within the same limits. Such a division would inevitably lead to fraudulent impositions upon persons who desired to purchase the use of the improvement, and would subject a party who, under a mistake as to his rights, used the invention without authority, to be harassed by · a multiplicity of suits instead of one, and to successive recoveries of damages by different persons holding different portions of the patent right in the same place. Unquestionably, a contract for the purchase of any portion of the patent right may be good as between the parties as license, and enforced as such in the courts of justice. But the legal right in the monopoly remains in the patentce, and he alone can maintain an action against a third party who commits an infringement upon it. This is the view taken of the subject in the case of Blanchard v. Eldridge, J. W. Wallace, 337, and we think it the true one. Applying these principles to the case before us, the action was properly brought by the plaintiff below, and could not have been maintained by Herring. The agreement is singularly confused and complicated. It purports to grant to Herring the exclusive right to make and vend the Salamander safe in the city, county, and state of New York; and Herring agrees to pay to the defendant in error a cent a pound for every pound the safes might weigh, to be paid

Undivided interest in the patent right; in which case the assignee becomes an owner in common with the assignor and acquires the rights and liabilities of owners in common of personalty generally.³⁵²

There is a very grave danger inherent in joint ownership of patents which should be well considered before one shares a title. It lies in the fact that each owner has the right to use and enjoy the invention to the fullest extent as owner, and, hence, is not accountable to anyone for such use. One's only control, therefore, over the acts of his co-owner lies in the honesty of such owner.

An illustration of what may happen is found in Blackledge v. Weir and Craig Mfg. Co.3827 The plaintiff, Blackledge, had been the co-owner of a patent with one Silberhorn. They two had licensed the defendant to use the invention on a royalty basis. Later, however, the defendant managed to buy Silberhorn's half interest. Thereafter it, the defendant, continued to use the invention but it no longer paid any royalties to the plaintiff. Furthermore, it, as an owner of the patent, granted licenses to other persons for which it got royalties, but for which the plaintiff got nothing. When the value of these royalties and this use by the defendant had amounted to \$10,000, the plaintiff sued, as co-owner, to recover half of the amount. The court rejected the suit. The defendant, it held, was an owner of the patent right and as such he had a commonthly. But at the same time it reserves to Wilder the right to set up a manufactory or works for making these safes in the state of New York, provided it is not within fifty miles of the city, and to sell them in the state of New York, paying to Herring a cent a pound on each safe so sold within the state. It is evident that this agreement is not an assignment of an undivided interest in the whole patent, nor the assignment of an exclusive right to the entire monopoly in the state or city of New York. It is therefore to be regarded as a license only, and under the act of Congress does not enable Herring to maintain an action for an infringement of the patent right. The defendant in error continues the legal owner of the monopoly created by the patent." Paulus v. Buck, 129 Fed. 594.

³⁸² Waterman v. Mackenzie, 138 U. S. 252; Gayler v. Wilder, 10 How. 477, 493.

³⁸²a 108 Fed. 71; Acc'd. Paulus v. Buck Mfg. Co., 129 Fed. 594.

plete right of enjoyment of it. The only limitation was that he could not exclude the other owner from a similar enjoyment. As owner, he did not have to pay anyone for his use of the invention; the granting of licenses is part of the enjoyment and use of a patent right and as the defendant did not have to pay for his enjoyment, he did not have to account to the plaintiff for the royalties received from such licenses. The dedefendant could not, the court said, keep the plaintiff from likewise using the device and licensing others to do so, but he could use it himself or sell his right of use without accounting to anyone.

So it follows that when a patent is owned jointly, anyone who wishes to use it has two possibilities. If the two owners, expecting to divide the returns, put too high a royalty on the license, he may, if one of them is susceptible, pay a little more than half such royalty to that one alone and get almost as valuable a license. He may even buy outright the right to use it and to license others, and the deceived co-owner will be helpless. The only difference in the result to the buyer will be, that if he had bought from both owners he might have acquired an *exclusive* right, whereas if he buys only from one he can not eclude the other or the other's licenses. 382b

Before existence of the patent. An assignment may be made of a patent right which has not yet been acquired by the assignor. This is different from an assignment so made and recorded that the patent will issue in the name of the assignee. The patent will be issued to the inventor, but his prior assignment of the rights which he is to get, will operate upon those rights just as though it had been made after their acquisition. This was declared by the court in the case of Gayler v. Wilder. The defense was made in this case

382b Lalance & Grosjean Mfg. Co. v. National Enameling Co., 108 Fed. 77, one co-owner may sell without consent of other; no sufficient evidence to show an agreement to account for the proceeds. But one co-owner's release will not affect prior accrued damages, Lalance & Grosjean Mfg. Co. v. Haberman Mfg. Co., 107 Fed. 487; Id., 93 Fed. 197.

The respective rights of the co-owners may be regulated by contract, as between themselves. Harrison v. Ingersoll, 56 Mich. 36.

383 10 How. 477.

that the plaintiff had no legal right to the monopoly, and therefore could not sue in his own name, because the assignment under which he claimed had been executed before the patent was in existence. The invention, however, had been perfected at the time the transfer was made. The court upheld the plaintiff's right to sue, saying, "The inventor of a new and useful improvement certainly has no exclusive right to it, until he obtains a patent. This right is created by the patent, and no suit can be maintained by the inventor against any one for using it before the patent is issued. But the discoverer of a new and useful improvement is vested by law with an inchoate right to its exclusive use, which he may perfect and make absolute by proceeding in the manner which the law requires. Fitzgerald possessed this inchoate right at the time of the assignment. The discovery had been made, and the specification prepared to obtain a patent. And it appears by the language of the assignment, that it was intended to operate upon the perfect legal title which Fitzgerald then had a lawful right to obtain, as well as upon the imperfect and inchoate interest which he actually possessed. The assignment requests that the patent may issue to the assignee. And there would seem to be no sound reason for defeating the intention of the parties by restraining the assignment to the latter interest, and compelling them to execute another transfer, unless the act of Cougress makes it necessary. The court thinks it does not. The act of 1836 declares that every patent shall be assignable in law, and that the assignment must be in writing, and recorded within the time specified. But the thing to be assigned is not the mere parchment on which the grant is written. It is the monopoly which the grant confers; the right of property which it creates. And when the party had acquired an inchoate right to it, and the power to make that right perfect and absolute at his pleasure, the assignment of his whole interest, whether executed before or after the patent issued, is equally within the provisions of the act of Congress." 884 Of course, a plaintiff

³⁸⁴ Acc. Littlefield v. Perry, 21 Wall. 205; Hendrie v. Sayles, 98 U. S. 546; Hammond v. Mason, 92 U. S. 724; Brush Elec. Co. v. California

who is not the person named in the patent, must prove his title to it; that is, must prove the assignment, before his suit can be maintained.

§ 3. Contracts to Transfer

Even before the invention itself comes into existence a contract to assign it when it shall have been made, may be validly entered into and will be enforced like any other contract. There can not be an actual transfer of the invention before it comes into existence, for the evident reason that there is nothing in existence to be transferred. There is not even the right to a patent, such as was made the subject of a transfer in Gayler v. Wilder, supra. But a contract to transfer the right to the patent when the invention does come into existence, or to transfer the patent which shall have been acquired for an invention that is to be made, is possible; just as is a contract to do any act upon the happening of certain events. When the events have transpired, that is to say, when the invention has been made, the courts will enforce the contract to transfer the patent the right to a patent. 386

Elec. Light Co., 52 Fed. 945; Nilsson v. De Haven, 47 N. Y. App. Div. 537; affd. 168 N. Y. 656; Burton v. Burton Stock Car Co., 171 Mass. 437. Such an assignment will not, however, affect an assignment was recorded patent without knowledge, even though the first assignment was recorded in the Patent Office, Nat'l Cash Reg. Co. v. New Columbus Co., 129 Fed. 114.

³⁸⁵ Reece v. Fenwick, 140 Fed. 287; American Brake Beam Co. v. Pungs, 141 Fed. 923; Littlefield v. Perry, 21 Wall. 205; Dalzell v. Dueber Mfg. Co., 149 U. S. 315.

³⁸⁶ Regan Vapor-Engine Co. v. Pacific Gas Engine Co., 49 Fed. 68; "The agreement of May 15, 1886, is not the assignment of a patent, though it contains language—'grant and convey'—sufficient for that purpose if there was anything to assign. It may be good as an agreement to sell and assign a future invention, but it can not operate as a sale or assignment of such an invention, even when made. No one can sell that which he hath not."

A court of equity will order an inventor to apply for a patent and to assign it, in favor of one with whom the inventor has contracted so to do. Adams v. Messinger, 147 Mass. 185; Runstetler v. Atkinson, MacArthur & Mackey (D. C.) p. 382.

Express agreements. It is not altogether infrequent for employers to insert in the contract of employment an express provision that any invention produced by the employee in the course of the employment shall become the property of the employer. Such contracts appear to have been uniformly enforced. In Thibodeau v. Hildreth, Thibodeau had contracted in writing with Hildreth to enter his employ, and to give him his best services and also the full benefit and enjoyment of any kind and all inventions and improvements which he had made or might thereafter make relating to machines or devices pertaining to said Hildreth's business. Suit was brought involving the conveyance of an invention under the terms of the contract, and the court said of it, "This contract is neither unconscionable nor against public policy. Such an agreement is not uncommonly made by an employee with his

³⁶⁷ Rudyard Kipling notes, in his descriptions of India, that the East Indian Railway Co. at that time required all employees to sign such a contract—to the great decrease in inventive production.

358 124 Fed. 892, 63 L. R. A. 480. For an interpretation of this contract see Hildreth v. Duff, 143 Fed. 139. A still broader contract was upheld in Hulse v. Bonsack Mach. Co., 65 Fed. 864. Here Hulse had agreed as a stated condition precedent to any contract of employment that any inventions he might make in respect to cigarette machines would be "for the exclusive use of the said company whether they should be made while he was in the employment of the company, or at any time thereafter." This contract was enforced despite the contention that, being perpetual, it was unconscionable, unreasonable and contrary to public policy. On the latter point the court said, "Is the contract void as against public policy? Does it injure the public? Here we have the case of an ingenious man, without opportunity of developing his talent, and struggling under difficulties, enabled by this contract to secure employment in a large and prosperous corporation, where he could give his inventive faculties full play. He in this way was afforded every opportunity of discovering and removing defects in cigarette machines. He secured this employment by signing this contract. He could not have obtained it if it had been understood that this contract had no validity. Then, in all human probability, the public would have lost the benefit of his discovery. In this point of view, a contract of this character cannot be said to be against public policy." Binney v. Annan, 107 Mass. 94; Wright v. Volalion Organ Co., 148 Fed. 200, contract that a half interest should appertain to the employer.

employer, and it may be necessary for the reasonable protection of the employer's business."

Such contracts to assign inventions have nothing whatever to do with the patentability of the invention or the validity generally of the patent. They do not involve the patent statute, despite the fact that the property with respect to which they relate is created by that statute, but, like any contract create only rights in personam. Their enforcement, therefore, lies within the normal jurisdiction of the state courts and is not exclusively the province of the federal courts.³⁸⁹

The title to inventions not covered by the terms of the contract is not affected, of course, by the contract. In one case, for illustration,300 one Dice contracted in writing to work for the company in whatever capacity "pertaining to the manufacturing of shellers and powers, and disposing of the same," the company might direct. He further agreed that all improvements he might make should belong to the Company. After the making of this contract, the company took up the manufacture of "check rowers," which had no relation to "shellers and powers," and Dice was employed at that work for part of his time. He then invented an improvement in "check-rowers," for an assignment of which the company brought this suit. The bill was dismissed on the ground that Dice had not contracted to assign this invention; that the written contract had reference only to "shellers and powers" and not to "check rowers." In another case,391 one Thibodeau had bound himself by written agreement to allow his employer the use of all inventions which he might make "relating to machines or devices pertaining to" the employer's business, which was that of candy manufacturing. Suit was brought by

³⁶⁰ Binney v. Annan, 107 Mass. 94; American Circular Loom Co. v. Wilson, 198 Mass. 182; Holt v. Silver, 169 Mass. 435; Keyes v. Eureka Mining Co., 158 U. S. 150; Shoemaker v. South Bend Spark Arrester Co., 22 L. R. A. 332, 135 Ind. 471; title in this case was derived through judgment of another court. Carleton v. Bird, 94 Me. 182, even though state court has to construe the patent.

³⁹⁰ Joliet Mfg. Co. v. Dice, 105 Ill. 649.

³⁰¹ Hildreth v. Duff, 143 Fed. 139, affirmed 148 Fed. 676.

the employer to compel assignment of the patent for a machine for pulling candy which Thibodeau had invented. This was refused by the court, which said that by the contract Thibodeau had been employed to work on "machines for use in the manufacture of candy, and especially for sizing, shaping, cutting, wrapping, and packing, also the pulling of molasses candy." "At the time the paper was signed," said the court, "machines for pulling candy, such as that here in question, to take the place of the men who pulled the candy over hooks to whiten it, were not known in the art. No such machine was in use in Hildreth's business nor in course of construction for him. Under the circumstances, neither Hildreth or Thibodeau could have contracted with immediate reference to such a machine. At that time, however, machines performing a different kind of pulling operation were known to and used in the trade. The function of that machine was to pull the candy down to the requisite size to feed the cutting and wrapping machine, doing the work of a girl who was accustomed to pull the candy down to the required size. A pair of such pulling machines were built for Hildreth in March, 1897, about two months before the Thibodeau contract was signed. Thibodeau was familiar with that class of pulling machines, but had no knowledge whatever with respect to any other machine for pulling candy. Therefore it is well within reasonable belief that he understood the words 'also for the pulling of molasses candy,' especially in view of their associated words, to refer to that class of then known and used pulling machines, as he testifies he did so understand them." "In the recital of the paper in controversy, which is the key to the meaning of the parties, it is not machines generally, but 'a certain machine or machines,' which Hildreth is desirous of having 'perfected and manufactured,' and it is on such machines that Thibodeau is to be employed for the purpose of 'constructing, improving and perfecting.' Now, this recital, in view of its specific reference to a certain machine or machines, cannot fairly be construed to cover a machine not then known to the art and radically different from any known machine. The more general

words subsequently employed in the body of the paper ought not to be held to have a larger scope than the language of the recital, especially as they expressly relate to machines or devices 'pertaining to said Hildreth's business.' McFarland v. Stanton Manufacturing Company. 53 N. J. Eq. 649, 650, 33 Atl. 962, 51 Ain. St. Rep. 647. Looking at the whole paper, it seems to me that Thibodeau had a right to understand that the contract related to Hildreth's business as then conducted, and that the machines mentioned in the body of the paper were not other than such as had already been made the subject of recitation."

IMPLIED AGREEMENTS. A promise to give another an interest in an invention to be produced, need not be in express words. It, like any other promise, may be implied by circumstances. These implied promises are often, loosely, spoken of as if they arose out of estoppel. Properly speaking they have nothing in common therewith. Estoppel is essentially a preclusion, for equitable reasons, from denying the existence of certain facts, whatever the reality may be. But in the case of an implied promise there is no preclusion of the truth; there is an assumption that the promise exists because the evidence indicates a tacit intent that such should be the result and there is no countervailing evidence produced. It is a judicial conclusion of fact, based upon all the circumstances of the case, not a fiction of truth imposed out of equity. The implied contract is the reciprocal intent which the court believes must have actuated the parties as normal men, under the circumstances, when they do not appear to have had any conscious intent.

An intent that the employer shall have an interest in an invention of the employee will not be assumed by the courts from the mere relation of employer and employee. Every employment is the result of a contract, of one sort or another, whereby the employee, in consideration of certain recompense, agrees to do certain things. The courts will not read into such contracts an agreement by the employee to make inventions for the benefit of the employer, unless unusual circumstances indicating it are present. It is impossible to formu-

late any rule of law as to when the circumstances are such as do indicate an intent that the employer shall have an interest in the employee's inventions, and when they do not so indicate.

As a broad rule it may be said, that the courts will never assume a tacit agreement that inventions outside the actual scope of the employee's normal occupation shall be for the benefit of the employer. Neither will an agreement that the employer shall have the benefit of the employee's inventions be assumed when the employment is one of merely mechanical or routine labor. A ditch-digger, inventing a shovel, or a bookkeeper, inventing an account-book, would not be bound to allow his employer any interest whatsoever therein.

It may further be said that an agreement to vest the owner-ship of an invention in the employer will practically never be deduced from mere tacit circumstances. The most that will be assumed without express words, is an intent that the employer shall have a right to use the invention, with or without further payment.³⁹²

392 American Circular Loom Co. v. Wilson, 198 Mass. 182. "The plaintiff has not established its right to require an assignment of the tubing machine patent, the letters patent numbered 543,587, and dated July 30, 1895, upon a machine for making tubing. This was the invention of the defendant himself, made while he was employed by the plaintiff as the superintendent of its manufacturing department. The machine was designed to turn out the same product, a flexible covering and protection for electric wires, which the plaintiff was already producing under the Herrick patent, so called, for the use of which the plaintiff held an exclusive license; and it was a material improvement upon the previous mode of obtaining that product. One of the defendant's duties under his employment was to look after the plaintiff's machinery and to make improvements therein. The expenses of procuring the patent were paid by the plaintiff. Many machines embodying the invention and built under the patent have been constructed under the direction and supervision of the defendant at the expense of the plaintiff, and have been used by it in its business with his knowledge and consent; and the success of its business has largely depended upon its use of these machines. But these circumstances and the other facts which have been found do not show that the plaintiff is entitled to the property right in the invention itself and in the letters patent which secure that right. The invention and the patent thereon belong to the inventor, to whom the patent has been issued, unless he has.

When one has been employed for the express purpose of devising means for accomplishing a certain end, the courts generally assume a tacit agreement that the employer shall have at least a license to use without further pay any inventions that may be produced for that purpose. A very clear indication of such intent is illustrated by the circumstances of Solomons v. United States.303 The government was seeking a practicable stamp for use in internal revenue collections. A committee of Congress was appointed to consider the matter. One Clark was, at the time, head of the Bureau of Engraving and Printing. He was directed by the committee, apparently as part of his employment in the Bureau, to devise a stamp, with the understanding that the best one he should devise would be put into use. Nothing whatever was said by either party in regard to the government's right to use the stamp. Clark did devise a stamp which was adopted by the government. It was subsequently patented by Clark, who brought an action to recover for its use by the government. The Supreme

made either an assignment of his right or a valid and enforceable agreement for such an assignment, even though it was his duty to use his skill and inventive ability to further the interests of his employer by devising improvements generally in the appliances and machinery used in the employer's business." Hildreth v. Duff, 143 Fed. 139; Hapgood v. Hewitt, 119 U. S. 226; Dalzell v. Dueber Mfg. Co., 149 U. S. 315; Joliet Mfg. Co. v. Dice, 105 Ill. 649; Burr v. DeLaVergne, 102 N. Y. 417, "The proposition asserted in behalf of the defendant, that one partner acquires no right or interest, legal or equitable, in an invention made by his copartner during the existence of the partnership by reason merely of the copartnership relation, although the invention relates to an improvement in machinery to facilitate the business carried on by the firm, and although the partner making the invention, uses copartnership articles to devote his whole time and attention to the firm business, is a doctrine supported by authority and consonant with reason. Slemmer's Appeal, 58 Penn. St., 155, 164; Belcher v. Whittemore, 134 Mass. 330." Pressed Steel Car Co. v. Hansen, 137 Fed. 403; Barber v. National Carbon Co., 129 Fed. 370; But compare Solomon v. U. S. 137 U. S. 342; Pressed Steel Car Co. v. Hansen, 128 Fed. 444, assumption not warranted by mere fact that the employee has theretofore assigned other inventions to his employer.

³⁹³ 137 U. S. 342.

Court denied his right to recover saying, "An employee, performing all the duties assigned to him in his department of service, may exercise his inventive faculties in any direction he chooses, with the assurance that whatever invention he may thus conceive and perfect in his individual property. There is no difference between the government and any other employer in this respect. But this general rule is subject to these limitations. If one is employed to devise or perfect an instrument, or a means for accomplishing a prescribed result, he cannot, after successfully accomplishing the work for which he was employed, plead title thereto as against his employer. That which he has been employed and paid to accomplish becomes, when accomplished, the property of his employer. Whatever rights as an individual he may have had in and to his inventive powers, and that which they are able to accomplish, he has sold in advance to his employer. So, also, when one is in the employ of another in a certain line of work, and devises an improved method or instrument for doing that work, and uses the property of his employer and the services of other employes to develop and put in practicable form his invention, and explicitly assents to the use by his employer of such invention, a jury, or a court trying the facts, is warranted in finding that he has so far recognized the obligations of service flowing from his employment and the benefits resulting from his use of the property, and the assistance of the coemployees, of his employer, as to have given to such employer an irrevocable license to use such invention." These statements of the court are undoubtedly too broad and in their breadth are in conflict with the actual decisions in other cases. but the finding of implied intent as to the right of the government to use is quite in accord with other decisions.394

If the evidence shows that in addition to being employed to improve known methods of accomplishing a given purpose the employee has used his employer's materials and machinery in the development of his invention and has actually permitted the employer to use it without further agreement, the con-

³⁹⁴ Cf. cases cited supra.

clusion that his employment gave his employer a right to use the invention is particularly clear.

The cases involving the matter are not numerous enough for any real classification of facts to be made and a rule of judicial custom founded thereon. The best that can be done by an attorney is to examine particular cases, seek the closest analogy, and hope that the force of the analogy will influence the court to a similar conclusion.³⁰⁵

ESTOPPEL. The decision in a number of cases appears to have been based on a real estoppel. The expressions of the court rather indefinitely combine tacit contract and estoppel, but the moving factor of these latter decisions seems to be that the employee has allowed the employer to change his position, upon a supposition of a right in the invention, to such an extent that it would be inequitable to allow the employee to deny

Here the inventor was employed at a weekly wage, apparently as a mere mechanician. After his invention he allowed his employers to use it, and his wages were increased in consequence. Eventually he left their employ, and subsequently brought suit on account of their continued use of the invention. The trial court charged the jury that these facts would fully justify the presumption of a license, and that they amounted to a consent and allowance of such use and gave the defendants a right to the continued use of the invention. This charge was sustained by the Supreme Court, and approved by it again in Solomon v. U. S. 137 U. S. 342.

In Lane & Bodley Co. v. Locke, 150 U. S. 193, the inventor had been employed as a designing engineer and draughtsman to assist in the development and construction of elevators and other machinery. He used his employers' tools and machinery in perfecting his invention of a check valve for elevators and subsequently allowed them to use the invention without a claim for compensation. These facts were held to demonstrate a license to the employers to continue the use of the invention even after a termination of the contract of employment.

See also, Continental Windmill Co. v. Empire Windmill Co., 8 Blatch. 295, Fed. Cas. No. 3142; Magoun v. New England Glass Co., 3 Bann & Ard, 114, Fed. Cas. No. 8960; Davis v. U. S. 23 Ct. Cl. 329; Barry v. Crane Bros. Mfg. Co., 22 Fed. 396; Bensley v. Northwestern Horse-Nail Co., 26 Fed. 250; Withington-Cooley Mfg. Co. v. Kinney, 68 Fed. 500; Herman v. Herman, 29 Fed. 92; Jencks v. Langdon Mills, 27 Fed. 622; Fuller & J. Mfg. Co. v. Bartlett, 68 Wis. 73, 60 Am. Rep. 838; Keyes v. Eureka Mining Co., 159 U. S. 150.

the reality of that right. It is quite impossible, however, to draw any line between those which turn upon pure estoppel and those which base their decision upon a conclusion of an implied license to a limited use. An illustration is the case of Barber v. National Carbon Co. Barber hall been in the employ of the defendants as a mechanical engineer, for the purpose of improving their processes of manufacture. While so employed he invented a valuable device which, with the defendant's knowledge, he patented. Six machines embodying this device were constructed under his direction for the company and used by them without any mention of royalty. The use of the machines by the company had involved the construction of special buildings and necessitated other expensive arrangements. On suit for infringement brought by Barber, the court held that there was no indication that he had agreed to assign title to his invention to the defendants, as was suggested, but that the defendants were, nevertheless, justified in the continued use of the machines already constructed. At the beginning of one paragraph the court says, "We think that the presumption is that he (Barber) intended to grant to the Carbon Company the right to use his process in connection with the machines, for which space in the several factories had been specifically arranged with his knowledge and under his direction." This would indicate a finding of constructive intent, but at the close of the same paragraph the court says, "By his conduct, Barber has estopped himself from asserting that the use of his invention to this extent is an infringement of his right as a patentee." Either doctrine leads to the same result.

The case of Gill v. U. S.³⁶⁷ was a clear case of estoppel and was expressed as such. The plaintiff had persuaded the government to defray the cost of embodying and perfecting mechanically an invention which he had made while in government employ, and had allowed the government to use the completed invention without any mention of recompense. His suit

^{396 129} Fed. 370.

^{307 160} U. S. 425.

to recover for this use was dismissed. The court said, "The principle is really an application or outgrowth of the law of estoppel in pais, by which a person looking on and assenting to that which he has power to prevent, is held to be precluded ever afterwards from maintaining an action for damages. A familiar instance is that of one who stands by, while a sale is being made of property in which he has an interest, and makes no claim thereto, in which case he is held to be estopped from setting up such claim. The same principle is applied to an inventor who makes his discovery public, looks on and permits others to use it without objection or assertion of a claim for a royalty."

An inventor may lose his right of exclusive enjoyment, to a limited extent, not only through estoppel as just discussed, but also through the provision of the statute itself which reads, "Every person who purchases of the inventor or discoverer, or, with his knowledge and consent, constructs any newly invented or discovered machine, or other patentable article, prior to the application by the inventor or discoverer for a patent, or who sells or uses one so constructed, shall have the right to use, and vend to others to be used, the specific thing so made or purchased, without liability therefor." 3077

A contract to assign will be specifically enforced. As a contract gives only a right against the person of the promissor, and does not create any right in the particular thing concerning which the contract was made, it follows that no right in the invention itself vests in the purchaser under such a contract to transfer. An actual transfer is necessary. If the inventor refuses to make such a transfer, according to the terms of his contract, he will be liable in damages just as in any other case of breach of contract.

Furthermore, equity will step in and compel the inventor to perform his contract specifically and to make the transfer, unless the rights of third parties have intervened or it would for

³⁹⁷⁹ Wade v. Metcalf, 129 U. S. 204.

³⁹⁸ Milwaukee Carving Co. v. Brunswick-Balke-Collender Co., 126 Fed. 171.

other reasons be inequitable to do so. Equity will not act to compel such an actual transfer if it would reflect injuriously upon some other purchaser for value, without notice, from the inventor. The mere recording of the contract to assign, even though it be in form a present assignment, is not constructive notice to any one purchasing the invention or an interest therein, after the invention is in existence. Hence, even a contract so recorded does not give the buyer therein named any interest as against one without actual knowledge of the contract, to whom the patentee has subsequently conveyed the patent.

§ 4. LICENSES

The name of "assignment" is technically and properly limited to those transactions by which the ownership of the patent right is transferred. It includes not only transfers of the absolutely unlimited ownership, but also those which convey an absolute ownership of the right within a particular geographical limit and those which convey a joint, but otherwise absolute, ownership. 402 The conveyance of anything less than the ownership creates in the person to whom it is conveyed only a right to do certain things in respect to the invention without interference from the owner of the patent. Such a transaction is properly called a "license," and the person in whom the privilege is created a "licensee." These two relations, i.e. that of assignee or that of licensee are the only ones which the patentee can create, although various other names are sometimes given to them. That is to say, a particular person must be either owner of the patent monopoly, or not owner of it,

³⁹⁹ Dalzell v. Dueber Mfg. Co., 149 U. S. 315.

⁴⁰⁰ National Cash Reg. Co. v. New Columbus Watch Co., 129 Fed. 114. An exception to the rule as stated is made in this case as regards future improvements. Concerning this the court says, "That an assignment of a patent, together with any future improvements thereon, is recordable and operative as a notice to subsequent assignees of patents for improvements may be conceded. Littlefield v. Perry, 21 Wall. 205, 22 L. Ed. 577; Aspinwall Co. v. Gill et al (C. C.) 32 Fed. 697."

⁴⁰² Waterman v. Mackenzie, 138 U. S. 252; Paulus v. Buck Mfg. Co., 129 Fed. 594; Pope Mfg. Co. v. Gormully, etc. Co., 144 U. S. 248.

Licenses 249

though his position may be given various indicative names. The same thing is, of course, true of all other forms of personal property, one is either owner or not owner, as the terms are employed in their never yet defined legal usage, but it is necessary to speak of it because confusion on this point is noticeable in some cases.⁴⁰⁸

If one is not owner, he has only such rights in respect to the monopoly as his agreement with the owner, directly or intermediately, gives to him. Towards third person he is not owner, and can not assume such position, and therefor can not bring suit against them in his own name. "In equity as in law, when the transfer amounts to a license only, the title remains in the owner of the patent; and suit must be brought in his name, and never in the name of the licensee alone, unless that is necessary to prevent an absolute failure of justice, as where the patentee is the infringer, and can not sue himself. Any rights of the licensee must be enforced through or in the name of the owner of the patent, and perhaps, if necessary to protect the rights of all parties, joining the licensee with him as a plaintiff."

Character of the transaction. The particular name by which the parties have called the transaction does not determine its character. It does not amount to a transfer of ownership merely because it is called an assignment by the parties; it will be called an assignment by the courts only if it does transfer the title. Whether the transaction is a transfer of ownership, or merely confers a right to make, use or vend the invention with permission of the owner of the monopoly, depends wholly

⁴⁰³ A mortgage amounts to a transfer of the ownership and vests title in the mortgagee, subject to defeasance upon performance of the condition. Waterman v. Mackenzie, 138 U. S. 252, Waterman v. Shipman, 55 Fed. 982.

Waterman v. Mackenzie, 138 U. S. 252, 255; Paper Bag Cases, 105 U. S. 766; Birdsell v. Shaliol, 112 U. S. 485; Rice v. Boss, 46 Fed. 195; Moore Mfg. Co. v. Cronk Hanger Co., 69 Fed. 998; Bogart v. Hinds. 25 Fed. 484; Littlefield v. Perry, 21 Wall. 205; Suydam v. Day, 2 Blatch. 20, Whether an assignment needs to be in writing or not, a license, it is settled, may be created by parole.

upon the intention of the parties as determined by the courts. In cases of doubt as to this intention the name by which the parties called their transaction would undoubtedly be of influence upon the decision, 405 so that it is well to use the terms in their accepted sense, and in accord with the real intent. The intention of the parties as to the relations created, the scope of the rights conveyed, and so forth, will be determined from the facts and circumstances of the entire transaction under the same rules of evidence and presumption as apply to the interpretation and construction of other agreements. 406 As in other cases of written instruments, the instrument itself controls and will be enforced according to its own terms if its meaning be clear and indisputable; it can be "interpreted" from the extrinsic circumstances only when the true meaning is in doubt. 407

RIGHTS OF LICENSEE. Because a mere license conveys to the licensee no title to the monopoly itself, but only the right to invade it without liability, and, in consequence, does not invest him with any right to sue as owner of the monopoly, his power to protect his own rights is, in theory at least, indirect only. If a license is so construed as to give the licensee nothing more than a right himself to invade the monopoly, he is not entitled to any protection whatever against other persons who may also invade the monopoly. So long as his own

⁴⁰⁵ Moore Mfg. Co. v. Cronk Hanger Co., 69 Fed. 998.

⁴⁰⁶ Nicholson Pavement Co. v. Jenkins, 81 U. S. 452, "An assignment of an interest in an invention secured by letters patent, is a contract, and like all other contracts, is to be construed so as to carry out the intention of the parties to it." Illingworth v. Spaulding, 43 Fed. 827; In Littlefield v. Perry, 21 Wall. 205, it was held that a record instrument containing in unmistakable language an absolute assignment of title to a patent would not be reduced to a mere license and the assignee precluded from sueing as owner, by a subsequent oral agreement limiting the assignee's right of user. The second agreement was said to be in effect a license back to the assignor from the assignee of the complete ownership.

⁴⁰⁷ Railroad Co. v. Trimble, 10 Wall. 367. For the interpretation of particular licenses on possibly recurrent points see, Pelzer v. City of Binghamton, 95 Fed. 823; Western Elec. Co. v. Robertson, 142 Fed. 471; Indiana Mfg. Co. v. J. I. Case Co., 154 Fed. 365.

Licenses 251

freedom of enjoyment is not itself restricted, his right is not lessened, although his profits may be more or less eliminated. He has no cause for action against the others who make, use or vend the invention, nor against his licensor for allowing such others to do it.

If his license gives him, either expressly or by implication, an *exclusive* right to make, use or vend the invention in certain particulars, the exercise of such privilege by others is obviously an invasion of his own right. This matter of exclusiveness of the right granted must be determined, of course, by the ordinary rules for construing contracts, before the procedure of protecting it can become a pertinent issue.

If it is an exclusive right and the assignor himself invades it, he, the assignor, is undoubtedly liable in an action for breach of contract. Since the title, however, is still in the assignor and he is therefore the only person entitled to sue because of infringement of the patent monopoly, it is the only logical conclusion that the licensee can not sue him for infringement, any more than he could sue a third party, and that action in breach of contract is the licensee's only remedy. He, the licensee, acquires no right *in rem* to the patent monopoly, but only a right *in personam* against the owner of the monopoly, who has agreed to let the licensee, and the licensee only, invade the monopoly without liability.

⁴⁰⁸ In N. Y. Phonograph Co. v. Edison, 136 Fed. 600, affd. 144 Fed. 404, the licensee was allowed to bring action based on contract liability against the assignee-with-notice of his licensor.

dictum, that the licensee could sue the licensor for infringement in such circumstances. In Littlefield v. Perry, 88 U. S. (21 Wall.) 205 that court held that title to the monopoly had actually passed to the plaintiffs. It then went on to say, "But even if they (plaintiffs) are not technically assignees, we think this action is, nevertheless maintainable (against the infringing grantor) . . . A mere licensee can not sue strangers who infringe. In such case redress is obtained through or in the name of the patentee or his assignee. Here, however, the patentee is the infringer, and as he can not sue himself, the licensee is powerless, so far as the courts of the United States are concerned, unless he can sue in his own name. A court of equity looks to substance raher than form. When it has jurisdiction of parties it grants the appropriate relief without regard to whether they come as plaintiff or defendant. In this case, the person who

When the invasion of the licensee's right is by a third person, not the licensor or one acting by his authority, it is clear that the licensee can not sue such invader in his own name, on the ground of infringement of the patent. The patent is infringed, to be sure, but the licensee does not own it and therefore cannot sue to protect it. He may, however, sue in the name of his licensor, if his license is exclusive.

Under these circumstances, 15 the licensor bound by his contract himself to sue the invader of the licensee's right? In other words, did he contract only that the licensee should have the exclusive right of enjoying the invention, with power to protect himself in the licensor's name: or did he further agree that he would himself, under his right to prevent infringement, protect the licensee. The question is a material one, because the financial burden of protecting the licensee from infringement of the patent might be extremely heavy. To hold that the licensor, the patentee, does, by granting an exclusive license, impliedly undertake to protect the licensee against infringement of the patent by others, is to throw a possibly heavy burden upon the licensor; a burden for which compensation could not be estimated in advance. If the licensor has not expressly agreed to protect the licensee against infringement he is apparently not bound to do so.411 This has been said to be the case even where the licensor has agreed "to protect the patent," as distinct from protecting the licensee. 412

should have protected the plaintiff against all infringements has become himself the infringer. He held the legal title to his patent in trust for his licensees. He has been faithless to his trust, and courts of equity are always open for the redress of such a wrong. This wrong is an infringement. Its redress involves a suit, therefore, arising under the patent laws, and of that suit the Circuit Court has jurisdiction." It might well be doubted whether the court would have said invasion of the licensee's exclusive right by way of contract was an infringement of the patent monopoly if that question had really been involved. See also, Waterman v. McKenzie, 138 U. S. 252, 255; Waterman v. Shipman, 55 Fed. 982.

⁴¹¹ In re McLeod, 66 N. Y. S. 253; Martin v. New Trinidad Lake Asphalt Co., 255 Fed. 93, citing authority.

⁴¹² Kline v. Garland Co., 135 Mich. 313.

Licenses 253

If the licensor has expressly agreed to protect the licensee against infringement he will, of course, be required to do so at his own cost. 413

As between the licensor and licensee, the validity of the patent should not be capable of becoming an issue in court proceedings. The agreement of a licensee to pay royalties, or whatsoever the consideration may be, can be made dependent on the validity of the patent. In such event, it would be a proper defense, perhaps, to allege and attempt to prove the invalidity of the patent. But unless such conditional liability on the licensee's part is clear from the terms of the license, his agreement is to pay the consideration named in return for immunity from prosecution for infringement by the licensor; the validity or invalidity of the patent is not an element in the mutual considerations, is not a condition precedent, and consequently not a proper defense.414 Where the evidence is clear that the acts of a defendant have been done under the pretense of a license from the patentee, he will be estopped to deny that they were in fact so done.415

413 Foster v. Goldschmidt, 21 Fed. 70; Such an agreement is valid, Virtue v. Creamery Co., 227 U. S. 8, 32; Bailey v. Milier, 15 Ind. Ap. 475; Clark v. Cyclone, etc. Co., 22 Tex. Civ. Ap. 41; Macon Knitting Co. v. Leicester, etc. Co., 113 Fed. 844. affd. 116 Fed. 196, cost of suit divided by agreement. The obligation to protect the licensee does not run with the ownership of the patent, so as to bind an assignee of the licensor, Bradford Belting Co. v. Kisinger Iron Co., 113 Fed. 811.

414 Platt v. Fire-Extinguisher Mfg. Co., 59 Fed. 897; Moore v. National Water-Tube Boiler Co., 84 Fed. 346; Martin v. New Trinidad Asphalt Co., 255 Fed. 93; Tilghman v. Proctor, 102 U. S. 707, 734, dictum. Marston v. Sweet, 66 N. Y. 206; In re McLeod, 66 N. Y. S. 253; Eureka Co. v. Bailey Co., 11 Wall. 188; Fair v. Sheiton, 128 N. C. 105.

415 The Illinois Watch Case Co. v. Ecanbert, 177 III. 587, syll. "One who has paid fees or royalties to the owner of a patent for the use thereof, and who has enjoyed the benefits of the patent, is estopped to set up that he is not a licensee but an infringer, in order to defeat the jurisdiction of the State court of an action for royalties claimed to be due and unpaid." Accd. Am. Street Car Advertising Co. v. Jones, 122 Fed. 803; Marston v. Sweti, 82 N. Y. 526, dictum; Marston v. Swett, 66 N. Y. 206; Holmes v. McGill, 108 Fed. 238.

If the defendant could show that the contract had been repudiated, or in other ways put an end to before the acts complained of took place, or that such acts were, for any other reason, not within the purview of a contract, he would then be free to contest the claim of the plaintiff in the same way that any alleged infringer could do. 516

A suit to recover royalties due under the contract is purely a contract action and, although the contract deals with a patent right, the suit is not one which, because it arises under the patent laws, gives the Federal courts a jurisdiction which they would not otherwise have.⁴¹⁷

The extent to which a licensee can assign his license to others is purely a matter of contract law, and is essentially the same in respect to licenses under patents as in respect to any other contracts of similar type. The mere fact that a licensee does assign his license, without right to do so, does not give the patentee any right of action in contract against such assignee. In such case the patentee's right is not on contract, which does not exist between him and the assignee, but for infringement of the patent, on the ground that such assignee is using the invention without authority from the patentee.^{417a}

416 It has been held that the failure of the licensee to pay the royalties contracted for does not in itself terminate the contract; which is quite in accord with the law in respect to other contracts, such as those for the payment of rent. White v. Lee, 3 Fed. 222; Wagner Typewriter Co. v. Watkins, 84 Fed. 57; Standard Dental Mfg. Co. v. National Tooth Co., 95 Fed. 291; Am. Street Car Advertising Co. v. Jones, 122 Fed. 803. The fact that a patent had been invalidated by interference proceedings in the Patent Office was held ipso facto to terminate a contract for the payment of royalties in Marston v. Swett, 82 N. Y. 526.

Estoppel to deny validity of the patent ceases on termination of the contract, regardless of the motive in terminating it. Stimpson, etc. Co., v. Stimpson, 104 Fed. 893. As to right to sell articles made during life of the contract, compare Pelzer v. City of Binghamton, 95 Fed. 823.

417 Briggs v. United Shoe Co., 239 U. S. 48; Even though the State court has to construe the patent, Carleton v. Bird, 94 Me. 182; Odell v. Farnsworth Co., 39 Sup. Ct. Rep. 516 (June, 1919).

Wilson v. Mechanical, etc. Co., 68 N. Y. S. 173, 170 N. Y. 542; Moore v. Coyne, etc. Co., 98 N. Y. S. 892; A promise to pay royalties will not be implied from the mere fact that the defendant has deliberately in-

In general it may be said, that he can not assign it unless his contract with the owner of the patent expressly so provides. He may, however, arrange to enjoy his license through the use of other persons as employees.

§ 5. RESTRICTIONS IN LICENSES

The statute gives a patentee the exclusive right to make, use and vend his invention. We have seen that he can transfer the ownership of this monopoly to another without destroying it. He need not make any use of the invention himself nor permit others to use it; he may keep all advantage of it from the world during the period of his patent, if he so chooses. But if he chooses to put his invention into use he can, as we have seen, open his monopoly to one or more particular persons; that is to say, he may license certain persons to invade his monopoly, without thereby throwing it open to the public.

Furthermore, the patentee may limit this permitted invasion of his monopoly not only to the particular person, but also to the particular extent. He may limit the invasion permitted to enjoyment of the invention in a particular territory or at a particular place, or for a particular time, or for a particular purpose only, or to a particular person without right of transfer. So also the limitation in a permission to use embodiments of the invention but not to make them has been upheld. All of these restrictions have been recognized as

fringed the patent monopoly, May v. Western Lime Co., 65 Wash. 696, 44 L. R. A. (N. S.) 333.

- 422 Continental Paper Bag Co. v. Eastern, etc. Co., 210 U. S. 405; Heaton-Peninsular Co. v. Eureka, etc. Co., 77 Fed. 288.
 - 423 Rubber Co. v. Goodyear, 9 Wall. 788.
 - 424 Mitchell v. Hawley, 16 Wall. 544.
- 425 Pope Mfg. Co. v. Gormully, 144 U. S. 248, Gamewell, etc. Co. v. Brooklyn, 14 Fed. 255.
- 426 Waterman v. Shipman, 55 Fed. 982; Oliver v. Rumford Chemical Works, 109 U. S. 81.
- 427 Brush Elec. Co. v. California, etc. Co., 52 Fed. 945; In Oliver v. Rumfi d Chemical Works, 109 U. S. 75, the patent covered the process of making an acid to be used in the manufacture of certain kinds of flour.

proper, and the *limited permission* to invade the monopoly and enjoy the invention did not create in the license a complete right to use and enjoy the invention.

RESTRICTIONS ON RESALE, OR USE OF EMBODIMENTS. From the fact that the patentee can thus limit the extent to which others are permitted to invade his monopoly, it would seem to follow that he could validly limit the licensee in respect to * the profit he might, or must, make and the ways in which he might use embodiments of the invention. Such is undeniably the logical proposition, and it is one which was accepted by the courts until recently. Thus in Bement v. National Harrow Co.428 the plaintiff had contracted, for certain considerations, to let the defendant make and sell embodiments of his invention, on the agreement of the defendant, however, not to sell the embodiments at less than a stipulated price. In suit to recover damages for the defendant's breach of this contract, it was claimed that the contract was void as an attempt to restrain trade in contravention of the Sherman Anti-trust Act. The court said, "On looking through these licenses we have been unable to find any conditions contained therein rendering the agreement void because of a violation of that act. . . . The provision in regard to the price at which the licensee would sell the article manufactured under the license was also an appropriate and reasonable condition. It tended to keep up the price of the implements manufactured and sold, but that was only recognizing the nature of the property dealt in, and providing for its value so far as possible. This the parties were legally entitled to do. The owner of a patented article can, of course, charge such a price as he may choose, and the owner of a patent may assign it or sell the right to manufacture and sell the article patented upon the condition that the assignee shall charge a certain amount for such article." The decision is, that a condition on the right to enjoy the patentee's monopoly, requiring the maintainance of a stipulated sale price,

The restriction of a license to make and sell such flour, but not to sell the acid itself was upheld.

^{428 186} U. S. 70.

is not invalid because of the Sherman Anti-trust Act. There seems to have been no question, even, but that except for that act, the condition was perfectly valid and enforcible.

Again, in Henry v. A. B. Dick Co.,429 the patentee had sold a mimeograph machine, embodying his invention, upon condition that the buyer should use it only with ink made by the seller. The seller sought to enjoin a third party from inducing the buyer to use other ink in breach of the condition. In granting the injunction the court not only said that the agreement not to use other inks was valid as a contract, but it held that inasmuch as the buyer's right to use had been limited to use with the seller's inks, any other use was an unauthorized invasion of the seller's exclusive patent right. The opinion explicitly says, "We repeat. The property right to a patented machine may pass to a purchaser with no right of use, or with only the right to use in a specified way, or at a specified place. or for a specified purpose. The unlimited right of exclusive use which is possessed by and guaranteed to the patentee will be granted if the sale be unconditional. But if the right of use be confined by specific restriction, the use not permitted is necessarily reserved to the patentee. If that reserved control of use of the machine be violated, the patent is thereby invaded. This right to sever ownership and use is deducible from the nature of a patent monopoly and is recognized in the cases." This statement makes a clear distinction between the ownership of the right to enjoy the invention and the ownership of a chattel embodying the invention. Although it is obvious from the whole opinion that the court does rather con-

^{429 224} U. S. I.

Phonograph Co. v. Schlegel, 128 Fed. 733. To the effect that even absolute ownership of a chattel embodying a patented invention does not save the owner from liability for infringement if he makes use of his chattel, see Birdsell v. Shaliol, 112 U. S. 485. It would not be denied that one who makes a machine of his own materials is the owner of it, yet it is equally undeniable that his use of the machine would be infringement of a patent covering such machines, unless he had permission of a patentee. Dickerson v. Sheldon, 98 Fed. 621: Rodgers v. Torrant, 43 Mich. 113.

fuse the two and think of the tangible machine as being itself the invention.431

Thus the law stood until it was upset by the decision in Bauer v. O'Donnell. The defendant in that case had purchased packages of "Sanatogen," a preparation protected by the plaintiff's patent. On each package was a notification—. knowledge of which the defendant did not deny—to the effect that no one was authorized to sell such packages at less than a stated price, and anyone selling at less than that price would be guilty of infringing the patent monopoly. The defendant did resell at less than the stated price. The issue in the case was whether this sale, at a price less than that authorized by the patentee, constituted infringement. The court held that it did not.433 This decision was followed in a few years by that of The Motion Picture Co. v. Universal Film Co.,434 which specifically overruled Henry v. Dick Co., supra. The plaintiff, as patentee of a device for operating motion picture films, had given the right to manufacture machines embodying his invention to one who in turn sold such a machine to defendant. Attached to the machine was a notice that its use was permitted by the patentee only with certain films also controlled by the

very strongly implied that a condition that the licensee should use no other machines than those furnished by the licensor was valid. In the English case of Incandescent Gas Lt. Co. v. Cantelo, 12 Rep. Pat. Cas. 262, the court said, "The patentee has the sole right of using and selling the articles, and he may prevent anybody from dealing with them at all. Inasmuch as he has the right to prevent people from using them or dealing in them at all, he has the right to do the lesser thing, that is to say, to impose his own conditions." Accord, British Mutoscope Co. v. Homer, 1 Ch. Div, 671 (1901); National Phonograph Co. v. Menck (1911), L. R. 36 A. C. 336.

432 229 U. S. I. The court "distinguishes" this case from that of Henry v. Dick Co., supra, but the reality of the distinction is illuminated by the fact that the four judges who constituted the majority in Henry v. Dick Co. (only seven judges took part) were all opposed to the decision in Bauer v. O'Donnell, and the majority in that decision included the three judges who had dissented in the earlier one.

⁴³³ Accord, Straus v. Victor Talking Machine Co., 243 U. S. 490. ⁴³⁴ 243 U. S. 502.

plaintiff. The defendant did not deny knowledge of this restrictive condition, and admitted that he had not conformed to it. The court did not discuss the validity of a contract between the patentee and his licensee imposing restrictions on the licensee's right, saying that such a question was outside the scope of patent law. This left the issue squarely, whether the unauthorized use of the device with other than the specified films constituted an infringement of the patentee's monopoly. The court held that it did not.

This development of the law may be perfectly sound as a matter of public policy and economic utility. But the opinion of the court is a most confusing admixture of justification of its decision upon the strength of its economic effect and attempt to justify it as a logical development of the existing law. As is usual when courts override existing law for the sake of public advantage, without frankly admitting that they are so doing, the pretense of reasoning given is, to say the least, irritating.

The real issue is, to use the court's own language, whether, "since the patentee may withhold his patent altogether from public use, he must logically and necessarily be permitted to impose any conditions which he chooses upon any use which he may allow of it." As the court says, this is not specifically answered by the patent statute, which in terms merely gives him the exclusive right to enjoy his invention. It is therefore purely a question of public policy whether, if he allows others to invade his monopoly at all, he must allow them to invade it

435 The possible economic harm that might result from a patentee's unlimited power to restrict the right to use embodiments of his invention is indicated by the not infrequent cases in which the holder of a valid patent, covering something essential to a particular trade, has secured a practical monopoly of profit in lines not covered by his patent. An excellent presentation of the methods by which patents are used to secure monopolies wholly unrelated to the patent, is given by Mr. W. H. S. Stevens in his "Unfair Competition," Chap IV.

On the other hand, the United States Chamber of Commerce has gone on record as favoring some plan by which resale prices may lawfully be sustained. See Chicago *Herald*, May 19, 1916, p. 13.

without restriction. 436 As we have seen, the consistent custom of the courts, until the case of Bauer v. O'Donnell, supra, had been to allow the patentee to restrict and limit the extent to which he would allow others to enjoy his monopoly. But, beginning with that case, the court decided not to permit the patentee to restrict the extent to which his monopoly might be invaded by purchasers of chattels embodying his invention. This is clear enough, and probably satisfactory as a matter of public policy. The confusion arises because the court has endeavored to place such purchaser's right to invade the monopoly on the fact of his ownership of the chattel. This absence of distinction between the ownership of a chattel embodying an invention, and the owner's right to use it in contravention of another's patent was foreshadowed in Henry v. Dick Co., supra, and carried to an extreme in the subsequent cases.437 The sum total of the decisions, however, is clearly that a patentee who, by selling an embodiment of his invention authorizes the buyer to invade the monopoly, can not limit

436 That public policy is the motivating reason for the decisions is indicated by the statement in the Motion Picture Co. case, 243 U. S. 515, that "The perfect instrument of favoritism and oppression which such a system of doing business, if valid, would put into control of the owner of such a patent should make courts astute, if need be, to defeat its operation." 437 In Motion Picture Co. v. Universal Film Co., 243 U. S. 502, for instance the court says, p. 516, "The right to vend is exhausted by a single. unconditional sale, the article sold being thereby carried outside the monopoly of the patent law. . . ." This is true enough; a patentee who has sold a tangible chattel embodying his invention has given up all control whatsoever over the ownership and, directly, of the use of that chattel. But has he given up his monopoly of the use and enjoyment of the invention? The chattel sold was not the invention, nor was it the patentee's monopoly of the invention; that still remains in the patentee. The buyer of the chattel has no right whatsoever to infringe the patentee's monopoly of enjoyment of the invention, except such right as the patentee expressly or impliedly gave him by the sale. The fact that the patentee sold the chattel is, therefore, in no way whatever a reason for the decision; on the contrary it is merely a fact in the case, the effect of which is the thing to be decided, and in this case the effect of the sale on the monopoly was expressly limited. See note 430.

that right as to the price at which the embodiment may be resold nor as to the way in which it may be used. 438

The existing decisions as to the time during which the right may be exercised, or the place where it must be exercised, have not yet been overruled.

The question as to whether a patentee, as the price of a license to enjoy his invention, can impose conditions upon the licencee's conduct in no way connected with the invention seems not to have been directly passed on. It was more or less discussed, however, in United States v. United Shoe Machinery Co.439 That was a suit to have the defendant company dissolved as an illegal combination. Suit was dismissed on the ground that such combination as existed was not illegal. One of the ways by which the company was alleged to have improperly restrained trade was in granting licenses, to use machines covered by its patents, only on condition that the licensee should not use similar machines not covered by the licensor's patents and also that the licensees should rent from the licensors, and from them only, certain entirely different machines not covered by any patent. It was this "tying" to the license of terms which had no relation to the invention at all that the government objected to as an improper restraint of trade. The majority of the court held that there was nothing illegal in these "tying clauses" and that the owner of a patent may license persons to enjoy the invention on such terms as he sees fit. There was, however, a strong dissenting opinion in which the right of a patentee to restrict the conduct of a licensee in ways unrelated to the invention was flatly denied. Logically, if it is sound public policy to preclude a patentee from putting restrictions upon the buyer of embodiments of the invention, it should be equally sound to forbid his putting such restrictions upon the lessee. (As we have seen the buyer is as truly a licensee in respect to the monopoly as is a lessee

⁴³⁸ For a more extended discussion of this topic see the excellent article by T. R. Powell in 17 Columbia Law Rev. 663, and that by the author in 15 Michigan Law Rev. 581.

^{439 247} U. S. 32. It is answered by implication, also in United States v. Winslow, 227 U. S. 202.

of the embodiment.) And in view of the tendency of the court it is very doubtful if such restrictions would be actually enforced.

RESTRICTIONS BY CONTRACT. Since the patentee, if he opens his monopoly at all by sale of chattels embodying the patent, must open it entirely, at least so far as resale price and use are concerned, and can not protect himself by virtue of his patent, it becomes a very natural question whether he can restrict the buyer of such chattels by a valid contract.

In Bement v. National Harrow Co.,440 the issue was whether a contract between the patentee and his licensee, whereby the latter agreed not to sell below a stipulated price the chattels which he should make embodying the invention, was valid and enforcible. The court held that it was enforcible and did not contravene the federal anti-trust statute, (the Sherman Act). Likewise in Henry v. Dick Co.441 it was clearly indicated that the buyer's agreement to use the machine with the seller's ink only, would be enforcible as a contract. However, these decisions were so far interwoven with the idea of the patentee's right to partially release his monopoly, that the basic reason expressed in the opinions has been removed by the decision in Bauer v. O'Donnell, supra. The only issue now possible is whether, regardless of the patent monopoly, or, indeed, without any such monopoly, a seller of goods can, by express contract, restrict the buyer's disposal or use of them.

In Dr. Miles Medical Co. v. Park & Sons Co.,412 the action directly involved the validity of a contract whereby one purchasing certain chattels from the plaintiff had agreed that he would not sell below a stated price. No patent right was involved at all. The contract was one of a great number of similar ones between the plaintiff and other dealers, constituting "a system of interlocking restrictions by which the complainant seeks to control not merely the prices at which its agents may sell its products, but the prices for all sales by all

^{440 186} U. S. 70.

⁴⁴¹ 224 U. S. I.

^{442 220} U. S. 373.

dealers at wholesale or retail, whether purchasers or sub-purchasers, and thus to fix the amount which the consumer shall pay, eliminating all competition." The court held that the fact that the articles were made under a "secret process" did not affect the issue; that the secret itself might be protected against fraud or breach of contract, but this had nothing to do with protection relating to specific articles made by the process. Of the contract itself the court said, "General restraint in the alienation of articles, things, chattels, except when a very special kind of property is involved, such as a slave or an heirloom, have been generally held void. 'If a man, says Lord Coke, in Coke on Littleton, section 360, 'be possessed of a horse or any other chattel, real or personal, and give his whole interest or property therein, upon condition that the donee or vendee shall not alien the same, the same is void. because his whole interest and property is out of him, so as he hath no possibility of reverter; and it is against trade and traffic and bargaining and contracting between man and man." " "The present case is not analogous to that of a sale of good will, or of an interest in a business, or of the grant of a right to use a process of manufacture. The complainant has not parted with any interest in its business or instrumentalities of production. It has conferred no right by virtue of which purchasers of its products may compete with it. It retains complete control over the business in which it is engaged, manufacturing what it pleases and fixing such prices for its own sales as it may desire. Nor are we dealing with a single transaction, conceivably unrelated to the public interest. The agreements are designed to maintain prices, after the complainant has parted with the title to the articles, and to prevent competition among those who trade in them." Accordingly the restriction in the contract was declared void.

This case, together with Bauer v. O'Donnell and those subsequent to it, makes it clear that a patentee can not, even by contract, preclude one who purchases from him from reselling or using the chattel as he chooses: at least, if the contract is one of a number whose tendency is unreasonably to restrain trade.443

A single contract, not part of an elaborate attempt to restrain trade, is probably valid. Those which are part of a system are held invalid because they unreasonably restrain trade. A single contract restricting resale or use would hardly be an unreasonable burden on commerce, and such contracts have, in fact, been held valid by the courts. Even one of a number of contracts affecting the resale price has been held valid, when the restriction affected only a small part of the total commerce in the articles concerned. One state court has even gone so far, so late as 1917, as to uphold a wide spreading system of such contracts. In Ingersoll & Bro. v. Hahne, the issue went directly to the validity of a contract precluding dealers in Ingersoll watches from selling at a price of less than \$1.35. "On

443 Accord, United States v. Kellogg, etc. Co., 222 Fed. 725; Ford Motor Co. v. Union Motor Co., 244 Fed. 156; Hill Co. v. Gray & Worcester, 163 Mich. 12; Compare, Ford Motor Co. v. B. E. Boone Co., 244 Fed. 335; 16 Michigan Law Rev. 127.

Contra, Ingersoll & Bro. v. Hahne & Co., 88 N. J. Eq. 222, 101 Atl. 1030. The federal statutes, 38 Stat. 730, make it unlawful for any person engaged in interstate commerce to sell, or contract to sell, or lease, any goods, whether covered by patent or not, on condition that the buyer or lessee shall not use goods of a competitor, etc.

Although such a system of contracts makes them illegal and, hence, unenforcible, it has been held by a lower court, at least, that it is not a criminal offense for a manufacturer, not acting in concert with other manufacturers, to enter into such contracts. United States v. Colgate & Co. 253 Fed. 522. But see the implied limitation on this in United States v. Colgate & Co., 39 Sup. Ct. Rep. 465 (June, 1919).

Since the foregoing was written the Supreme Court, in United States v. A. Schrader's Sons, Inc., 64 Law Ed., has "distinguished" the Colgate case on the ground that the Colgate Co. did not make contracts that its customers would not resell below the stipulated price, but only refused to sell to those who would not adhere to the fixed price. In the Schrader's Sons case the making of such contracts was held to be criminal.

444 Garst v. Harris, 177 Mass. 72; Clark v. Frank, 17 Mo. App. 602; This distinction between a single contract and a system of contracts was indicated in Hill Co. v. Gray & Worcester, 163 Mich. 12.

445 Ghirardelli Co. v. Hunsicker, 164 Cal. 355.

446 88 N. J. Eq. 222.

the argument there was, and in counsel's brief there is, a long discussion as to whether the contract against price cutting, evidenced by the notice, is contrary to public policy, and defendant relies upon cases in the supreme court of the United States. I am now considering the public policy of the State of New Jersey as distinguished from any public policy of the United States. Unless the article is the subject of interstate commerce, I am not bound by the opinions of the supreme court of the United States. They are entitled to great weight and careful consideration, but it must not be overlooked that the effect of the case of Motion Picture Patents Co. v. Universal Film Co., decided April 9th, 1917, is a complete reversal of Henry v. Dick 224 U. S. I. To consider in detail the reasoning of the court in the very numerous cases which have been decided bearing upon this question would unduly extend this opinion. Suffice it to say, that after careful consideration, I have come to the conclusion that upon the general proposition, I agree with the dissenting opinion of Mr. Justice Holmes in Dr. Miles Medical Co. v. John D. Parks & Sons Co., 220 U.S. (at p. 411)." Accordingly, the contracts were held to be valid and enforcible.

CHAPTER IX

PROTECTION OF THE MONOPOLY

§ 1. Jurisdiction of the Courts

PATENT MONOPOLY WITHIN JURISDICTION OF FEDERAL COURTS. The rights and privileges conferred by a patent are protected and enforced by the Federal courts, and these have jurisdiction that is exclusive of the state courts in such matters.⁴⁴⁷

PATENT RIGHT, AS PROPERTY, IS WITHIN JURISDICTION OF STATE COURTS. This does not deprive the State courts of jurisdiction of matters which do not determine rights granted by a patent, even though the ownership of such rights, whatever they may be, is involved. Whenever the patent is involved in controversy merely as a piece of property, without calling into question the effective value of such property, the state courts have the same jurisdiction that they would have in any other cases involving the ownership and control of property. Contracts concerning the patent right are likewise subject to the same jurisdiction that other contracts are. In many instances the owner of a patent who has contracted with another in regard to its enjoyment has a choice of remedies. The wrongful act of the defendant may be a branch of the contract, through a use of the invention which has been clearly forbidden by the terms of his agreement. This same act, being done without the patentee's permission, would also be an infringement of the patentee's exclusive right. If the owner chooses to treat the wrong as a breach of the contract, his suit is not within the limited jurisdiction of patent law but must be brought in the courts having proper jurisdiction of breaches of contract. If however he chooses to treat the matter as an unauthorized infringement of his patent monopoly.

⁴⁴⁷ Act of March 3, 1911 (Judicial Code) § 24, § 255.

action must be in the Federal courts. As the court has put it,448 "When a contract is made respecting a right under a patent, and the parties get into litigation, confusion has sometimes arisen over the guestion whether the cause of action originates in the contract or in the patent laws. The test is this: If the plaintiff is seeking a judgment for debt or damages, or a decree for cancellation or specific performance, on account of the defendant's breach of his covenants, the cause of action arises out of the contract; and, though the determination of the issue of breach or no breach may involve the interpretation of the patent and of the prior art, the insistence of the defendant that his device, according to the true construction of the patent and of the prior art, is not within the patent right granted him in the contract, cannot change the nature of the action. Standard Sewing Machine Co. v. Leslie, 118 Fed. 557, 55 C. C. A. 323. On the other hand, if the plaintiff is seeking a judgment for damages, or a decree for an injunction and an accounting, on account of the defendant's unauthorized use of the patent right in making or using or selling the device without license, the cause of action arises out of the patent laws; and, though the determination of the issue of infringement or no infringement may involve the interpretation of the contract, the insistence of the defendant that his act was within his rights under the contract, if properly construed, cannot change the nature of the action."449

448 Victor Talking Machine Co. v. The Fair, 123 Fed. 424. Accd., Carleton v. Bird, 94 Me. 182.

449 A suit for specific performance of a contract to furnish money for development purposes, in consideration of an interest in the profits of an invention, and for an injunction against claiming title to the patent under a fraudulent assignment, was held not to give the federal courts any jurisdiction. Kurtz v. Straus, 106 Fed. 414.

On the other hand, in Henry v. Dick Co., 220 U. S. 1, where the licensee had expressly contracted not to use anything but plaintiff's ink with the patented mimeograph but had used other ink, it was held that even though suit might have been brought in the State courts for breach of contract it might also be brought in the Federal courts for infringement of the patent. Wilson v. Sanford, 10 How. 208; Hartell v. Tilghman, 99 U. S. 547; Albright v. Teas, 106 U. S. 613, to recover royalties—no invalidity of

Care must be taken to distinguish those cases in which the remedy is optional from those in which the wrong done is not something actually precluded by the contract but something outside of it and not covered by it at all. In this latter type of case there can be no action on the contract, and the suit must be in the Federal courts, for infringement.

Remedies. The Federal courts have authority;—to protect the owner of the patent by awarding him compensation for the damages he has suffered by infringement, with a penalty added in certain cases; to award him the amount of profit the infringer has made; and to prevent further infringement by injunction. The procedure by which these remedies are secured is not discussed in this book. It requires a knowledge of federal procedure in general, and should properly be studied as a part of that subject. To separate that part of the federal procedure which pertains particularly to patents, would still leave so much of the common fundamentals to be elucidated as to necessitate almost another volume. This treatise is, therefore, confined to the substantive part of the patent law.

Whichever remedy the plaintiff may choose to ask for, the defendant is privileged by the statute⁴⁵¹ to show as a defense that the patent on which suit is brought was secured by fraud of some sort and is void on that account; that it is void because the right to it had been lost through abandonment, or public use or sale more than two years prior to the application; that the patentee was not in fact the first inventor or any inventor at all and therefore was not entitled to a patent; and that even if the patent be valid the defendant has not infringed it.⁴⁵² The

patent set up; U. S. v. Palmer, 128 U. S. 262; Excelsior Wooden Pipe Co. v. Pacific Bridge Co., 185 U. S. 282.

⁴⁵⁰ The courts can not award the patentee title to the things unlawfully made by an infringer of the patent. Belknap v. Schild, 161 U. S. 10. ⁴⁵¹ R. S. § 4920.

⁴⁵² This broad statement covers practically the entire range of patent law. Since the defendant may attack the validity of the patent, he may do it on any ground—anticipation, public use, fraud, or anything else. Likewise he may set up anything that supports his defense of non-infringement. These matters are all discussed under their appropriate headings,

defendant is not restricted to any one of these defenses but may avail himself, so far as his evidence allows, of them all. in short, the defendant may both attack the validity of the patent and deny infringement of its monopoly.

The patent as evidence. The burden of proof in his attack on the patent is thrown upon the defendant, because the existence of the patent is prima facic evidence of its own validity in whatever respect it may be attacked. In the absence of any evidence to the contrary the legal conclusion is that it was issued without fraud, to the proper person, for a real invention. This presumption of validity has been carried in judicial statement to the extent that "every reasonable doubt should be resolved against" the person attacking the validity and effectiveness of the patent.

Patent not real evidence of invention. But while the patent is prima facie evidence of its own validity, the evidence is not strong enough to have much real effect on the issue when countervailing evidence is given. This lack of evidenciary force in a patent has been a potent cause of the often expressed opinion, that a patent is never worth much of anything and the patent statute is a delusion and snare. There can be no doubt but that the layman believes the fact that a patent

and it is quite unnecessary to repeat that discussion under the title of "defenses", as is done by at least one text writer who states, and partially re-discusses, twenty-nine defenses.

Fed. 743; Parks v. Booth, 102 U. S. 96, "Neither damages nor profits can be recovered unless the complaining party alleges and proves that he or the person under whom he claims was the original and first inventor of the patented improvement, and that the same has been infringed by the party against whom the suit is brought. Both of those allegations must be proved to maintain the suit; but the patent, if introduced in evidence by the complaining party, affords him prima facie evidence that the patentee was the original and first inventor. That presumption, in the absence of any satisfactory proof to the contrary, is sufficient to entitle him to recover if he proves the alleged infringement." West v. Frank, 149 Fed. 423.

454 Coffin v. Ogden, 18 Wall. 120, 124; Cantrell v. Wallick, 117 U. S. 689. 455 Palmer v. Corning, 156 U. S. 342; Hollister v. Benedict Mfg. Co., 113 U. S. 59, 71; N. Y. Belting Co. v. Sierer, 149 Fed. 756, 770; Warren Bros. v. Owosso, 166 Fed. 309.

has been granted is legally supposed to be proof of its validity, and that a successful defense to an infringement suit amounts to some sort of an evasion of the law, and of the protection which the statute intended a patent should give. If it were the intent of the statute that the granting of a patent should be anything more than the merest prima facie evidence of its validity, the feeling that patents are generally undesirable, because useless, would be justified by the great number of them which the courts have declared worthless, in comparison with those which have been held valid.

But the statute clearly never intended any such effect of absolute validity to follow the issue of a patent. The procedure of the Patent Office is necessarily such that the prior art can not be examined for existing knowledge except as that knowledge has been recorded in the office, and the issue of a patent can signify nothing whatever as to the novelty of the alleged invention, except as to such recorded knowledge. A particular device might have been on sale in every shop in San Francisco, or even in Washington, for years and a patent nevertheless be issued for it, if the prior patents recorded in the Patent Office did not show it. The Patent Office does not purport to be omniscient in any respect. Furthermore, since the statute was not intended to give a monopoly for every bright idea and mechanical change in the prior art, and the decision of the Commissioner of Patents is not final as to what amounts to such narrow change from even the recorded art, it is obvious that the issue of a patent means nothing as to whether the patentee was really entitled to the monopoly he claimed. The patent simply gives him the right to a monopoly so long as no one disputes it, and then a right to prove the validity of his claim in court. When one realizes the number of persons who, having conceived what appears to be a new and useful idea of means, immediately ask for a patent on it, without any competent investigation of existing knowledge, the number of patents found by the courts to be invalid is not in the least derogatory of the protection which the patent law gives to real and original inventors.

§ 2. Proof of Infringement

Thus far we have been discussing the various matters relating to the patent itself and its validity. We come now, assuming the existence of a valid patent, to a discussion of infringement of the patent monopoly.

Issues which arise. This involves two fundamental questions in each case; first, what is the invention that is covered by the patent; second, has the defendant made, used or vended anything embodying this particular invention.

The form claimed. The first of these is a question of law, to be decided by the court, ⁴⁵⁷ and it involves, in itself, two distinct possibilities of issue. The simpler of these inquiries is, what is the invention *literally* set out and claimed. In other words, what is the formal embodiment described in the patent. It is possible that the patent is so defective in its description as not to set out anything definite at all. ⁴⁵⁸ Or there may be well founded dispute as to the thing actually described in words and phrases. To determine this seems to be a matter of interpretation of the instrument by the court.

The ordinary rules for the construction of contracts apply here. The literal scope of the patent is limited by the claims

457 Winans v. Dennead, 15 How. 329, 337; Corning v. Burden, 15 How. 252; Parker v. Hulme, 1 Fish Pat. Cases 44, Fed. Cas. No. 10,740; Coupe v. Royer, 155 U. S. 565, syll. "In letters patent No. 77,920 granted to Herman Royer and Louis Royer, May 12, 1868, for "an improved machine for treating hides," the first claim, viz., for a "vertical shaft," and the second claim, viz., for a "groved weight," are restricted to a shaft and crib in a vertical position, and to a weight operating by the force of gravity aided by pressure; and they cannot be extended so as to include shafts and cribs in a horizontal position, and pressure upon the hides by means of false heads, actuated and controlled by gearing wheels, springs, and a crank. In jury trials in actions for the infringement of letters patent, it is the province of the court, when the defense denies that the invention used by the defendant is identical with that included in the plaintiff's patent, to define the patented invention, as indicated by the language of the claims; and it is the province of the jury to determine whether the invention so defined covers the art or article employed by the defendant."

458 This is discussed supra.

and these are to be construed with the interest of both the inventor and the public in mind. 450

The meaning and extent of the claim may be interpreted by reference to the description and drawings, although it can not be expanded to include matter described but not claimed.

The idea claimed. But the monopoly of the patent is not necessarily limited to the device as literally set out in the description. If it were so limited, the inventor of any device would be compelled to foresee and describe all the forms in which his idea might be materially embodied, and anyone who was able by mere mechanical skill to construct a device differing in material form from those described in the patent would not be an infringer. But, as we have said before, it is not the material device actually described in the patent that constitutes the invention protected by it. And nowhere does it more clearly appear, that it is the *idea* of an art, machine, etc. that really constitutes the invention, than it does in decisions upon infringement.

In a very large proportion of cases one form of material embodiment is set forth in the patent, and only one; yet the courts have held that the patent was infringed by the use of a material device quite unlike, in substantial form, the one described. In Tilghman v. Proctor,461 for instance, the claim of the patent was for "The manufacturing of fat acids and glycerine from fatty bodies by the action of water at a high temperature and pressure." The only material means of accomplishing this separation pointed out in the description, consisted of a long coil of strong iron pipe passing through an oven or furnace where it was subject for 10 minutes to a temperature of 612° F., that of melting lead. The defendant accomplished the same result by an obviously different material means; he used a boiler in which the fatty substances were subject for several hours to a temperature of only 400° F. The same patent had been considered, on these facts, in the case of

⁴⁵⁹ Cases supra. O. H. Jewell Filter Co. v. Jackson, 140 Fed. 340, 343. ⁴⁶⁰ O. H. Jewell Filter Co. v. Jackson, 140 Fed. 340. ⁴⁶¹ 102 U. S. 707.

Mitchell v. Tilghman, 462 and the court in that case found that the patent was limited to the means pointed out in the specification and that there was no infringement because of this difference in material means of accomplishing the result. This decision was overruled in the Proctor case and the court held that the device used by the defendant was in fact an infringement of the patent despite its material difference. This decision of the court was based on the ground that the patent was "for a process, and not for any specific mechanism for carrying such process into effect." Exactly what a "process" is the court does not explain, save that it comes within the meaning of "art" as used in the patent statute. But, whatever the meaning of the terms employed, it is clear that Tilghman was given protection beyond the limits of the material embodiment described in his patent. In the case of Expanded Metal Co. v. Bradford the court went so far as to hold that no material means need be described at all if what the court called the "method" of reaching the specified result be so clearly set out that anyone skilled in the art could find the substantial means of accomplishing it.

Even where the invention purports to be the concept only of a machine, in its strict sense, and not an art or a process, the monopoly of the patent is not restricted to the mere description given, but the patentee is often protected against the use of machines quite dissimilar in material form to the one described. As an illustration is the case of Ives v. Hamilton. The patent was for a saw mill, consisting of the combination of a saw, levers, rods, guides, etc., constituting a machine which gave to the saw a rocking or rolling motion desirable for certain purposes. The defendant secured the same rocking motion by using two straight guides set at an angle, where the plaintiff used a single, curved one, and by reversing the plaintiff's connections, at two places, so that the ultimate mo-

^{462 19} Wall. 287.

^{463 214} U. S. 366.

^{404 92} U. S. 426.

tion was the same. This formally and substantially different device was held to be an infringement of the patent. 465

Neither is the scope of a patent limited to the particular use described. A patentee is entitled to all uses to which it may be put, which do not themselves involve invention.

The changes in form which do not in fact evade the monopoly of the patent are usually spoken of as "equivalents." Customarily, the proposition set out in the foregoing paragraphs is reversed, and it is said that the substitution of equivalents does not constitute invention, nor avoid infringement. Some writers have even attempted to lay down "rules" as to what will constitute an "equivalent." But, on examination, it appears that these rules are only the statements of individual cases. The truth is that the existence of invention and non-infringement is not ascertained from the fact that a change is an equivalent; it is an equivalent because its substitution did not require inventive genius. There is no such thing as a definite "equivalent" from which non-invention may be predicated; its limits and scope can no more be defined than can the concrete inclusiveness of "invention." The socalled "doctrine of equivalents" means nothing more than that the protection of a patent is not limited to the precise material embodiment of the invention as described.

It appears, therefore, that whatever the invention may be called by the inventor or the courts, it may be, in its scope, something more than the concept literally depicted by the words of the description. Just how much more, if any, the invention as patented does cover, constitutes the second division of the first issue referred to above, and is the real issue in most patent litigation. This question is one to be answered by the court, and is therefore a question of law, so-called.

465 Acc. Water-Meter Co. v. Desper, 101 U. S. 332, "It is equally well known that if any one of the parts is only formally omitted, and is supplied by a mechanical equivalent, performing the same office and producing the same result, the patent is infringed"; Westinghouse v. Boyden Power Brake Co., 170 U. S. 537, 568, "We have repeatedly held that a charge of infringement is sometimes made out, though the letter of the claims be avoided."

It is obvious that the whole actual scope of the invention can not be decided in any one case. The courts can not forsee all the formal changes, the substitution of mere equivalents, which may be made, any more than the inventor himself could. The only matter, therefore, that can be decided is, whether the scope of the invention covers the particular device which is alleged, in the suit, to infringe. The question therefore takes the true form of an inquiry whether the defendant's derice is within the scope of the patent, and not, what is the scope of the patent. Some courts have made it appear as though there were two distinct questions, namely, the scope of the patent and, whether the defendant's device comes within it. They have said that the first is of law, the second of fact. Properly, there is no such distinction. As the first question can not be answered except by reference to the particular instance, its determination settles ipso facto the other question. and there is nothing left by way of further inquiry. Obviously, if the scope of the patent is broad enough to include the defendant's device, the defendant's device is within the scope of the patent, and there is nothing further to be decided. It is important to realize this, in order not to be confused by the apparently different cases in which the courts are deciding "the scope of the patent" and those in which they are deciding "whether the defendant has infringed."

Unless the alleged infringing device is identical with the description of the patent, this decision, any way it is looked at, can be nothing else than a matter of opinion. It can not be treated as a matter that is governed by "rules," for, by the very nature of the subject, the circumstances of two cases will never be precisely alike. Even the value of other decisions as persuasive guides is less than in other branches of substantive law, because of the essential dissimilarity of facts. The most that can be said for the value of precedents in affecting this decision is, that certain circumstances appear to have been given more weight than others by the courts and should, therefore, be of similar effect upon the opinions of later courts.

Particular cases holding one way or other on particular facts need not be given here as they can be found, classified, in the digests.

FACTORS INFLUENCING THE DECISION. The circumstances which affect the finding of infringement or non-infringement are, in theory, the same as those which affect a finding of invention or anticipation. If a production is so like something that preceded it as to lack the inventive quality, and be anticipated, it logically follows that it would be an infringement of the earlier device were that protected by a patent. Conversely, were a device held not to be anticipated by an earlier one, it would, theoretically, be held not to be infringed by it were the suit to come up in that way. Even the courts have said that "that which infringes, if later, would anticipate if earlier." Conversely, it is said, "A device which, if existent before the making of a patented invention, would not anticipate it, cannot if made after the issue of the patent, be said to infringe it."467 In Cook v. Sandusky Tool Co.468 the opinion of Mr. Chief Justice Waite is short and to the point, being in its entirety, "If the hoe made by the Tool Company infringes the patent of the appellant, it was an anticipation of the invention, and the patent is void, for the testimony leaves no doubt whatever in our minds that the company made and sold

⁴⁶⁶ Knapp v. Morss, 150 U. S. 221, 228; Peters v. Active Mfg. Co., 129 U. S. 530, 537; Miller v. Eagle Mfg. Co., 151 U. S. 186, 203.

⁴⁶⁷ Cleveland Pneumatic Tool Co. v. Chicago Pneu. Tool Co., 135 Fed. 783. In this case a certain tool existent before the patent had been held not to make it void by anticipation and the court held the defendant's tool not to be an infringement because it was materially identical with the prior one. In Peerless Rubber Co. v. White, 118 Fed. 827, the court proceeded on the assumption that a device which would not have anticipated an invention could not reasonably be held to infringe it. To the writer this seems fallacious. It is quite conceivable that a device might be such an improvement on old ones as to be an invention, while if it had come first, in its entirety, the faulty one, constructed later, would be merely a clumsy infringement of the invention.

^{468 28} L. Ed. 124.

its hoes long before the date of the invention patented. If it is not an anticipation, it is not an infringement." The bill was therefore dismissed.

It does not appear in this case whether the dismissal was because there was no infringement, or because the patent was void for anticipation. The case is unique and it seldom appears that the alleged infringing device has actually existed prior to the patented invention. Ordinarily a decision of infringement or non-infringement must be made. Judging from many of these decisions, one may reasonably doubt, in actual practice, whatever be the theory, that what would have anticipated if earlier will infringe if later. In a great number of cases the defendant's device has been found not to be an infringement, although one is morally certain that it would have been held sufficient to anticipate the plaintiff's invention had the case arisen under different circumstances. As a perhaps extreme illustration may be cited the case of Poirier v. Clementson.409 The plaintiff in this case held a patent for an improvement in pack-straps. One of its claims was for a bag having shoulder straps secured to a piece of leather across the top of the bag and their other ends arranged to fasten, after passing across the shoulders, to buckles on the lower corners of the bag. He contended that defendant's pack differed from his only in the fact that the straps were attached at a somewhat lower point. Defendants insisted that the method of attachment was different and that the load was carried in a different position. The validity of the patent was not disputed by the defense and the court dismissed the bill on the ground that there was no infringement. If the validity of the patent had been attacked and the device of the defendant had been set up as pre-existing, it seems incredible that the court would not have held the patent void as exhibiting only mechanical change from the earlier device. 470

It appears often that the case is determined on a finding of

^{469 70} Fed. 617.

⁴⁷⁰ See also Bragg v. Fitch, 121 U. S. 478; Crawford v. Heysinger, 123 U. S. 589; Boyd v. Janesville Tool Co., 158 U. S. 260.

non-infringement in order that, by a narrow construction, the court may evade the actual invalidity of the patent which would follow a construction broad enough to make the subsequent device an infringement.⁴⁷¹ Because of this, it is not safe to rely on cases in which a certain similarity has been held to constitute anticipation, as precedents for the contention that the same degree of similarity should be held to constitute infringement.

Another matter that is judicially declared to affect the court's conclusion as to the scope of a patent is the patentee's own acquiescence in its delimitation by the Commissioner of Patents. The courts have "often held that when a patentee, on the rejection of his application, inserts in his specification, in consequence, limitations and restrictions for the purpose of obtaining his patent, he cannot, after he has obtained it, claim that it shall be construed as it would have been construed if such limitations and restrictions were not contained in it." "If an applicant, in order to get his patent, accepts one with a narrower claim than that contained in his original application he is bound by it. If dissatisfied with the decision rejecting his application, he should pursue his remedy by appeal." Although these statements are not infrequent, it may fairly be said that they are not adhered to, except when the court is

⁴⁷¹ Scaife & Sons Co. v. Falls City Woolen Mills, 209 Fed. 210; Roemer v. Peddie, 78 Fed. 117.

⁴⁸⁰ Roemer v. Peddie, 132 U. S. 313. In this particular case the lower court had reached the same conclusion of narrow scope in order to escape the necessity of holding the patent void, as it would have been if a wider scope had been ascribed to it. Roemer v. Peddie, 78 Fed. 117. It is not at all certain that the Supreme Court would have followed the letter of its own statement had there not been this additional reason.

⁴⁸¹ Shepard v. Carrigan, 116 U. S. 593. Here again it appears that if the scope claimed had been allowed, the patent would undoubtedly have been void for lack of novelty. Acc. Phoenix Caster Co. v. Spiegel, 133 U. S. 360; Sutter v. Robinson, 119 U. S. 530; Sargent v. Hall Safe & Lock Co., 114 U. S. 63; Singer Mfg. Co. v. Cramer, 192 U. S. 265; Computing Scale Co. v. Automatic Scale Co., 204 U. S. 609; Morgan Envelope Co. v. Albany Perforated Wrapping Paper Co., 152 U. S. 425; Ventilated Cushion & Spring Co. v. D'Arcy, 232 Fed. 468.

influenced toward a narrow construction by other reasons, such as that a wider scope would invalidate the patent.

Occasional statements are also found to the effect that "When the terms of a claim in a patent are clear and distinct482 the patentee, in a suit brought upon the patent, is bound by it. He can claim nothing beyond it." "It is his (the patentee's) province to make his own claim and his privilege to restrict it. If it be a claim to a combination, and be restricted to specified elements, all must be regarded as material, leaving open only the question whether an omitted part is supplied by an equivalent device or instrumentality."484 As has already been said, the scope of a patent is not limited to the material form of the embodiment of the invention as described. Such statements as these are in general merely loose expressions of the fact that the particular invention is not deserving of a range of equivalents or protection outside of its literal description. It is not impossible that a patentee who is ignorant of the principle embodied in his device, or who is careless in the very precision of his language, may limit himself so expressly to the specific formal embodiment claimed, that the other forms to which his protection might have been spread can only be looked upon as dedicated to the public. But the cases are few, in which a patentee who might have had greater protection under a proper claim is deprived of it because of the wording of his actual claim.

PIONEER PATENTS. Another thing which has materially affected courts in their decisions as to the scope of an invention is the distance of relationship between it and the knowledge which preceded it, or, in other words, the length of the step forward which the inventor has made. The thing patented is not the substantial thing actually described in the patent, but the idea embodied in that substantial form. It appears from the cases that, in a figurative sense, this idea must be symmetrical; it can reach so far forward to cover improvements, and

⁴⁸² As they always should be.

⁴⁸³ Keystone Bridge Co. v. Phoenix Iron Co., 95 U. S. 274.

⁴⁸⁴ Fay v. Cordesman, 109 U. S. 408. The court had already found that "this patent stands on very narrow ground" in view of the prior art.

only so far, as it is itself in advance of the prior state of the art. If it is but a slight improvement upon the known art, it has but a narrow scope of protection against infringements; if it be a long step forward, its monopoly has a wide scope of inclusiveness. Such an invention, far in advance of the known art, is usually spoken of as a "pioneer."

The reports are replete with statements of the broad scope of protection which is to be given to such patents. "If one inventor precedes all the rest, and strikes out something which includes and underlies all they produce, he acquires a monopoly, and subjects them to tribute. But if the advance toward the thing desired is gradual, and proceeds step by step, so that no one can claim the complete whole, then each is entitled only to the specific form of device which he produces, and every other inventor is entitled to his own specific form, so long as it differs from those of his competitors and does not include theirs. These general principles are so obvious, that they need no argument or illustration to support them."472 Another opinion says, "If he (the patentee) be the original inventor of the device or machine called the divider, he will have a right to treat as infringers all who make dividers operating on the same principle, and performing the same functions by the same or 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 can not treat another as an infringer who has improved the original machine by use of a different form or combination perform-

472 Railway Co. v. Sayles. 97 U. S. 554, 556. The patent in this case was for a double-acting railway car brake. The plaintiff's invention was of such excellence as to supersede other types of brakes, but it did not embody an unprecedented idea. Other double-brakes had been earlier invented, employing the same fundamental principle as his. His new idea of means was therefore only an improvement in the manner of utilizing that principle. The court restricted him therefore to a range of equivalents limited by the particular novelty of the mere improvement which he had engrafted upon the known principle.

ing the same functions. The inventor of the first improvement can not invoke the doctrine of equivalents to suppress all other improvements which are not mere colorable invasions of the first."⁴⁷³

Just what constitutes a pioneer invention is not capable of precise delimitation. "This word (pioneer)," says Mr. Justice Brown, "although used somewhat loosely, is commonly understood to denote a patent covering a function never before performed, a wholly novel device, or one of such novelty and importance as to mark a distinct step in the progress of the art, as distinguished from a mere improvement or perfection of what had gone before. Most conspicuous examples of such patents are: The one to Howe of the sewing machine; to Morse of the electric telegraph; and to Bell of the telephone. The record in this case would indicate that the same honorable appellation might be safely bestowed upon the original air-brake of Westinghouse, and perhaps also upon his automatic brake."473" The inventions referred to, all embodied the use of a theretofore unrecognized principle of nature, or the utilization of a natural force, for a function or purpose not before conceived of in connection with it. This fact and the verbiage of all the statements in regard to pioneer patents indicate, that a true pioneer invention is the idea of accomplishing a result by means of a principle which is sufficiently fundamental to come within that vaguely limited term "law of nature" and which has never before been thought of as useful for the particular end desired. Morse used the principle of electro-magnetism, which while well known in itself had not been used for the particular purpose. In Bell's invention, the various electrical actions and reactions had been known, but the idea of using them to reproduce articulate sounds at a distance from their place of utterance, was inchoate. Westing-

⁴⁷³ McCormick v. Talcott, 20 How. 402, 404; Morley Machine Co. v. Lancaster, 123 U. S. 263; Royer v. Coupe, 146 U. S. 524, Morton v. Jensen, 49 Fed. 859; Miller v. Eagle Mfg. Co., 151 U. S. 186, 207; Paper Bag Patent Case, 210 U. S. 405; Kokomo Fence Machine Co. v. Kitselman, 189 U. S. 8; Clark Thread Co. v. Willimantic Linen Co., 140 U. S. 481, 492.

473" Westinghouse v. Boyden Power Brake Co., 170 U. S. 537, 561.

house's application of pneumatic pressure was to produce a result never practically connected with it. So all other admittedly pioneer inventions are found to be such as for the first time connect a desired result with any definite means of accomplishing it. Such connection of means and desideratum may be imperfect, and later inventions may excel it in utility, but those more successful ones are not the first to make the connection; they follow the pioneer. The "result" can not be patented, its accomplishment is open to other persons by means of other principles; neither can the "principle" be patented, it is said; the means of utilizing a principle for a result may, if sufficiently novel, be given a scope of protection practically equivalent to the principle itself when used for the particular result.

Not all pioneer patents are given the same scope, of course. An inventor, like a homesteader, may be a discoverer of the unknown; may "pioneer" into a known but unexplored land; or into a merely unsettled territory. And his reward differs in accord with what he has done. Bell and Morse went into a practically unknown land and were given a wide monopoly.475 Tilghman was the real discoverer of the fact that fatty substances would separate into their constituent parts under the action of water at a high temperature and pressure, and he was accordingly awarded the monopoly of that process.478 As the court said, "Had the process been known and used before, and not been Tilghman's invention, he could not then have claimed anything more than the particular apparatus described in the patent; but being the inventor of the process, as we are satisfied was the fact, he was entitled to claim it in the manner he did." But the fact that the ground has been fairly well explored and its possibilities realized does not deprive an inventor, who first effectuates a utilization of those possibilities. of a comparative range of equivalents. In the Paper Bag

⁴⁷⁴ As in O'Reilly v. Morse, 15 How. 62, see the explanation of this case in Tilghman v. Proctor, 102 U. S. 707, 727 ff.

⁴⁷⁵ The Telephone Cases, 124 U. S. 1; O'Reilly v. Morse, 15 How. 62.

⁴⁷⁶ Tilghman v. Proctor, 102 U. S. 707.

Patent Case477 it was contended by the defendants that the invention, not being first in its line, could not be infringed by a device materially different from the one described in the patent. The court, however, decided that, in the words of the syllabus, "The previous decisions of this court are not to be construed as holding that only pioneer patents are entitled to invoke the doctrine of equivalents, but that the range of equivalents depends upon the degree of invention; and infringement of a patent not primary is therefore not averted merely because defendant's machine may be differentiated." "The more meritorious the invention, the greater the step in the art, the less the suggestion of the improvement in the prior art, the more liberal are the courts in applying in favor of the patentee the doctrine of equivalents. The narrower the line between the faculty exercised in inventing a device and mechanical skill, the stricter are the courts in rejecting the claim of equivalents by the patentee in respect of alleged infringements."478

In cases where the invention is scarcely more than a mechanical change from the art which preceded it, and is given validity at all only by the narrowest margin, its range of equivalents is so correspondingly narrow as to be practically nothing. In such cases infringement occurs only when the unauthorized device corresponds precisely with the formal description of the patent.⁴⁷⁰

Summary. The other factors, extraneous to the patent itself, such as the personality of the judge, earlier opinions, etc., which were discussed under the head of invention, influence the findings on infringement just as they do those on invention. When allowance is made for the influence of these factors, particularly the tendency to find non-infringement rather than

^{477 210} U. S. 405.

⁴⁷⁸ Judge Taft, in Penfield v. Chambers Bros. Co., 92 Fed. 630, 649, Acc. Benbow-Brammer Mfg. Co. v. Straus, 166 Fed. 114; Boston & R. Elec. St. Ry. Co. v. Bemis Car-Box Co., 80 Fed. 287; Roemer v. Peddie, 78 Fed. 117; Mallon v. Wm. C. Gregg & Co., 137 Fed. 68; Diamond Rubber Co. v. Consolidated Tire Co., 220 U. S. 438.

⁴⁷⁹ Poirier v. Clementson, 70 Fed. 617; Roemer v. Feddie, 78 Fed. 117; Ball & Socket Fastener Co. v. Ball Glove Fastener Co., 58 Fed. 818.

to construe a patent so broadly that it would be void for lack of novelty, and the desire to reward a pioneer inventor as completely as possible, then the issue of infringement or noninfringement is practically the same as that of invention or anticipation. The answer to both depends upon the opinion of the court as to whether the apparent difference between the earlier device and the later one is the result only of mechanical skill or proceeded from the inspiration of inventive genius. The cases involving infringement can therefore be to a certain extent grouped according to characteristic material changes which have or have not been held sufficient to avoid a charge of infringement. But, again be it said, these cases can not be analyzed into "rules," because of the intrinsic and inevitable difference of facts. Thus, it is said in many cases and by some text writers, that "mere change of form does not avoid infringement." It can not possibly be said flatly that no change of form will so amount to invention in itself as not to constitute infringement, and to say that "mere" change of form does not, still leaves open the same question in different verbiage when is change of form "mere change," and when is it "invention" and no infringement? The nearest to any positive generalization that can be made is well expressed by one court.467 "Mere changes of form of some of the mechanical elements of a patented combination do not avoid infringement, when the principle of the invention is adopted and form is not its essence. But the rule that changes of form do not avoid infringement has at least two exceptions—when the form of the mechanical element is the distinguishing characteristic of the invention, and when the change in the form of the element changes the principle or mode of operation of the combination." By these expressed exceptions the question is thus left as unanswered as before, being merely put into a different form of expression.

The same impossibility of positive generalization holds true of all the other types of apparent change, and nothing definite by way of rule or statement can be deduced as a help in

⁴⁸⁷ O. H. Jewell Filter Co. v. Jackson, 140 Fed. 340, 346.

deciding an issue of infringement. This can only come from a fundamental comprehension of the whole subject of invention and non-invention. Beyond the suggestion of classification of cases which is discussed under invention, nothing further need be said about them. They stand only as separate cases and any good digest can present them more usuably than a work of this kind.

§ 3. Who May Be An Infringer

There is no restriction either by statute or by the courts as to who may be guilty of infringement. Such a suit stands upon the same footing as every other type of civil action, and any person or corporation capable of being sued may be liable to action. The United States government was made liable to suit for infringement by Act of June 25, 1910.485 This provides "Whenever an invention described in and covered by a patent of the United States shall hereafter be used by the United States without license of the owner thereof or lawful right to use the same, such owner may recover reasonable compensation for such use by suit in the Court of Claims: Provided, however, That said Court of Claims shall not entertain a suit or reward compensation under the provisions of this Act where the claim for compensation is based on the use by the United States of any article heretofore owned, leased, used by, or in the possession of the United States: Provided further, That in any such suit the United States may avail itself of any and all defenses, general or special, which might be pleaded by a defendant in an action for infringement, as set forth in Title Sixty of the Revised Statutes, or otherwise; And provided further, That the benefits of this Act shall not inure to any patentee, who, when he makes such claim is in the employment or service of the Government of the United States; or the assignee of any such patentee; nor shall this Act apply to any device discovered or invented by such employee during the time of his employment or service."486

⁴⁸⁵ Ch. 423, 36 Statutes at L. 851.

⁴⁸⁶ As to the liability of the government prior to this act, see Farnham

§ 4. What Acts Constitute Infringement

The second issue referred to at the beginning of the chapter, namely, whether the defendant has infringed or not, needs now to be considered only briefly. It is clear that a decision upon the first issue will have swallowed most of the possible forms of the second. If the court has decided that the scope of the patent is such as to include the particular form of device used by the defendant, there is no question but that the defendant's device is an infringement of the patent. The only further issue possible is, whether or not the defendant did make, use or vend the device, which he is alleged to have made, etc. This is a pure issue of fact, depending wholly upon the evidence adduced. As a general rule it would precede the consideration of the other issue, for if no use of the device alleged had actually been made by the defendant it would be futile to determine the relation of such a device to the patent. In using for any purpose the cases which make reference to the question of whether the defendant has infringed, care should be taken to distinguish between the issue of the infringing character of the device, and that of whether he did use the device complained of. The term "infringement" is used indiscriminately of both the acts of a defendant and of the material device with which he acts.488

THE INTENT with which the defendant did the acts alleged is not material in determining his liability as an infringer, unless the charge be merely that he is a contributory infringer. Real absence of intent to infringe may in some circumstances reduce the amount of damages recoverable under R. S. § 4919. But the fact that the defendant was unaware that any patent had been issued for the device, or honestly believed that his own device was not an infringement of the one patented, does not prevent an adjudication of infringement.⁴⁸⁹

v. United States, 240 U. S. 537; U. S. v. Societe Anonyme, 224 U. S. 309; Crozier v. Krupp, 224 U. S. 290; Russell v. U. S. 182 U. S. 516; U. S. v. Berdan Arms Co., 156 U. S. 552; Schillinger v. U. S. 155 U. S. 163; Belknap v. Schild, 161 U. S. 10.

⁴⁸⁸ Haselden v. Ogden, 3 Fish. 378, Fed. Cas. No. 6190.

⁴⁸⁹ Parker v. Hulme, I Fish Pat. Cases 44, Fed. Cas. No. 10,740; Globe

The statute⁴⁹⁰ provides expressly that no damages shall be recovered for infringement, when the defendant has not had due notification before the acts on which suit is predicated, unless the plaintiff has given general notice to the public by marking articles covered by the patent with the word "patented," and the date on which the patent was issued. If the article itself can not be so marked, it is provided that a label may be affixed to it, or to the package in which it is enclosed, containing the notice.401 The fact that a defendant had no actual notice of the patent, and that the articles covered by it had not been marked "patented" so as to give him constructive notice, would not preclude the granting of an injunction in otherwise proper circumstances. The mere fact of notice of the suit for injunction would in itself constitute the notice, that the device was patented, necessary to render the defendant liable for all future infringement. If he would be liable for damages in the future, he might properly, so far as the matter of notice is concerned, be enjoined from causing them. 492 In one case it was urged by the defendants, that the infringing articles had been accidentally made in the course of other manufacturing and unintentionally sold. The court held an injunction against any further manufacturing or sale to be proper nevertheless. 493

Making, using and vending not all necessary. The monopoly given by the patent is the right to exclude others not only from making things covered by the patent but also from using or vending such things. One is guilty of infringe-Wernicke Co. v. Fred Macey Co., 119 Fed. 696; Cimiotti Unhairing Co. v. Bowsky, 143 Fed. 508; It has been held to affect the patentee's right to an injunction, as distinct from mere damages, Sheridan-Clayton Paper Co. v. U. S. Envelope Co., 232 Fed. 153.

⁴⁹³ R. S. § 4900.

⁴⁹¹ On the subject see Sessions v. Romadka, 145 U. S. 29; Coupe v. Royer, 155 U. S. 565, 583.

⁴⁹² It has been declared that a single unauthorized sale of the patented article will justify an injunction when the circumstances are such as to indicate a readiness to make other sales. Hutter v. De Q. Bottle Stopper Co., 128 Fed. 283; Johnson v. Foos Mfg. Co., 141 Fed. 73.

⁴⁹³ Thompson v. Bushnell, 96 Fed. 238.

ment who does any one of these prohibited acts; it is unnecessary that he shall have done them all. 494

A more difficult proposition is presented in regard to the use or sale of the product of a patented device. Is one who neither makes, uses, or sells the device covered by the patent guilty of infringement, if he does use or sell something made by the device, without authority from the patentee? Of course if he himself makes something with the device, he is guilty of using the device. But if he merely buys, directly or indirectly, something that another made unauthorizedly with the patented device, and uses it without himself having anything to do with the patented device does that constitute infringement?

There seems to be no direct decision upon this point. Unless this product of the device can be considered a part of the patented invention, the person using it but not himself using the device, is not logically guilty of making, using, or vending the invention covered by the patent. At most he would be a contributory infringer. The Supreme Court in referring to the question "whether, when a machine is designed to manufacture, distribute or serve out to users a certain article, the article so dealt with can be said to be a part of the combination of which the machine itself is another part," said, "If this be so then it would seem to follow that the log which is sawn in the mill; the wheat which is ground by the rollers; the pin which is produced by the patented machine; the paper which is folded and delivered by the printing press, may be claimed as an element of a combination of which the mechanism doing the work is another element." The question itself the court does not specifically answer, on the ground that it is not perti-

⁴⁹⁴ The manufacturing in this country of articles covered by the patent is an infringement of the monopoly granted thereby even though the articles are intended for use outside of this country only, Dorsey Revolving Harvester Rake Co. v. Bradley Mfg. Co., 12 Bløtch. 202; Fed. Cas. No. 4015; Adriance Platt & Co. v. McCormick Harvesting Mach. Co., 55 Fed. 288; Bullock Elec. & Mfg. Co. v. Westinghouse Elec. & Mfg. Co., 129 Fed. 105.

⁴⁹⁵ Morgan Envelope Co. v. Albany Paper Co., 152 U. S. 425, 431.

nent to the case, but the implication is that the article produced is not protected by a patent for its means of production. 406

The author is not aware of any case in which it has been held that one who buys articles not themselves covered by a patent is guilty of contributory infringement merely because the articles were made by a machine or process whose use was itself an infringement.

REPAIRS. When a patented device has been sold by the patentee, or its use and enjoyment has been licensed, the purchaser or user acquires with the device the implied right to repair it. Such repair, unless expressly restricted by agreement, does not constitute infringement. As a matter of law, the proposition is settled. The practical application of the rule is troublesome, however, and the statements in regard to it are confused. The difficulty lies in the impossibility of distinguishing definitely, and definitively, between "repair" and "replacement." While the vendee is entitled to repair the machine, or other device, which he has bought, he has no right to make a new one under the guise of repairing the old one. It is obvious that the line between repair and remaking is impossible of theoretical allocation in advance of the various instances that may arise. Its determination must of necessity

406 So declared in a reference to this case in the later case of Heaton-Peninsular Button Fastener Co. v. Eureka Specialty Co., 77 Fed. 288, 35 L. R. A. 728, 735. In Merrill v. Yeomans, 94 U. S. 568, it was held that a patent for a process for making certain heavy oils was not infringed by one who did not manufacture but did vend such oils which he had bought from an unauthorized maker. The case is not so close in point as would appear from the holding, because the court specifically found that the oil sold by the defendants was manufactured by a totally different process from that of the patent. The case might well have been decided on the simple ground that the oil sold by defendants was not the same oil as that of the patent, having been made by a different process. A somewhat distant analogy to the questions here suggested is found in the cases holding that the selling to a licensee of goods which might be put to infringing use is not of itself contributory infringement. See authorities cited under that subject; Cf. Sheridan Clayton Paper Co. v. U. S. Envelope Co., 232 Fed. 153.

follow the fact, not precede it, and be dependent upon the circumstances. Like so many other issues of the patent law, it is fundamentally a matter of judicial opinion in the particular case. It is capable of very little guidance from precedent instances, although an inductive and comparative study of many cases in which the issue has been passed upon may serve to reduce somewhat the width of debatable ground, as is true of other matters of judicial opinion.497 The whole matter can not be better discussed than by quoting at length from the opinion in the case of Goodyear Shoe Machinery Co. v. Jackson. The defendants in this case were engaged in a small way in the business of general machinery repair work. Several persons who had purchased from the plaintiff shoe machines made under the patent, sent their machines to defendants to be repaired. In this work, the defendants replaced a number of parts by making new ones. The plaintiff contended that this constituted an infringement of his patent. The court was of opinion that, under the particular circumstances—which need not be set out here—there was no infringement. In the course of the opinion it said, "Infringement by the purchaser of a patented machine consists in the substantial rebuilding of such machine. A contributory infringer necessarily only makes or sells a part of the patented invention. The purchaser of a patented machine, in order to infringe, must make or reproduce, in substance, the whole patented invention. To prove infringement, in one case, it is only necessary to show a partial infringement in aid of an unlawful complete infringement, while in the other case a substantially full and complete infringment must be established. The rule that a person may be guilty of contributory infringement by making or selling a material element of the patented combination has no application to infringement by the purchaser of a machine embodying such patented combination. A purchaser stands in no differ-

⁴⁹⁷ The cases in point are not cited here for the reason that, the problem being analyzed and understood, they can be found under appropriate headings in a digest much more satisfactorily and fully than it would be possible to give them here.

^{497* 112} Fed. 146.

ent position from an ordinary infringer, except in the circumstance that he has bought a patented machine, and, consequently, his infringement does not consist in the construction of a wholly new machine, but in the reconstruction of such machine after it is worn out or substantially destroyed. The essence of the infringement is the same in both cases.

"The ordinary infringer makes the entire patented machine; the infringing purchaser begins with what remains of the patented machine, and rebuilds it. To show infringement in the case of an ordinary infringer, where the patented invention comprises several elements in combination, it is necessary to prove that the alleged infringing machine contains all the elements (or their equivalents) which make up the combination, although some of the elements may not be material, or of the essence of the invention. To show infringement by the purchaser in such a case, the same strictness of proof is not required, for the reason that it may not be necessary for him to make the immaterial or unessential elements of the patented combination, because they may not be worn out or destroyed in his machine when the work of reconstruction begins. A practical reconstruction of the patented machine, and not necessarily a literal reconstruction of the patented combination, is all that is required to constitute infringement by the purchaser. For example, where the patent is for an improved lamp, and the whole invention resides in the burner, but the claim is for the combination of the burner and a chimney, in an ordinary suit for infringement it must be shown that the defendant made or used or sold the patented combination, namely, the burner and chimney; while in a suit for infringement against a purchaser of the lamp it would only be necessary to prove that he replaced the old burner with a new one, because, manifestly, that would constitute a substantial reconstruction of the patented invention. If a person other than the purchaser should make or sell the burner with the intent and purpose of its use by another in combination with the chimney, it would be a clear case of contributory infringement.

"In approaching the question of infringement by the purchaser of a patented machine, it is important to bear in mind what the patentee sold and the purchaser bought. The patentee has parted with his machine and the monopoly that goes with it, and the purchaser has bought the machine with the right to use the patented invention until the machine is worn out or destroyed. When the machine is worn out, or substantially destroyed, his right to use the patented invention ceases; and when he rebuilds his machine, and thereby makes substantially a new machine, it becomes subject to the patentee's monopoly, the same as in the case of any other person who unlawfully makes the patented machine. When the patented machine has passed outside the monopoly by a sale and purchase, the patentee has no right to impose any restrictions on its use for his own benefit. He cannot forbid the further use of the machine because it is out of repair in consequence of the wearing out or breaking of some of its parts, and so oblige the purchaser to buy a new machine. The purchased machine has become the individual property of the purchaser and is like any other piece of property which he owns. He may sell it, or he may use it so long as its usefulness lasts, and then throw it away, or dispose of it for junk. He may prolong its life and usefulness by repairs more or less extensive, so long as its original identity is not lost. He is only prohibited from constructing a substantially new machine. He cannot, under the pretext of repairs, build another machine.

"A purchaser, then, may repair, but not reconstruct or reproduce, the patented device or machine. Repair is 'restoration to a second, good, or complete state after decay, injury, dilapidation, or partial destruction.' Reconstruction is 'the act of constructing again.' Reproduction is 'repetition,' or 'the act of reproducing.' These definitions are instructive in bringing home to the mind that repair carries with it the idea of restoration after decay, injury, or partial destruction, and that reconstruction or reproduction carries with it the idea of a complete construction or production over again.

"But the difficult question still remains, what is legitimate repair, and what is reconstruction or reproduction as applied to a particular patented device or machine? When does repair destroy the identity of such device or machine and encroach upon invention? At what point does the legitimate repair of such device or machine end, and illegitimate reconstruction begin?

"It is impracticable, as well as unwise, to attempt to lay down any rule on this subject, owing to the number and infinite variety of patented inventions. Each case, as it arises, must be decided in the light of all the facts and circumstances presented, and with an intelligent comprehension of the scope, nature, and purpose of the patented invention, and the fair and reasonable intention of the parties. Having clearly in mind the specification and claims of the patent, together with the condition of decay or destruction of the patented device or machine, the question whether its restoration to a sound state was legitimate repair, or a substantial reconstruction or reproduction of the patented invention, should be determined less by definitions or technical rules than by the exercise of sound common sense and an intelligent judgment.

"When the patent is for a single thing, like a knitting needle, for example, and not for a device or machine composed of several things or elements combined, it is obvious that the replacement of an old needle by a new one in a knitting machine is not repair, but a reproduction of the patented thing.

"When the patent is for a device embracing the combination of several elements, a purchaser will infringe by reconstructing the device after it has fulfilled its purpose and is substantially destroyed. Where, for instance, the patent was for a cotton-bale tie, consisting of a band and buckle, and 'licensed to use once only,' it is manifest that the severance of the band at the cotton mill was intended to operate as a destruction of the tie, and that to roll and straighten the pieces of the band and rivet the ends together, at the same time using the old buckle, was a reconstruction of the tie, and not repair. "Again, where the subject of the patent was an electric lamp, and the invention resided in the discovery that an attenuated carbon filament, if operated in a high vacuum, would withstand disintegration, and the claim was for the combination of carbon filaments with a receiver made entirely of glass, and conductors passing through the glass, from which receiver the air is exhausted, it is plain that, when the filament is destroyed, and the vacuum is destroyed by making a hole in the receiver, and nothing remains but a perforated glass bulb and the conductors, the lamp is practically destroyed, and that to replace the old filament with a new one, and again exhaust the air in the receiver, and again seal it, is substantially the making of a new lamp.

"Where the patent is for a machine, which commonly embraces the combination of many constituent elements, the question of infringement by the purchaser will turn upon whether the machine is only partially worn out or partially destroyed, or is entirely worn out, and so beyond repair in a practical sense. In the case of a patent for a planing machine composed of many parts it was held that the replacement of the rotary knives, 'the effective ultimate tool' of the machine, was repair, and not reconstruction." 408

If the construction is such as the owner of the machine has himself a right to perform by way of repair, it is not infringement for some one else to do the work for him. 499

§ 5. Contributory Infringement

It is a settled principle of the Common Law that one who wrongfully induces another to break a contract with a third person, or who induces another to commit a tort against a third person, is himself guilty of a tort and liable to a suit for damages. We have already seen that a patentee may license another to invade his monopoly, and utilize his invention, with a limitation upon the extent or character of the licensee's en-

⁴⁹⁸ Morrin v. Robert White Engineering Co., 143 Fed. 519. Burguieres Co. v. Deming Co., 224 Fed. 926. Many cases are cited in the opinion. See especially, Wilson v. Simpson, 9 How. 109.

⁴⁹⁹ Morrin v. Robt. White Engr. Co., 143 Fed. 519.

joyment. The limitation may take the form simply of a limited license, or it may be considered as a contract by the licensee not to do certain things, or it may have both forms. If the licensee exceeds the permission in his license and does what he has agreed not to do, he is not only guilty of infringing the patentee's monopoly, but he is also guilty of breach of contract.⁵⁰⁰

One who induces the commission of such an infringement or the breach of such a contract, or aids therein, is himself liable in damages to the patentee, under the Common Law.⁵⁰¹ This tortious conduct, whether it be by way of inducement to infringe, or to break a contract limiting the extent of use, is comprehensively called "contributory infringement." No distinction is made, in terms, of the particular alternative forms which it takes. It is not material, except as to jurisdiction in certain cases, whether the act of the principal wrong doer be looked upon as a true infringement or merely a breach of the contract.

One can not be held liable as a contributory infringer unless the acts which he induced were in themselves wrongful. Therefore exactly the same questions, and all of them, may arise in suits against contributory infringers as may come up in any action for infringement or breach of contract of license. The validity of the patent, the reality of the alleged infringement, the validity of the contract, the fact of its breach, and the legality of the condition in general, are all as pertinent is-

⁵⁰⁰ For a discussion of this matter see, ante.

trespass on the case. From the earliest times, all who take part in a trespass, either by actual participation therein or by aiding and abetting it have been held to be jointly and severally liable for the injury inflicted." Thomson-Houston Elec. Co. v. Ohio Brass Co., 80 Fed. 712, 721. The opinion explains the case of Morgan Envelope Co. v. Albany Perf. Wrapping Paper Co., 152 U. S. 425. Dr. Miles Medical Co. v. John D. Park & Sons Co., 220 U. S. 373, syl. 1. "An actionable wrong is committed by one who maliciously interferes with a contract between two parties and induces one of them to break the contract to the injury of the other, and in the absence of an adequate remedy at law equitable relief will be granted." (Dictum.)

sues in suits against a contributory infringer as they are in suits against a principle wrong doer. The fact that the defendant is merely contributory to the wrong does not affect the issues respecting the wrong itself, and as they have already been discussed they need not be reconsidered in this connection.

But when suit is against one who is merely a contributory infringer, there is the additional issue as to whether he, as a contributor only, is liable for the wrongful acts which the party has committed. This depends upon the established Common Law doctrines of contributory wrong doing and not on any rules appertaining particularly to patent law.

Intent necessary. The existence of a wrongful intent is necessary to constitute liability for contributory infringement, and its immateriality in cases of principal infringement must not be confused with this. A possible source of confusion is in the fact that circumstances might arise in which one could be treated as either a principal infringer or a contributory one. Suppose, for instance, one should so work upon the machine of another, under the pretense of "repairing" it, that his work would be held actually a "replacement." If in such case the owner of the machine had been under contract with the patentee not even to repair it, he would be guilty of breach of contract and the one who had done the work might be guilty of contributing to the breach if it were shown that he intentionally induced it. But certainly, if the machine had been properly marked "patented," his making of a new one, although done at the request of the licensee would be, in itself, an infringement of the patent regardless of his intent. The difference in intent requisite to liability in the two grounds of action must be kept clear. It is only when the cause of action is not the infringement or breach itself, but the inducing of the infringement or breach, that the intent is material.

The intent need not have been expressed by the defendant, for the real mental intent of a man is not demonstrable. It will be inferred by the court from the circumstances under which the acts complained of took place. "One is legally pre-

sumed to intend the natural consequences of his act."⁵⁰² It is therefore the acts themselves and not any verbal expression of intent to which the courts will look. In the case just quoted from the court formed its opinion, that the defendant intended to assist in an infringement, from the fact that the articles he sold could be used only in such a way as would constitute an infringement and that, as persons do not ordinarily buy articles except for normal use, he must have known they would be used in an infringing way and have intended it.⁵⁰³

But the intent necessary to constitute contributory infringement will not be deduced merely from the fact that the defendant has sold to an infringer articles which can be used for infringement, when such articles are not in themselves covered by the patent and have a recognized use quite unconnected with any infringement. Some further knowledge on the part of the defendant of the purpose to which they are to be put by the purchaser must be shown before a wrongful intent will in such case be inferred.⁵⁰⁴

502 Thomson-Houston Co. v. Ohio Brass Co., 80 Fed. 712, 721.

503 Acc. Canda v. Mich. Malleable Iron Co., 124 Fed. 486.

Rumford Chemical Works v. Hygienic Chem. Co., 148 Fed. 862; quoting, Edison Elec. Lt. Co. v. Peninsular Lt. Co., 95 Fed. 673; App'd Leeds & Catlin Co. v. Victor Talking Mach. Co., 154 Fed. 58; Cortelyou v. Johnson, 207 U. S. 196; Edison Elec. Lt. Co., v. Peninsular Lt. Co., 101 Fed. 831; Sheridan-Clayton Paper Co. v. U. S. Envelope Co., 232 Fed. 153. The purchasing of the various elements that go to make up a patented combination was said as dictum not in itself to be an infringement in Seim v. Hurd, 232 U. S. 420.

"What contributory infringement is, and why it should be enjoined, was clearly shown in Wallace v. Holmes, 9 Blatch. 65, Fed. Cas. No. 17,100,—the earliest case in this country upon the subject, and upon which the subsequent cases of contributory infringement rest. The complainant's patent in that case was for an improved lamp, which consisted of an improved burner, or metallic portion, and a glass chimney. The defendant made and sold the improved burner, which must be used with a chimney, and, in order to make sales, exhibited the burners with chimneys to customers; and the circuit judge thought that a concert with others to use the patented article, as a whole, was a certain inference from the obvious facts in the case, and the efforts of the defendant to solicit sales by showing the operation of the whole patented article. The willingness of the defendant in this case to aid other persons in any attempts which

It does not appear to be necessary for the alleged contributor to have actual knowledge that the action or device to which he is contributing is covered by a patent. The fact that devices made under the patent are duly marked "patented" probably serves as constructive notice to a contributory infringer as completely as to a direct infringer.

Making, using, etc. not necessary. Since the cause of action against a contributory infringer is his wrong in inducing another to infringe or to break a contract, it follows that the contributor need not himself have done anything at all by way of making, using or vending the device covered by the patent. One who should induce another to infringe by mere verbal incitement and moral encouragement would undoubtedly be as fully liable to suit as though he had actively assisted by mechanical means. There is no lack of cases in which the defendant has been held liable without having himself directly infringed in any way. An example—notable because of the amount of popular discussion it evoked—is the case of Henry v. Dick Co. ⁵⁰⁵ The complainant's patent covered a mimeographing device. One of the machines had been sold to Skou with the express limitation that it might be used only with ink made by the complainant. The ink itself was not patented. Defendant Henry sold ink to Skou with the undeniable intent that it should be used on the machine, in breach of the limitation. The defendant had perfect right to make, use and yend his ink, unrestricted by any patent monopoly on it. Its use by Skou, however, in contravention of his agreement with the

they may be disposed to make towards infringement is also apparent. Its trolley stands are designed to be used in the patented system, and to be the means of enabling the trailing pole to perform its distinctive and novel part in the combination. It sufficiently appears from the defendant's advertisements and affidavits that it was ready to sell to any and all purchasers, irrespective of their character as infringers. A proposed concert of action with infringers, if they presented themselves, is fairly to be inferred from the obvious facts of the case; and an injunction order is the proper remedy against wrongful acts which are proposed, or are justly to be anticipated." Thomson-Houston Elec. Co. v. Kelsey Elec. Ry. Spec. Co., 75 Fed. 1005, 1007.

⁵⁰⁵ 224 U. S. I.

Dick Co., was held by the court to be an infringement of that company's patent. and the defendant was held liable as a contributor to such infringement on the ground that he had ininduced it.⁵⁰⁶

A somewhat different type of contributory infringement was the cause of action in Trent v. Risdon Iron & Locomotive Works. On An ore crushing mill had been erected which was held to be an infringement of complainant's patent. The defendant denied any liability for this infringement on the ground that he was neither owner nor instigator of it, that his sole connection with it was as architect and building contractor for hire. It developed on trial, however, that he had himself furnished the plans and specifications for the crusher. He was held liable as a contributing infringer. Many other cases may be found in which a defendant has been held guilty of contributory infringement although he did not himself actually make, use or vend the patented invention.

In summary of the whole matter of a patentee's rights under his patent, it may be said that the courts have protected him, not narrowly nor half-heartedly, but to the fullest extent possible under the statute.

§ 6. PRACTICAL VALUE OF VOID PATENTS

Even when an idea is of such character that the courts would in all probability refuse to hold it an invention, there is, never-

patented button fastening machine, whose use had been permitted by patentee on condition that it be operated only with fasteners purchased from him, was held to be contributory infringement, in Heaton-Peninsular Button-Fastener Co. v. Eureka Specialty Co., 77 Fed. 288, 35 L. R. A. 728. Thomson-Houston Elec. Co. v. Ohio Brass Co., 80 Fed. 712, furnishing one part of a combination held contributory infringement. "They have infringed the process of Johnson because they supplied the apparatus adopted to employ Johnson's process with the intent that the plant should be or would be operated as that put in for the Genessee Fibre Co. It was therefore guilty of contributing to the infringement of the first claim of the Johnson patent," Johnson v. Foos Mfg. Co., 141 Fed. 73, 88; Leeds & Catlin Co. v. Victor Talking Machine Co., 154 Fed. 58.

theless, an undoubtedly very practical advantage in having it patented. As has been said, the Patent Office is not in position to examine the prior art except to the extent that it is covered by patents, and even to that extent the policy seems to have been to allow new patents wherever superficial difference appears. The Patent Office does not assume the difficult task of determining when apparent change is merely mechanical. A patent, therefore, of absolutely no legal value whatever, is not particularly difficult to secure, and gives the right to mark articles "patented." The ethics of doing this, unless the patentee really believes his idea of means to be an invention, the author does not discuss, but it is seldom that the most conscientious of would be inventors fails so to believe. The advantage of the "patented" mark is obvious when one contemplates the number of manufacturers who are paying small royalties "rather than stand the trouble and cost of even a successfully defended suit;" and of others who refrain from manufacturing certain small articles, for the same reason, 508

Automobile Manufacturers to the owners of the "Seldon Patent," before it was declared ineffective in Col. Motor Car Co. v. Duerr, 184 Fed. 893, is an example. It is common rumor that the owners of the transmission patents on which the present association of automobile manufacturers is founded fear to sue the Ford Co. for infringement lest the patent be avoided. Yet the others are paying royalties rather than assume the expense of a fight.

Because our system of legal remedies does not provide for a "declaratory judgment" the owner of patent has not only protection if his patent be valid, but he has also an obnoxious means of annoying legitimate business even if his patent be probably void. The only way other persons, who desire to use his alleged invention, can find out whether his patent is valid or not, is to expend enough money in infringing to force him to bring suit. If his suit is sustained the infringer's loss in invested capital, to say nothing of damages awarded the patentee, may be tremendous. Thus the financial risk involved in ascertaining whether a dubious patent is really good, may make practically effective many an unjust monopoly. For a discussion of the desirability of some method of securing a declaratory judgment, see the article by E. R. Sunderland, in 16 Michigan Law Rev. 69.

CHAPTER X

Designs

The statute provides,509 "Any person who has invented any new, original, and ornamental design for an article of manufacture, not known or used by others in this country before his invention thereof, and not patented or described in any printed publication in this or any foreign country before his. invention thereof, or more than two years prior to his application, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law and other due proceedings had, the same as in cases of invention or discoveries covered by section fortyeight hundred and eighty-six, obtain a patent therefor. The Commissioner may dispense with models of designs when the design can be sufficiently represented by drawings or photographs. Patents for designs may be granted for the term of three years and six months, or for seven years, or for fourteen years, as the applicant may, in his application, elect. All the regulations and provisions which apply to obtaining or protecting patents for inventions or discoveries not inconsistent with the provisions of this title shall apply to patents for designs." "Hereafter, during the term of letters patents for a design, it shall be unlawful for any person other than the owner of said letters patent, without the license of such owner, to apply the design secured by such letters patent, or any colorable imitation thereof, to any article of manufacture for the purpose of sale, or to sell or expose for sale any article of manufacture to which such design or colorable imitation shall, without the license of the owner, have been applied, knowing that the same has been so applied. Any person violating the provisions, or either of them, of this section, shall be liable in

⁵⁰⁹ R. S. \$4829-31-33, and "Act of Feb. 4, 1887."

the amount of two hundred and fifty dollars; and in case the total profit made by him from the manufacture or sale, as aforesaid, of the article or articles to which the design, or colorable imitation thereof, has been applied, exceeds the sum of two hundred and fifty dollars, he shall be further liable for the excess of such profit over and above the sum of two hundred and fifty dollars; and the full amount of such liability may be recovered by the owner of the letters patent, to his own use, in any circuit court of the United States having jurisdiction of the parties, either by action at law or upon a bill in equity for an injunction to restrain such infringement."

As the section providing for a patent is in the same phraseology precisely as the section⁵¹⁰ providing for patents for the invention of an art, machine, etc., it is evident that the same inquiries and issues must arise in regard to design patents as come before the courts in other patent cases. It follows equally that the decisions should be arrived at upon the same principles and by the influence of the same factors.

DISTINCTION BETWEEN DESIGNS AND MANUFACTURES. The greatest difficulty in discussion involving designs, so far as the law and not mere fact is concerned, is to distinguish between a design and a manufacture or composition of matter. A design is broadly definable in its patent law use, as well as in common parlance, as the delineation or configuration of matter. It depends for its effect, for its distinction from anything else, upon arrangement of matter. Every design is necessarily constituted by the contour of substance or the relation of various substances, the relation of ink and paper for instance. A design, to be patentable, is undeniably artificial. In a certain sense, and wholly proper use of the terms, a design is therefore both a manufacture and a composition of matter. In common parlance, the name of design is probably restricted to the idea of outline as projected upon a plane surface; the silhouette contour or arrangement, of matter. Even the "design of a church" and similar phrases convey the meaning not of three dimentional substance, but of planes, of flat outlines, which may however be so arranged dihedrally that the whole forms a three dimentional body. It is difficult for the average mind to think of "design" in any other way. The patent law, however, extends the scope of the section allowing design patents to solid as well as to plane contour.⁵¹¹

One of the comparatively few elements by which one manufacture can be distinguished from another is its physical outline, its contour. One collar button, for instance, may be of the same material as another and its static purpose the common one of holding a collar to the collar band, but its essential idea of means for accomplishing that purpose may be so different from that of known collar buttons as to amount in itself to an invention. Yet its only perceptible difference from other collar buttons may be its physical contour. More fundamentally, its essential difference is in its idea of means and in the method of manufacturing which gave its peculiar shape. Both of these elements are considered in determining identity. but the only direct impression of difference comes from its sensible contour. As the effectuation of its peculiar purpose is also the result of its peculiar configuration, it might be said that the configuration of the collar button was the invention, the essential idea of means. Is this invention then, this configuration, which constitutes an idea of means and which, in its tangible embodiment, is a new manufacture, to be patented as a "design," or as a "manufacture" embodying a new idea of means. If it be assumed that the design is "ornamental,"

any new, original, and ornamental design for an article of manufacture, not known or used by others in this country before his invention thereof, and not patented or described in any printed publication in this or any foreign country before his invention thereof, or more than two years prior to his application, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law and other due proceedings had, the same as in cases of invention or discoveries covered by section forty-eight hundred and eighty-six, obtain a patent therefor." The earlier statutes expressly included with designs, "any new and original shape or configuration of any article of manufacture." The present statute speaks of "models of designs."

as required by the statute, it might be patented under either section, in the choice of the patentee.⁵¹²

This duplex character of the invention, as a design and a manufacture, at once gives rise to the possibility of such questions as the following; Automobile "all-year round" tops have been known and used for some years; if one should by mere mechanical skill evolve certain advantages of shape, the improved top would not be patentable as a manufacture because lacking in invention. This new shape would, however, be in ordinary sense a design. Could the mechanic secure a design patent, and thereby preclude others from making or using tops of that design? If he could, his monopoly would be as effective as though he had secured the patent for a manufacture from which lack of invention precluded him. Again, if one has a design patent for a peculiar shape and contour of a knob or stud for hanging pictures on walls, can he preclude others from making, using and selling collar-buttons which happen to be of that exact contour? An affirmative decision on either question would be wholly incongruous with the spirit of the patent law.

The answer to the first type of issue depends upon whether a design patent ought to be granted under such circumstances. If granted, it would seem to preclude the use suggested. In the second type of case the answer depends on the scope of protection that a design patent gives.

The first inquiry, then, is for what designs a design patent may be issued. It is impossible to make any exact distinction between those manufactures and compositions of matter which may be patented as designs only under \$ 4929 and those which may be patented as nominally manufactures or compositions of matter under \$ 4886. Broadly it may be said that those

Stark v. Bousefield, 10 Wall, (77 U. S.) 133; Williams Calk Co. v. Nevership Mfg. Co., 136 Fed. 210; Bradley v. Eccles, 126 Fed. 945; It should be noted, however, that "ornamental" is synonymous, with "visible" and nothing, practically speaking, has been refused patentability under § 4929, except when, as in the last case cited, where the design was for a packing for a joint, it is by the nature of its purpose invisible. Dominick & Haff v. Wallace & Sons Co., 209 Fed. 223.

whose sole purpose is to please the eye must be patented as design. This lack of purpose other than pleasure to the eye, is often loosely and confusingly spoken of as "lack of utility." ⁵¹³

As it is impossible to dissociate visual impression from the composition and configuration of matter out of which it arises, it is impossible to separate a design from the matter which gives it concrete existence. It is therefore the peculiar composition or configuration of matter that is really patented, whether the thing covered by the patent be looked upon as a concrete idea of means or the physical embodiment of a concrete idea. So, even those creations which, because of their purpose may be patented as designs, are of the same character as those whose less esthetic purpose requires them to be patented under section 4886. It is impossible in the case of a manufacture or composition of matter to say that it must be patented under either section.

is referred to above. The interrelation of patentability is also shown by the fact that a design patent will serve to anticipate a mechanical patent—Williams Calk Co. v. Neverslip Mfg. Co., 136 Fed. 210—and a mechanical patent will serve to anticipate a design patent—Roberts v. Bennett, 136 Fed. 193.

⁵¹⁴ N. Y. Belting Co. v. N. J. Rubber Co., 137 U. S. 445, "There is one feature of this patent which presents an interesting if not a novel aspect. We are in the habit of regarding a design as a thing of distinct and fixed individuality of appearance--a representation, a picture, a delineation, a device. A design of such a character, of course, addresses itself to the senses and the taste, and produces pleasure or admiration in its contemplation. But, in the patent before us, the alleged invention is claimed to be something more than such a design. It is claimed to have an active power of producing a physical effect upon the rays of light, so as to produce different shades and colors according to the direction in which the various corrugated lines are viewed—a sort of kaleidoscope effect. It is possible that such a peculiar effect, produced by such a particular design, impressed upon the substance of india-rubber, may constitute a quality of excellence which will give to the design a specific character and value and distinguish it from other similar designs that have not such an effect. As this is a question which it is not necessary now to decide, we express no opinion upon it." Pelouze Scale & Mfg. Co. v. Am. Cutlery Co., 102 Fed. 916; Hammond v. Stockton, etc. Works, 70 Fed. 716. This identity of character is hardly demonstrable by reference to cases, but it is clearly the implication throughout them. Assuming it to be the fact, it follows that the same principles and influencing factions ought to be followed in decisions upon design patents as upon others. The cases state that the same ones are followed. "The law applicable to design patents does not materially differ from that in cases of mechanical patents, and all the regulations and provisions which apply to the obtaining or protection of patents for inventions or discoveries shall apply to patents for designs." ⁵¹⁵

Inventive Quality required. It follows, therefore, that, like all other patentable creations, a design to be patentable must be the product of inventive genius. Mere skillful adaptation, readjustment, or development of known designs is not of itself sufficient to warrant a patent, there must be present in the new production the same psychological factor of invention that is requisite for other patents. It sequentially follows that the same factors are active in determining the psychological fact, that is to say, in inducing the opinion as to the presence or absence of invention. The same factors are active in determining the psychological fact, that is to say, in inducing the opinion as

⁵¹⁵ Mr. Ch. Justice Fuller in Smith v. Whitman Saddle Co., 148 U. S. 674, 679, quoting from Northrup v. Adams, 12 O. G. 430, 2 Bann & Ard. 567.

Fed. 62; Ripley v. Elsom Glass Co., 49 Fed. 927; N. Y. Belting, etc. Co. v. N. J. Car Spring Co., 53 Fed. 810; Soehner v. Favorite Stove Co., 84 Fed. 182; Westinghouse Elec. & Mfg. Co. v. Triumph Electric Co., 97 Fed. 99, "utility" not necessary; Cary Mfg. Co. v. Neal, 98 Fed. 617; Am. Elec. Novelty Co., v. Newgold, 113 Fed. 877; Mygatt v. Schauffer-Flaum Co., 91 Fed. 836; Chas. Boldt Co. v. Turner Bros. Co., 199 Fed. 139; Bergner v. Kaufman, 52 Fed. 818, aggregation held not to be invention; Post v. Richards Hardware Co., 26 Fed. 618, mere substitution of materials held not invention; Dominick & Haff v. Wallace & Sons Co., 209 Fed. 223.

"where a new or original shape or configuration of an article of manufacture is claimed, its utility may be also an element for consideration." The statute under which this case was determined provided for the patenting not only of "new and original designs" but also of "New, useful and original shapes." Lehnbeuter v. Holthaus, 105 U. S. 94, holding also that the design patent is, like other patents, "prima facie evidence of both

To revert to the possible questions suggested, it would appear that whether the design for an automobile top could be patented or not would depend on whether it was the product of inventive genius or merely the result of mechanical skill. The issue would be precisely the same as if the patent had been sought under § 4886 instead of the section allowing patents for designs. If it did not involve invention to produce the new shape it could not be patented. If it had been patented, its use by another for purposes other than pleasure to the eye would be merely the usual question of infringement. Such would be the issue, also, in the suggested case of a collarbutton made in the configuration of a picture-knob whose design had been patented. The patentee of the design would be entitled to all analogous uses for which matter revealing his design might be used, just as a patentee under § 4886 is entitled to all analogous uses to which the matter embodying his idea of means may be put. But in any case, one is not precluded, by another's patent for one idea of means, from using the precise substantial embodiment of that idea for an unanalogous purpose. It is the concept, as we have said before, that is patented, not the particular form of matter. So the fact that matter of a certain design is used for a purpose not ascriptable to the design itself might take the use out from the preclusion of the design patent. The actual decision in any particular case depends upon the opinion of the particular court, but the law itself is definite enough, if the distinction between the concept and the matter upon which it is impressed be kept in mind. The question of whether a design patent has been infringed is also the same as the question of infringement in other cases.

OBJECTIVE DESIGNS. As a design patent covers, theoretically, an idea of means for pleasing the eye, and those out of novelty and utility." In accord on point that patent is prima facie evidence of novelty is Ripley v. Elson Glass Co., 49 Fed. 927. Scofield v. Browne, 158 Fed. 305, reception of the improvement by the public may aid in determining its inventive quality; Chas. Boldt Co. v. Turner Bros. Co., 199 Fed. 139, public reception may be considered in determining presence of invention.

which litigation most frequently arises are actually of this sort, all factors determinative of the presence of invention or the fact of infringement are usually omitted from consideration except that of the effect on the eye. Other factors may be considered, but the cases in which they do not appear and could not have a part are so frequent that they are usually ignored in judicial expression. In very many cases, therefore, the inventive quality of a design seems to have depended, and probably did depend, solely upon its visible similarity to those already known, or its difference from them. So also the infringement of a later design seems to have been decided wholly by the distinction between them which could be perceived through the eyes.

In regard to this identity of visible characteristics the rule is probably that laid down in Gorham Co. v. White;518 "the thing invented or produced, for which a (design) 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. . . . 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." It must be remembered that the court is here expressing itself in regard to a design whose sole purpose was its effect upon the eye. It was definitely stated by the later case of Sniith v. Whitman Saddle Co.,⁵²⁰ in direct reference to the statement of rule just quoted, that appearance is not the only criterion, but that such elements as the more material usefulness of a design, or its effect upon other senses, than sight, may be considered if they enter into its character. But to the extent that visible character is the test of invention or infringement, the court held that it is the appearance to the eye of "an ordinary observer." It said, "The court below was of the opinion that the test of a patent for a design is not the eye of an ordinary observer. The

^{518 14} Wall, 511.

⁵¹⁹ Accd. Dobson v. Dorman, 118 U. S. 10; Braddock Glass Co. v. Macbeth, 64 Fed. 118.

^{520 148} U. S. 674.

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 designs 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 cannot 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 supposed 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." 521

As the principles which apply to design patents are identical with those which have already been discussed throughout the book nothing further need be said of them in this connection.

521 Accord. Jennings v. Kibbie, 10 Fed. 669, holding that testimony of witnesses as to apparent identity is not necessary, and that the trial judge may properly reach a decision as a result of the impression on his own visual senses only.

The very slight difference of appearance necessary to constitute novelty in some cases where the appearance is the real purpose of the invention is illustrated by the case of Pelouze Scale & Mfg. Co. v. Am. Cutlery Co., 102 Fed. 916.

Ripley v. Elson Glass Co., 49 Fed. 927 Byram v. Friedberger, 100 Fed. 963; Macbeth-Evans Glass Co. v. Rosenbaum Co., 199 Fed. 154, the eye of the ordinary observer decides the question.

CHAPTER XI

EPILOGUE

Aaron Burr is reputed to have defined "law" as "whatever is boldly asserted and plausibly maintained." However incorrect this definition may be, it is more nearly true of the law respecting patents than of any other branch. In all litigation it is seldom the law itself that is in dispute. It does occasionally happen that the substance of a rule is in doubt and must be ascertained by the court. But in the overwhelming majority of cases, it is the proper application of undisputed rules to the particular facts, or, in other form of expression, it is the choice of the rule proper to the particular facts, on which attorneys and, often, the judges can not agree.

In patent law, however, the essential dissimilarity of sensible circumstance precludes the possibility of rules and the influence of other precedent cases. All of the characteristic issues are those of judicial opinion only. By the statute the defendant may attempt to show in answer to the suit both that the plaintiff's patent is invalid and that his own device does not in fact infringe it.

The complainant in a case is, therefore, ever attempting to convince the court that his idea of means is unlike anything that has preceded it, but that it is so like the defendant's device as to make the latter an infringement. Conversely, the defendant bends all his energies to demonstrating the essential similarity of the plaintiff's invention to prior knowledge and the real dissimilarity of his own device to that of the plantiff. For this, a "knowledge of the law" is not enough. He who would succeed in patent practice must, more than in any other branch of law, be able to analyze his case. He must see not only the presence of facts on which rules of law have already been predicated, but also the actual issues on which personal opinion may be divided, and the most forceful relationship of

his facts thereto. If he has the ability of a detective in ferreting out facts and in construing their true bearing upon the proposition he would like to demonstrate, so much the better. As even judicial opinion can not be wholly removed from the influence of personality, it is peculiarly well for the patent practitioner if to his knowledge of law and of fact he adjoins a power in persuasive argument and a magnetic personality.

INDEX

| A | Constitution |
|--|--|
| Abandonment | Contracts |
| Abandoned applications 210 | patent as 9 |
| Abandoned experiments 86 | to assign inventions 237, 247 |
| Acknowledgment | inducing breach of 294 |
| Actions to invalidate patents 217, 218 | imposing restrictions on cii- |
| (see "Remedies") | joyment |
| Administrator, may apply | jurisdiction of courts 239, 254 |
| Auministrator, may appry | to pay royalties 253 |
| for patent | Contributory infringement. 294, 296 |
| patent descends to 225 | what constitutes 298 |
| Aggregation | Conveyance of patents |
| Amendment 209, 213 | |
| Anticipation | (see "Assignment") Correction of errors 196, 198, 209 |
| (see "Prior Knowledge," | Courts |
| "Novelty," etc.) | jurisdiction of3, 214, 256, 285 |
| abandoned experiments 26 | contracts respecting inven- |
| use not necessary 85 | tions |
| Appeal 213 | contracts respecting royalties 254 |
| Application, amendment 209 | Creation essential to invention 15 |
| by whom made | Cication essential to invention 15 |
| form of | n |
| how filed 169 | |
| new | Date of prior knowledge 98 |
| Art 24, 26 | Date of invention 98 |
| Assignment | Death of inventor 118 |
| (see "licenses") | Dedication to public 164 |
| before invention made 237 | Defenses |
| before patent issues 235 | title of plaintiff 238, 239, 251, 311 |
| how made | Demand long existing 59 |
| partial | Dependent inventions 186 |
| recording of | Description |
| undivided interest 234 | need not state principle 179 |
| Avoidance of patents 217 | by drawings 272 |
| Attordance or parents | Designs 301 |
| R | Distinguishing inventions 15, 23, 37, 84 |
| | Disclaimer 196 |
| Better materials 42 | Discovery |
| / | Drawings |
| | as proof of prior knowledge 87 |
| Claim | as proof of invention 101 |
| Change of form 51, 274 | as part of application 165 |
| Concept 15, 24 | as part of description 183 |
| invention is 37, 89, 272 | Duplication 44 |
| Combination 50 | Duration of monopoly 222 |
| Common Law I | |
| Composition of matter 24 | \mathbf{E} |
| Conditions | Employees |
| by contract | as inventors |
| in licenses 255 | Employers |
| in transfer of patent 232 | rights in employee's inventions 238 |
| | -G |

| Enlargement | Invention, abandonment of 154 (see "Originality," "Prior Knowledge," "Novelty," "Anticipation") characteristics of 15, 34 date of 98 designs as |
|--|---|
| I | public acceptance 62 |
| Foreign publications 77 | utility 62 opinions of experts 68 |
| Foreign patents | |
| Foreign use | prior decisions as to 72 |
| Form of application 165 | proof of |
| Form, change of51, 274 | related inventions 189 |
| Forgotten knowledge 92 | Invention, what constitutes15, 272 |
| Factors influencing decisions 276 | |
| Failure to apply for patent 157 | 1 5 |
| Failure to pay fee 212 | rules for ascertaining 38 |
| Fee, final | |
| Frivolous devices 107, 115 | |
| Function | must apply for patent 118 who is 124 |
| G | 1 1110 15 11111111111111111111111111111 |
| Cavarnment | · |
| Government, action to avoid patent 217 | Joint inventions120, 130 |
| liability for infringement 285 | |
| Guardian, may apply for patent 118 | |
| Charatan, may apply for parent from | , |
| H | K |
| Harmful inventions 115 | Knowledge (see "Prior Knowledge") of patent by infringer 287 |
| i Idaa inganting in an or on Oo one | T |
| Idea, invention is15, 24, 37, 89, 272 | Law of nature |
| Ignorance, of patent | Loss of rights to patent136, 154 |
| Importation | loss Ist |
| Impractical devices 109 | T |
| Infringement | (see "Assignment") |
| by whom | buyers of patent affected by 230 |
| change of form as 274 | ** * * * * * * * * * * * * * * * * * * |
| contributory 294 | |
| factors influencing decision, 276 | M |
| intent | |
| knowledge of patent 287 | Manufacture 24 |
| what constitutes 286 | Marking "patented" |
| Inoperative devices 109 | Mechanical skill 55 |
| Inoperative patents 198 | Mental process31, 100 |
| Insane inventor | Mistake, correction of 196, 198, 209 |
| Intent, in infringement 286 in contributory infringement 296 | |
| Interferences | |
| Interpretation of statutes 7 | ************************************** |
| THE PROGRAMME OF BRICHIES | vention |

| Monopoly, by Royal grants | 2 | what covered by272, 279 |
|------------------------------------|------------|--------------------------------------|
| none at Common Law | I | who entitled to 118 |
| by statute | 5 | Patents, foreign 77 |
| origin of | I | Patentability, creation essential 15 |
| justification for | 4 | not every idea patentable 33 |
| character of | | usefulness 107 |
| design patents | 301 | inoperativeness 107 |
| division of | | Patentable inventions 12 |
| duration of | | character 12 |
| must be claimed | _ | source 12 |
| patent as evidence of | | importation 12 |
| protection of | | discovery |
| scope of | 279 | Personality |
| | | of attorney 311 |
| \mathbf{N} | | of judge 69 |
| New applications | 210 | Pioneer patents 279 |
| purpose or use | 53 | Practical value of void patents 299 |
| what is | | Precedents |
| Novelty | 76 | Principle |
| (see "Prior Knowledge") | | as distinguishing inventions 179 |
| what is | 34 | as part of invention 179 |
| Notice of monopoly | 287 | means of utilizing |
| _ | | of nature 15 |
| O | | of operation 22 |
| Oath | 166 | Prior decisions |
| Omissions | | Prior Art, (see "Prior Knowledge") |
| correction of | 163 | Patent Office search of 270 |
| from application | 159 | presumed to be known35, 79 |
| Opinion of experts | 68 | Prior Knowledge 76 |
| Origin of patent rights | I | abandoned experiments 86 |
| Originality | 7 6 | date of 98 |
| Ownership of patent | 222 | drawings 87 |
| joint | | models 87 |
| of physical embodiment1, | 257 | extent of |
| _ | | lost arts |
| P | | forgotten knowledge 92 |
| Patent, as evidence of patentabil- | | in foreign countries 76 |
| ity | 82 | patentee's own prior revela- |
| as property | | tions 97 |
| avoidance of | 217 | proof of |
| construction of7, 271, | | scattered knowledge 96 |
| failure to apply for | 157 | unrecognized results 95 |
| monopoly given by | 223 | use not necessary 85 |
| inoperative | 198 | Prior use or sale136, 155 |
| interfering213. | 218 | Process |
| in whose name issued | | mental 31 |
| is a monopoly | 7 | Proof of invention 98 |
| is a reward or contract | 9 | Property, embodiment as1. 257 |
| loss of right to | | patent as |
| meaning of | 2 | transfer of ownership 225 |
| ownership of | | Protection of the monopoly 265 |
| purpose ofrelated inventions | 34 | Protest against issue 216 |
| _ | _ | Public acceptance of device 62 |
| scope of | | Public use or sale |
| separation of rights | | Purpose of invention 107 |
| value of | 200 | of monopoly |

Index

| R | | Tangible form, not indicative of | |
|--|--|---|----------------------|
| Recording of transfer. Reissue Related inventions Remedies | 198 189 266 219 216 289 227 255 232 255 | invention | 10 15 10 11 18 16 17 |
| Result | | 17 | |
| Royal grants Royalties, not dependent on validity of patent obligation to pay is personal not transferred by sale of patent Rules, for determining invention or non-invention of Patent Office S Sale, experimental (see "Public sale" and "Prior sale") of patents | 253 228 230 38 106 | Uncertainty of decision | 34 5 4 5 6 5 5 7 7 |
| of patents | | | |
| Secret inventions protected by Common Law. patentability may be lost Secret use Statutes interpretation of T | I I44 I39 | V Validity of patent as between assignor and assignee | 33 |
| Tangible embodiment, not inven- | | \mathbf{w} | |
| tion | 120 257 | Witness, to prove prior knowledge | _ |
| as affecting prior knowledge | 89 | expert 6 | 8 |