in Chicago, bought a quantity of Victor machines from a jobber and sold them at less than the price prescribed by the Victor company. Yet The Fair knew of the "conditions" under which the jobber had bought the phonographs from the Victor company, for they appeared on a plate fixed on each machine, as follows:

"Notice: This machine, which is registered on our books No. ...., is licensed by us for sale and use only when sold to the public at a price not less than $..... No license is granted to use this machine when sold at a less price. Any sale or use of this machine when sold in violation of this condition will be considered as an infringement of our U. S. patents under which this machine and records used in connection therewith are constructed, and all parties so selling or using this machine contrary to the terms of this license will be treated as infringers of said patents, and will render themselves liable to suit and damages. This license is good only so long as this label and the above-noted registered number remain upon the machine, and erasures, or removal of this label will be construed as a violation of the license. A purchase is an acceptance of these conditions. All rights revert to the undersigned in the event of any violation. Victor Talking Machine Company." [6]

The court, on suit being brought by the Victor company, held that this company, in effect, had said to the jobber: "'We are unwilling to part with the whole of our monopoly. There are no terms on which we will give you an unrestricted right to deal in our machines. However, if you choose to pay our price for a limited right, we will place our machines in your hands to be sold by you or by dealers under you to the public at not less than $25 each'—and that the jobber explicitly accepted this offer. It is axiomatic in all departments of law that unless the quality of innocence intervenes, the title of the purchaser is no better than his seller's." [7] The decision, in effect, held that the patentee parted with the title to the concrete embodiment of his invention, receiving the full price for it, but that, under his patent, by means of the label or notice affixed to the article, he licensed the purchaser of that article to sell it at not less than the prescribed price.

The court declared that The Fair, having knowledge of the

[6] *Ibid.*, p. 424.

[7] *Ibid.*, p. 427.

"conditions," was an infringer. Many other decisions of the lower courts agree with the two phonograph cases presented.[8] All of them, in effect, announced the right of the patentee to prescribe by contract or notice or both the re-sale price. Any one who knowingly disregarded the provisions of the contract or the warning of the notice became an infringer.

New Jersey Patent Co. v. Weinberg. In this case the court held that the restrictions as to price applied to second-hand patented goods. Weinberg purchased phonograph records from users who had tired of them. The jobber had purchased the records from the patentee; the retailer, from the jobber; and the user, from the retailer. Nevertheless, the court maintained that the records were still subject to patent rights.[9]

The actual and potential control over re-sale prices which these decisions gave may be appreciated by considering the number of United States patents and the comparative ease with which they may be secured. Design patents furnished the best illustration of this situation. They were issued for 3½, 7, and 14 years, and a new design could be taken out every year. A manufacturer of silverware, for example, could enjoy a perpetual price monopoly by changing the pattern or configuration as required in order to keep alive one or more design patents.[10]

Sanatogen Case. The Supreme Court has passed upon several cases involving the right of the patentee to dictate the re-sale prices of his products.[11] In the Sanatogen case[12] the

[8] A list of these cases appears in Appendix V.

[9] Fed. Rep. Advance Sheets, March 2, 1911 (Vol. 183, p. 588). A rehearing, it seems, was granted defendant, as the case does not appear in the bound volume. See Oldfield Hearings of 1912, No. 23, p. 11; and 6 Ill. Law Review 357, 364.

[10] Oldfield Hearings of 1912, No. 23, p. 17.

[11] Also the Supreme Court and other tribunals have considered the legality of re-sale price maintenance as applied to trade-marked and copyrighted goods. In Dr. Miles Medical Company v. Park, 220 U. S. 373, the Supreme Court held that the Miles company could not legally establish the re-sale prices of its trade-marked medicine through a system of contracts and notices; in the "Garst" cases the court of Massachusetts considered similar facts and rendered similar decisions. Garst v. Harris, 177 Mass. 72; Garst v. Hall and Lyon, 179 Mass. 588; Garst v. Charles, 187 Mass. 144. In Bobbs-Merrill Company v. Straus, 210 U. S. 339, 1908, the Supreme Court held that the owner of a copyright on a book did

Supreme Court, in May, 1913, invalidated the printed restriction as to the re-sale price. The complainant made and sold a patented drug called Sanatogen. Each container bore the name Sanatogen, the inscription "Patented in U. S. A., No. 601,995," and the following notice:

"Notice to the Retailer: This size package of Sanatogen is licensed by us for sale and use at a price not less than one dollar. Any sale in violation of this condition, or use when so sold, will constitute an infringement of our patent No. 601,995, under which Sanatogen is manufactured, and all persons so selling or using packages or contents will be liable to injunction and damages. A purchase is an acceptance of this condition. All rights revert to the undersigned in the event of violation. The Bauer Chemical Company." [12]

Accordingly, when O'Donnell, a druggist in Washington, D. C., advertised and sold original packages of Sanatogen at less than the prescribed price, the complainant brought suit for infringement. The lower court (Court of Appeals of the District of Columbia) dismissed the bill; the complainant appealed to the Supreme Court. Other vendors of patented articles—the Victor Talking Machine Company, Waltham Watch Company, and the Gillette Safety Razor Company—who likewise maintained the re-sale prices of their products by means of the printed notice, joined the complainant in upholding the practice. The court, by a five to four decision (the four dissenting judges were the ones who handed down the majority opinion in Henry v. Dick, 224 U. S. 1) decided that O'Donnell did not infringe the complainant's patent.

not have the legal right under the copyright law to fix by notice the re-sale prices of copies of the book. This was the first decision of the Supreme Court denying the right to maintain re-sale prices. A similar decision resulted in Straus v. American Publishers' Association, 231 U. S. 222, an excerpt from which follows: "So, in the present case, it cannot be successfully contended that the monopoly of a copyright is in this respect any more extensive than that secured under the patent law. No more than the patent statute was the copyright act intended to authorize agreements in unlawful restraint of trade and tending to monopoly, in violation of the specific terms of the Sherman law, which is broadly designed to reach all combinations in unlawful restraint of trade and tending because of the agreements or combinations entered into, to build up and perpetuate monopolies." *Ibid.*, 234-235.

[12] Bauer v. O'Donnell, 229 U. S. 1. [13] *Ibid.*, pp. 8-9.

The issue was stated as follows: "The question, therefore, now before this court for judicial determination, is: May a patentee by notice limit the price at which future retail sales of the patented article may be made, such article being in the hands of a retailer by purchase from a jobber who has paid . . . the full price asked for the article sold?" [14]

The argument of the complainant that a notice appeared on each package of Sanatogen stating that "This size package of Sanatogen is licensed by us for sale and use at a price not less than one dollar ($1)," did not receive a sympathetic response from the court, as the following quotation shows:

"The jobber from whom the appellee purchased had previously bought, at a price which must be deemed to have been satisfactory, the packages of Sanatogen afterwards sold to the appellee. The patentee had no interest in the proceeds of the subsequent sale, no right to any royalty thereon, or to a participation in the profits thereof. The packages were sold with as full and complete title as any article could have been sold in the open market excepting only the attempt to limit the sale or use when sold for not less than $1. In other words, the title transferred was full and complete, with an attempt to reserve the right to fix the price at which subsequent sales could be made; . . . to call the sale a license to use is a mere play upon words. . . . The appellee and the jobbers from whom he purchased were neither the agents nor the licensees of the patentee." [15]

"The right to vend conferred by the patent law has been exercised, and the added restriction is beyond the protection and purpose of the act. This being so, the case is brought within that line of cases in which this court from the beginning has held that a patentee who has parted with a patented machine by passing title to a purchaser has placed the article beyond the limits of the monopoly secured by the patent act." [16]

Subsequently, the Supreme Court referred in this manner to its decision in the Sanatogen case: "In other words, the

[14] Bauer v. O'Donnell, 229 U. S. 11.
[15] *Ibid.*, pp. 16-17.
[16] *Ibid.*, p. 17.

decision was that a patentee could not use and exhaust the right to sell, as to which a monopoly was given him by the patent law, and yet by conditions and stipulations continue that law in effect so as to make it govern things which by his voluntary act were beyond its scope." [17]

What is the distinction between this opinion and the decisions of the lower courts relating to the same subject; namely, the attempt of a patentee to control the re-sale price of his patented good? In the phonograph and other cases, the lower courts stated that the patentee, who has the exclusive right to vend his product, agreed to part with it if the purchasers would maintain the re-sale price, and that the sale was conditional and incomplete. On the other hand, the Supreme Court in the Sanatogen case held that the patentee received full consideration for his commodity, that the title passed to the dealer, and that the sale was unconditional and complete. Its decision meant then that, except for the monopolistic rights granted by the patent, the same legal principles apply to the marketing of both patented and unpatented articles.[18]

It is interesting to note that the Bauer Chemical Company, the manufacturer of Sanatogen, has tried subsequently to circumvent this decision. A vague but perhaps effective "notice" appears on the recent cartons containing Formamint, viz.: "Formamint is manufactured and sold under U. S. letters patent. The minimum retail price in U. S. A. for this package is 60 cents."

Straus v. Victor Talking Machine Company. The Supreme Court affirmed its opinion in the Sanatogen case by denying to the Victor Talking Machine Company the right to fix re-sale prices.[19] According to the facts as set forth by the Supreme Court, the Victor company employed a "License Notice" and a "License Contract" in disposing of its machines.

[17] Boston Store v. American Graphophone Co., 246 U. S. 8, 23.

[18] Hearings before the House Committee on the Judiciary, 63rd Cong., 2nd Sess., Trust Legislation, Serial 7, Vol. 3, p. 1406.

[19] 243 U. S. 490. A district court had decided adversely to the Victor company; the decision was reversed by a Circuit Court of Appeals, 230 Fed. Rep. 449. The case was then carried to the Supreme Court for review on certiorari.

The "License Notice," quoting the court, "declares that the machine to which it is attached is manufactured under patents, is licensed for the term of the patent under which it is licensed having the longest time to run, and may be used only with sound records, sound boxes, and needles manufactured by the plaintiff; that only the right to use the machine 'for demonstrating purposes' is granted to 'distributors' (wholesale dealers), but that these 'distributors' may assign a like right 'to the public' or to 'regularly licensed Victor dealers' (retailers) 'at the dealers' regular discount royalty'; that the 'dealers' may convey the 'license to use the machine' only when a 'royalty' of not less than $200 shall have been paid, and upon the 'consideration' that all of the conditions of the 'license' shall have been observed; that the title to the machine shall remain in the plaintiff, which shall have the right to repossess it upon breach of any of the conditions of the notice by paying to the user the amount paid by him less five per cent for each year that the machine has been used. The notice in terms reserves the right to the plaintiff to inspect, test, and repair the machine at all times, and to instruct the user in its use, 'but it assumes no obligation to do so'; it provides 'that any excessive use, or violation of the conditions, shall be an infringement of the plaintiff's patent'; and that any erasure or removal of the notice will be considered as a violation of the license. Finally, it provides that at the expiration of the patent 'under which it is licensed' having the longest time to run, the machine shall become the property of the licensee provided all the conditions recited in the notice shall have been complied with, and the acceptance of the machine is declared to be 'an acceptance of these conditions.'" [20] The License Contract was between the Victor company and its dealers, and the terms were practically the same as those contained in the License Notice.

Straus, connected with a mercantile establishment in New York City, was charged by the Victor company with inducing its dealers to violate the license contract by buying Victor machines from them at "less than the prices stated in the 'License Notice,'" and with selling these machines to the public

[20] 243 U. S. 494-495.

"at much less than the price stated in the notice affixed to each machine." The court declared that "whatever rights the plaintiff (Victor) has against the defendants (Straus) must be derived from the 'License Notice' attached to each machine, for no contract rights existed between them, the defendants being only 'members of the unlicensed general public'; and that the sole act of infringement charged against the defendants is that they exceeded the terms of the license notice by obtaining machines from the plaintiff's wholesale or retail agents, and by selling them at less than the price fixed by the plaintiff." [21]

The court concluded that the purpose of the License Notice was not to protect the patents but to dictate the re-sale price.

"It thus becomes clear," the court stated, "that this 'License Notice' is not intended as a security for any further payment upon the machine, for the full price, called a 'royalty,' was paid before the plaintiff parted with the possession of it; that it is not to be used as a basis for tracing and keeping the plaintiff informed as to the condition or use of the machine, for no report of any character is required from the 'ultimate user' after he has paid the stipulated price; that, notwithstanding its apparently studied avoidance of the use of the word 'sale' and its frequent reference to the word 'use,' the most obvious requirements for securing a bona fide enforcement of the restrictions of the notice as to 'use' are omitted; and that, even by its own terms, the title to the machines ultimately vests in the 'ultimate users,' without further payment or action on their part, except patiently waiting for patents to expire on inventions which, so far as this notice shows, may or may not be incorporated in the machine." [22]

"Convinced as we are that the purpose and effect of this 'License Notice' of plaintiff, considered as a part of its scheme for marketing its product, is not to secure to the plaintiff any use of its machines, and as is contemplated by the patent statutes, but that its real and poorly concealed purpose is to restrict the price of them, after the plaintiff had been paid for them and after they have passed into the possession of dealers

[21] *Ibid.*, pp. 496-497.
[22] *Ibid.*, p. 500.

and of the public, we conclude that it falls within the principles of Bauer v. O'Donnell; that it is, therefore, invalid." [23]

Boston Store v. American Graphophone Company. This decision of the Supreme Court, the third one with respect to the right of a patentee to restrict the re-sale price of his product, agreed with its opinions in the Sanatogen, and Straus v. Victor cases.[24] The American Graphophone Company sold its patented products to the dealer with the stipulation in the contract that they must be re-sold at prices fixed by this company. It brought suit against the Boston Store for violation of this contract.

The Supreme Court found the issue involved here to be like that in the Sanatogen, Straus v. Victor, and projecting machine cases, all of which it reviewed before rendering its decision. It stated: "Applying the cases thus reviewed, there can be no doubt that the alleged price-fixing contract disclosed in the certificate was contrary to the general law and void. There can be equally no doubt that the power to make it in derogation of the general law was not within the monopoly conferred by the patent law, and that the attempt to enforce its apparent obligations under the guise of a patent infringement was not embraced within the remedies given for the protection of the rights which the patent law conferred." [25]

The graphophone company had argued that the wording, etc., of its contract and notice was important, that it differentiated its scheme of price maintenance from other attempts of patent-owners to dictate re-sale prices. The Supreme Court met this argument in the following manner: "It becomes, we think, unnecessary to do more than say that we are of opinion that the attempt in argument to distinguish the cases by the assumption that they rested upon a mere question of the form of notice on the patented article, or the right to contract solely by reference to such notice, is devoid of merit, since the argument disregards the fundamental ground upon which, as we have seen, the decided cases (Sanatogen, Straus v. Victor, etc.) must rest." [26]

[23] 243 U. S. 501.
[24] 246 U. S. 8, 23-24.
[25] *Ibid.*, p. 25.
[26] *Ibid.*, p. 25.

The court gave a negative answer to the definite question, "Can a patentee, in connection with the act of delivering his patented article to another for a gross consideration then received, lawfully reserve by contract a part of his monopoly right to sell?" [27]

Folding Bed Case. The Supreme Court apparently anticipated, in 1895, the three decisions just described.[28] It stated: "We think it follows that one who buys patented articles of manufacture from one authorized to sell them becomes possessed of an absolute property in such articles, unrestricted in time or place. Whether a patentee may protect himself and his assignees by special contracts brought home to the purchasers, is not a question before us, and upon which we express no opinion. It is, however, obvious that such a question would arise as a question of contract, and not as one under the inherent meaning and effect of the patent laws.

"The conclusion reached does not deprive a patentee of his just rights, because no article can be unfettered from the claim of his monopoly without paying its tribute. The inconvenience and annoyance to the public that an opposite conclusion would occasion are too obvious to require illustration."

Criticism. The Supreme Court, therefore, in several decisions has denied the right to dictate the re-sale prices of patented (also unpatented) goods by contract, notice, or otherwise. It never passed upon the question, however, until 1913 in the Sanatogen case. Prior to that the lower courts upheld the right, and the exercise of it prevailed at least twenty years. It was a species of unfair competition in that it tended to lessen competition between dealers and therefore to prevent the working out of the process by which the most efficient concerns survive.

Litigation in the Courts

Amount and Expense of Litigation. The amount and expense of patent litigation serves as a handmaid to those who would

[27] *Ibid.*, p. 27.
[28] Keeler v. Standard Folding Bed Co., 157 U. S. 659, 666-667.

oppress others in order to attain their designs. The same patent may be the subject of litigation in one or more of the nine circuits.[29] Such a situation means years of litigation and an opportunity for oppression by the wealthy and powerful corporation.[30] Furthermore, "the proceeding in court is so expensive, and there are such delays attendant upon it, that it is not a question of being right; it is a question of having enough money to wear out the other man." [31]

An eminent inventor has described the situation in an eloquent manner: "As to wealthy corporations, it has become obvious that the skillful handling of patent cases places them at an untold advantage against their smaller competitors. For them, a well-organized patent department is a reliable machine, where money is the lubricant. This machine, in its slow but sure grinding way, can reduce to pulp any of the smaller competitors. For large corporations the maintenance of such a machine with a staff of lawyers and experts, is merely a small side expense. By its aid they can bluff their weaker competitors into quick submission. If this is not successful, they can drag out a patent suit indefinitely, until the weak opponent, unable to bear the ever-increasing expenses, collapses and withdraws.

"These tactics are well-known, and have been played successfully, whether it was to uphold the worthless patent or to obtain immunity in case of infringement. In every case the wealthy corporation is sure of the outcome of the game, and plays, 'Heads I win, tails you lose.' " [32]

This inequality before the law arises whenever one litigant is strong and the other is weak, financially; and in the case of patent suits it is especially prevalent, for most of the judges, versed in law and not in mechanics, chemistry, etc., must lean largely upon the testimony of experts, and the arguments of patent lawyers.

[29] Nolan Hearings of 1919, p. 70.
[30] Oldfield Report of 1912, p. 23.
[31] Oldfield Hearings of 1912, No. 18, p. 13.
[32] *Ibid.*, No. 4, p. 34.

Threats of Infringement Suits. Threats of infringement suits are made in bad faith as attested by the failure or refusal, in most instances, to institute legal proceedings to determine the question of infringement. They usually involve an element of false claiming with respect to the patent and therefore a fear that the infringement suit would be lost. The claims of the patent may include what is already public property. Some concerns apparently have planned and launched campaigns of threats of infringement suits against rivals and their customers. To further such a scheme, some of them have secured vague patents which would seem to furnish a legal basis for such tactics and even for the collection of royalties. The mere name of "patent," even though it relates to a trivial invention and an invalid patent, is of value to its holder, because people prefer not to come into conflict with it. The owner of the Selden patent exacted tribute several years from automobile manufacturers before it was held invalid. Writers have applied various epithets to patents of this sort, such as scarecrow, bluffing, blackmail, etc.

These threats of infringement suits are usually regarded by the courts as unfair and illegal. The Federal Trade Commission has compiled excellent and representative decisions, both American and English, relating to unfair competition at the common law; a portion of them pertain to the "Intimidation of competitor's customers by threats of infringement suits." [33]

Under this heading the Commission states: "It has been a somewhat common practice for manufacturers of patented articles to prevent the sale of a competing article by circulating broadcast threats to sue for infringement all dealers handling these articles. Such a campaign against a competitor is usually begun by circularizing the trade generally, and in particular the customers of the competitor whose business it is sought to injure or destroy, stating that the competitor's article is an infringement of the writer's patent and that suits will be instituted against all dealers handling the infringing

[33] Memorandum on *Unfair Competition at the Common Law*, 1916, pp. 141-149; also, see pp. 285 and 286.

article; and letters of this description are frequently supplemented by oral statements of travelling salesmen." [34]

A circuit court in Dittgen v. Racine Paper Goods Company [35] described this kind of competition as follows: "If such a campaign be skillfully conducted for a series of years, as seems to have been the case here, the competitor is helpless. His orders are countermanded, old customers desert him through fear of litigation, or demand bond of indemnity as a condition for placing orders. His business is melting away. Everywhere the trade is apprehensive of 'peremptory measures' if they buy goods of an infringer. He appeals to the patentee to bring suit and offers to enter an appearance in any court having jurisdiction, but all to no purpose. Customers will not listen to his explanations or denials, and unless he can get relief in a court of equity his business . . . may be entirely ruined by a competition which is malicious and unfair." The court concluded that the defendant had been guilty of unfair competition and had maliciously diverted and injured the trade of the complainant.

The Circuit Court of Appeals, in passing upon the same case, declared: "Undoubtedly one claiming that his patent is being infringed should take steps to advise the public of his rights as provided by statute, provided, however, that if it is made to appear that under pretense of so doing he is pursuing a course which is calculated to unnecessarily injure another's business, and with the plain intention of so doing, his conduct will be deemed malicious, and he brings himself within the rule of law obtaining in cases of unfair competition in trade, and subject to injunction." [36]

Another case of unfair competition involved the National Harrow Company, previously described. This company maintained that the harrows manufactured by Adriance, Platt and

[34] Memorandum on *Unfair Competition at the Common Law*, 1916, p. 141.

[35] 164 Fed. Rep. 85, 89; C. C., 1908. Also *Unfair Competition at the Common Law*, p. 141.

[36] 171 Fed. Rep. 631, 633, 1909, and *Unfair Competition at the Common Law*, p. 142; a decision of like tenor based on similar facts is Electric Renovator Mfg. Co. v. Vacuum Cleaner Co., 189 Fed. Rep. 754.

Company, a competitor, infringed its patents, and suggested that the competitor become one of its licensees. The Adriance company, refusing to do this, invited the National company to test out the charge of infringement in the courts; the latter declined but stated that it proposed to prevent the sale of the former's harrows in its own way. The National company then sent out circulars and letters to the customers of the Adriance company, claiming that the latter's harrows infringed the patents of the National company and threatening to sue dealers who handled them, for infringement. The Adriance company brought suit to restrain the distribution of these circulars and letters and was granted an injunction by a Circuit Court of Appeals.[37] The court clearly distinguished between proper warnings and legal proceedings for the defense of a patent, and improper and unlawful tactics, as the following shows:

"Undoubtedly the owner of a patent is acting within his rights in notifying infringers of his claims and threatening them with litigation if they continue to disregard them; nor does he transcend his rights when, the infringer being a manufacturer, he sends such notices to the manufacturer's customers, if he does so in good faith, believing his claims to be valid, and in an honest effort to protect them from invasion. The question whether the patent owner is acting in good faith in advertising his claims to the manufacturer's customers by circulars or letters can seldom be determined from the contents of the communication alone, and, like all questions of intent, must generally be determined by the extrinsic facts. . . .

"As ordinarily the patent owner would be prompt and zealous to assert his claims, if he halts and purposely procrastinates, and attempts to effect by threats and manifestoes that which he can compel by the strong hand of the law, a strong inference arises that he has not any real confidence in his pretensions. This inference becomes irresistible if he refuses to bring suit during a considerable period of time when the alleged infringement is open, notorious, and defiant, and

[37] *Unfair Competition at the Common Law*, p. 14.

so extensive as to threaten destruction to his alleged exclusive rights." [38]

However, letters to the customers of a competitor charged with infringement, if "sent out in good faith for the purpose of protecting the sender from an infringement," [39] do not necessarily constitute unfair competition. A test of good faith is, as already shown, the institution of legal proceedings to determine the infringement. This view is borne out by several decisions.[40]

The National Cash Register Company engaged in various methods of unfair competition, one of which consisted of threats to bring infringement suits. In United States v. Patterson, the District Court asked, "Can the patentee, during the 17 years, sally forth with torch and ax, commit acts of unfair competition, and, with or without establishing his patent, destroy those industries, claiming to be the owner of a monopoly as of right, when in fact the monopoly does not exist?" [41] The court answered, "A part of the patent right is the expressly granted power to bring suits to exclude all infringers. The patentee has no sanction under the patent laws to exclude infringers in any other way." [42]

The Federal Trade Commission has issued several complaints involving this kind of unfair competition. It ordered the National Binding Company to cease "stifling and suppressing competition . . . by threats of suit for infringement against users of tape on machines other than the National

[38] Adriance, Platt and Company v. National Harrow Company, 121 Fed. Rep. 827, 829-830, C. C. A., 1903. Also *Unfair Competition at the Common Law*, pp. 143-145.

[39] *Unfair Competition at the Common Law*, p. 146.

[40] For example: United Electric Company v. Creamery Package Co., 203 Fed. Rep. 53, D. C., 1913; and Clip Bar Mfg. Co. v. Steel Protected Concrete Co., 209 Fed. Rep. 874, D. C., 1913. Also, see *Unfair Competition at the Common Law*, pp. 146-148.

[41] 205 Fed. Rep. 292, 297. Also, see 201 Fed. Rep. 697; 222 Fed. Rep. 599; and Hearings before the Senate Committee on Interstate Commerce, 63rd Cong., 2nd Sess., Vol. II, pp. 1340-1341.

[42] *Ibid.*, p. 297. A part of the indictment against the New Departure Manufacturing Company, consisted of threatening with prosecution dealers in the commodity of a competitor. United States v. New Departure Manufacturing Company, 204 Fed. Rep. 107, 110.

binding machine." [43] The Commission also directed the Nulomoline Company to cease "using an unfair method of competition in the sale of inverted sugar sirup, viz., claiming ownership of the exclusive right to employ said process of manufacture, said exclusive right being founded upon a patent issued on the basis of false representations made by respondent; threatening to sue competitors for infringement of patents; threatening to sue dealers handling sugar manufactured by competitors of respondent by means of inverted process." [44]

Malicious Infringement Suits. Infringement suits may not be brought in good faith. A powerful corporation, for example, may institute proceedings in order to enmesh a small competitor in a network of expensive and vexatious litigation, with the hope and expectation of weakening him, or of acquiring his patent rights, or perhaps of buying his business at a low figure. As one inventor has said, "There is no present requirement that a suit under a patent be brought in good faith. It not infrequently happens that the owner of a patent brings suit against a perfectly innocent defendant, puts him to expense, worry, and general harassment in his own defense, and injures his business; and it is finally found by the court, when the case is concluded, that the defendant has not infringed any valid claim of the patent sued upon. Under the present system, as far as I know, the defendant can recover nothing but his court costs, which represent a very small portion of the expense to which he has been put in his defense." [45]

Mr. Blair, an erstwhile competitor of the Eastman Kodak Company, stated: "In my opinion the Eastman company brought the patent suits against me and threatened to bring them where they had no grounds for bringing them. . . . I am forced to add that the method of the Eastman company in bringing suits against me, influenced me in selling out the

[43] Annual Report of the F. T. C., 1918. p. 75, complaint No. 10, instituted Dec. 31, 1917.

[44] *Ibid.*, 1919, p. 60, complaint No. 29, instituted Dec. 18, 1917; also, see *Ibid.*, 1921, p. 149, complaints Nos. 126 and 224.

[45] Oldfield Hearings of 1912, No. 15, p. 6.

business."[46] According to the government's brief in the Eastman litigation, "the only patent suit that the Eastman Kodak Company apparently ever won involved the Eastman-Walker roll holder." . . .[47] The National Cash Register Company brought infringement suits against other manufacturers of cash registers and the purchasers of their machines, apparently for the purpose of intimidating them. Other concerns have made a practice of influencing business unfairly by suing on their patents, not only the manufacturer of an alleged infringing device, but also the users of the device.[48]

Intentional Infringement of Patents. The intentional infringement of patents arises from a desire to harass and intimidate and weaken a competitor. A recent commissioner of patents stated, "When he [the patentee] gets out his patent, if it is a good thing and he does not succeed in making arrangements with people who will take it up satisfactorily, he is face to face with an arrangement which is frequently carried on by concerns that are created merely for the purpose of infringement, and with the determination to go into the hands of a receiver if they are brought to book."[49] The president of the Edison company in 1912 stated, "Every advantage appears to be given the infringer, and there are in this country corporations whose well-recognized policy is to infringe patents without hesitation and depend upon the opportunities afforded by the present practice to escape any liabilities. In other cases infringements are committed by irresponsible persons who, when finally brought to book, either disappear or are found to have nothing that can be reached. Even when a patentee, after years of effort and the expenditure of thousands of dollars, succeeds in securing an injunction against the infringer, yet with the present rules for determining profits and damages a substantial recovery cannot be secured in one case in a thousand."[50] A lawyer said before the Oldfield Committee that the items of expense and profit are often

[46] U. S. v. Eastman Kodak Co., Brief for the U. S., Part I, p. 15.
[47] *Ibid.*, p. 155.
[48] Oldfield Hearings of 1914, Part 7, p. 142.
[49] Oldfield Hearings of 1912, No. 10, p. 27.
[50] *Ibid.*, No. 10, p. 40.

manipulated and concealed so as to put it beyond the power of the patent owner to prove profits or damages.[51]

Interference Proceedings in the Patent Office

Amount and Expense of Interference Proceedings. According to our patent laws a patent is granted to the first or prior inventor. If two or more applications for the same invention are pending in the Patent Office at the same time, an "interference" is declared for the purpose of ascertaining to whom the patent should be issued. About one per cent of the patents issued have been in interference. The procedure is usually complicated, prolonged, and expensive. It is judicial and technical in nature and therefore requires the employment of patent lawyers and the testimony of skilled experts. Many appeals are possible. The examiner of interferences gives the first decision and then appeals may be taken successively to the examiner in chief, the commissioner of patents, and the Court of Appeals of the District of Columbia. The Federal courts offer other possibilities for the continuation of the litigation. Another and subsequent interference may necessitate the repetition of similar proceedings.[52]

The expensiveness of interference proceedings is indicated by the experiences of individual inventors. One wealthy and individual inventor spent $60,000 in six years in a single interference case.[53] Another inventor stated, "I presume I have spent not less than $75,000 of my own money in fighting interference proceedings in the Patent Office, in every one of which I was first in the Patent Office, and in each case the other man was not only second in the Patent Office, but has never alleged that he invented the device before the time that I filed my application. His alleged date of conception in these various cases was in all of them subsequent to my date of filing, and yet I have been forced to spend enormous sums of money in these interference proceedings." [54]

[51] *Ibid.*, No. 16, p. 26.
[52] See Edelman, *Inventions and Patents*, pp. 117-121.
[53] Oldfield Hearings of 1912, No. 4, p. 30.
[54] *Ibid.*, No. 3, p. 20.

The complexity and delay and expense of interference proceedings have been eloquently described by the Court of Appeals of the District of Columbia: "From the simple and summary mode first adopted for determining the question of priority of invention, that proceeding, by system of Patent Office rules, has grown to be a veritable old man of the sea, and the unfortunate inventor who becomes involved therein is a second Sinbad the Sailor. It is known to all who are familiar with the practice in interference proceedings that by motions, petitions, and appeals of every conceivable character that the ingenuity of the skilled attorney can devise, interferences can be and are prolonged for years, to the injury of the public, and often to the financial ruin of the parties." [55]

In interference proceedings, however they arise, the poor inventor is at a great disadvantage. The history of them shows that whenever a weak opponent confronts a rich opponent the former ordinarily compromises and settles his case, and the papers are worded in some way or other by mutual con · it to the advantage of the latter.[56] The poor inventor, who cannot withstand the financial strain of interference proceedings, chooses the lesser of two evils.

"*Dragnet Applications.* Many of the interferences are due to "dragnet" applications which serve the purpose of "scooping" up subsequent inventions. One inventor has stated that our interference system "works very well to the advantage of large corporations who can afford to keep cases pending indefinitely and use them as a dragnet for interference and for saddling every interference case upon a weak opponent." [57] The wealthy corporation may purposely delay the granting of a patent to it so as to entangle a rival but poor inventor in expensive interference proceedings, with the hope and expectation of forcing him either to abandon his invention or to sell it at a nominal price. Commissioner Moore, in 1912, indicated before the Committee on Patents of the House of Repre-

[55] Report of the Investigation of the United States Patent Office, 1912, p. 44.
[56] Oldfield Hearings of 1912, No. 4, p. 30.
[57] *Ibid.*, No. 4, pp. 29-30.

sentatives the extent of dragnet cases: "I might also state the fact that there are to-day held in the office thousands of those dragnet cases. We know it, and every man in the patent business knows it. And these men who go out of the [Patent] Office and go into the large concerns are put in the shops to write specifications. They do not take out patents unless some rival concern files an application. The United Shoe Machinery Company to-day has applications pending that have been in the office eight or ten years. There is a printed list of them, and that is only one corporation." [58]

Forced Validity of Patents

The forced validity of patents means an unwarranted attempt to uphold the legality of a patent. By means of contracts the Eastman Kodak Company tried to insure the validity of its patents. For example, two individuals, Houston and Blair by name, agreed to acknowledge the validity of the two patents which Houston assigned to Eastman. It should be added that Houston was the inventor and Blair a former officer of another camera company.[59] Moreover, this company was a party to mutual agreements to cancel infringement suits and thus preserve the patent rights of all concerned. The Columbia Phonograph Company required its dealers to admit the validity of its patents.[60] The licensees of the United Shoe Machinery Company agreed not to deny the validity of the patents of this company.[61] According to the terms of the sub-agency contract of the Weed Chain Tire Grip Company, in 1914, "the agent admits and concedes the

[58] Hearings before the House Committee on Patents, Patent Office Certificates of Correction, Jan. 31, 1912, p. 66. Other references to interferences as unfair competition may be found in Macomber, "Patents and Industrial Progress," *North American Review*, June, 1910; Kaempffert, "Our Defective Patent System," *The Outlook*, July 6, 1912, p. 548; Oldfield Hearings of 1912, No. 15, p. 7, No. 25, pp. 7-8; and Avram, *Patenting and Promoting Inventions*, pp. 68-69.

[59] United States v. Eastman Kodak Co., Vol. 5, Govt. Ex. 5, Article XVII, p. 2024.

[60] Oldfield Hearings of 1912, No. 8, pp. 9, 24.

[61] Oldfield Hearings of 1914, Part 8, p. 150.

validity of the patents of the Weed Chain Tire Grip Company under which the products covered by this contract are manufactured and sold, and will not at any time or under any circumstances contest the validity of said patent." [62]

Forced Royalties

A concern may require the payment of royalties on articles not covered by any of its patents in order to discourage the manufacture and sale of the products of competitors. The Eastman Kodak Company, for example, received such royalties on cameras that did not involve any of its patents. In a license agreement of March 4, 1898, between the Eastman company and Anthony and Company, the latter agreed to pay to the former a royalty of 7½ per cent of the retail list price upon cameras embodying certain patents controlled by the Eastman company, and also upon those which it might procure from persons not licensed under the Eastman patents.[63]

False Marking

To recover damages from an infringer, the patentee must prove that he marked the patented article as "Patented," or that the infringer had actual notice that the patent existed. Designating an unpatented article as "patented" constitutes false marking and is punishable by a fine of not less than $100. Some articles bear the words, "Reg. in U. S. Pat. Office," which indicates the registration of trade marks in the Patent Office. The use of such words for this purpose, though not unlawful, may lead to the supposition that the articles on which they appear are patented.

A manufacturer of complicated machinery may not affix the numbers of his patents to his machines. The explanation of this policy, in many instances, is the attempt to prevent competitors from ascertaining which ones of his numerous

[62] Hearings before the House Committee on the Judiciary, 63rd Cong., 2nd Sess., Trust Legislation, Vol. III. pp. 1284-1285.
[63] U. S. v. Eastman Kodak Co., Vol. 7, p. 3481, Defendant's Exhibit 135.

patents must be avoided in making a competing product. Furthermore, the patentee is under no legal obligation to distinguish the patented feature, or to indicate whether the patent covers a basic invention or a slight improvement. The effect of this, especially in the case of a complex machine, is to make it uncertain whether or not any part of the patented article may be lawfully copied.

The expressions, "Patent Applied For" and "Patent Pending," have been exploited. In this connection, a recent commissioner of patents stated, "It frequently happens that devices for which no application for patent has been made are marked 'patent applied for,' and also that to devices for which application for patent has been made and the application refused and finally abandoned, the same legend is still applied. My attention has also recently been called to the fact that certain attorneys who are employed by applicants to make a preliminary search to determine whether or not a device is patentable will advise their clients that in their opinion the device is not patentable, but that if they desire protection they will file their applications in order that they may mark the articles 'patent applied for,' which they advise them will afford almost the same protection as if the articles were actually patented. This, of course, is clearly an intent to deceive the public, since the applicant, acting on the advice of the attorney, has reason to believe that he cannot obtain a patent upon the article which he marks 'patent applied for.' Applications of this character are, of course, held pending in the Patent Office as long as possible, in order to afford the applicant as 'great a measure of protection as possible.'"[64]

Moreover, to affix on a patented commodity the dates of all its patents, both expired and unexpired, is a common practice. The apparent object of this is to give the appearance of a legal protection which really does not exist. Many patent dates give a cumulative effect and suggest to the public, which is generally uninformed concerning the duration, etc., of a patent, the comprehensiveness of the patentee's monopoly. Some of the dates may refer to expired basic patents; others,

[64] Oldfield Hearings of 1912, No. 1, p. 10.

to unexpired and insignificant patents. The word "patented" may be legally affixed to an article after the patent has expired, since the public is presumed to know, from the date of the patent that it has expired. For example, the Singer Manufacturing Company affixed upon its sewing machines the inscriptions: "Patented, September 10, 1846; May 8, 1849; November 13, 1850; August 4, 1851; August 12, 1851; April 11, 1854; May 30, 1854; November 21, 1854; December 19, 1854; May 29, 1855; and October 9, 1855." These patents had expired, a fact interpreted by the court in the light of the law which forbids the false marking of unpatented articles. The court stated that, to establish the offense, it must appear that the Singer company affixed a stamp indicating a subsisting patent on its machines. The tribunal concluded that the dates of these patents clearly showed that they had expired; therefore, that their appearance upon the machine constituted no violation of the statute.[65]

Piracy

A patentee may be deprived of the value of his invention by other patents that either obstruct or circumvent his invention. The resort to "obstructive" or "dog-in-the-manger" patents may render the invention of a competitor unfit to use.[66] Thus, an individual wrote, in 1914, to the Senate Committee on Interstate Commerce, "I have in mind now the case of a corporation which maintains a corps of patent experts and mechanics who are employed for the purpose of studying machines and devices produced by its competitors, and then, before such machines and devices can be worked out and improved to the point of completion, they are 'covered up' by numerous applications for patents, which make it difficult, if not impossible, for the competitors to perfect and market their own devices." [67]

[65] Wilson v. Singer Manufacturing Co., 12 Fed. Rep. 57, 58-59; also see 30 Fed. Case No. 17, 836.

[66] Nolan Hearings of 1919, pp. 162-163.

[67] Hearings before the Senate Committee on Interstate Commerce, 63rd Cong., 2nd Sess., Trust Legislation, Vol. 2, p. 1078.

On the other hand, the value of a patent may be destroyed by the substitution of other inventions. The end desired may be attained by other so-called inventions which closely resemble the original invention. A considerable amount of invention is born of the predatory desire to circumvent an existing invention.[68] This situation explains the practice of the original inventor, in many instances, in taking out "alternate" or "contingent" patents, which cover departures from and modifications of the general idea.[69] One writer has stated that patent property may often be safeguarded by fortifying the approach through which that property may be attacked. Further, "the royal road to success, so far as there is one, seems clearly to lie in the direction of supplementing one patent by another and thereby cementing together into one homogeneous mass a complete system or network of protection which considered as a whole will be, during the life of the patent, substantially proof against serious attack, notwithstanding that no patent in the system may be even fairly strong when taken by itself." [70]

Economic Waste

Unfair competition, as previously noted, tends to destroy those business units which can make and sell their goods with a minimum of the factors of production. In other words, it enables the inefficient units to survive and therefore promotes the waste of our economic resources. Moreover, activities which are unfair methods of competition represent waste. They require the time and energy of contestants, lawyers, judges, and others. In other words, they mean the withdrawal of an appreciable part of our economic resources from other fields of employment and therefore an encroachment upon our economic welfare.

[68] *Patents*, Machinery's Reference Series, p. 3; Edelman, *Inventions and Patents*, pp. 48-50.
[69] Oldfield Hearings of 1912, No. 24, p. 7; No. 3, p. 21.
[70] Richards, *The Conditional Nature of Patent Property*, American Assn. of Inventors and Mfgrs., Washington, D. C., pp. 148-149.

CHAPTER VI

SUPPRESSION OF PATENTS

THE suppression of patents is regarded as one of the greatest evils of our patent system. A large proportion of inventions are not embodied in products; their disclosure through publication of the patents thus becomes the only channel through which knowledge of their existence is obtained, and the only return to the public for the grant of legal monopolies. In this chapter the author will consider the legality of the suppression of patents, the causes and extent of the practice, and the objections to the evil in the light of the purpose of the patent laws.

LEGAL RIGHT TO SUPPRESS PATENTS

Hoe v. Knap. A decision of the Circuit Court in Hoe v. Knap involved the non-use of patented machines due to the greater profitableness of the old machines and the expense of displacing the latter by the former. The court stated that a patentee is "bound either to use the patent himself or allow others to use it on reasonable or equitable terms."[1]

Evart Manufacturing Company v. Baldwin Cycle-chain Company. Another decision of a circuit court, in 1898, approved the doctrine that the suppression of patents is contrary to the philosophy of the patent system.[2] It declared that "it has long appeared to the court, as constituted for the hearing of this cause, that a patent for an invention which the patentee refuses to make available himself, and refuses to allow others to make useful, is not within the spirit of the provision of the

[1] 27 Fed. Rep. 204, 212, Mar., 1886.
[2] Evart Manufacturing Company v. Baldwin Cycle-chain Company, C. C., 91 Fed. Rep. 262.

constitution which assigns as a reason for securing exclusive rights to authors and inventors a desire 'to promote the progress of science and the useful arts,' and that patents so held are entitled to scant recognition at law, though necessarily to some, but to none whatever in equity. They are not, as claimed by the plaintiff, the equivalent of a highly-cultivated field, surveyed, plotted, and fenced in by the owner; but they constitute, for all useful purposes, a waste from which the public is sought to be excluded for reasons of which equity takes no cognizance." [3]

Button-fastener Case. A Circuit Court of Appeals, in 1896, rendered the first judicial decision which definitely upheld the legal right to suppress patents.[4] It stated that the patentee if he sees fit, "may reserve to himself the exclusive use of his invention or discovery. If he will neither use his device, nor permit others to use it, he has but suppressed his own. That the grant is made upon the reasonable expectation that he will either put his invention to practical use, or permit others to avail themselves of it upon reasonable terms, is doubtless true. This expectation is based alone upon the supposition that the patentee's interest will induce him to use or let others use, his invention. The public has retained no other security to enforce such expectations. A suppression can endure but for the life of a patent, and the disclosure he has made will enable all to enjoy the fruit of his genius. His title is exclusive, and so clearly within the constitutional provisions in respect of private property that he is neither bound to use his discovery himself, nor permit others to use it." [5]

But has the public retained no other security, than the self-interest of the patentee, to enforce the use of the invention? Does a disclosure in words alone insure the enjoyment of the invention after the patent expires? The reduction of the invention to practice—its embodiment in concrete articles—is also necessary.

[3] *Ibid.*, p. 265.
[4] Heaton-Peninsular Button Fastener Co. v. Eureka Specialty Co., 77 Fed. Rep. 288.
[5] *Ibid.*, pp. 294-295.

Paper Bag Case. A decision very similar to the preceding one, except for the dissenting opinion of the lower court, was in Continental Paper Bag Company v. Eastern Paper Bag Company, known as the paper bag case. The complainant, the owner of two patents on machines for manufacturing paper bags, made and sold one of the patented machines but wilfully suppressed the patent for the other device. The suit arose from the infringement of the unused patent. One of the arguments of the defendant was that the patent had been suppressed. In the Circuit Court of Appeals two of the three judges decided that, in spite of suppression and non-use, the complainant still enjoyed the right to restrain infringement by injunction.[6] The third judge registered a strong dissenting opinion: "Notwithstanding infringement, I contend that injunction relief should not be granted because it is an infringement of a paper patent deliberately held in non-use for a wrongful purpose."[7]

Elaboration of this point brought the judge to a discussion of the patent law and public policy: "In the aspect most favorable to the plaintiff, the relief sought is injunction protection to a business or an industry built up in using a particular invention, and through acquiring and holding in deliberate non-use a competing invention by way of protection.

"It results, therefore, that a court of equity is asked not to protect from infringement the statutorily intended monopoly of the right to make, use, and vend under a particular patent, but to protect a monopoly beyond and broader than that, a monopoly in aid of the rightful statutory monopoly of the patent in use. The proposition involves the idea of a secondary monopoly maintained to stifle patent competition in the trades and industries, and thus contemplates a condition which at once contravenes the manifest purpose of the Constitution, and a monopoly of a kind and breadth and for a purpose in no sense ever contemplated by the statutory contract which safeguards the legal right to make, use, and vend under a particular patent."[8]

[6] 150 Fed. Rep. 741, Dec., 1906.
[7] *Ibid.*, p. 744.
[8] *Ibid.*, p. 744.

The judge concerned himself with the intent and result of non-use rather than non-use *per se:* "Simple non-use is one thing. Standing alone, non-use is no efficient reason for withholding injunction. There are many reasons for non-use which, upon explanation, are cogent, but when acquiring, holding, and non-use are only explainable upon the hypothesis of a purpose to abnormally force trade into unnatural channels —a hypothesis involving an attitude which offends public policy, the conscience of equity, and the very spirit and intention of the law upon which the legal right is founded—it is quite another thing." [9]

This case, appealed to the Supreme Court, received the sanction of this tribunal; the complainant here, however, made at least a plausible justification of the non-use.[10] The court stated: "But, granting all this, it is certainly disputable that the non-use was unreasonable or that the rights of the public were involved. There was no question of a diminished supply or of increase of prices, and can it be said, as a matter of law, that a non-use was unreasonable which had for its motive the saving of the expense that would have been involved by changing the equipment of a factory from one set of machines to another? And even if the old machines could have been altered, the expense would have been considerable. As to the suggestion that competitors were excluded from the use of the new patent, we answer that such exclusion may be said to have been of the very essence of the right conferred by the patent, as it is the privilege of any owner of property to use or not use it, without question of motive." [11]

The court, it should be noticed, suggested a loop-hole to this sweeping statement by adding, "Whether, however, a case cannot arise where, regarding the situation of the parties in view of the public interest, a court of equity might be justified in withholding relief by injunction, we do not decide." [12]

Mr. Justice Harlan dissented from this opinion; he concluded that "the facts are such that the court should have declined,

[9] *Ibid.*, p. 745.
[10] 210 U. S. 405, June, 1908.
[11] *Ibid.*, p. 429.
[12] *Ibid.*, p. 430.

upon grounds of public policy, to give any relief to the plaintiff by injunction." [13]

Lock Case. A patentee may not agree to suppress his patent for the purpose of restraining trade in his patented commodity. In the lock case a circuit court, in 1909, announced: "The right of a patentee to suppress his own rests upon ordinary considerations of property right. The public has no right to compel the use of patented devices or of unpatented devices, when that is inconsistent with fundamental rules of property. When a patentee agrees, however, to restrain his own trade in the article of his own invention, not as an incident to a granting of rights, but for the purpose of enhancing his price by the removal of competitors, he is then quite outside the sphere of any right granted him by the government. . . ."

"Granting that non-use of an invention is fully within the right of the owner of a patent, it does not follow that he may by agreement bind himself to non-use, save in connection with an assignment of his letters patent. Ownership of a patent involves no obligation to use, nor does ownership of other property. Non-use ordinarily violates no law; but contracting with another, putting it in the power of another to compel one not to use is a contract in restraint of trade, designed for the purpose of suppressing competition." [14]

The Oldfield Report of 1912 declared: "The suppression of intellectual products for the preservation of the old market does not promote the progress of science and the arts. A patentee who agrees to suppress his invention is not promoting it. He is not deriving his profit from its promotion, but from manipulation of the market. It is no part of the constitutional scheme, or of the scheme of the patent laws, to secure to inventors a profit from the suppression of their creation." [15]

The foregoing judicial opinions indicate, though not unre-

[13] 210 U. S. 430, June, 1908.
[14] Blount Mfg. Co. v. Yale and Towne Co., 166 Fed. Rep. 555, 559, 560 (1909).
[15] Oldfield Report of 1912, p. 7, quoting Blount case, 166 Fed. Rep. 561.

servedly and unanimously, the right of a patentee to suppress his own patent. He is under no greater obligation to use the invention than any other property which he may have. The Supreme Court is more lenient in this respect than the lower courts. However, as pointed out in the lock case, an agreement to suppress a patent to restrain trade is illegal.

Causes of Suppression

The following are the chief causes of the suppression of patents: (1) demerits of the invention or patent, (2) inadequate finances, (3) incompetence of the patent owners, (4) the illegality of an unauthorized use of improvements in conjunction with patented inventions of a basic nature, (5) the expense of replacing old equipment with new inventions, and (6) the desire to secure a monopoly of a particular industry by obtaining all relevant patents. Two or more of these causes may be operative at the same time. Moreover, it should be pointed out that the suppression may be voluntary or involuntary, as the explanations of the practice suggest.

Demerits of Invention or Patent. A patent may lack sufficient merit or value for several reasons, all of which may be grouped under the two general categories of demand and supply. The invention may be unimportant—even freakish—and therefore the demand for it may be very limited or absent. Further, every invention of importance represents a growth or evolution. The article ultimately marketed is the result of many individual inventions; the best ones are incorporated in a single product while the inferior ones are abandoned. All of these inventions constitute a reserve of ideas to draw upon. The inventor has to conceive many of them as an inevitable incident in the development of the best possible article.[16] Hundreds of patents are issued every year for accomplishing a result less efficiently than the existing methods. Car couplers so delicately poised that they cannot withstand the impact of cars furnish an illustration to the point. Necessarily there is no demand for inferior inventions

[16] Oldfield Hearings of 1912, No. 26, p. 9.

even though they bear the blue seal of the Patent Office. A concern engaged in manufacturing an unpatented product may refuse to buy a patent covering an improvement of it, for fear of infringement suits. There is a growing realization that a patent conveys no substantial protection until its validity is established in the courts. On the other hand, if the concern's product is patented, it may purchase a patent similar to its own, not to use it, but to avoid the likelihood of litigation. This is one of the reasons for the formation of trusts: for example, the Eastman Kodak Company and the United Shoe Machinery Company. The demand for some patents, therefore, is limited to the desire to remove the dangers of litigation.

In general there is a lack of public confidence in the reliability of an invention—rightly so, for many so-called inventions are next to worthless. The people are dubious of any new product, regardless of its intrinsic qualities. Inertia based upon habitual consumption must be overcome. The market for the class of products to which the invention belongs may be saturated, or the invention itself may be ahead of its time.[17] The various departments of the Federal government, for example, are usually indifferent to new inventions. Tying clauses, like those once maintained by the A. B. Dick Company and the United Shoe Machinery Company, may explain the impossibility of marketing a new and patented product. The inability to sell an invention, whatever the cause, necessitates its suppression.

The demerits of an invention may be examined from the standpoint of production or supply. The cost of manufacture and marketing may be too great as compared with the price and volume of sales of the patented product. In any event the initial expense of making and selling a new product is high. In a few instances it may be impossible to secure the necessary materials for applying the invention. It should be recalled that the Eastman Kodak Company at one time agreed to sell its sensitized film only to the Motion Picture Patents Company. Under such a condtiion how could the

[17] Senate Document No. 6, p. 53.

inventor of a new motion picture camera utilize his product?

Inadequate Finances. The inventor himself is proverbially poverty-stricken, and he experiences difficulty in securing financial aid from outside sources. Bankers and others are, and usually should be, hesitant in advancing funds for the development of an invention. Its possibilities are unknown, the patent may be invalid,—these and other factors intensify the risk. Witness the financial difficulties of Goodyear, Bell, and others. The promotion of the invention—its financing—is the stumbling block which leads to the involuntary suppression of thousands of patents, some of them—and if wise men could only discern which ones!—with great potentialities for success.

Incompetence of Patent Owner. The incompetence of the inventor requires little comment. The inventor is seldom a man of business ability. He is apt to be the builder of castles in the air. He may dream of the far-reaching effects of his invention, of the wealth which will be his, and of the good fortune of any one who may share the honor of developing it. His dream is broken by stern realities and he finds himself embittered and disappointed. He may become indifferent to what seems an unappreciative world, and therefore let his patent lie idle. Moreover, it should be noted that many inventors are ignorant even of the possible channels for marketing patents.

Illegality of Unauthorized Use of Improvement with Basic Invention. The consummation of every basic and pioneer invention of importance is followed by diverse improvements; but if these cannot be legally employed in conjunction with the former—as often happens when the owners of the improvement patents cannot secure licenses from the owner of the basic patent and cannot sell their patents to him—they are inevitably suppressed. On the other hand, obstructive patents covering improvements may necessitate the abandonment of the basic invention.

Expense of Replacing Old Equipment. Some manufacturers shelve patents rather than scrap existing equipment. The suppression of patents covering the automatic telephone and

machines for making paper bags, which will be examined presently, are appropriate illustrations.

Attempt to Secure Industrial Monopoly. Suppression of patents may result incidentally from the attempt to secure a monopoly which exceeds the one conferred by a single patent. The milder form which it may take has been set forth by an eminent chemist. "So, in the case of patents, there are what are called alternate patents. If you know several ways of coming to the same result, the duty of the inventor, as a matter of self-protection, is to patent them all. If that is not done, then another man will come along and he will say, 'I will find a loophole, and I am going to beat this man out of his monopoly.' So you are compelled to take alternate patents, even if some of these are inferior methods."[18] One writer, in describing the conditional nature of patent property, stated, "Through the amplification of inventions therefore and by means of successive patents which overlap on subject-matter, as well as in the scope and character of the protection afforded thereby, the defects and risks inherent in particular patents can very frequently be effectually safeguarded."[19] A manufacturer of cotton machinery said that many inventions "illustrate logic rather than genius, for they are worked out with the definite intent of strengthening the situation when the claims of the important patents are not all-controlling."[20]

These quotations posit the idea of an individual inventor seeking to protect his pivotal idea by enmeshing it in a network of patents covering all the possibilities of manifesting the idea. Many of these patents, therefore, are contingent or alternate in character and are suppressed.

A far more odious practice, as described in an earlier chapter, consists of the control of practically all patents relating to a particular industry and therefore the domination of the industry. Many of these patents acquired for this purpose are

[18] Nolan Hearings of 1919, p. 94.

[19] Richards, *The Conditional Nature of Patent Property*, p. 146, American Assn. of Inventors and Manufacturers, Washington, D. C.

[20] Draper, "Patents," *Proceedings of the Eleventh Annual Convention of American Cotton Mfgrs. Assn.*, Phila., Pa., 1907, p. 187.

suppressed, as will be shown presently. On the other hand, the refusal of a trust to buy a relevant patent usually results in its suppression, as there is no other outlet for it. What would the inventor of an improvement on shoe machinery do with his patent if he could not sell it to the United Shoe Machinery Company?

Extent of Suppression

The explanations of the suppression of patents suggest the extent of the practice. A large proportion of our patents, perhaps one-third of them, are not developed, because the inventions to which they relate do not have sufficient merit or value. It is estimated that nine-tenths of the patents issued by the United States do not bring enough financial reward to the inventors to cover the Patent Office fees, the charges of patent lawyers, and attendant expenses. Moreover, many patents are suppressed, as explained in the first part of this chapter, owing to inadequate finances, incompetence of the patent owners, the legal difficulties of using improvements in conjunction with patented inventions of a basic nature, and the desire to avoid the expense of replacing old machinery with new inventions. The extent to which the suppression of patents is incidental to the securement of industrial monopolies is suggested in preceding chapters and in the following pages.

Patents Granted to Americans. It is difficult to find specific evidence with which to prove the suppression of patents, as no thorough investigation has ever been made. A New York court in 1897 said that the National Harrow Company controlled 85 patents on spring tooth harrows, some of them unused.[21] A circuit court in 1906 ascertained that the Indiana Manufacturing Company had acquired over 100 patents relating to straw stackers which could not be used conjointly, and hence many of them had been suppressed.[22] In the so-called

[21] National Harrow Co. v. Bement, 21 App. Div. N. Y. 290 (1897; 47 N. Y. S. 462.

[22] Indiana Mfg. Co. v. Case Mach. Co., 148 Fed. Rep. 21 (1906).

lock case a circuit court announced that "it is a fact, familiar in commercial history, that patent rights have a commercial value for purposes of extinction; that many patents are purchased in order to prevent the competition of new inventions and of new machines with old machines already installed."[23] The button-fastener and paper bag cases presented evidence of the suppression of patents.[24] The American Tobacco Company acquired a patent for a tobacco-stemming machine by purchasing a majority of the stock of the Standard Tobacco Stemmer Company; this machine was not manufactured, but the control of the patent by this combination prevented its development and use by competitors.[25]

The American Bell Telephone Company, it is charged, bought up all patent rights pertaining to the automatic telephone and suppressed them. Congressman Nolan of California, Chairman of the House Committee on Patents, said, in 1919, that the automatic telephone company had installed its service in several cities in California, and had become a real competitor of the Bell company. The latter bought the patents and other property of the automatic company. The automatic service was discontinued, and the Bell company re-established its monopoly.[26]

The United Shoe Machinery Company bought the competing shoe machinery patents, together with other assets, of T. G. Plant, and the patents of other individuals and concerns. It would seem that all these patents could not be used conjointly in its shoe machinery. The control by one company of hundreds and even thousands of patents obtained from various sources, suggests the suppression of some of them. This statement applies not only to the United Shoe Machinery Company, but to the American Steel and Wire Company, the General Electric Company, and others as well.

In 1916 the A. B. Dick Company controlled 128 patents

[23] Blount Mfg. Co. v. Yale and Towne Co., 166 Fed. Rep. 555, 560 (1909).

[24] 77 Fed. Rep. 288 and 150 Fed. Rep. 741, 210 U. S. 405.

[25] Report of Commissioner of Corporations on Tobacco Industry, Part I, p. 84.

[26] Nolan Hearings of 1919, pp. 147-148.

relating to only a few subjects.[27] Of these patents only 67, about one-half, were first issued to A. B. Dick; the others were acquired from other parties. Twenty-four of these patents relate to sheet-feeding apparatus in connection with a duplicating machine. It seems certain that these patents cannot be conjointly used in a single sheet-feeding apparatus, nor is one the outgrowth or development of another. They represent different lines of improvement of different basic inventions, all proceeding simultaneously. Thus, three of the patents relate to the feeding of sheets to a duplicating machine from the *top* of the pile, and two, from the *bottom;* the dates of issue of the former are February 2, 1904, July 3, 1906, and May 25, 1915; of the latter, June 19, 1906, and August 14, 1906. This shows that the development of the one line of invention did not cease before the other began. All the sheet-feeding apparatus employed in 1916 on the duplicating machines of the A. B. Dick Company fed the sheets of paper to the machine from the *top* of the pile. Prior to that time, it does not seem that the A. B. Dick Company provided its machines with an apparatus to use the Dick patents for feeding sheets from the *bottom* of the pile. In other words, some of the patents have never been used; and as this company has consistently refrained from using them, suppression has resulted.

In 1916, 28 patents of the A. B. Dick Company pertained to stencil sheets. These patents cannot be used conjointly in the preparation of stencil paper; they represent different lines of invention, all independent of one another. They cover five methods of forming characters in the stencil sheet: namely, abrasion, pressure, heat, adhesion, and extraction. The dates of issue of the patents relating to abrasion are 1880, 1886, 1890, 1892, and 1914; to pressure, 1888 and 1892; to heat, 1893; to adhesion, 1894 and 1896; and to extraction, 1895. One method did not become obsolete and then another ap-

[27] This and the following statements are based on a study of the Dick patents, which may be obtained from the Patent Office. These patents were examined in 1916, when the legal status and the economic effect of the patentee's dictation of supplementary supplies for his patented machine or other articles were subjects of controversy.

pear; improvement or evolution of the one did not cease before that of another began. All developed simultaneously, but without being interrelated. A. B. Dick himself received letters patent for one method only, pressure; all the patents covering the other four methods were issued to other parties, and A. B. Dick obtained control of them. These patents, representing five distinct means of forming characters in a stencil sheet, cannot be, and as a matter of fact were not, conjointly used; only two methods, pressure and abrasion, have been employed by the A. B. Dick Company. The acquisition of the other three methods would seem to have no legitimate justification; instead, it indicates an intention to monopolize all patents relating to the preparation of stencil paper so as to use a part of them and suppress the remainder.

The suppression of patents was brought out a few years ago in the hearings on bills relating to trust legislation: [28] "Paper patents, patents covering inoperative devices, and dormant patents (that is, patents not used but applied for and held for the purpose of preventing the manufacture of the devices or improvements therein described), are at the foundation of much of the most injurious monopoly and trade restraint. . . . There are thousands of patents lying dormant, having been acquired by established concerns whose business was threatened by competition."

One author has stated that, in spite of repeated denials, there are patents which are purchased by some of the largest corporations and then never developed.[29] Another writer has declared that many patentees have been caught by the manufacturer who offers large royalties for the sole purpose of gaining possession of the patent and then suppressing it. His objective, of course, is to keep the competing article out of the market.[30] The same result may be accomplished by the acquisition of the patent by another concern which the manufacturer secretly controls. An eminent patent lawyer, who is

[28] Hearings before the Committee on Interstate Commerce, U. S. Senate, 63rd Cong., 2nd Sess., Vol. II, p. 1078.
[29] Edelman, *Inventions and Patents*, p. 157.
[30] Cresse, *Practical Pointers for Patentees*, p. 65.

also an author of articles and books relating to patents, has stated that manufacturers suppress competing inventions, but they do not suppress to any great extent the inventions that would be a very great improvement on present articles.[31] Individual inventors have declared before Congressional Committees that their patents have been acquired for purposes of suppression. Finally, the Oldfield report of 1914 declared that "the practice of buying up and suppressing patents is widely indulged."

Patents Granted to Foreigners. The extent and effects of the suppression of patents are most readily appreciated when one considers the non-working of United States patents by citizens of other countries. Many foreigners who obtain patents from the United States do not utilize them in this country, but "work" them elsewhere, usually in their own country, form which they have also secured patents on the same subject-matter. In this manner, foreigners have reserved the United States as the exclusive market for their goods—a territorial monopoly, as it were, defined by national boundaries.

The extent to which United States patents may be suppressed by foreigners is suggested by the large number of patents, both absolutely and relatively, which are granted to foreigners by this country. During 1910 and 1915 the United States granted 21,073 patents to citizens of foreign countries, 11.43 per cent of the total number of patents granted during this period. From 1900 to 1910, the per cent of patents obtained by foreigners was 11.26; 1890 to 1900, 9.86; 1880 to 1890, 6.64; and 1870 to 1880, 4.50 per cent. Prior to 1870 the percentages were less and less. From 1915 to 1917, foreigners received only 8.52 per cent of the patents granted by the United States, owing to the influence of the war. About 80 per cent of the foreign patentees are citizens of Canada, England, France, and Germany. During the three periods, 1890 to 1900, 1900 to 1910, and 1910 to 1915, England received 32, 25, and 22 per cent respectively of all patents granted to foreigners by the United States; France received 9, 9, and 8

[31] Oldfield Hearings of 1912, No. 10, p. 17.

per cent respectively; and Germany, 25, 30, and 33 per cent.[32] The great increase in the relative number of patents granted to German citizens is to be noted, such patents increasing from 25 per cent of the total in 1890 to 1900, to 33 per cent in 1910 to 1915. The percentage fell to 22 per cent during the years from 1915 to 1917 because of the war.

This relatively large number of patents granted to foreigners by the United States may be ascribed to the cheapness and convenience of acquiring and maintaining them. The initial patent fee is nominal and there are no yearly charges or fees. Moreover, this country does not require the "working" of patents—a factor of great importance to the foreigner.

Most of the patents granted to foreigners, to Germans especially, relate only to a few subjects, the dye and chemical industries in particular. This fact, together with the non-working of such patents in the United States, largely accounts for the lack of development of these industries in this country before the World War. Up to January 1, 1902, 1196 patents known to the Patent Office as "carbon dyes" had been issued, 622 of them during the decade 1891 to 1900. Of these 622 patents, 609 or 97.91 per cent were issued to foreign inventors, the Germans preponderating, and only 2.09 per cent to American inventors. During 1900 the value of the imports of coal-tar colors and dyes was $4,890,072, of which Germany is credited with $3,822,162. The country which furnished most of the patentees is the one which furnished most of the imports. During the same year the value of the artificial dyestuffs manufactured in the United States was $52,648, 1.07 per cent of the aggregate of imports and home product for 1900. It would seem, then, that there is a correlation between this per cent and the per cent of patents relating to this industry issued to American inventors, namely, 2.09.

Up to January 1, 1902, the Patent Office had issued 532 patents relating to "carbon compounds" (chemicals), of which 312 were issued during the decade 1891 to 1900. Two hundred and eighty-one or 90.1 per cent of these 312 patents were issued to foreign inventors, the Germans predominating,

[32] Annual Reports of the Commissioner of Patents to Congress.

and 9.9 per cent to American inventors. During 1900, the value of the imports of "chemicals, drugs and dyes, all others (dutiable)" was $6,530,037, of which Germany was credited with $3,145,254. Again, it is evident that the country which furnished most of the patentees is the one which furnished most of the imports. During 1900 the value of fine chemicals made in this country was $4,206,744. This is 39.18 per cent of the total of imports and home manufacture, while 9.94 per cent of the patents covering chemicals were granted to American inventors.[33] This comparison is subject to slight error as the classifications of chemicals by the Census Bureau and Patent Office do not exactly coincide.

Statistics for more recent years which show the correlation between the distribution of United States patents to citizens of this country and foreign nations on the one hand, and the relative values of manufacturers in the United States and imports into this country on the other, are not available. It would seem, however, that the correlation continued to exist until the outbreak of the war in 1914.

A report of A. Mitchell Palmer, alien property custodian, indicated the status and the prospects of the American industry of dyestuffs and medicines. Until August, 1914, it consisted largely of small assembling plants operating on German intermediates and therefore at the mercy of German producers. At the beginning of 1914, German concerns supplied nine-tenths of the dyes used in the industries of the United States. Measured in terms of value, Germany manufactured 74 per cent of the world's output of dyes.[34] The United States Tariff Commission, in its census of dyes and coal-tar chemicals, stated that from September, 1916 to April, 1917, "the dye industry sought the line of least resistance. As a rule this meant making old well-known dyes on which the patents had already expired and for which the intermediates could be most readily made. It meant expanding along

[33] Special Reports on Selected Industries, Manufacturers, Twelfth Census of the United States, 1900, Vol. X, Pt. IV, 1902, pp. 759-760.

[34] Bureau of Foreign and Domestic Commerce, Special Agent Series, No. 96, p. 30.

familiar lines rather than entering new and untried fields. The American industry, before the war, had been chiefly confined to the group of dyes called 'azo' dyes. It was this group which had the greatest and earliest development. Whole groups of other dyes . . . were entirely neglected, partly because of patents owned by Germans and partly because a fundamental raw material (anthracene) was not available." [35]

In 1914 a large proportion of the dye factories in England and France were owned and operated by German dye concerns because the patent laws of these two nations required the "working" of patents. On the other hand, the Germans owned practically no dye factories in the United States owing to the absence of a "working clause" in our patent law. During the war France and England took over the German dye factories, but the United States had no such factories to utilize—a situation due to the suppression of United States patents by foreigners.

This account of the dye and chemical industries indicates that the effect of the non-working of United States patents by foreigners upon the industrial development of this country varies with the nature of the patented inventions and the availability of the patented products. If the inventions represent mere improvements, it is quite possible for the manufacturers in this country to bring forth similar but different improvements or intensive inventions of equal or greater efficiency. If the inventions are basic or pioneer and highly original, as many of those relating to dyes and chemicals are, they are at a greater disadvantage. Moreover, this disadvantage may be extended to other industries by withholding from them the patented product upon which their development depends.[36]

[35] U. S. Tariff Commission, Tariff Information Series, No. 6, 1917, p. 48.

[36] Ravenshear, *The English Patent System*, pp. 77, 78, 125, 126, 137; also, Martin, *English Patent System*, p. 29. Additional sources concerning the exploitation of patents by foreigners are: Shuster, "The Patent and Designs Act, 1907," *The Economic Journal*, Vol. XIX, p. 538; Palgreave, *Dictionary of Political Economy*, p. 76; *Workers of the Nation*, Vol. I, p. 339; Marshall, *Principles of Economics*, Vol. I, p. 362; Hesse, "Annual Patent Renewal Fees," *The Journal of Industrial and Engineering Chemistry*, Vol. XI, 1919, p. 697; "Discussion on Patent Law Reform," *Journal of the Society of Chemical Industry*, Vol. 36, 1917, p. 808.

Criticism

The spirit of our patent system is diametrically opposed to the suppression or non-working of patents in spite of the fact that inventions so treated may be disclosed in patents issued by the Patent Office. The public, in keeping with the philosophy and purpose of the patent laws, expects more than a mere description of the invention in return for the exclusive monopoly granted to the patentee for a period of seventeen years. As one writer has said, "Now, although full and honest disclosure of an invention constitutes the lawful consideration which will support the inventor's right to a patent, it is well known that such disclosure on the part of the inventor is not, in many cases, a consummation of the great object of the patent laws, namely, actually to place the patented improvements upon the market and thereby actually demonstrate the merits of the improvements and develop any possible latent defects."[37] The most efficient and profitable way in which the people can learn of an invention is by using it or the product which it manufactures. (One should remember in this connection that the Patent Office has not required models of inventions since 1880).[38]

The expectation that the patentee will use his invention is implied in our infringement laws, which protect the legal monopoly of the patentee—the right to exclude others from making, using, and selling his invention—throughout the entire period during which his monopoly extends. The corollary of this protection, it would seem, is that the patentee must develop his invention.[39]

If an invention is not worthy of development, the patent covering it should not be permitted to clog the stream of inventive thought to which it relates. Such a patent may conflict with the most advantageous use of another invention. Moreover, it may be a "scarecrow" patent in that it frightens

[37] Senate Document No. 6, p. 43; also see Hesse, "Annual Patent Renewal Fees." *Journal of Industrial and Engineering Chemistry*, Vol. XI, 1919, p. 697.

[38] Oldfield Hearings of 1912. No. 27, p. 101.

[39] *Robinson on Patents*, pp. 65-67.

away other inventors from the particular field of invention. The same situation applies to patents which are not developed on account of inadequate finances, incompetence of the inventor, or a desire to prevent the discarding of old equipment; whatever the cause, invention is discouraged, contrary to the purpose of the patent laws. As Palgreave has stated, "The granting of a patent may be a hindrance to industrial life, if the patentee, through want of energy or want of means neglects to work his invention, whilst others, who would be willing and able to do so, are afraid of infringing his rights."[40]

At this point one should consider whether it is socially desirable to suppress patents in order to utilize old equipment more completely. It is argued that the immediate adoption of a new invention, such as the automatic telephone, however worthy, may mean maladjustment and unemployment of labor, and waste of capital; and therefore that it is desirable to delay or graduate the introduction of invention. This contention undoubtedly has considerable merit. But it should be remembered that technical and industrial progress, as someone has appropriately remarked, may be measured by the size of the scrap pile. Witness, for example, in the technical development of the American railways how engines and cars were discarded and more efficient engines and cars adopted. The abandonment necessitated considerable waste; the adoption of the new rolling stock meant progress. Each is a balancing factor to the other, and the one that predominates depends largely upon the circumstances of each particular case. In any instance it should be borne in mind that the suppression of patents *per se*, whatever the excuse, discourages invention and falls short of fulfilling the spirit of the patent law and the expectations of the public; and that competition, one of the cornerstones of the existing economic order, implies the adoption, even with attendant wastes, of the most efficient methods by gain-seeking rivals.

The suppression of patents is often the result of acquiring practically all patents relating to a particular industry. Some of them are used and the others are suppressed. This pre-

[40] Palgreave, *Dictionary of Political Economy*, p. 76.

vents the competition that would otherwise spring up between the owners of the patents, and is contrary to the purpose of the patent law to grant a monopoly in the *beneficial use of a specific invention* and not of an *industry*. The acquisition of kindred patents and the suppression of some of them not only promote monopoly; they also discourage invention and retard industrial progress, and hence defeat the purpose of the patent law. The inventor, imbued with the creative instinct, cannot behold the concrete utilization of his ideas, and to that extent the stimulus to inventive endeavors is taken away.

The suppression of United States patents by individuals and concerns of this country presents a worse situation, from the standpoint of our general economic welfare, if corresponding patents are not secured in other nations. It means that the people of the United States are forbidden to make the inventions patented here, while foreigners are free to develop them. The gravity of this situation may be appreciated when one considers that many American inventors, though securing United States patents, obtain patents in none of the foreign countries or in relatively few of them.

The arguments against suppression are accepted most readily when considered in connection with patents granted to foreign citizens. It is a contravention of our patent law and an economic injustice to the American manufacturer to allow foreigners to take out patents in this country merely for the purpose of reserving the United States as a market for their patented products, which are manufactured abroad exclusively. This situation means the acquisition of a territorial monopoly and the discouragement of invention by excluding would-be competitors and inventors of the United States from the industries covered by the patents; moreover, at the same time the industries of other countries are built up to the detriment of the United States.

CHAPTER VII

OTHER EVILS OF THE PATENT SYSTEM

PREVIOUS chapters described different methods used in exploiting patents. The purpose of this chapter is to discuss a miscellaneous group of other evils arising from the patent system, as follows: litigation, delay in granting patents, inefficient and unethical attorneys, unscrupulous promotion of patents, employer-employee contracts, and continuation of monopoly after expiration of patent.

LITIGATION

Extent of Litigation. The amount of patent litigation constitutes a fundamental weakness of our patent system. Ten per cent of the time of the United States courts is devoted to patent cases.[1] Patent litigation occurs in the courts of equity; the district court has original jurisdiction, and its decision is usually followed by an appeal to the circuit court of appeals. This may be repeated in other circuits, theoretically eight in all. A patent has been characterized as an invitation to infringement suits. One of the patent commissioners reported to the Secretary of the Interior, "In payment for the invention the inventor obtains the right to bring suit in the Federal courts against infringers during the period of 17 years."[2] It is usually necessary to adjudicate a patent in order to establish its validity. One of our Federal judges stated in 1919: "A patent, until the courts have finished with it, is not a real protection to the inventor." Further, "as the law stands now," he said, "I do not think it is an exaggeration to say that a

[1] Prindle, "The American Patent System," *American Industries*, 1908, Part I, p. 20.
[2] Oldfield Hearings of 1912, No. 25, p. 4.

patent is not a patent all over the United States until the inventor has gone through two, and in very serious cases more than two, expensive litigations." [3]

Expense of Litigation. Patent litigation is very expensive, in that it necessitates skilled attorneys, expert testimony, documentary evidence, and extensive preparation for trials. This expense has been less burdensome since the year 1912, which marks the promulgation of the new equity rules providing that all testimony, except under special circumstances, must be taken in open court. Prior to that time, testimony could be taken before an examiner, and it was invariably written in longhand and then printed. Enormous, and for the most part useless, quantities of it would be presented to the court of equity for its consideration. As already suggested, this added greatly to the expense of the litigation. The most famous case of this sort involved the Selden patent, in which instance thirty-six large octavo volumes of printed testimony were laid before the judge for his perusal. But even with this improvement in judicial procedure since 1912, the expense of adjudicating patents remains enormous. It is so great, according to E. J. Prindle, that only the largest companies can stand the expense of a full-fledged litigation carried to the extreme limits.[4]

The expense of defending one's patents frequently equals or exceeds the revenue derived from them. About $1,000,000 was spent to prevent the infringement of the Edison incandescent lamp.[5] The president of Thomas A. Edison, Inc., once stated that Edison had spent more money in obtaining patents, litigating them, and preventing infringements of them than he had received from his patents as such.[6] One inventor stated to the House Committee on Patents that he knew of two infringers of his patents but that he would not sue them because he would not receive enough to pay the legal expenses.[7]

[3] Nolan Hearings of 1919, pp. 119-120.
[4] *Ibid.*, p. 69.
[5] W. Kaempffert, "Our Defective Patent System," *The Outlook*, July 6, 1912.
[6] Oldfield Hearings of 1912, No. 2, p. 32.
[7] *Ibid.*, No. 23, p. 30.

Reduction in Effective Life of Patent. Another aspect of the burden of patent litigation consists of delays. These not only increase expenses, such as lawyers' fees, but they diminish the effective life of the patent. A patent is a monopoly of limited duration, and therefore each year of delay in ascertaining its legal status means practically one year less of its effective operation. Several years ago it was estimated that the average infringement suit lasted five years. This statement indicated a definite and clear-cut patent monopoly of twelve instead of seventeen years.[8] Frederick P. Fish, in 1919, before the House Committee on Patents, stated that prior to the adoption of the new equity rules few cases were decided in less than a couple of years, and sometimes they continued seven or eight years. The new rules of 1912 have apparently reduced the delay in patent cases.[9]

Causes of Litigation. The excessive amount of patent litigation in the United States arises from several causes, as follows: (1) large number of patents and claims; (2) invalidity of many of these patents and claims; (3) infringement suits arising from the malicious action of one of the litigants; (4) conflict between the nine different circuit courts of appeal; (5) the doctrine of "equivalents"; and (6) right to sue individual users of an article charged with infringement. The consideration of these causes constitutes the subject matter of the next seven pages.

a. Number of Patents and Claims. The very large number of patents granted by the United States to its own citizens and foreigners is undoubtedly one of the sources of litigation.[10] This country grants more patents than any other; in fact, it has granted up to date approximately one-third of all the patents conferred by all nations.[11] Thousands of patents overlap each other to a considerable extent. They may describe means which vary only slightly in performing the same

[8] Kaempffert, "Our Defective Patent System." *The Outlook*, July 6, 1912.
[9] Nolan Hearings of 1919, pp. 57-58; Oldfield Hearings of 1912, No. 4, p. 36.
[10] *Ibid.*, No. 15, p. 5.
[11] Report of Commissioner of Patents to Congress, Dec., 1920, p. 12.

function or in accomplishing a particular result; for example, there are hundreds of patents on safety razors, and thousands on wrenches. This leads to infringement suits, disappointment of inventors, and the general disrepute of the patent system.

The large number of United States patents is due primarily to three causes: (1) an insufficient number of examiners in the Patent Office; (2) the subject which a patent may cover; and (3) its exemption from fees after issuance.

There are thousands of applications for patents each year. Their number exceeds considerably the number of patents granted; nevertheless the Patent Office of the United States grants patents to a larger proportion of applicants than does that of any other country employing the examination system. The rejections are only one-half as great as in Germany, in proportion to the number of patents applied for.[12] One of the primary functions of the Patent Office, namely, that of refusing patents, cannot be properly exercised owing to an insufficient force of men in the employment of the Patent Office.

A slight improvement or a somewhat different way of accomplishing a particular result, may be patented in the United States. Moreover, the typical United States patent contains several claims that overlap each other considerably, and each claim is a permit for a lawsuit. On the other hand, the patent law of Germany requires that patents must cover broad claims; it does not recognize the narrow claim of an application which shades off into the broad claim of a patent already issued, as proper subject matter for a patent. This comparison furnishes the primary explanation of the much larger proportion of rejections in Germany than in the United States. The ability to secure patents covering inventions which are slightly distinguishable in the function performed necessitates "alternate" or "blocking" patents in order to protect an invention. A large number of patents covering all the ways of accomplishing a particular result is necessary in order to protect the essence of the invention. In other words, numerous patents are required to accomplish what one patent containing a broad claim would accomplish. The defect or incomplete-

[12] Ravenshear, *The English Patent System*, p. 132.

ness of one patent is safeguarded by another. Moreover, a patent may not be interpreted by the court from the standpoint taken by the inventor or his attorney when the patent was granted. This possibility suggests the desirability, for the sake of protection, of several patents covering practically the same subject.

The United States, in contrast with other countries, does not impose yearly fees upon the holders of the patents which it has issued. There is no occasion for the revocation of patents by the United States because of non-payment of fees. Every patent issued by this country, unless declared invalid, runs for seventeen years. It may not be used, as is true of many patents, but its legal existence continues.

An enormous number of patents, the average one containing several claims, whatever the reasons for their existence may be, increases the likelihood of litigation.

b. Invalidity of Patents and Claims. Another cause of litigation is the number of invalid patents. A patent covering an alleged invention may be invalid because of prior public use of which the Patent Office has no record; disclosure in some prior patent overlooked by the patent office examiners; or difference in judgment between the courts and the Patent Office as to whether the patented matter is such a departure from what was known to be old as to constitute invention.[13] The enormous number of patents granted in this country as compared with other nations suggests the invalidity of some of them. During 13 years, from 1891-1904, 30% of all the patents which were adjudicated by the circuit courts of appeal of the United States were declared to be invalid; 29% were declared to be valid; and 41% were declared not to have been infringed.[14] The Federal courts lack confidence in the validity of patents, as is shown by their unwillingness to protect them against alleged infringement by granting a preliminary injunction. To-day, as a rule, a court will grant a preliminary injunction against an alleged infringer only if the validity of the patent has been established, or if it has

[13] *Michigan Law Review*, Apr., 1908, Vol. 6, p. 442.
[14] House Report (Misc.) No. 2145, 60th Cong., 2nd Sess., p. 4.

gone unchallenged for several years. Furthermore, the prevalence of invalid patents is indicated by the fact that many private corporations and trade associations examine relevant patents to test their validity. The National Automobile Chamber of Commerce, for illustration, examines automobile patents so as to prevent automobile manufacturers from paying tribute for the use of invalid patents. It finds that the majority of such patents are invalid either partly or entirely.[15]

An attempt will be made to present the specific reasons for the issuance of invalid patents, as follows: lack of examination, disagreement of courts concerning patents, defective soliciting by patent attorneys, and ignorance of other inventions.

The increasing number of applications for patents has made the number of patent examiners inadequate; and the rising cost of living, reducing the purchasing power of their salaries, has resulted in a high rate of turnover in the Patent Office staff. Moreover, aside from the number and efficiency of examiners, it is becoming increasingly difficult to ascertain the originality of an invention. The number of patents granted by all nations, up to 1919, was 4,296,659.[16] The Patent Office does not have copies of all these patents, and in other respects its working facilities are incomplete for the granting of valid patents.[17] It is no exaggeration to say that at present we have only a one-half examination system; the other one-half is mere registration.[18] A Federal judge, in speaking of the patent cases which had come before him, stated in 1919, "I seldom find that the prior patent, what we call the prior art on which the validity of the patent depends, has been discovered in the Patent Office." [19]

After securing and examining all data relating to a patent application, it may still be impossible for an examiner to make a decision which will insure the validity of the patent, for the courts themselves may disagree with respect to what

[15] Nolan Hearings of 1919, p. 291.
[16] Report of Commissioner of Patents to Congress, Dec., 1921, p. 17.
[17] Oldfield Hearings of 1912, No. 4, p. 37.
[18] Nolan Hearings of 1919, p. 103.
[19] *Ibid.*, p. 128.

constitutes patentability, infringement, and related subjects. A recent commissioner of patents stated that "we in the Patent Office are sometimes mystified to the detriment of our best work, by the conflicting opinions in the different circuits." [20] In a judicial system like ours, where it is possible for courts of equal dignity and authority to conflict with each other without any right of appeal to a higher court, invalid patents are inevitable. "Under the present system of nine circuit courts of appeal, there is serious confusion in the application of the patent law to special cases, resulting in some instances in a divergence of views between two different courts of appeal as to the validity and scope of the same patent, and generally in the different circuits in a want of harmony as to question of patentability, construction of patents, and infringements; that is a serious evil." [21]

Defective and therefore invalid patents may arise from poor soliciting. It may result in vague and inadequate patents, and therefore poor protection to the inventor. A patent lawyer needs accurate and comprehensive knowledge in order to serve his client and strengthen the legal position of patents. A patent lawyer who knows nothing of technical matters, as is true of many of them, may take out patents which are broader or narrower than the applicant expects and deserves.[22]

Moreover, many improvements are not patented owing to fear of litigation and its attendant expenses. Many concerns take the position that patents would merely encourage imitations and, therefore, they resort to secrecy.[23] As a result, a considerable number of inventions in public use are not on record in the Patent Office; there is accordingly greater likelihood of patents that are legally unsound. Invalid patents, regardless of the reasons for their prevalence, lead to litigation.

c. Infringement Suits without Good Faith. Unfair competition, as pointed out in another chapter, often takes the form of litigation. Infringement suits against competitors,

[20] Nolan Hearings of 1919, p. 187.
[21] Senate Document No. 225, 63rd Cong., 1st Sess., p. 24.
[22] Sewell, *Law of Patents*, p. 14.
[23] Interviews with manufacturers.

particularly small companies and individuals, may be brought in bad faith.[24] The object may be to drive them out of business, to invalidate a particular patent, or to receive money for the withdrawal of the suit.[25] Furthermore, a large corporation may knowingly infringe the patents of a small competitor. It is fairly safe in doing this because a preliminary injunction is seldom granted until the validity of the patent has been proven, and damages of any considerable amount are seldom collected.[26] The corporation appreciates the almost unlimited extent to which litigation may proceed, the possible delays, and the necessary expenses. It figures that it may wear out the competitor until he compromises or submits to the infringement, and that, in any event, it can escape with the payment of little or no damages. In New York less than ten per cent of the infringement cases in which accountings were decreed, show substantial recovery.[27]

A patent lawyer gave the Oldfield Committee an illustration of the extent and delay of patent litigation, and therefore of the temptation to infringe the patents of a competitor. "We have won a case and recovered judgment for $350,000 after 6 or 7 years of litigation, but by that time the defendant had dissipated all the profits of the enterprise, and we could get only $25,000 in settlement of our judgment. In another case against the Brill Company of Philadelphia, we litigated for over 14 years, I should say, and finally received $200,000 for our client as the result of a proceeding that went all the way to the Supreme Court of the United States. But, when we collected, our client was ruined and out of business, while the Brill Company was in a flourishing condition."[28]

d. Conflict between Circuit Courts of Appeal. The judicial machinery of the United States is conducive to litigation.

[24] Oldfield Hearings of 1912, No. 10, p. 26; No. 15, pp. 6-7, 10.
[25] Meade, *Trust Finance*, p. 278.
[26] House Document No. 1110, 62nd Cong., 3rd Sess., p. 208; Draper, "Patents," *Proceedings of the Eleventh Annual Convention of American Cotton Manufacturers' Assn.*, 1907, p. 186.
[27] Macomber, "Patents and Industrial Progress," *North American Review*, June, 1910.
[28] Oldfield Hearings of 1914, Part 6, p. 116.

The Evarts Act of 1891 abolished the circuit courts and created nine circuit courts of appeal of equal dignity. The district courts, instead of the circuit courts, now have original jurisdiction in patent cases, and appeals may be taken to a circuit court of appeals. The act discontinued the right to appeal patent cases to the Supreme Court except by certiorari; the discontinuance of this right arose from the desire to lighten the docket of that tribunal. Each circuit court of appeals, as a matter of comity, considers the decisions of the other eight circuits; however, it is not bound to follow them. A patent may be valid in one circuit and invalid in another, and its owner may, therefore, win a suit for infringement in one circuit and lose it in another. Judicial conflicts of this sort may not be reviewed by the Supreme Court. Therefore, it may happen that the manufacture and sale of an alleged invention in one circuit is illegal while in another legal. In 1919, the Patent Committee of the National Research Council reported that "it has even happened in a substantial number of cases that two of the appellate courts have taken a different view of one and the same patent."[29] In 1908 a report of the House of Representatives stated that many cases have arisen in which a patent which has been sustained in one circuit court of appeals is vacated by another circuit court of appeals.[30] The awkwardness of this situation and the apparent lack of good faith on the part of the government which grants the patents require no explanation.

c. Other Causes. Another source of litigation has been the "doctrine of equivalents." The courts employ the so-called doctrine of equivalents according to which the inventor may include within his monopoly not only everything described by the language of his claims, but everything which is the mechanical or chemical equivalent. This rule, though giving the court an opportunity to do equity, means uncertainty and litigation.[31] Moreover, the right of the patentee to

[29] Nolan Hearings of 1919, p. 7.
[30] House Report (Misc.) No. 2145, 60th Cong., 2nd Sess., p. 2.
[31] Prindle, "The American Patent System," *American Industries*, 1908, Part II, p. 18.

sue the users of articles that are supposed to infringe patents encourages litigation.[32]

Importance of Litigation to Public. Patent litigation is more significant than the ordinary lawsuit, in that it indicates to the public the legal boundaries of a patent monopoly, and therefore their rights as well as those of the individual contestants. The necessity of litigation increases the uncertainty as to the respective rights of the inventor and the public. The Brandegee report of 1912 declared that "the owner of a questionable patent has a color of right to prevent others from using some machine, device, combination, or process which may in fact have been more or less widely known before the patent was ever applied for; and this may result in the manufacturer, through fear of infringement, abandoning the use of an idea which in justice he should have had the right to use." [33] The chairman of the Patent Committee of the National Association of Manufacturers stated, in 1919, "Uncertainty in law and in property rights is a direct and powerful business retardant, and the increasing number of indefinite, uncertain, and invalid patents is a direct menace to many of the industries of the country." [34] These considerations emphasize the desirability of reducing patent litigation to a minimum so as to define and safeguard the rights of the public.

Delay in Granting Patents

In a contest on priority of invention, the filing of an allowable application is the equivalent of an actual commercial use.[35] Moreover, the inventor is allowed one year in which to reply to the official letters of the Patent Office concerning his application.[36] Regardless of the number of answers to the notices of the Patent Office and the time consumed as a result, the prior inventor is entitled to receive a patent on his invention. While the patent is pending, he may begin to manufac-

[32] Oldfield Hearings of 1914, Part 7, p. 142.
[33] Senate Report No. 1034. 62nd Cong., 2nd Sess., p. 2.
[34] Nolan Hearings of 1919, p. 109.
[35] *Patents*, Machinery's Reference Series, p. 23.
[36] Rules of Practice in the U. S. Patent Office, 1916, Rule 77.

ture the patented product, or the invention may lie dormant. No one else is likely to develop his invention. Applications for patents are kept secret in the Patent Office; and though the invention be known, others hesitate to utilize it because they may become infringers when the patent is granted. Moreover, the patent dates from the time of issue by the Patent Office. These factors encourage the delay in the prosecution of an application for a patent, so as to extend unduly the monopoly of the invention beyond the statutory period of seventeen years.

Extent of Practice. Instances of extreme delay in the granting of patents may be cited. One of the automatic telephone cases, involving about 400 claims, was pending over sixteen years.[37] The extent of delayed applications is summarized in the following table:

Number of applications pending 15 years or longer:		Number of applications pending 5 years or longer:	
Dec. 31, 1915.....	29	Dec. 31, 1915.....	2,646
Dec. 31, 1916.....	15	Dec. 31, 1916.....	1,611
Dec. 31, 1917.....	18	Dec. 31, 1917.....	1,149
Dec. 31, 1918.....	30	Dec. 31, 1918.....	1,003
Dec. 31, 1919.....	47	Dec. 31, 1919.....	1,006
Dec. 31, 1920.....	60	Dec. 31, 1920.....	1,151
Number of applications pending 10 years or longer:		Number of applications pending 2 years or longer:	
Dec. 31, 1915.....	183	Dec. 31, 1915.....	26,171
Dec. 31, 1916.....	141	Dec. 31, 1916.....	22,098
Dec. 31, 1917.....	157	Dec. 31, 1917.....	20,548
Dec. 31, 1918.....	162	Dec. 31, 1918.....	21,631
Dec. 31, 1919.....	146	Dec. 31, 1919.....	23,265
Dec. 31, 1920.....	145	Dec. 31, 1920.....	22,823
Number of applications pending 8 years or longer:		Total number of applications pending not in issue or forfeited:	
Dec. 31, 1915.....	419	Dec. 31, 1915.....	102,632
Dec. 31, 1916.....	283	Dec. 31, 1916.....	97,463
Dec. 31, 1917.....	261	Dec. 31, 1917.....	98,558
Dec. 31, 1918.....	237	Dec. 31, 1918.....	92,156
Dec. 31, 1919.....	218	Dec. 31, 1919.....	107,390
Dec. 31, 1920.....	222	Dec. 31, 1920[38].....	127,641

[37] Nolan Hearings of 1919, p. 238.

[38] Report of Commissioner of Patents to Congress, December, 1920, p. 14.

Taft's commission on economy and efficiency reported, "That there is a considerable percentage of applications which are intentionally delayed by the attorney or the applicant is possible of proof. It may be true that an inventor of small means is anxious to have his application acted on as soon as possible, but even in the case of such an inventor it is not always true that he wishes prompt action, while in the case of applicants who are stronger financially it is alleged the intentional delay is not uncommon." [39]

Causes of Delays. The delay in the granting of a patent may be attributed to the inventor, to the Patent Office, or to both. More specifically, it may be on account of unwarranted claims in the application, the inopportuneness of the invention, the desire to include subsequent inventions, interferences, and conditions in the Patent Office. Two or more of these factors, of course, may be operative at the same time.

a. Unwarranted Claims in Application. The initial claims of a prospective patentee are usually broader than his invention justifies. As a rule he is not acquainted with the art to which it refers. A former commissioner of patents, in 1919, described this situation:

"There is hardly any application for patent filed now but what is rejected the first time, and naturally so, and that is something that nobody that I know of can obviate. The attorneys do not know when they file the applications and the inventors do not know what has been done before. The inventor is not acquainted with the art ninety-nine times out of a hundred, and he comes in with broad claims. He claims and he thinks that the invention is very much broader than it is ordinarily, so that the office has to tell him that his claims are too broad. He then comes back and amends. We cite him to references, and we give him what patents have been taken out before he comes into the office, and he then amends his application and by rewording his claims he avoids those references. Then the office examines the application as amended. The applicant is given a year in which to do that,

[39] House Document No. 1110, 62nd Cong., 3rd Sess., p. 179.

and frequently there are several communications passing between the office and the inventor before each is satisfied that the invention is properly claimed in the application. Taking the average of all of the applications we have, that process takes, I believe, about a year and a half or two years." [40]

b. Inopportuneness of Invention. Moreover, the time may not be opportune for patenting and introducing an invention, owing to the prevalence of an economic depression or the backwardness of the industry to which it relates. In either case the invention is ahead of its time.

Perhaps the most notorious example of a delayed application is the Selden patent. It pertained to the propulsion of a vehicle by means of a gasoline engine. A circuit court of appeals,[41] which declared the patent invalid, described and discussed the delayed application: [42]

"This patent was applied for in 1879 and granted in 1895. For over 16 years the application lay in the Patent Office, and the applicant took full advantage of the periods of inactivity permitted by the rules and statutes. It is apparent that he delayed just as long as possible the issue of the patent to him. During this long time the automobile art made marked advances along different lines, and when, in 1895, the patent was granted, it disclosed nothing new. Others had then made the patentee's discovery and had reduced it to practice in ignorance of what he had done. While he withheld his patent, the public learned from independent inventors all that it could teach. For the monopoly granted by his patent he had nothing to offer in return. The public gained absolutely nothing from his invention, whatever it was. From the point of view of public interest it were even better that the patent had never been granted. Judge Hough was quite within bounds in saying: 'No litigation closely resembling these cases has been shown to the court, and no instance is known to me of an idea being buried in the Patent Office while the world caught up to

[40] Nolan Hearings of 1919, p. 188.
[41] Columbia Motor Car Co. v. Duerr, 184 Fed. Rep. 893, 1911.
[42] All told, $2,000,000 in royalties was paid before the patent was declared invalid. W. Kaempffert, "Our Defective Patent System," *The Outlook,* July 6, 1912.

and passed it, and then embodied it in a patent only useful for tribute.' "[43]

The incentive to delay the granting of a patent may relate primarily to an improvement on a basic invention. An improvement cannot be used legally in conjunction with a patented basic invention without the consent of the patentee; therefore, it is to the interest of the inventor of the improvement to take out his patent about the time that the patent on the basic invention expires. Moreover, the incentive to do this may be present even though the same company controls both inventions. By graduating the delay in the securement of patents on improvements according to the expiration of basic and other patents, a monopoly may be extended indefinitely.

Prindle stated that "an exceedingly interesting instance of an attempt to prolong the monopoly after the expiration of the original patent is the case of the telephone. The main Bell telephone patent was issued in 1876 and expired in 1893. In 1877 an application for patent was filed by Berliner, and this application was kept alive in the Patent Office until 1891, when the patent was issued. The best form, and practically the only commercial form, of telephone transmitter is the loose carbon or microphone transmitter, and the Bell company contended that this Berliner patent covered this transmitter. In 1903 the patent was held by the court to cover only a transmitter having metallic contacts, and not to cover the microphone transmitter; but if the company's contention had been sustained, the monopoly would have extended from 1876 to 1908."[44]

c. Desire to Include Subsequent Inventions. An applicant by "juggling" with an application in the Patent Office several years, may use it as a scoop or dragnet for all similar applications which may be filed during the interim by other in-

[43] 184 Fed. Rep. 893, 894-895. In 1908 Selden received another automobile patent, the original application for which was filed in 1879. W. Kaempffert, "Our Defective Patent System," *The Outlook*, July 6, 1912. Other references to the Selden patent are: Allen, *United States Automobile Patents*, p. 491; and Edelman, *Inventions and Patents*, pp. 257-258; and Nolan Hearings of 1919, p. 298.

[44] Prindle, *Patents as a Factor in Manufacturing*, p. 71.

ventors. When a revelant patent is issued to another inventor the applicant immediately becomes busy with the dormant application, amending and broadening the originally loosely drawn specification and claims so as to include the invention which has just been patented. Two examples of this practice, accompanied by affidavits, were presented in 1912 to the House Committee on Patents by an inventor who described himself as the victim.[45] Dr. Backeland stated in 1912, that "with our current methods, it is possible to file patents and let them pend for many, many years, and use these pending applications as a dragnet in which to catch any other patents which may be applied for by others and by which to get the benefit of any practical developments or improvements which go on in the meantime."[46] An inventor "of a system known as the 'Telesene system,' used in hotels to call up the office and order anything that the guest wished to order from his room, where he was given a wide choice of articles, had an application on that system, and he drew a claim ultimately in the course of something over 15 years' prosecution, which embraced within its terms the central battery system in telephone communication, although the central battery system was not in existence when he filed his application on the Telesene and was not within his contemplation when he filed that application."[47] The Commissioner of Patents, in 1912, recommended the speedy issuance of letters patent "to prevent applicants from holding their applications in the office awaiting developments of the art by others and thereafter taking out broad patents which cause those who have made independent inventions during the pendency of the application to pay tribute to an applicant who has merely lain in wait for such developments."[48]

[45] Oldfield Hearings of 1912, No. 21, pp. 33-34.
[46] *Ibid.*, No. 4, pp. 37-38.
[47] Hearings before the House Committee on Patents, 64th Congress, 1st Session, p. 4.
[48] Oldfield Hearings of 1912, No. 1, p. 8. Other sources relating to dragnet patents are: Hearings before the House Committee on Patents, Patent Office Certificates of Correction, Jan. 31, 1912, pp. 60-68; Oldfield Hearings of 1912, No. 10, p. 31; Imperial Industries Club, "Symposium on Compulsory Working of Patents and Designs in England," *The Journal of Industrial and Engineering Chemistry*, Vol. 7, 1915, p. 307.

d. Interferences. Much of the delay in granting patents arises from interference proceedings. They are for the purpose of determining priority of invention between two or more parties claiming substantially the same patentable invention.[49] The interference may occur when different inventors, at practically the same time, file their applications covering the same subject matter; neither one anticipates a conflict with the other. On the other hand, those who file "dragnet" applications expect them to interfere with subsequent inventions; they are made for that purpose. The preparation, presentation, and consideration of these cases, together with various appeals which may be taken, mean indefinite delays.[50]

A lawyer stated, in 1914, before the Oldfield Committee: "I shall briefly refer to an interference which is still pending in the Patent Office, in which I am general counsel for one of the parties. To this interference there are three parties, and the applications involved have been pending in the Patent Office many years. The application of one of the parties was filed April 1, 1901, and has been pending a period of 13 years; the application of another of the parties was filed July 16, 1904, and has been pending a period of nearly ten years; and the application of the third party was filed February 11, 1905, and has been pending a period of more than nine years. The application of the party represented by me has been involved in three different interferences. The first of them was prosecuted through all of the tribunals of the Patent Office and to the court of appeals, and then the second interference was declared, and was prosecuted through all the tribunals of the Patent Office and to the court of appeals, and then the third interference was declared, which is the one now pending, and that is on its way through all the tribunals of the Patent Office and to the court of appeals."[51]

[49] House Document No. 1110, 62nd Cong., 3rd Sess., p. 44.
[50] Edelman, *Inventions and Patents*, p. 121; Wright, *Inventions, How to Protect, Sell and Buy Them*, pp. 89-92; Kimmel, *Patent Knowledge for Inventors*, pp. 60-61.
[51] Oldfield Hearings of 1914, p. 5; statement of Wm. A. Redding, Merchants' Assn., N. Y. City.

An inventor declared, in 1912, before the Oldfield committee that he knew of interferences which had been pending nine years.[52] For the year ended June 30, 1922, the interferences declared in the Patent Office numbered 2260.[53] Interferences constitute the chief explanation of the prolonged delays in the Patent Office.

e. Conditions in Patent Office. Another reason for delayed applications is the condition of the Patent Office. The extremely complex and involved procedure within the Patent Office, especially with respect to interferences, accounts for many delays.[54] Furthermore, insufficiency in the number of patent examiners causes much of the delay in the granting of patents. In July, 1919, Commissioner Newton said, "I have been connected with the Patent Office since 1891, and I am sure that the office was never in so poor a condition as it is now. It is poor in this respect, that I cannot get examiners." [55] In December, 1920, Commissioner Whitehead declared that the average new case is reached for its first action about seven months after it is filed. In December, 1922, Commissioner Robertson stated, "Since Commissioner Newton made the foregoing statement in July, 1919, conditions have been steadily growing worse. At that time the Patent Office was 18,000 applications in arrears; 18 months afterwards Commissioner Whitehead reported 40,000 cases in arrears; and now I am compelled to report 61,000 patent applications besides 6,000 trade-mark and design applications awaiting official action." [56] In August, 1922, the same commissioner reported 69,944 patent applications awaiting official action—"sufficient to occupy the whole force for a year, even if all new work were refused."

Consequent Risk in Development of Patents. The delay in the granting of a patent postpones the availability of the invention, and unduly prolongs the patentee's monopoly. Both

[52] Oldfield Hearings of 1912, No. 4, p. 40.
[53] Report of Commissioner of Patents to Secretary of Interior, 1922, p. 7.
[54] E. Wetmore, *Notes on Patent Law*, American Bar Assn., 37 Report 1914.
[55] Nolan Hearings of 1919, p. 188.
[56] Report, Commissioner of Patents to Congress, December, 1921, p. 3.

results violate the spirit if not the letter of the patent law. Moreover, this delay increases the risk connected with the development of patents. Delayed applications for patents—especially the "dragnet" variety—may when granted nullify the patents of other inventors and impair the capital already devoted to their development.[57]

The application for the Woodbury planer patent was in the Patent Office 28 years prior to its issue. Meanwhile others had been manufacturing and selling the invention in question. The appearance of the patent compelled them either to cease the manufacture and sale of the article or comply with the terms of the patentee.[58] The president of the Draper company told of the experience of his concern with delayed applications: "We were once made liable by the issuance of a patent nine years after its application. We had been manufacturing the infringing device made under a patent of our own granted much earlier. We had to compromise with the owners of the new patent, since it antedated ours; in fact, we had to buy the right of use at a very substantial figure."[59]

A manufacturer of shoe machines gave several illustrations of the effects of "dragnet" applications. One of these examples is as follows:

"In May, 1912, Andrew Raiche filed an application for a machine for setting lacing hooks. A very careful investigation was made to ascertain whether or not this machine infringed any prior patent. Nothing could be found which contained claims that were infringed. This application was considered by the Patent Office and a number of claims allowed, some of them very broadly, and the features of the machine were apparently new.

"In view of the fact that the prior investigation and examination of the Patent Office disclosed no patents which apparently were infringed, the manufacturers decided to build the

[57] It should be remembered that an inventor, in applying for a patent, is ignorant of the applications of rival inventors which may be pending.

[58] Hearings before the House Committee on Patents, Patent Office Certificates of Correction, Jan. 31, 1912, pp. 60, 66.

[59] Draper, "Patents," *Proceedings of the Eleventh Annual Convention of American Cotton Manufacturers Assn.*, 1907, p. 191.

Raiche machine and spent a great deal of money in making patterns, tools, jigs, template, etc., and actually placed on the market many of these (Raiche) machines.

"It was not until January, 1914, that the Patent Office declared an interference between this application of Raiche's and an application which had been filed by one Goddu, which latter application had been pending in the Patent Office since 1905. The situation is obvious. Since Raiche's invention was made so late in date the Goddu patent will issue with claims that will completely dominate Raiche's machines, and means practically that Raiche's machine must be abandoned and that all the money that has been spent on it lost." [60]

The discouragement of the development of inventions on account of the delay in granting patents retards technical progress and therefore economic welfare.

Inefficient and Unethical Attorneys

A patent attorney should possess the two cardinal qualities of ability and honesty. He should advise the inventor not only as to the patentability of the invention, but also as to its probable commercial value. The relationship between them is necessarily one of trust and confidence. The inventor, ignorant of patent law and procedure, must rely upon the ability and integrity of the attorney. It is important not to obtain a patent for its own sake, but to procure one which will secure real protection. The Patent Office in its rules of practice recommends the employment of "a competent patent attorney, as the value of patents depends largely upon the skillful preparation of the specification and claims." [61]

The Supreme Court has emphasized the need of an experienced patent lawyer, as follows: "The specification and claims of a patent, particularly if the invention be at all complicated, constitute one of the most difficult legal instruments to draw with accuracy, and in view of the fact that valuable inventions are often placed in the hands of inexperienced per-

[60] Oldfield Hearings of 1914, Part 8, p. 149.
[61] No. 17.

sons to prepare such specifications and claims, it is no matter of surprise that the latter frequently fail to describe with requisite certainty the exact invention of the patentee, and err either in claiming that which the patentee had not in fact invented, or in omitting some element which was a valuable or essential part of his actual invention."[62]

Patent law practice is technical and intricate; it requires a knowledge not only of law but of the arts and sciences as well. Nevertheless, it is comparatively easy to qualify as a registered patent attorney; and therefore some of the patent attorneys may be incompetent. An attorney may succeed in obtaining a patent on an invention that he does not understand and therefore cannot clearly describe. Incompetence on the part of the lawyer, even though his intentions are of the highest order, is likely to mean a vague or narrow patent. The able lawyer should secure claims which are clear and broad, and the ability to do this requires a knowledge of the "prior state of the art."

Some patent solicitors strive for "quantity production"; in other words, they are more interested in securing fees than in giving proper service to their clients. They may charge exceptionally low fees, and recommend the securement of the most trivial patents, those covering the most minute features or improvements. Moreover, the patent attorney, in an effort to rush patent applications, may agree to cancel claims to which objections have been made by the Patent Office; and may, therefore, secure a patent which contains only narrow and insignificant claims, one that fails to protect the essence of the invention. It should be stated in this connection that the Patent Office objects to one or more claims of about ninety per cent of the applications for patents. Furthermore, the attorney, in an attempt to secure a large number of patents for clients, may recommend, in spite of foreign laws concerning fees and compulsory working of patents, that they take out patents in other countries. Many of these foreign patents are abandoned within a few years, but this is apparently of no concern to the unethical lawyer who has already received his

[62] Topliff v. Topliff, 145 U. S. 156, 171 (1892).

fees. The Commissioner of Patents, in discussing this situation, declared that innocent inventors are bled financially.[63]

The advertising standards of several lawyers have been subjected to adverse criticism. Until recent years, and even now to some extent, it has been the practice of some of them to advertise "free searches." Several years ago an inventor sent the duplicate of a patent already granted to him, to six Washington attorneys who advertised free searches. Every one of them replied that not only did they consider the construction patentable, but that nothing similar had ever been patented. Some even commented on its originality.[64] One firm of patent attorneys stated in a form letter of April 12, 1921, in answer to a general inquiry of the author, that "if you have invented something, you should without delay send us a description of it, together with a sketch, photograph, or model, in order that we may report regarding the patentable nature of your invention," and later added, "remember that our opinion will cost you nothing." Some advertise a contingent fee system like that prevailing in personal injury cases, namely, the payment of fees in case the patent is obtained. This arrangement serves to stimulate the attorney in securing patents, however worthless, so as to collect the fees. Others cater to rejected applications. One of them states that he makes a specialty of handling "cases which have been unsuccessfully conducted either by the inventor or by other attorneys." Other aspects of unethical advertising by patent lawyers include stories of fortunes made by inventors, and a list of inventions wanted. The Commissioner of Patents, in 1912, stated, "The character of this advertising in many instances is such as to cause the unwary inventor to believe that great inducements are held out to him for simple inventions, and he is gradually lured on until considerable sums of money have been obtained from him without any adequate return of services." [65]

A few patent attorneys issue "confidential invitations to subscribe to business ventures based on patents. One attor-

[63] Nolan Hearings of 1919, p. 231.
[64] H. C. Thomson, *The Story of My First Invention*, p. 6.
[65] Oldfield Hearings of 1912, No. 1, p. 7.

ney, in a form letter of August, 1921, addressed to the author, held out such an opportunity. "Has it ever occurred to you that the safest—the surest—way to make money out of an idea is to *get in on the ground floor* of a new concern that is marketing, or is about to market, some invention of *unusual* value?" Further, "Every once in a while my large practice brings me into contact with a most unusual opportunity," etc. The invitation was limited and exclusive in character, as the following would suggest:

"This letter is being sent to several hundred selected clients and others whose names have been given to me as being progressive business men to whom an unusually good proposition will appeal. If replies received justify it, I will list those interested and lay before them for consideration each good proposition as it comes to my attention. A few men with a few dollars can do nothing. A thousand men with only $100 each can make industrial and commercial history—and money for themselves. That is the whole story in a nutshell.

"Will you be one of the thousand? Will you listen to, and consider an unusual opportunity when it knocks at your door? If so, fill out the enclosed card, sign it and drop it in the mail—it's one of Uncle Sam's so it doesn't even need a stamp. Of course, it won't put you under any obligation, and you needn't invest a cent unless you like the proposition I may submit to you.

"If you are NOT interested, say so on the card and let someone else have the chance.

"Will you please let me hear from you IMMEDIATELY?"

A recent assistant commissioner of patents described the exploitation of the patent system—and of the innocent inventor particularly—by the unethical patent attorney, in the following terms: "The present evils are glaringly apparent. Make-believe inventions used for promoting stock-selling schemes are usually carried on by the aid of unscrupulous patent attorneys. These should be vigorously searched out and eliminated. Great numbers of incompetents who have prostituted a profession into a mere business of fleecing the innocent swarm about the Patent Office offering alluring prospects to useless ingenuity. When they catch the innocent they file imperfect papers; they prosecute with the sole view of getting

a patent quickly without regard to its value; they habitually induce inventors to file expensive foreign applications before investigation as to whether there is an invention present. They encourage efforts in wrong directions, promote the patenting of immature ideas, waste the money and energy of inventors, all for the sole purpose of swelling their own profits."[66]

Unscrupulous Promotion of Patents

Patent attorneys, as already suggested, may exploit their profession by trying to promote patents. Other individuals of a more questionable sort may, in pretense of promoting patents, fleece the inventor and others. They offer to secure purchasers of patents, and the inventor pays a fee for a service which he fails to receive. Another plan of unscrupulous promoters is to supply capital through stock-selling schemes, and to take some thirty per cent as their share for their services. At about the time when the whole scheme is about to fail the promoters disappear and the inventor must meet the responsibility alone. Some of these get-rich-quick schemes have deceived leading inventors, and netted the promoters thousands of dollars.[67] Inventors themselves may play the rôle of the dishonest promoter. In many cases their stock in trade consists of elaborate plans and specifications, which they use as a bait, but which they know will never be developed.[68]

Employer-Employee Contracts

Employees, as a general rule, are entitled legally to their own inventions and the patents which cover them. This right may, however, be modified by contract. Many manufacturers of patented products require their factory or mill employees to agree that any inventions which they may make during

[66] Nolan Hearings of 1919, p. 278.
[67] Edelman, *Inventions and Patents*, p. 150.
[68] Avram, *Patenting and Promoting Inventions*, p. 23.

their term of employment shall be assigned to the employer.[69] The employee applies for the patent and assigns it to the employer, apparently receiving, in most instances, no substantial remuneration. This arrangement has the effect of granting a seventeen year monopoly to a manufacturer who has expended nothing in securing the invention. It also deadens the incentive to invent on the part of the employee. The patent system furnishes no direct stimulus to the employee. The employer would receive the same ideas from the employee, in the absence of patents, by requiring him to sign a contract to the effect that all improvements conceived by him must be transmitted to the employer.

An electrical engineer who entered into a contract of this sort with the American Telephone and Telegraph Company as a condition of employment, wrote to the Oldfield Committee in 1912 that all such contracts tend to discourage invention by removing the incentive to invent.[70] A member of Congress from Massachusetts, who appeared before this committee, expressed a similar thought and indicated the prevalence of these contracts. He stated that the employees of the Crompton Knowles Loom Works, the Draper Company, and the United States Envelope Company assigned the patents on their inventions to their respective employers, without receiving any remuneration for them.[71] Many other corporations, such as the General Electric Company, Eastman Kodak Company, and the United States Rubber Company, maintain similar contracts.

It should be added that this situation prevails to some extent as between the Government and its employees. Several of the Government departments, although they have not required their employees to assign their inventions to the Gov-

[69] Appendix VI contains a reproduction of one of these contracts. References to the legal rights of the employer and employee with respect to the inventions of the latter are: *Patents*, Machinery's Reference Series, pp. 29-31; Prindle, *Patents as a Factor in Manufacturing*, pp. 84, 85, 88; 91, 92; Edelman, *Inventions and Patents*, pp. 125-127; Mastick, "Contractual Rights Relating to Letters Patent," *Journal of Industrial and Engineering Chemistry*, Vol. 7, 1915, p. 984.

[70] Oldfield Hearings of 1912, No. 26, p. 47.

[71] *Ibid.*, No. 24, p. 23.

ernment, have discouraged them from taking out patents. Some of the employees have voluntarily relinquished their patent rights to the Government. A law of 1883 provides that if an employee of the Government "would dedicate the free use of his invention to the Government and the people of the United States, a patent would be issued to him without the payment of fees." As this provision eliminated "all hope of remuneration from the patent, both from its use by the Government and the public, inventors in the Government service have not generally resorted to it." This law is, in form, merely permissive, but a former Secretary of Agriculture attempted, in 1905, to make it compulsory in his department.[72]

Remuneration or recognition—in short, reward of some sort—is necessary to stimulate inventors. Any contract or law which deprives them of reward discourages invention and therefore should be condemned.

Continuation of Monopoly after Expiration of Patent

A monopoly based upon a patent may, in effect, continue after the expiration of the patent. This is especially true of an advertised product of personal use which bears a trade-mark. For seventeen years a trade-mark may be associated with the patented product; the one may suggest the other so invariably that they become practically synonymous in the mind of the consumer. After the expiration of the patent, therefore, the monopoly of the product based on a patent tends to pass over into a monopoly of the same product based on a trade-mark. The same product manufactured by others suggests imitation and inferiority. Aspirin, for example, was advertised as patented and as Bayer's aspirin prior to the expiration of the patent covering the product. The long association of only one trade-mark, that of Bayer and Company, with aspirin enables this company to continue the domination of the market in this product. Other companies have manufactured aspirin since the expiration of the Bayer patent, but

[72] House Report (Misc. Sp.) 5374, 60th Cong., 1st Sess., p. 7.

most people who purchase this product insist upon Bayer's for the reason stated.

Conclusion

Litigation, delay in granting patents, and contracts which compel employees to surrender their inventions to employers may be used to further the designs of industrial monopolies based on patents. Moreover, litigation, delay in granting patents, inefficient attorneys, and unscrupulous promotion increase the risk connected with the development of inventions, and therefore encourage the suppression of patents. Lastly, all the evils described in this chapter discourage inventors and constitute a great economic waste, as explained in the next chapter.

CHAPTER VIII

DISCOURAGEMENT OF INVENTORS

THERE are several ways in which the inventor attempts to secure his reward. He may sell his patent rights to others either for a lump sum or for royalties; the former basis of compensation is much more frequent than the latter. He may develop his invention either with his own capital or partly, if not entirely, with the capital of others; usually it is necessary for the inventor to seek outside sources of capital. Although a considerable number of corporations have built on the inventions of their officers, a very small percentage of the patentees manufacture their own inventions.[1] The majority of patented inventions are neither sold to others nor developed by the inventors; they are not developed at all.

EXTENT OF FAILURES OF INVENTORS

Inventors, patent attorneys, and others who have appeared before Congressional committees on patents and who have discussed the patent problem in the press, agree almost unanimously that inventors as a group are ultimately discouraged rather than encouraged by the present patent situation. Only about one per cent of the inventors whose names are recorded in the Patent Office are financially successful.[2] Dr. Baekeland once stated, "I know many inventors, and I can tell you that very, very few of them ever obtained any important sum of money by their inventions, as such."[3] Thomas A. Edison said, "Unhappily there is absolute certainty that under our present patent laws the poor devil of an inventor would never receive

[1] Oldfield Hearings of 1912, No. 10, pp. 19-20; No. 4, p. 11.
[2] *Ibid.*, No. 24, p. 4.
[3] *Ibid.*, No. 4, p. 35.

any reward."[4] Assignees have made practically all the money that has been derived from patents.[5] Admiral Fiske stated that "many an inventor has endured a purgatory while trying to get a hearing for his invention, and yet been wholly forgotten when it was finally adopted."[6] Some of our greatest inventors, such as Whitney and Goodyear, have failed to receive the rewards which they richly deserved. The Commissioner of Patents, in 1858, said of Goodyear, "No inventor probably has ever been so harassed, so trampled upon, so plundered by that sordid and licentious class of infringers known in the parlance of the world as 'pirates.'" He died worn out with work and disappointment.[7] Almost endless evidence of this kind could be adduced to show the conspicuous failure of our patent system in enabling our inventors to secure the rewards which the framers of the Constitution intended to provide.

Causes of Disappointment of Inventors

The explanations of this failure, suggested in the foregoing chapters, may be grouped as follows: demerits of inventions and patents; monopoly of patents; unfair competition; suppression of patents; other evils of the patent system, such as employer-employee contracts, delayed applications, unscrupulous promotion, inefficient and dishonest patent attorneys, and litigation; lack of capital; nature of invention; and characteristics of the inventor. These will be considered in greater detail in the order indicated.

Demerits of Inventions and Patents. Inherent technical defects of inventions and patents explain the suppression of many patents, as previously noted, and also the disappointment of hundreds of inventors. The successful inventor must contribute something which is both profitable and advantageous to the public. He must be master of the art in which he is

[4] *Literary Digest*, June 19, 1920, p. 114.
[5] Senate Document, No. 6, p. 17.
[6] Fiske, *Invention, The Master-Key to Progress*, pp. 308-309.
[7] P. G. Hubert, *Men of Achievement—Inventors*, p. 177.

hoping to produce an improvement.[8] An invention should be a better or cheaper way of accomplishing a result. An inventor to be successful should conduct a preliminary investigation as to the possible cost and sales of his invention. Frederick P. Fish, the "dean" of the patent bar, expressed the belief that four out of five inventions that are patented are for worse ways of doing something that is well done already. The man that makes that kind of invention usually does not recognize its defects, and charges its failure to others.[9]

Moreover, an invention may be so far ahead of the times that the term of the patent may completely expire before the public fully understands, adopts, or appreciates the invention.[10] Inventions must overcome habit, custom, prejudice, and indifference.[11] Draper, at one time president of the cotton machinery company which bears his name, said: "The introducer of a patented improvement not only has to encounter the competition of infringers, but he has to overcome the prejudices of the possible purchasers. The average man does not like to change a process or a machine that he is used to, any more than he likes to change the style of his clothing or the hours of his meals. He can be convinced of the necessity for change if there be sufficient proof of a profit; but his help also dislike to change their habits, and they are not so sure of sharing in the profit. Many a good idea is killed because the operatives will not assist in getting possible results from new machinery, and the very operatives who have become efficient by long practice with the old machinery are less likely to encourage the adoption of the new ideas. We have found that we sometimes get better results with new machinery where help is used that never knew the old machinery. They have nothing to unlearn." [12]

The inventor working alone may be carried away by his

[8] Oldfield Hearings of 1912, No. 24, p. 5.
[9] Nolan Hearings of 1919, p. 63.
[10] Senate Document No. 6, p. 70.
[11] *Literary Digest*, June 19, 1920, p. 114.
[12] Draper, "Patents," *Proceedings of the Eleventh Annual Convention of American Cotton Manufacturers' Assn.*, 1907, p. 186.

ideas, and consequently the result of his efforts, though new and patentable, frequently cannot be reduced to practice. The inventions made by men lacking experience in operating the machines to which their inventions relate, must be modified by practical men, in most instances, before they can be utilized.[13]

An invention which compares favorably with competing products from the standpoint of utility cannot be successfully introduced in many cases because its price is considered too high. Furthermore, if the purchase requires the expenditure of a considerable amount of money, the prospective buyer may want assurance that his competitor will not be able to secure the invention on more favorable terms and that the seller will not later offer a better model to his competitor.[14]

The disappointment of the inventor due to the apparent demerits of his invention has been described in a picturesque fashion by Sir W. Petty:

"Note, by the way, that few new Inventions were ever rewarded by a Monopoly; for although the Inventor oftentimes drunk with the opinion of his own merit, thinks all the world will invade and incroach upon him, yet I have observed, that the generality of men will scarce be fired to make use of new practices which themselves have not thoroughly tried, and which length of time hath not vindicated from latent inconvenience; so as when a new Invention is first propounded, in the beginning every man objects, and the poor Inventor runs the Gantloop [gauntlet] of all petulant wits; every man finding his several flaw, no man approving it, unless mended according to his own advice. Now not one of an hundred outlives this torture, and those that do are at length so changed by the various contrivances of others, that not any one man can pretend to the Invention of the whole, nor well agree about their respective shares in the parts. And moreover, this commonly is so long a doing, that the poor Inventor is either dead, or disabled by the debts contracted to pursue his design; and withal railed upon as a Projector, or worse, by those who

[13] *Ibid.*, p. 189.
[14] *Ibid.*, p. 186.

joyned their money in a partnership with his wit; so as the said Inventor and his pretences are wholly lost and vanisht." [15]

The patent, regardless of the merit of the invention itself, may be well-nigh worthless because of neglect in investigating the patent situation. A patented invention of a basic nature may prevent the exploitation of the improvement patent. The claims in the patent may be narrow and therefore easily evaded by means of alternate patents. Further, it may be vague and weak because, when granted, the invention was in a nebulous state.[16]

Worthless inventions and weak patents must fail, of course, to bring the inventor any financial return. On the other hand, many a patentee—the proverbial poor inventor especially—has received little or nothing for meritorious inventions and for reasons which will now be examined.

Monopoly of Patents: (*a*) *Control of Basic Patent.* An individual or company may control the basic and pioneer invention to which an improvement relates. The improvement cannot be used legally in conjunction with a patented basic invention without the consent of the patentee. In other words, those who improve basic inventions protected by patents must depend upon the latter in order to derive any return from their inventions. The owner of a basic patent, therefore, has a considerable advantage in bargaining for patents which cover improvements on his invention. This situation in turn prevails in the case of slight improvements of important improvements, if it is assumed again that both are covered by patents. Therefore, any individual or concern which has a pioneer and basic patent in the beginning and which acquires important improvement patents subsequently, is in a position to drive hard bargains in acquiring slight improvements from others. It enjoys, in other words, a purchasing monopoly as far as one particular field of invention is concerned.

b. Patent Trusts. Many corporations, as shown in previous

[15] C. H. Hull, *Economic Writings of Sir W. Petty*, Vol. I, pp. 74-75.

[16] The worthless invention and the weak patent as factors in the promotion of new enterprises are discussed by A. S. Dewing, *Corporation Finance*, pp. 52-53.

chapters, are industrial monopolies based largely upon the control of many patents. Each one of them represents practically the only market for the patents of outside inventors—i.e., enjoys a monopoly in the buying of patents. The outside inventor of shoe machinery, for example, must perfect an entire line of shoe machinery and secure sufficient capital to engage in its manufacture, or sell his patents to the United Shoe Machinery Company. The latter is by far the more likely to happen. In fine, there is practically only one purchaser of patents relating to shoe machinery while there may be many prospective sellers of them. Likewise, patents pertaining to cotton machinery must be sold, if at all, to the Draper company.[17] The General Electric and Westinghouse Electric Companies control the situation so far as the purchase of most electrical patents is concerned. From 1896 to 1911 these two companies maintained a patent purchasing agreement to the effect that neither one would acquire a patent which would tend to injure the other; and many inventors, consequently, became embittered because they could not find a market for their patents.[18]

President Taft, in his message to Congress in 1912, stated that "large corporations, by absorbing patents relating to particular arts, have succeeded in dominating entire industries, and the only market to which an inventor of improvements upon such machines may offer his patents for sale is to such corporations." A corporation of this sort will pay for a patent according to the protection that its ownership will give to a pre-existing monopoly.[19]

Mr. Brandeis, now a justice of the Supreme Court, said before the Oldfield Committee in 1912:

"These great organizations are constitutionally unprogressive. They will not take on the big thing. Take the gas companies of this country; they would not touch the electric light. Take the telegraph company, the Western Union Telegraph

[17] Draper, "Patents," *Proceedings of the Eleventh Annual Convention of American Cotton Manufacturers' Association*, 1907, p. 185.
[18] Oldfield Hearings of 1912, No. 4, pp. 5, 6, 16.
[19] Oldfield Report of 1912, p. 7.

Company; they would not touch the telephone. Neither the telephone company nor the telegraph company would touch wireless telegraphy. Now, you would have supposed that in each one of those instances those concerns if they had had the ordinary progressiveness of Americans would have said at once, 'We ought to go forward and develop this.' But they turned it down, and it was necessary in each one of those instances, in order to promote those great and revolutionizing inventions, to take entirely new capital." [20]

The Inventors' Guild, an association of eminent inventors, has stated, "It is a well-known fact that modern trade combinations tend strongly toward constancy of processes and products, and by their very nature are opposed to new processes and new products originated by independent inventors, and hence tend to restrain competition in the development and sale of patents and patent rights; and consequently tend to discourage independent inventive thought, to the great detriment of the nation, and with injustice to inventors whom the Constitution especially intended to encourage and protect in their rights." [21]

c. Continuity of a Patent Monopoly. Moreover, the independent inventor may be discouraged by the continuity of an existing monopoly based on patents. In order to succeed, he must overcome what may be termed the prospective unprofitableness of capital and inventive effort. The mere size of a corporation which rests upon patents, together with the complexity of its organization, may well deter a poor inventor who would become a competitor. Its enormous plant, marketing organization, etc., suggest to him the impossibility of competing, and therefore the necessity of selling his patent at a price which it may dictate. Moreover, many inventions are complementary in nature; in short, a complete set must be furnished to users or else none at all. For example, the invention of a single new shoe machine, though of a most efficient type, would not find a ready market among shoe manufacturers, since they are interested in obtaining a complete line of shoe

[20] Oldfield Hearings of 1912, No. 18, p. 12.
[21] Oldfield Report of 1912, p. 3.

machinery. Even though the inventor could perfect a new, complete, and efficient line of machines, he would experience difficulty in introducing them. Manufacturers, employees, and others dislike to change machinery or anything else to which they are accustomed. They are naturally suspicious of anything which is new and prefer to let others give it the first test. Further, a large corporation having hundreds and even thousands of patents suggests trouble to those who would invade its territory. It bristles with patents which, like bayonets, point toward those who would enter the preempted field. It is often difficult to know the ground really covered by the expired and unexpired patents respectively; hence a long list of patents, however trivial in reality, may dishearten those who would become competitors.

A large corporation whose business rests largely upon patents is in a better position, through its professional inventors and other employees, to invent in an effective fashion. Their experience furnishes a background for intelligent procedure. As nothing succeeds like success, so nothing invents like invention. They are familiar with the product already patented, have excellent laboratory facilities for testing out their ideas, and in addition receive business-like advice as to what should be invented. Their efforts are directed along money-making lines.

This situation is in contrast to the disadvantages of the outside inventor with very limited means. He is not in a position to draw upon the experience of other inventors and the counsel of the engineer and the business manager; he seldom knows what has already been accomplished in the general field to which his invention relates, and usually lacks adequate facilities for making and testing his invention. He makes more mistakes in proportion to the inventive effort put forth, and in the end usually becomes one of many disappointed inventors.

Unfair Competition. The employment of unfair methods prevents the survival of the most efficient business unit, and tends to create monopolistic conditions and therefore to obstruct the exercise of initiative. It closes the field of oppor-

tunity and therefore may discourage the inventor as well as others. Exclusive arrangements of all sorts may deprive the patentee of a market for his invention. Thus, the attempt of the manufacturer to dictate the supplementary supplies for his patented product discourages attempts to invent better supplies. Litigation in the courts and interference proceedings in the Patent Office constitute one of the worst obstacles to the patentee of moderate means. One inventor stated before the Oldfield committee, "Invention and the manufacturer of patented inventions are being discouraged rather than encouraged. The discouraging influence is the fear of unjust, harassing, and enormously expensive litigation." [22] The enforcement of a patent in the courts according to Dr. Backeland is subject to so many uncertainties, complications, delays, and to such enormous expenses, that the man with limited resources is at an inexpressible disadvantage.[23] Admiral Fiske, in describing the exploitation of the inventor, declared that in some instances wealthy manufacturers have stolen his invention, knowing that he was too poor to fight against them.[24] Other kinds of unfair competition described in a preceding chapter, like false marking and piracy of inventions, constitute obvious sources of discouragement to the patentee.

Suppression of Patents. A previous chapter has described the causes and extent of the suppression of patents. Inadequate finances of the inventor, the illegality of an unauthorized use of improvements in conjunction with patented inventions of a basic nature, and other factors may prevent the use and development of his invention, and explain his failure to receive any financial reward. Furthermore, suppression, even though the patentees receive handsome prices for their inventions, tends to discourage them. It tends to deaden their creative faculties, to smother the instinct of workmanship or contrivance. Those who justify the suppression of patents take little or no account of the inventor's happiness in seeing his inven-

[22] Oldfield Hearings of 1912, No. 15, p. 7; statement of A. C. Eastwood, President of Electric Controller and Mfg. Co., Cleveland, Ohio.
[23] *Ibid.*, No. 4, p. 34.
[24] Fiske, *Invention, The Master-Key to Progress*, p. 309.

tion in general use and the stimulation to additional inventive effort which he derives from it. Undoubtedly a part of the reward of the inventor, and especially of the great inventor, is psychological in nature; and the suppression of his invention, whatever the cause, prevents that reward, and therefore to that extent discourages him.

Other Evils of Patent System. As set forth in the last chapter, other abuses of our patent system dishearten the inventor. Contracts between an employer and his workmen by which the latter agree to assign their inventions to the former thwart the purpose of the patent laws. Delays in the granting of patents, especially if they arise from dragnet applications, may weaken or invalidate a patent previously granted and therefore may vitiate any investment in a business based upon it. Inefficient and unethical patent attorneys, who are interested in fees and not in the welfare of their clients, are responsible for many worthless patents and disappointed inventors. The sequel to this evil is the unscrupulous promotion of patents by which the unwary inventor pays dearly for having his hopes raised by the false representations of the promotor, only to be dashed to earth when the true facts are learned.

Patent litigation is the greatest curse to inventors. Granting the good faith and adequate finances of the contestants would not justify a modification of this statement. The evil effect of litigation, however, is intensified if one litigant is wealthy and the other poor. The testimony of various inventors may be offered to show their attitude toward patent litigation. Edison stated in a letter to the Oldfield committee: "The long delays and enormous costs incident to the procedure of the courts have been seized upon by capitalists to enable them to acquire inventions for nominal sums that are entirely inadequate to encourage really valuable inventions. The inventor is now a dependent, a hired person to the corporation. The administration of the law is the cause." [25] Dr. Baekeland stated before the same committee, "Woe, indeed, to the poor inventor who tries to enforce his rights against

[25] Oldfield Hearings of 1912, No. 23, p. 32.

wealthy infringers, aided by skillful lawyers; his well-engraved United States patent parchment may then become his certificate of entrance to the poorhouse or to the lunatic asylum. All this tends to discourage invention by independent individuals and paralyzes the stimulation of invention our Constitution intended to promote by the patent law."[26] Another inventor said that the Government, by means of a patent, gives the inventor "a very beautiful printed instrument, with a ribbon and seal, and practically tells him to go out into the world and, if it is of value, to fight off pirates who will help themselves to it."[27]

Lack of Capital. The preceding discussion of the factors which discourage the inventor suggests the necessity and at the same time the difficulty of securing adequate capital for defending a patent and developing an invention. For example, the extent of invalid patents requires a complete search of the legal merits of a patent prior to its development. The cost of making this search is often prohibitive.[28] Large capital is necessary not for the development of the invention, but to protect it.[29]

However, even though these weaknesses in our patent system did not exist, it would still be true that a new invention requires an enormous amount of capital for developmental purposes. The theory of the patent system, more than a century ago, was that the inventor himself would make and sell his invention. It was a time of relatively simple tools and devices, the production and sale of which required no great outlay of capital. Large scale production and a national market, however, make this theory inapplicable to-day. Modern methods of manufacturing and marketing a new product, and especially a complicated one, demand an initial outlay of large proportions. Machinery for making the invention must be perfected and its introduction to the public requires salesmen and advertising. Moreover, those who introduce patented

[26] Oldfield Hearings of 1912, No. 4, p. 34.
[27] *Ibid.*, No. 24, p. 10.
[28] Nolan Hearings of 1919, p. 77.
[29] Oldfield Report of 1912, p. 23.

machinery are compelled by the very haste of its evolution, continually to modify it.[30] It costs $200,000 to make the tools and machines that are necessary to put a typewriter on the market, at a salable price, even before any advertising is done.[31] Dr. Baekeland said that he has been personally identified with enterprises which could only begin to work an invention after investing to the extent of $1,200,000 for plans alone.[32] The alliance between the inventor and the capitalist is more important now than formerly because of the increasing complexity and cost of modern devices.[33] The capitalist furnishes the power of waiting, an indispensable function in the development of an invention. One inventor has expressed the opinion that few patents of merit have ever been brought to a marketable condition, on an average, in less than ten years.[34] In fact, inventors often lose possible profits because they are not willing to wait for slow returns.[35]

The inventor and others do not appreciate, in many instances, the contribution of capital in making inventions available for daily use. The inventor, in order to receive his fair share, must offer an attractive proposition to the capitalist.[36] The patentee may welcome the coöperation of the capitalist and agree to give him a fair share of any return from his invention and still be unable to secure sufficient capital for its development. The patentee is usually the proverbial poor inventor and therefore must seek outside sources of capital. Banks refuse to finance a new invention of any sort, for they cannot afford to lend money with mere possibilities as security. The patentee may either borrow money from his friends and other individuals or sell an interest in his invention to them. But the uncertainty of any new invention and the defects of

[30] Draper, "Patents," *Proceedings of the Eleventh Annual Convention of American Cotton Manufacturers' Association*, 1907, p. 192.
[31] Thomas, *Industry, Emotion and Unrest*, p. 5.
[32] Oldfield Hearings of 1912, No. 4, p. 42.
[33] F. W. Taussig, *Inventors and Money-Makers*, p. 41.
[34] Oldfield Hearings of 1912, No. 4, p. 24
[35] Draper, "Patents," *Proceedings of the Eleventh Annual Convention of American Cotton Manufacturers' Association*, 1907, p. 191.
[36] Oldfield Hearings of 1912, No. 18, p. 10.

our patent system deter them in advancing funds. The same reasons often explain the difficulty in securing any appreciable remuneration from the outright sale of patents.[37]

Insufficient capital, to repeat, explains the failure of many patentees to secure any appreciable reward from their inventions. The Commissioner of Patents reported, in 1872, "It is a fact familiar to all who have given the subject-matter any considerable attention that a very large proportion of the more valuable inventions are assigned in their infancy for trifling considerations, because of the indigent circumstances of the patentee." [38]

The importance of capital, as indicated, tends to direct the efforts of the poor inventor along those lines which require a minimum of capital.[39] As the editor of the *Inventors' Outlook* said, "The inventor of a fascinating toy or a puzzle or some other device of a transient character has less economic difficulties to overcome than the inventor of a new art or a vital improvement in an old art, which greatly widens the social horizon or vastly enriches the social domain. That this should be so is at once a great tragedy and national problem." [40]

Nature of Invention. Invention represents a growth, a prolonged and persistent effort by many individuals. There is a period of conception, a period of development, and a period of achievement. These periods may be separated by many years.

Those who conceive and develop an invention do not receive, as a rule, their fair share of recognition and remuneration. On the other hand, those who manufacture and sell the invention, adding perhaps some slight improvements, obtain the lion's

[37] Nolan Hearings of 1919, p. 69.
[38] Senate Document No. 6, p. 17.
[39] One inventor stated that "the man who starts in the development of inventions may sometimes be fortunate in having a hook and eye or something else which is not very elaborate to build, or which can be readily exploited, with reasonable gift of gab; but if it is a thing that is complicated, or which trenches upon existing situations, he has a long and tedious fight ahead of him, and most inventors go down."—Nolan Hearings of 1919, p. 141.
[40] Oldfield Hearings of 1912, No. 6, p. 18; also, see *Ibid.*, No. 14, p. 9.

share of the reward. As Admiral Fiske has said, "An invention that may have cost its creator the toil and struggle of a lifetime may not gain success simply because of some existing unfavorable conditions of some kind. Suddenly the conditions become favorable. John Doe takes advantage of all the work that other men have done, adds some slight improvement, achieves 'success' and dons the laurel wreath."[41]

Moreover, inventions which appear unrelated are often complementary to each other. Every great invention presupposes other inventions; the one would be impossible without the other. The airplane waited upon the internal combustion engine. The inventor and maker of the boring machine enabled Boulton and Watt in 1776 to bring their steam engine to the point of practicability.[42] Those who lay the foundation of a great invention may be ill rewarded and soon forgotten. We hear of the inventors of the telephone and the airplane, but not of the inventors of machines and tools which made possible the manufacture of the telephone and the airplane.

Moreover, environment in the form of inventions, scientific discoveries, etc., determines to a large extent the direction of inventive endeavors. Two or more individuals, therefore, may conceive a new invention approximately at the same time, but only one of them receives a patent.

Characteristics of Inventor. The disappointment of the inventor, and especially of the great inventor, may arise from his personal characteristics. The mechanical genius is not likely to be a capable organizer and manager.[43] The great inventor, like the artist, is usually so absorbed in his thoughts that he cares but little for material gain.[44] Again, an inventor may be eccentric because of the very qualities that make him an inventor. He is apt to overestimate the importance of his invention and therefore to become the victim of bitter disappointment when his exalted hopes are shattered. Lastly, the temperament of the inventive genius yearns for a just

[41] Fiske, *Invention, The Master-Key to Progress*, p. 217.
[42] Thompson, *The Age of Invention*, pp. 184, 228.
[43] F. W. Taussig, *Inventors and Money-Makers*, pp. 38-39.
[44] Fiske, *Invention, The Master-Key to Progress*, p. 309.

valuation of his contribution to the social welfare. Disappointed and embittered, he may very appropriately repeat the words of Dickens's poor inventor: "Is it reasonable to make a man feel as if, in inventing an ingenious improvement meant to do good, he has done something wrong? How else can a man feel after he is met with difficulties at every turn? And look at the expense, how hard on me, and how hard on the country, if there is any merit in me (and my invention is took up now, I am thankful to say, and doing well), to put me to all that expense."[45]

Effect of Discouragement

Retardation of Inventions. The obstacles which may greet the inventor at every turn encourage him to keep his invention secret. The likelihood of interference proceedings and of subsequent litigation especially deters the poor but intelligent inventor in taking out a patent. Thomas A. Edison stated in 1912 that "the administrative and judicial processes are discouraging inventors and to-day are driving the best of them into the adoption of secretly worked machinery and processes."[46] Many inventions remain under cover awaiting the time when the inventor can secure capital.[47] Dr. Baekeland once said, "When an inventor asks me whether he shall take out a patent in the United States I tell him, 'Have you got the money to maintain your rights and to defend them in case of infringement? If not, do not lose any time or money in taking out a patent: keep the matter secret.' I did so myself. My first successful invention here in this country was a new photographic process, called Velox paper. At that time I was not rich enough to take out a patent, and to defend it at the same time. I knew that my competitors would have swamped me by infringing the patent, and there would have been very little chance of my defending my rights. So I

[45] Dickens, "A Poor Man's Tale of a Patent" (one of the *Christmas Stories)*, Macmillan edition of 1896, p. 64.
[46] Oldfield Hearings of 1912, No. 23, p. 32.
[47] *Ibid.*, No. 24, p. 24.

practiced it secretly, and after I made business a success, then I sold out to a large corporation at my terms." [48]

Inventions which represent either a process of making something, or a machine the product of which can be sold, offer the greatest temptation to infringers. As one inventor has remarked, "A man may use your process and make goods and sell them, and the goods themselves will not show that the patent is infringed." [49] On the other hand, inventions of this sort lend themselves most effectively to secrecy.[50] But these are becoming increasingly difficult to conceal, for the development in the art of chemical analysis enables others, in some instances, to ascertain the ingredients and perhaps the particular methods employed in making them.

The concealment of the invention may be short-lived intentionally, for example, until the basic and controlling patent expires.[51] In the interim the invention may be hidden away, or the application for a patent may be delayed until the opportune time for its issue. The inventor, of course, takes the risk of losing his invention, or rather, the ability to exclude others from it; for, if the secret leaks out, it becomes the property of all. Moreover, another person may conceive the same invention and secure a patent for it, in which instance he may exclude others, even the first inventor. Nevertheless it is a fact that many inventors are willing to assume this likelihood of loss rather than confront the evils of our patent system—interference proceedings, prolonged and expensive litigation, etc.

The discouragement of inventors finds expression in the relative decline of important inventions in the United States.

[48] Oldfield Hearings of 1912, No. 4, p. 29. Another inventor, in 1919, stated, "I was asked to-day what advice I would give to a young man who had the idea of patenting some invention. I would be inclined to say to him that, under the existing conditions of the laws, with the restrictions which are imposed upon him, with the difficulty of developing and marketing his invention and the great difficulty of defending what the Government awards him nominally, he had better keep out of it." Nolan Hearings of 1919, p. 132.

[49] Oldfield Hearings of 1912, No. 23, p. 29.

[50] See Report, U. S. Industrial Comm., 1900, Vol. XIII, pp. 180, 203.

[51] Prindle, *Patents as a Factor in Manufacturing*, pp. 27-28.

Our patent system, as one inventor has said, has "succeeded in creating a condition which is highly unfavorable to invention, and one which is operating to hamper the development of the whole country. This is shown by the numerous inventions which are constantly coming from abroad, and which might have been invented by American inventors had they been properly encouraged by a modern and equitable patent system."[52] In this connection it was pointed out at the Oldfield Hearings that the Diesel engine, the internal combustion engines, the blast furnace, gas engines, and electric smelting furnaces were all invented abroad five years before ever used here.[53]

Economic Waste. The discouragement of inventors implies a great waste of our economic resources. That the revenue of the Patent Office equals or exceeds the monetary expense of supporting it is beside the point. Even a perfect patent system would entail a considerable drain upon our factors of production. The consequent encouragement of inventions would signify the dedication of a certain amount of labor and capital to them. Every man who gives himself to invention means one less man in the other fields of economic activity, and the laboratory material which he uses in his experiments, however well utilized, means a diminution in the total amount of capital goods. Moreover, the patent attorneys and their assistants, though performing an essential function, reduce the number of people engaged in other lines of activity. The same observation applies to the employees of the Patent Office. Finally, the patents, as legal monopolies, necessarily delimit the freedom of industrial activity.

But our patent system—the laws and the administration of them—is far from perfect. In addition to the economic costs already indicated as necessary for a *perfect* system, waste of labor and capital of even greater magnitude prevails under our *imperfect* system. Thousands of applications are rejected; and, as already shown, about nine-tenths of the patents, whatever the cause, do not yield enough to the original owners to

[52] Oldfield Hearings of 1912, No. 24, p. 29.
[53] *Ibid.*, No. 9, p. 14.

cover the fees of the patent attorneys and the Patent Office. It is true that a part of this cost is inevitable. Inventions are necessarily experimental in character. That they blaze a way into the unknown implies a trial-and-error method and the emergence of many inventions that cannot be utilized successfully. Proudhon once said, "There is not an inventor, not a workman, who for one sane and correct conception, has not given birth to thousands of chimeras; not an intelligence, which, for one spark of reason, does not emit whirlwinds of smoke."[64] The pathway of the great inventions is strewn with apparent waste, which has demonstrated the failures and suggested the ultimate successes.

Nevertheless, it seems that the extent of waste is unjustifiably great. Futile attempts to make inventions and little or no financial returns from the great majority of the patents indicate unnecessary waste. Most of the inventions, it seems, are not embodied in concrete products. Failures, repeated failures, blight the lives of many inventors. In addition, their misdirected and fruitless efforts are accompanied by the waste of capital in laboratories and elsewhere. Furthermore, a multiplicity of applications and patents—and be it noted that the United States has granted approximately one-third of all the patents in existence—means the employment of patent attorneys and their assistants in obtaining patents, fighting interferences, making searches with respect to questionable patents, etc. It necessitates the employment of hundreds in the Patent Office to examine the applications for patents, consider interferences, and attend to routine matters. The excessive number of patents, the extent of invalid patents, and the sundry attempts to exploit them, signify infringement suits and litigation concerning their validity. These legal contests require lawyers, experts, judges, and others. The time and energy of all these classes of individuals and the attendant waste of capital constitute an immense loss, which in large measure offsets the benefits accruing from the patent system.

[64] Proudhon, *The Philosophy of Misery*, p. 278.

CHAPTER IX

REMEDIES

Social Cost of Patent System

The various evils which arise from our patent system may be grouped under four headings: namely, industrial monopoly, suppression of patents, discouragement of invention, and waste of economic resources. It has been pointed out that industrial monopoly may be attained by pooling the privileges of one or more patents, by acquiring practically all patents relating to a particular industry, and by unfair methods of competition. All the evils connected with industrial monopoly, such as higher prices and the encroachment upon economic opportunity, will not be expanded at this point. That the existence of such monopolies is an economic burden to society, and a very tremendous one, requires no proof. The suppression of patents means that the inventions to which they relate are not available. This failure to embody the inventions in concrete products deprives the people of their use, and to that extent defeats the purpose of the patent laws. Previous chapters, especially Chapter VIII, indicate the specific ways in which the various evils of our patent system discourage invention. It is believed that this discouragement is very appreciable, and therefore constitutes a liability in estimating the final effect of patents. Furthermore, our patent system involves a considerable waste of labor and capital. A multiplicity of undesirable patents signifies useless efforts of inventors, patent examiners, lawyers, judges, etc., and the impairment of capital. These represent social costs of the patent system which must be considered and eventually minimized if its net worth is to be raised to a maximum. Hence, in attempting to improve our patent system, the problem is to minimize in detail these four

groups of evils: industrial monopoly, suppression of patents, discouragement of invention, and economic waste.

Demand for Abolition of Patents

During the last quarter of the nineteenth century, particularly in the late seventies, strong opposition to the patent system developed, even to the extent of a demand, in some instances, for the abolition of the patent laws. Many individuals, especially the farmers in the Middle West, had been annoyed wrongfully, as they thought, by the harsh enforcement of certain patents, particularly of those relating to barbed wire.[1] In England, too, though somewhat earlier, many people urged the abolition of patents as the "needful accompaniment and the complement of free trade," and for the "emancipation of British productive industry from artificial restraints." To this end, in Parliament and elsewhere "many arguments were brought forward, among which were the hindrances to trade when a manufacturer was prevented from adopting freely the latest knowledge in an industry; that owing to the mutual interchange of information, inventions are not solely produced by their nominal inventors, but are usually the joint production of them and their contemporaries; that, on a public demand arising, inventions will be forthcoming without patents; that manufacturers by the stress of competition are compelled to invent in order to keep abreast of the times; the rare spectacle of the inventor himself being benefited; the hardship upon the inventor who, anxious to perfect his idea, delays his application for a patent, and thereby permits a less conscientious inventor to anticipate him, perhaps by a day or two only; that inventors are a deluded race, and the law fosters their delusion; and—the argument of the great Brunel—the patent system has within it all the elements of a state-aided lottery." [2]

[1] Fish, *Letters Patent in Relation to Modern Industrial Conditions*, Senate Document No. 225, p. 9.

[2] Martin, *English Patent System*, pp. 32-33. Also, see R. A. Macfie, *Abolition of Patents, Recent Discussions in the United Kingdom and on the Continent*, 1869; and R. A. Macfie, *Copyrights and Patents for Inventions*, "Patents," Vol. II, 1883.

These protests against the abuses and disadvantages of patents, though failing to abolish patents, resulted in a betterment of the patent laws, especially in England and other European countries. Another wave of opposition to the exploitation of our patent system appeared in 1912, after the mimeograph or Dick decision, which led to appropriate and wholesome provisions in the Clayton Anti-trust Act. However, as previously indicated, other evils connected with our patent system still remain and demand remedial action.

Proposals for Improvement of Patent System

Destruction of Patent Trusts. Previous chapters describe the extent to which industrial monopolies are based upon the control of practically all patents relating to particular industries. The Sherman and Clayton anti-trust laws should be applied to them as to other monopolies. In addition, the existence of a monopoly of this sort should furnish a defense for the infringement of its patents; in fact, their cancellation deserves favorable consideration. The restoration of competition would remove some of the worst abuses of our patent system. The evil of industrial monopoly *per se* would cease, and invention would be encouraged to a greater extent. Competition between different companies in the purchase and lease of patents would develop. In short, the inventor would have a real market for his patents instead of one limited, as in some industries to-day, to a single corporation as a possible purchaser. For example, the owner of an improvement patent on shoe machinery, after substantial competition in this field arises, would receive bids for his patent from several companies instead of one; in other words, in disposing of it, he would be in a position as favorable as that of the owner of an improvement patent on a typewriter, phonograph, safety razor, or watch, fields in which competition already prevails. Unfair competition, born of the desire to create or maintain monopolistic conditions, would tend to disappear. No concern would suppress patents—whether good, bad, or indifferent—as an incident to the control of patents for preventing competi-

tion. The purchase and lease of other patents would be limited to the attempt to improve a particular product, as is true today of typewriter, phonograph, and other companies; therefore only the inferior patents, if any, would be discarded. Also, competition would decrease the extent to which important patents are now suppressed owing to the lack of a market for them. Moreover, it is believed that the destruction of industrial monopolies would reduce the prevalence of that form of employer-employee contracts which binds the latter to surrender inventions to the former; and it would lessen other abuses of our patent system.

Less Litigation: (*a*) *Decrease in Number of Patents.* Multiplicity of kindred patents, as previously explained, leads inevitably to infringement suits. The number of patents granted by the United States is growing rapidly, faster than our population or industries. One should not be misled, however, into thinking that the inventive and industrial progress of a nation can be measured in terms of the mere number of patents, for many of them represent little manifestation of inventive genius. Fewer patents and better patents should be the slogan in the administration of our patent laws.

The first suggestion for reducing the number of patents is to increase the difficulty of securing them. Claims should be broader and fewer in number; every claim of a patent should be more fundamentally differentiated from the claims of other patents. The realization of this proposal would require greater strictness and efficiency in the administration of the patent laws, and therefore more employees in the Patent Office.

A second remedy would be the assessment of yearly fees upon outstanding patents, the amount of which might increase with the age of the patent. This would lead to the abandonment and therefore the cancellation of worthless, alternate, obstructive, and other patents of an undesirable sort. The present situation would be simplified in that the number of patents would be reduced, and the likelihood of litigation decreased.

b. Validity of Patents. The means of making our patents valid are suggested by the causes of invalidity of patents.

First and most important, the patents should be examined more thoroughly, and hence there should be more patent examiners, higher salaries for them, and better facilities with which to expedite their work.

Further, it is desirable that effective publicity be given to every application before the issuance of the patent. The invention in connection with which a patent is applied for should be publicly announced so as to encourage any possible objections to the granting of the patent. The subject matter may be one of public use but of which the Patent Office has no record. in which case those who already use the alleged invention would object to the application. Moreover, the subject matter may have been covered partly or entirely by other patents, and hereupon the patentees would voice their objections. The invalidity of many patents to-day is due to the inability of the Patent Office to ascertain prior use or description of the invention. Publicity prior to the issue of a patent, for perhaps two months, would partly remove one of the causes of invalid patents, and therefore reduce the extent of litigation.

Moreover, it seems desirable to limit, perhaps to five years, the period in which to test the validity of a patent.[3] This provision prevails in Germany and other countries; it specifies that the validity of the patent cannot be brought into question after it has been in effect a certain number of years.

A reduction in the number of claims contained in patents would reduce the possibilities of conflict between patents, and therefore litigation. Although patents can apparently never be guaranteed by the Patent Office, the examination of applications should be so rigid that the issue of a patent would carry with it *prima facie* evidence of validity, and therefore a basis for a preliminary injunction in the event of infringement.

A general improvement of the patent situation so as to encourage the taking out of patents on processes, etc., now kept secret would tend to reduce the number of invalid patents, since the Patent Office would have a more complete record of

[3] Oldfield Hearings of 1912, No. 10, p. 24.

what had been practiced in those fields to which invention relates.

Finally, uniformity in the interpretation of patents by a court of patent appeals or some other high tribunal would settle questions as to the nature of patentability and infringement, and therefore would assist the Patent Office in granting valid patents.

c. Assumption of Validity of Patents and Preliminary Injunctions. At present one part of the Federal government, the Patent Office, grants patents to alleged inventors, whereas another branch of the government, the Federal court system, declares many of them invalid. In effect, the United States repudiates through its courts its action taken through the Patent Office. The courts, in view of the prevalence of worthless patents, refuse to assume the validity of patents, and therefore refuse to grant a preliminary injunction against an alleged infringer unless the validity of the patent has been established by the courts or by common consent. Satisfactory protection to patents makes it necessary to assume the validity of patents and to grant preliminary injunctions against alleged infringers thereof.[4] Thus, the burden of proof is now on the patentee, rather than on the alleged infringer as it should be. In short, the patentee must establish the validity of his patent before he can secure an injunction agains the infringer, or collect damages from him. To justify this assumption of the validity of patents, it would be necessary to examine applications for them more thoroughly than heretofore. The scrutiny of applications is quite essential in that the present disrepute of patents from the standpoint of validity is the outgrowth of incomplete examination by the Patent Office. The justice of giving a patentee more adequate protection against infringement is well brought out by the question raised by a former commissioner of patents: "Why should the holder of a patent, which is presumptive evidence of a title, be liable to have his right called into question by every mere

[4] Oldfield Hearings of 1912, No. 23, pp. 33-34; No. 10, p. 40; House Document No. 1110, 62nd Cong., 3rd Sess., p. 208; Senate Document No. 6, p. 36.

trespasser? Such a course is not permitted in relation with any other species of property." [5]

President Taft in his message to Congress in 1912 stated: "Much complaint has been made that patents granted by the United States are not deemed *prima facie* valid by the courts, and that preliminary injunctions are granted only upon patents which have been adjudicated to be valid by the courts or those whose validity has been *prima facie* established by public acquiescence for a considerable period of time. It is urged that the laws should be revised in such a manner that the issuance of a patent by the United States will carry with it the *prima facie* force and effect of a valid patent, and the burden placed upon him who would infringe that patent to establish its invalidity, rather than, as at the present time, to require the patentee to establish the validity of his patent before obtaining a preliminary injunction or securing an award of damages for the intentional infringement of his patented invention." [6]

d. Cumulative Damages and Costs. To diminish litigation and also to discourage unfair competition in the form of intentional infringement of patents and malicious infringement suits, it is well to adopt the essence of the recommendation contained in the Patent Office Report of 1851-2:

"I would also recommend that, for the purpose of diminishing litigation, a system of cumulative damages and cumulative costs be authorized, depending upon the number of times a patent has been affirmed or invalidated before a court of competent jurisdiction. It is believed that such a system will, to a great extent, prevent calling the validity of patents in question for mere purposes of vexation, and will also check the bringing of suits upon invalid patents for the purpose of procuring unjust tribute through fear of litigation. No plan has occurred to me which I consider so well calculated to check unnecessary and vexatious litigation under patents." [7]

[5] Report of Commissioner of Patents to Congress, 1856; also see Oldfield Hearings of 1912, No. 27, p. 97.
[6] House Document, No. 749, 62nd Cong., 2nd Sess.
[7] Patent Office Report, Mechanical, 1851-2, pp. 16-17. Also, see Oldfield Hearings of 1912, No. 15, p. 10.

An even more effective way of reducing this kind of litigation would be a more liberal use of the preliminary injunction as already described.

c. Court of Patent Appeals. Judicial decisions should be certain, speedy, and inexpensive. This canon of justice suggests the need of a higher court to which patent cases may be appealed from the circuit courts of appeal. Without such a tribunal the conflict among the lower courts as to the invalidity of patents, infringement, etc., will continue. The present situation, by which the same issue may be tried in two or more circuits—theoretically as many as nine—means extensive litigation, endless delays, and enormous costs. The creation of a higher court to unify the interpretation of the patent law is imperative. Such a court has been advocated by inventors, patent attorneys, and others.[8] Most of the proposals have centered around a so-called court of patent appeals, first suggested about twenty years ago. Taft's commission on economy and efficiency, which made a study of the Patent Office several years ago, asked those interested in patents to submit their views on the question of the advisability of creating a court of patent appeals, and the answers received indicated a practically unanimous opinion in its favor.[9] In 1917 the National Research Council appointed a patent committee for the purpose of studying the patent situation and proposing remedies. One of the results of its research was the recommendation of a court of patent appeals.[10]

The argument for a patent court which will reconcile the differences between the nine circuit courts of appeal is irrefutable. The Supreme Court, with an ever increasing number of cases before it, cannot be expected to review the patent decisions of the lower courts as it once did. Therefore, it seems that another court—one that is superior to the nine circuit courts of appeal—must be created. It would remove the conflicts now existing between the circuit courts of appeal.

[8] House Document No. 1110, 62nd Cong., 3rd Sess., p. 204.
[9] *Ibid.*, p. 204.
[10] Nolan Hearings of 1919, pp. 4-8.

The Patent Commissioner in 1910 reported, "A decision involving the construction of a patent by the circuit court of appeals of one jurisdiction is effective only for that jurisdiction and has no legal effect in any other of the several circuits, except through comity. There have been in the past decisions rendered by several circuit courts of appeals which are directly opposed to each other." [11] Such a court, moreover, will make the patent decisions free from local sentiment. "The division of the circuit court of appeals into nine circuits has created nine courts of last resort for patent cases, all of equal dignity, none of them bound by the decision of any other, located in nine different parts of the country, each reflecting to a greater or less extent the local color of the sentiment of the community in which it is located, and hence want of uniformity." [12]

It seems likely that the creation of this court would mean fewer invalid patents. "The United States court of patent appeals when established would so simplify and settle the law as to greatly reduce the number of void patents issued, and would greatly reduce the number of cases in which infringement would not be found, because, the law once established, counsel would feel secure in advising clients not to bring infringement suits where they felt satisfied they could not succeed." [13] This court, by making more certain the rights of the patentee and the public, would foster inventions. In order to attach any value to a patent and encourage the development of the invention which it covers, there must be adequate and effective judicial machinery to furnish protection.

It is not necessary to discuss the details by which this court would be constituted. One aspect of the plan, however, deserves comment: namely, that the judges should be selected from other Federal courts in various parts of the country, and that the personnel should rotate. This would prevent the judges from becoming too technical and narrow. It might be stated here that one of the objections to interference proceedings in the patent office is the extent to which technical rules

[11] Report of Commissioner of Patents to Congress, 1910, p. 11.
[12] House Report (Misc.) No. 2145, Vol. 1, 60th Cong., 2nd Sess., p. 2.
[13] *Ibid.*, p. 4.

and other matters which only the skilled attorney can understand predominate. The shifting in the personnel of this court would ensure judges of a broad and fresh experience in other fields of litigation. They could or should be chosen with a view to their capacity for understanding mechanical and other matters pertaining to inventions and patents, as well as principles of law. One objection to this court is the inconvenience which would necessarily result from going to Washington or wherever the court might be located. This adverse reason applies to the Supreme Court as well, and therefore is insignificant.

f. Infringement Suit Only in One Circuit. A suit for the alleged infringement of certain claims of a patent should be allowed in only one judicial circuit. In other words, "prevent the bringing of infringement suits on the same claims of a patent in two or more of the several judicial circuits until the validity of the claims has been established and an injunction granted, after which suits for infringement may be brought in any or all of the several judicial circuits simultaneously or otherwise." [14]

g. Limitation of Right to Sue Users of Patented Article. A law should be passed to forbid the bringing of infringement suits against the users of patented articles until infringement by the manufacturer thereof has been definitely established.[15]

h. Miscellaneous. Attention might be directed briefly to a group of miscellaneous ideas with respect to patent litigation. It has been argued, for example, that the existing court fees should be reduced, and that more judges should be appointed to expedite cases.[16] The adoption of these two propositions should improve our patent system. Another proposal is that the government should assume all responsibility for the litigation which is necessary to defend patents against infringers because the patentee, in effect, agrees to disclose his invention to the public if the Government will exclude others from an unauthorized employment of it for 17 years. A fourth pro-

[14] Oldfield Hearings of 1912, No. 15, p. 10.
[15] Oldfield Hearings of 1914, Part 7, p. 142.
[16] Oldfield Hearings of 1912, No. 10, p. 24.

posal, advanced in the light of the same general philosophy, is that no one should be permitted to question the validity of patents; in short that the Government should guarantee their "titles." This, in effect, would make the decision of the Patent Office final. A fifth proposal provides for the extension of the life of a patent equal to the time consumed by litigation concerning it. These third, fourth, and fifth proposals, however, present administrative difficulties which seem to take them beyond the realm of the practical.

Prevention of Unfair Competition. Unfair methods of competition practiced in the name of patent rights will probably be curbed more and more as the activities of the Federal Trade Commission expand. In exercising its power to restrain the use of "unfair methods of competition in commerce," it has already ordered several concerns to "cease and desist" from unfair practices involving patents. The work of the Commission in building up higher standards of competition deserves sustained support.

Less Delay in Granting Patents. The desirability of less delays in granting patents, those arising from "dragnet" interferences especially, requires no comment. Several remedies have been proposed. One of them consists of reducing the period in which the applicant must reply to the actions of the Patent Office. In 1897 the time was changed from two years to one year, with little effect, however, on the extent to which applications drag along in the Patent Office. This change merely tended to double the amount of correspondence, and therefore the inconvenience of keeping a patent pending indefinitely. A reduction of the period from one year to a few months would likewise exert no considerable influence on the rate with which applications for patents are granted or rejected.

An excellent proposal is to issue a patent for a particular invention to the first individual who applies for it. Allowances would be made in cases involving fraud, etc. This would entirely eliminate interferences, and would be in keeping with the fundamental object of the patent laws: the immediate disclosure of the invention and therefore the pro-

motion of the arts. The public is more interested in the invention *per se* than in the individual who first conceived it. Moreover, it is almost impossible in many instances to ascertain, on the basis of priority, to whom the patent should be granted. Many of our important inventions are conceived at practically the same time by individuals working independently of each other. An expedient procedure would be to award the patent to the first applicant. It might be desirable, in order to prevent individual instances of injustice, to permit the other inventor, as is done in Germany and other countries, to practice his invention without paying tribute to the one who secures the patent. The proposal to grant a patent to the first applicant has the approval of many inventors, patent lawyers, and others. Mr. Edison stated in 1912, "My opinion is that the first inventor who shall file a clear and accurate description of his invention, which the Patent Office shall find to be new, useful, commercially practical, and unknown before the date of filing, should have the patent."[17]

A proposal which supplements the preceding one is to let the patent start at the date of filing. Allowances would be made for those delays not attributable to the applicant. It would be to the interest of an inventor, therefore, not only to file an application for a patent at the earliest date possible, but also to secure his patent as soon as possible. Another remedy is to reduce the number of possible appeals in the patent office.[18]

Higher Standards of Patent Attorneys. Within recent years, the Patent Office, aided by laws passed by Congress, has somewhat raised the standards of patent attorneys. By an act of Congress passed April 27, 1916, "it is made unlawful for any attorney practicing before any of the departments of the Government to use the name of any officer of the Govern-

[17] *Ibid.*, No. 23, p. 33.

[18] Sources which discuss remedies for the present situation with respect to interferences are: Oldfield Hearings of 1912, No. 3, p. 19; No. 4, pp. 39-40; No. 10, pp. 32, 34-35; No. 15, pp. 7, 10-11. House Report, No. 1110, 62nd Cong., 3rd Sess., p. 180; Oldfield Report of 1912, p. 24; Macomber, "Patents and Industrial Progress," *North American Review*, June, 1910.

ment in advertising his business." [19] In 1918 the Patent Office added an amendment to one of its rules to the effect that every registered patent attorney must "submit to the Commissioner of Patents for approval copies of all proposed advertising matter, circulars, letters, cards, etc., intended to solicit patent business." [20] The Patent Office has indicated, first, what might be set forth in advertisements; second, what should not be included.[21] The Commissioner of Patents reported in 1919 that "misleading advertisements and circulars are doubtless still published, but a healthy sentiment against them has been established among advertising registered attorneys, which I regard with the greatest satisfaction." [22] The Commissioner of Patents may disbar any patent attorney "shown to be incompetent or disreputable." [23] A violation of either the law or the rule just noted, is sufficient ground for disbarment. In 1919 the Commissioner of Patents reported that "the standard for admission to practice before the Patent Office is being strictly maintained," and later added the significant paragraph:

"The necessity of safeguarding inventors through a closer scrutiny of those who desire to represent them before the Patent Office is a pressing one. The capacity and probity of members of the Patent Office bar can hardly be fixed at too high a standard. The knowledge, both of technics and patent practice, necessary to properly assist applicants for patents in their endeavors to obtain proper protection is becoming greater every day, due to the constant growth of the arts, the greater complexity of the scientific questions involved, and the immense body of legal literature that has arisen. It may therefore become necessary in the future, as the arts and questions involved become more and more complex, to insist upon more extensive proofs of qualifications than have been required in the past." [24]

[19] Report of Commissioner of Patents to Congress, 1916, p. 22.
[20] Rule 17 (h).
[21] Report of Commissioner of Patents to Congress, 1918, p. 19.
[22] Report of the Commissioner of Patents to Congress, 1919, p. 14.
[23] Rule 22 (c).
[24] Report of the Commissioner of Patents to Congress, 1919, p. 14.

This quotation suggests the necessity of much higher standards. The patent attorney should be examined, as in England, for admission to practice before the Patent Office, and should show ability to prepare specifications, knowledge of patent law, and acquaintance with physics, chemistry, and other sciences, both theoretical and applied.[25] Further, a nominal annual fee should be imposed upon registered patent attorneys so as to eliminate the names of those persons who do not practice actively before the Patent Office.[26] Moreover, attorneys, like examiners in the Patent Office, should be forbidden to secure patents of their own, because they are in a position to obtain confidential information concerning pending patents.[27] Finally, the Patent Office should have sufficient facilities for administering the present and proposed measures for raising the standards of patent law practice.

Modification of Employer-Employee Contracts. The contracts between the employer and his employees in the factory or mill—contracts which require the employee to surrender his inventions to the employer—tend to destroy the economic value of the patent system. They confiscate the reward which the inventor should receive and to that extent, therefore, defeat the purpose of the patent law. The stimulation of invention and the spirit of fairness itself demand the modification, if not the prohibition, of these contracts. Moreover, the Government should provide greater encouragement to its employees who conceive inventions to the end that their inventive proclivities may be revived and directed along useful lines. Several bills which would accomplish this object have been introduced in Congress.[28]

Fees: a. Revision of Present Fees. The fee schedule of the Patent Office should be revised so as to increase its

[25] Oldfield Hearings of 1912, No. 2, p. 12; Hobson, *Our Country's Debt to Patents*, pp. 107-108.
[26] Oldfield Hearings of 1912, No. 1, p. 7.
[27] *Ibid.*, No. 23, p. 35.
[28] For example, S.5265, S.3223, and H.R.9932, H.R.11984. Read Joint Hearings before Committee on Patents of Senate and H.R., Administration of Certain Inventions and Patents by the Federal Trade Commission, 66th Cong., 1st Sess., S.3223 and H.R.9932, November, 1919.

revenues and discourage applications for trivial patents. At present the applicant pays $15 when he files his papers and $20 when and if his application is allowed. It is proposed that these fees should be reversed. The payment of $20 instead of $15 at the time of filing the application papers would discourage, to some extent, the enormous number of applications and would approximate more closely the actual cost of examination. On the other hand, the payment of $15 when the application is allowed would be more commensurate with the attendant expenses of the Patent Office. The total amount of the fees, $35, would remain the same to the successful applicant, while it would be $5 more to the unsuccessful applicant. Since approximately one-half of the applications for patents are rejected, it would mean a considerable increase in the revenue of the Patent Office. This might be used, if Congress would permit, in improving the quality of its examinations of applications.[29]

b. Imposition of Annual Fees. Several countries, including England, Germany, and France, impose, after the first four or five years of the life of a patent, annual fees, failure in the payment of which results in its cancellation. These fees usually increase progressively with the age of the patent, upon the theory that an invention, if successful, earns more and more each year until the patent expires, and that, if unsuccessful, the inventor has the opportunity to abandon it prior to the payment of oppressive fees.

Annual fees would eliminate undesirable patents and, therefore, reduce the amount of patent litigation. A multiplicity of patents covering the slightest details retards the development of inventions of the finer sort. The imposition of yearly fees would remove many of them, increase the value of the other patents, and clear the way for manufacturing activity. There would be fewer patents to consider when capital proposes to enter a particular field of activity in which invention

[29] It may be of interest to note that the United States patent law of 1836 fixed the fee for American citizens at $30; for subjects of Great Britain at $500; for all other persons at $300. This was changed by the law of 1861.

is important. The elimination of many improvement patents, many of which are significant only in blocking the way to superior inventions, would lead to better processes and products. Fees would also discourage the suppression of patents owing to the appreciable cost of maintaining them.[30] Even an industrial monopoly based upon thousands of patents most of which lie idle might surrender some of them to avoid the financial burden which they entail. It might not be able to pass this additional expense to the users of its product for which an elastic demand exists, and therefore would abandon its patents of little value.

The extent to which foreigners, particularly Germans, have reserved the United States as a market for their patented goods manufactured abroad is presented in another chapter. This reservation of the market, especially in the field of dyes and other chemicals, is accomplished by means of thousands of patents. The imposition of annual fees would lead to the surrender of some of them, and would tend to discourage the practice in the future. Also, burdensome fees would tend to dishearten so-called patent "pirates" who devote themselves to creating obstructive and alternative inventions and to forcing others in some instances to buy them in order to avoid infringement suits. Besides, there is an obvious discrimination against United States inventors through the absence of a fee system in this country. For example, "when a German inventor forfeits his German patent, he thereby throws the field open to development and exploitation by Germans in Germany but because he does not also and at the same time relinquish his corresponding rights in the United States we are barred by our own laws and by our own acts from enjoying a liberty of action and a freedom of motion that the Germans enjoy. A dead German patent, therefore, still lives and rules in the United States." [31]

Arguments against annual fees may be advanced, as is true of every proposal to improve the patent situation. These

[30] Hesse, "Annual Patent Renewal Fees," *The Journal of Industrial and Engineering Chemistry*, Vol. XI, 1919, p. 697.
[31] *Ibid.*, p. 697.

levies might compel the indigent inventor to abandon his patents, however valuable intrinsically, and therefore would discourage his inventive endeavors in the future. Industrial monopolies based upon the control of patents could afford, it is said, to pay the fees. This last contention, however, is not borne out by the effect of fees in foreign countries. Most of the English and German patents are surrendered prior to their expiration through unwillingness to continue the payment of the fees. In Great Britain less than five per cent of the patents applied for by residents and foreigners, are considered by their owners worth keeping alive by the payment of annual fees and taxes up to the end of the fourteenth year.[32] The number abandoned in this fashion is so great as to lead one to the conclusion that large corporations, as well as indigent inventors, have contributed toward the total. Also, it is contended that the necessity of paying fees would discourage the securement of patents, and therefore the disclosure of inventions; in short, would encourage the secrecy of inventions. The answer to this argument is that such inventions, if they are not valuable enough to warrant the payment of fees, would detract little from our industrial life. Moreover, it is alleged that these fees would impose a heavy burden upon patents which require several years of development before they can be a source of revenue to their owners. Many inventions are ahead of their time, and though valuable intrinsically they do not lend themselves to profitable exploitation for some time. It seems unjust in such cases to impose a financial burden upon the inventor. Also, many improvement patents cannot be developed on account of basic and controlling inventions, in which instances the same objection to fees might be applied. These objections to annual fees, though of considerable weight, are more than counterbalanced by the advantages which would, as described, flow from their imposition.

Compulsory Working of Patents. Many countries provide that if a patent is not adequately worked within a certain period, say four years, it must be subject either to revocation

[32] Marks, "Post-Bellum Britain and the Inventor," *The Scientific American,* Dec. 13, 1919, p. 594.

or compulsory licenses. The general philosophy which lies back of such a law is that the suppression of patents violates the purpose of patent laws, that it retards the promotion of invention. Also, the law is designed to prevent the suppression of patents for purposes of exploitation.[33] Moreover, its justification is most evident with respect to dragnet patents and essential inventions.

Various arguments have been advanced in support of a similar law in the United States. It would make possible the utilization of many improvements prior to the expiration of controlling and basic patents. On the other hand, patented improvements could be applied to the basic invention, in some instances, prior to their expiration. In short, the law would facilitate the assembling of inventions which are complementary and auxiliary to each other, and therefore facilitate the perfecting of a particular process or product. It would expedite the concrete application of inventive efforts and therefore the realization of the purpose of the patent laws.

Compulsory licenses would extend the use of the royalty basis of compensation to the inventor. A court or commission would fix the amount of the royalty. The patentee would be more likely to receive compensation for his invention; and the public, to enjoy the fruits of his endeavors. He could devote more time to invention and less to attempts to sell his patent. Moreover, compulsory licenses would prevent his overestimation of the importance of his patent and the consequent nonuse of his invention. Royalties for him and the working of the invention would promote the public welfare.[34] If his invention is of importance, competing manufacturers would apply for licenses as a matter of self-protection.

The objections to the compulsory working of patents, with its attendant penalties of revocation and compulsory licenses, are of considerable weight, especially from the standpoint of the individual inventor in the United States. First, one should remember that it requires many years, often more than one-half the life of a patent, to reduce some inventions to practical

[33] Oldfield Hearings of 1912, No. 24, p. 26.
[34] *Ibid.*, No. 24, p. 28.

use; and therefore revocation or compulsory licenses in such instances would be unjust to the inventor.

It is contended that the purpose of these provisions could be defeated. The patents of a wealthy corporation—the good, bad, and indifferent—could be worked slightly and sufficiently to satisfy the requirements of the law. It is conceivable that an additional plant would be erected to provide for the "adequate" working of the idle and usually inferior inventions. Individuals and small companies might be licensed to utilize them to an adequate extent. Patent lawyers of foreign countries that have these laws solicit business in the United States by advertising "Patents worked."[35] Also, the announcement of the willingness to license others, known as "working by advertisement," might meet the technical requirement of the law, as it does in some countries. Moreover, these provisions might encourage the secrecy of inventions, at least until the time of their introduction becomes opportune.

The last paragraph suggests the possibility of waste. The working of patents merely to conform to the requirements of the law, and especially if they cover alternate and inferior inventions, dissipates our factors of production. The same objection would apply to the securement of licenses to work inventions of this sort. Also, the attempt of a concern to work many and varied patents might lead to an undue expansion of its business and perhaps failure.

The compulsory working of patents would operate in favor of the wealthy corporation and against the indigent inventor or small company. The one would be able to work its patents sufficiently to escape the law, but the other might not, owing to differences in the amount of capital available. The large corporation would be in a better position than the typical inventor in exploiting other inventions made available by revocation or compulsory licenses. For example, the General Electric Company, with its existing plants and organization that represent millions of dollars, could advantageously employ other inventions which pertain to electricity; while the average inventor would not have sufficient capital to utilize

[35] Oldfield Hearings of 1912, No. 6, p. 24.

them. The tendency would be toward a greater concentration in the control of patents, and a further encroachment upon the business of a small competitor.[36] The large corporation might be tempted to crush a small rival by means of unfair competition, reduce its patents to idleness, and therefore subject them to the provisions of the law.[37] Moreover, if one concern, like the United Shoe Machinery Company, already dominates an entire industry, the outside inventor would have no better market for his invention, for it would be the only possible licensee, as it is to-day the only purchaser or licensee.

Litigation, already a weakness of our patent system and the bane of the inventor's existence, would arise from the enforcement of the penalties of revocation and compulsory licenses. Every attempt to apply them would require the settlement of the question as to what constitutes "adequate" working of an invention. Unless the onus of proof were placed on the patentee, an applicant for a license would be unable to obtain data concerning sales, etc., with which to prove inadequate working. The differentiation of alternative inventions for the purpose of ascertaining which ones are worked would present an intricate problem. Furthermore, the fixation of the amount of royalty in return for licenses would ever remain a subject of controversy. It would be difficult, if not impossible in some instances, to stipulate a royalty which would be fair to both the licensor and licensee, because the value of a new invention is largely an unknown quantity.[38] An invention, for example, which seems trivial to-day may be of great importance in the future. The volume of future sales is a matter of conjecture. Readjustment of the royalties from time to time would result in confusion and uncertainty. The embodiment of many inventions in a single product would complicate the problem. It might be contended that an applicant is not entitled to a license owing to the invalidity of his patents. The patentee would be forced into litigation as the defendant in suits

[36] *Ibid.*, No. 3, p. 21.
[37] *Revision of Patent Laws*, Patent Law Assn. of Washington, 1912, p. 67.
[38] Oldfield Hearings of 1912, No. 3, p. 22.

brought for the securement of licenses. In addition, the inability to work a patent owing to the sickness, poverty, etc., of the inventor or to the existence of obstructive and controlling patents would require modification, allowances, and exceptions in applying the law, and therefore litigation and its attendant evils.

If the applicant for a license were not obliged to accept it upon the conditions prescribed by the court although the patentee were compelled to grant it, the situation would be unfair to the latter.[39] The applicant should be compelled to take the license upon the terms stipulated by the court. Such a provision, however, would discourage applications for licenses and therefore would tend to defeat the purpose of compulsory licenses.

It should be remembered that neither revocation nor compulsory licenses guarantee the working of an invention. "Without cordial coöperation between the inventor and the manufacturer it is only rarely that the printed description of a patent—however carefully drawn—conveys sufficient information to enable a new process to be successfully worked and this successful coöperation can not be obtained by compulsion. As a matter of fact, a patent is only granted for a demonstrably new idea, whereas some of the fundamental conditions which allow this new idea to fructify may not in themselves be patentable and consequently are automatically excluded."[40] Many patent specifications filed by foreigners are either incomplete or intentionally misleading, a fact which accentuates the difficulty of the manufacturer. This applies particularly to chemical patents.[41] Moreover, revocation and compulsory licenses would destroy the exclusiveness of a patent monopoly, and therefore lessen the incentive to assume the risk of developing a new invention since competitors could escape this risk and cost and yet partake of any resultant success.

[39] Oldfield Hearings of 1912, No. 8, p. 15.
[40] Mond. "The Patents and Designs Bill," 1919, *The Journal of the Society of Chemical Industry*, Vol. 38, No. 2, 1919, p. 323 R.
[41] "Discussion on Patent Law Reform," *Journal of the Society of Chemical Industry*, Vol. 36, 1917, p. 808.

The net effect of the foregoing objections to the compulsory working of patents would be the discouragement of invention. The inventor, it seems, would be likely to receive a smaller reward than at present. It would be more difficult to sell a patent upon satisfactory terms. Furthermore, the corporation would have less inducement in employing professional inventors. Many of their patented improvements, inferior or alternate in character, could not be advantageously embodied in a particular product, and therefore would be subject either to unprofitable and wasteful working on the one hand or revocation and compulsory licenses on the other.

The experience of foreign countries indicates a small measure of success with revocation and compulsory license provisions in their patent laws. They have been most effective with respect to patents granted to foreigners. Many American companies, such as International Harvester Company, Westinghouse Electric Company, United Shoe Machinery Company, National Cash Register Company, Singer Sewing Machine Company, Gillette Razor Company, Columbia Phonograph Company, Remington and other typewriter companies, American Pencil Company, and Diamond Match Company, have established factories abroad so as to save their patents.[42] Other individuals and corporations have granted licenses more willingly. The Germans have resorted to subterfuges to evade the purpose of the working requirements of the English and other laws, for example carrying on the final processes abroad on intermediates made in Germany. The citizens of this country are required to work their patents in England, France, and many other countries from which they may obtain them, although the United States does not impose these restrictions upon its citizens who secure patents in this country. Similar laws in the United States which will apply

[42] *Export Problems of the United States*, American Manufacturers' Export Assn., Vol. II, 1919, p. 177; Oldfield Hearings of 1912, No. 8, p. 12; *The Economic Journal*, Vol. XIX, p. 546; *The Journal of Industrial and Engineering Chemistry*, Vol. 7, No. 4, p. 306; *Journal of the Society of Chemical Industry*, Vol. 36, 1917, p. 809; Perry's *Directory of Great Britain and Ireland*, 1917, pp. 1943, 1944, 2605, and 2671; United Shoe Machinery Corporation, Report of the President to the Annual Meeting of Stockholders, 1908, p. 2.

to them are worthy of favorable consideration.[43] The significance of such a provision is suggested in a previous chapter which describes the suppression of United States patents by foreigners.

Royalty Basis of Remuneration. Another proposed remedy is that the inventor should be permitted to dispose of his patent only on a royalty basis. Thomas A. Edison stated, in 1919, that "if there is any possible way whereby the law would in actual practice work out so that the inventor would be protected from the capitalist, either by the impossibility of alienating all his interest, or in that a fixed per cent should always be his, in spite of himself, it would be of great value to the people of the United States."[44] The task of fixing the royalties of hundreds of thousands of patents suggests the impracticable nature of this proposal.

Expiration of Basic and Improvement Patents at Same Time. Another proposal for improving the patent laws rests upon a distinction between basic and improvements patents: namely, that the latter shall expire at the same time as the basic patent to which they relate. This would have prevented the prolongation of former monopolies by means of tying clauses based upon patents. The present illegality of such clauses removes this practice. The two facts, that about 99 per cent of the patents cover improvements, and that some of them are secured after the basic patent expires, are sufficient to demonstrate the futility of this proposal.[45]

[43] The United States patent law of 1832 required an alien to introduce his invention into public use in this country within one year from the issue of his patent. The patent law of 1836 provided that the suppression of an invention by an alien constituted one of the defenses which an alleged infringer could offer, to wit: "That the patentee, if an alien at the time the patent was granted, had failed and neglected, for the space of eighteen months from the date of the patent to put and continue on sale to the public, on reasonable terms, the invention or discovery for which the patent issued."

[44] Nolan Hearings of 1919, pp. 172-173.

[45] A long list of improvement patents, however trivial, may serve to intimidate those who would consider the manufacture and sale of the product on which these patents appear. It has been suggested that they should be designated "improvement patents" and should indicate the specific improvements which they cover.

Dedication of Essential Inventions to Public Use by Government. Important inventions, like those relating to surgical instruments, wireless telegraphy for ships, methods of manufacture which protect the health of the workers, should be available to all upon reasonable terms. The self-interest of those who own the patents may clash with the vital welfare of the public. No one who has the social well-being at heart would question, for example, the urgent necessity for the immediate and general adoption of the new process of making matches and the discontinuance of the former sulphur match and its attendant evils. The government, in granting patents, should reserve the right of purchasing them and permitting others to use them either gratis or upon a royalty basis. Some nations retain this prerogative in their patent laws. The English Act of 1883, for example, compels the patentees to permit the government "to use in the public service the inventions for a consideration." Prior to that date inventors, like Arkwright, have received money for their inventions.[46] The United States Government has appropriated money to a few inventors, such as Morse, to assist them with their inventions, but its patent law does not provide for the availability of important inventions through government action.

Institution for Development of Inventions. Undoubtedly the greatest obstacle to the average patentee is lack of capital in developing and defending his invention. A patent covers an invention of unknown value and therefore cannot be financed through banks and other regular channels. Consequently, the patentee, whatever the intrinsic value of his invention, is apt to suffer from insufficient capital and in addition, perhaps, from the practices of the unscrupulous promoter. This situation suggests the desirability of creating an institution to assist the patentee in developing his invention and presenting it to the public. It would reduce the untold waste of the present system by discarding the worthless invention at an early stage and by utilizing the meritorious invention. A thorough and impartial investigation of inventions would justify the inventor either in abandoning his invention, or in

[46] Martin, *English Patent System*, p. 37.

asking substantial remuneration for it. An institution of this sort might promote inventions as much as does the patent law itself. As one writer has said, "The splendid wealth of latent talent, retarded in its development for lack of funds and other causes, would find expression in tangible results and benefits for all." We have "many institutions for the encouragement of scientific research, but all of these are conducted on purely theoretical lines, and there exists no organization that both encourages research and provides the means of placing the result before the people commercially."[47]

Public Appreciation of Inventor. A part of the general environment which promotes invention is public appreciation of the scientist and the inventor, those unpretentious men of genius who prepare the way for our economic and social progress. They dedicate themselves, often in the midst of hardship, to the search of what is yet to be, and in the end our knowledge of what they contributed to the world is confined in too many instances to the names of the corporations that have exploited their ideas. The professional athlete, the prizefighter, the spendthrift, and the demagogue are the idols of millions who neither know nor care about those who contribute to that invisible current which refreshes and sustains and directs our civilization. The inventor who receives any material reward of consequence is the rare exception. Our patent laws, operating in an economic society in which capital is playing a rôle of ever-increasing importance, do not succeed in rewarding inventors as our forbears intended. This situation accentuates the necessity of fostering a general environment—of which public opinion is a potent part—which will brighten and quicken the spirit of inventive genius.

Effective Publicity as to Evils of Patent System. Effective publicity as to the evils of our patent system would hasten remedial measures for their removal, and would enable the inventor to avoid the pitfalls and disappointments which now await him. The Patent Office could accomplish beneficial results in educating the inventor, not with opinions but with facts. For example, if the inexperienced inventor knew that

[47] Avram, *Patenting and Promoting Inventions*, p. 166.

the majority of patents bring no financial return to their owners, he might be more concerned with the question, "Should I, not can I, obtain a patent?" The National Institute of Inventors of New York City, organized in 1914, gives advice to its members and urges the betterment of our patent laws. The author's study of the economics of our patent system should be supplemented by a government investigation of the extent of certain practices arising from patents—for example, the suppression of patents. The authority and resources of the Government would permit the collection of statistical data which are beyond the reach of the individual investigator.

Conclusion

That our patent system has promoted inventions, but not in the manner intended by our forefathers, seems certain. The industrial monopoly based on patents seeks to continue its power by means of professional inventors employed in its laboratories, by contracts with other employees to receive their inventions, and by the acquisition of patents from other sources. In many instances the exploitation of patents in furthering industrial monopoly is the chief incentive to invention. The patent law is an immediate source of encouragement and an ultimate source of discouragement to the outside inventor. The evils connected with our patent system reduce his patent in most instances to a mere deception. The wealthy corporation and not the inventor, as a rule, derives substantial returns from patents. The social costs of the present patent situation—industrial monopoly, suppression of patents, discouragement of invention, and waste of human and material resources—offset considerably, if not completely, any good derived from patents. And yet the fundamental idea which underlies the granting of patents is sound. The problem is to alter the patent and other laws, and their administration, in the light of modern conditions, so that they may encourage invention to the greatest extent and at the least cost to the people.

APPENDICES

APPENDICES

Appendix I

SOME QUESTIONS CONSIDERED BY THE COURTS IN PASSING UPON THE LEGALITY OF INDUSTRIAL MONOPOLIES BASED UPON PATENTS

1. Is there only one patentee?
2. What is the intention of the patentee?
3. Are the patents capable of conjoint use in a single machine?
4. Are any of the patents suppressed?
5. Do the patents cover the same commodity?
6. Are the patented articles competitive?
7. Were the various concerns in entering the combination aware of its purpose?
8. What companies and how many belong to the monopoly?
9. Is the combination designed primarily to increase efficiency, to prosecute infringers, or to restrain trade?
10. What is the effect of the monopoly on prices?
11. Does the patent cover a major or a minor part of a commodity or process?
12. Does the patent pertain to a process or to a commodity?
13. Does the monopoly arise from patents or from combination?

Appendix II

LIST OF DECISIONS OF LOWER COURTS CONCERNING THE RIGHT OF PATENTEE TO DICTATE THE SUPPLEMENTARY SUPPLIES FOR HIS PATENTED ARTICLE

Commercial Acetylene Co. v. Autolux Co., 181 Fed. Rep. 387; U.S. Fire Escape Counterbalance Co. v. Joseph Halsted Co., 195 Fed. Rep. 295; United States v. Winslow, 195 Fed. Rep. 578; Consolidated Rubber Tire Co. v. Republic Rubber Co., 195 Fed.

Rep. 768; Parsons Nonskid Company Limited, et al., v. McKinnon Chain Company, 196 Fed. Rep. 218; Lovell-McConnell Mfg. Co. v. Waite Auto Supply Co., 198 Fed. Rep. 130; Winchester Repeating Arms Co. v. Buengar, et al., 199 Fed. Rep. 786; Crown Cork & Seal Co. v. Brooklyn Bottle Stopper Co., 200 Fed. Rep. 592; American Graphophone Co. v. Pickard, 201 Fed. Rep. 546; Waltham Watch Co. v. Keene, 202 Fed. Rep. 225; Winchester Repeating Arms Co. v. Olmsted, 203 Fed. Rep. 493; Robert H. Ingersoll & Bro. v. M'Coll, 204 Fed. Rep. 147. Other decisions of lower courts on the validity of restrictions as to the use of a patented article are: Cortelyou v. Lowe, 111 Fed. Rep. 1005; Cortelyou v. Lowe, 114 Fed. Rep. 1021; Cortelyou v. Carter's Ink Co., 118 Fed. Rep. 1022; Broderick Copygraph Co. v. Roper, 124 Fed. Rep. 1019; Mayhew v. Broderick Copygraph, 137 Fed. Rep. 596; Broderick v. Mayhew, 131 Fed. Rep. 92; Cortelyou v. Johnson, 138 Fed. Rep. 110; and Cortelyou v. Johnson, 145 Fed. Rep. 933.

Appendix III

TYING CLAUSES OF THE UNITED SHOE MACHINERY COMPANY

The "additional machinery" clause appeared in "the current form of lease for the important group of 'metallic machines.'"

"In case the lessee has more work of the kind which can be performed by any of the machines belonging to the Metallic department of the lessor than the capacity of the Metallic machinery which he has under lease from the lessor will permit, then the lessee shall either take from the lessor, under a like lease and agreement, sufficient additional machinery to perform the work, or in case the lessee does not thus lease additional Metallic machinery from the lessor, then the lessor may, if it so elects, cancel forthwith this lease and any other lease of Metallic machinery then in force between the lessor and the lessee."[1]

The "exclusive use" clause appeared in the leases for lasting, heeling, pegging, pulling-over, and other machines, but the lasting in particular.[2]

[1] Brief for the United States in United States v. United Shoe Machinery Company (No. 207), pp. 161-162.
[2] *Ibid.*, pp. 369-371.

"If at any time the lessee shall fail or cease to use exclusively lasting machinery held by him under lease from the lessor for lasting all boots, shoes, and other footwear made by or for him, which are lasted by the aid of machinery, or shall fail or cease to use exclusively tacking mechanisms and appliances held by him under lease from the lessor for doing all work in the manufacture of all boots, shoes, and other footwear made by or for him which is done by the aid of tacking mechanisms and appliances, the lessor, although it may have waived or ignored prior instances of such failure or cessation, may at its option terminate forthwith by notice in writing any or all leases or licenses of lasting machines, lasting machinery, lasting mechanisms, or lasting devices then existing between the lessor and the lessee, whether as the result of assignment to the lessor or otherwise; and the possession of and full right to and control of all lasting machines, lasting machinery, lasting mechanisms, and lasting devices the lease or license of which is so terminated shall thereupon revest in the lessor free from all claims and demands whatsoever."[3]

The "prohibitive" or restricted use clause appeared in the leases for nearly all types of shoe machinery.

"The leased machinery shall not nor shall any part thereof be used in the manufacture or preparation of any welted boots, shoes, or other footwear or portions thereof which have been or shall be welted in whole or in part, or the soles in whole or in part stitched by the aid of any welt-sewing or sole-stitching machinery not held by the lessee under lease from the lessor, or in the manufacture or preparation of any turned boots, shoes, or other footwear or portions thereof, the soles of which have been or shall be in whole or in part attached to their uppers by the aid of any turn-sewing machinery not held by the lessee under lease from the lessor, or in the manufacture of any boots, shoes, or other footwear which have been or shall be in whole or in part pulled over, slugged, heel seat nailed, or otherwise partly made by the aid of any pulling-over or 'metallic' machinery not held by the lessee under lease from the lessor."[4]

The "full-capacity" clause appeared in the leases for most of the types of shoe machinery of this company.

"The lessee shall use the leased machinery to its full capacity upon all boots, shoes, or other footwear or portions thereof made

[3] *Ibid.*, pp. 162-163.
[4] *Ibid.*, pp. 163-164, 371-374.

by or for the lessee in the manufacture or preparation of which such machinery is capable of being used."[5]

The "return" clause appeared in some of the leases.

"Upon the expiration or termination of this agreement or any extension thereof or of the lease and license herein contained by notice or by reason of any default on the part of the lessee as to the terms of this agreement or of any other lease or license agreement from the lessor or otherwise, in any manner whatsoever, the lessee shall forthwith deliver the leased machinery to the lessor at Beverly, Mass., complete and in good order, reasonable wear and tear alone excepted; and shall thereupon pay to the lessor without prejudice to any other rights or remedies of the lessor the sum of One Hundred and Fifty Dollars ($150) in respect to each lasting machine hereby leased as partial reimbursement to the lessor for deterioration of the leased machinery, expenses in connection with the installation thereof, and instruction of operators."[6]

The "supplies" clause appeared in some of the leases.

"The lessee agrees, as rent or royalty for the said machinery, to purchase of the lessor at the prices established by the lessor all the fastening material used by him in or in connection with the said machinery, paying therefor in cash on delivery. The lessee hereby guarantees that for each machine hereby leased the amount of fastening material used by him and purchased from the lessor in accordance with the terms hereof shall not be less than 400 pounds during each calendar year embraced by this lease, excepting that a reduction of 33 pounds from the amount thus guaranteed shall be allowed at the end of the year for each calendar month during which the factory of the lessee has remained wholly idle."[7]

"Royalty forcing" or "factory output" clause appeared in several leases, especially those for welt machinery.

"The lessee shall pay to the lessor throughout the full term of this agreement the respective amounts set forth in the following schedule in respect to each pair of welted boots, shoes, or other footwear, or portions thereof, manufactured or prepared by or for the lessee, which shall have been welted in whole or in part or the soles of which shall have been in whole or in part attached to welts by the use of any welting or stitching or sewing machinery, and in respect to each pair of 'turned' boots, shoes, or other footwear, or

[5] Brief for the United States in United States v. United Shoe Machinery Company (No. 207), p. 165.

[6] *Ibid.*, pp. 165-166.

[7] *Ibid.*, p. 166.

portions thereof, manufactured or prepared by or for the lessee, the soles of which shall have been sewed or attached to their uppers in whole or in part by the use of any sewing or stitching machinery." . . .

"It will be noted that if a shoe manufacturer made 1,000 pairs of shoes of which 500 were sewed on defendants' machines used to their full capacity and 500 on a machine of a competitor, he would nevertheless have to pay to defendants royalties both on the 500 pairs made on their machines and on the 500 pairs made on the competing machine. In addition, he would, of course, have to pay for the competing machine."[8]

The "discriminatory royalty" clause appeared in some of the leases.

"The lessee shall pay to the lessor on the last day of each calendar month the amount or amounts set forth in the following schedule of payments in respect to each pair of footwear of a kind or kinds therein specified cut during the preceding calendar month in whole or in part by the aid of any clicking machine or machines held by the lessee under lease from the lessor or by the aid of any Clicking Machine dies of the lessor:

Schedule of Payments	*Per Pair*
For all footwear which is lasted by machinery not held by the lessee under lease from the lessor.....	1 cent
For all welted footwear which is welted or stitched by machinery not held by the lessee under lease from the lessor	6 cents
For all turned footwear the soles of which are sewed to their uppers by machinery not held by the lessee under lease from the lessor.....	1¾ cents"[9]

The leases contained other restrictions.

The lessee was required "at his own expense" to keep the machinery "in good and efficient working order." He had to obtain from the "lessor exclusively" the parts needed for repairs at prices "from time to time established by the lessor." The lessee could not "without permission from the lessor, remove a machine from one of his factories to another." The United company "and its agents and employees shall at all times be given access to the leased machinery for the purpose of inspecting it or watching its use and operation, or of altering, repairing, improving, or adding to it, or determining the nature or extent of its use." The machinery was held at the risk of the lessee. The lessee paid taxes and assessments upon the

[8] *Ibid.*, pp. 167, 168.

[9] *Ibid.*, pp. 169-170.

machines. At the expiration of the lease, the machine was returned by the licensee at his expense. The licensee had to keep and submit a record of the number of pairs of footwear manufactured and "furnish any further information which may be called for in relation to the leased machinery or the use thereof." Lastly, the licensor was given the right to take and remove the machine in case of "any default on the part of the licensee as to the terms of this agreement or of any other lease," without making any repayments to the licensee.[10]

Appendix IV

COPIES OF NOTICES AND CONTRACTS RELATING TO MAINTENANCE OF RE-SALE PRICES OF PATENTED ARTICLES

Robert H. Ingersoll & Bro. employed a printed notice pasted on each box containing a watch sold to the retail trade:

"Yankee Watch. Nickel. Notice.

"As manufacturers of the Yankee Watch under various United States patents and trade-marks owned and controlled exclusively by us, which according to recent court decisions establish our right and privilege to fix the retail price, we do hereby fix such price at one dollar ($1.00) and we sell this watch only on condition that the retail dealer will not sell it for less than one dollar ($1.00).

"The retail dealer acknowledges that the receipt and acceptance of this watch shall be an assent to the above terms and an agreement directly with the manufacturers to sell subject to the above fixed price.

"Robert H. Ingersoll & Bro., Manufacturers."[1]

The Gem Razor Company maintained a contract with the dealer and used the printed notice to reach the consumer, as the following contract signed by the dealer reveals:

"This razor is licensed by us for sale and use only when sold to the public at the price stipulated. Any sale or use of this razor in violation of this condition will constitute an infringement of our patents under which they and the blades used in connection therewith are manufactured, and all parties so selling or using this razor contrary to the terms of this license will be treated as infringers of said patents and sued for injunction and damages.

[10] Brief for the United States in United States v. United Shoe Machinery Company (No. 207), pp. 187-189.

[1] 147 Fed. Rep. 522-523.

.....19.....

Gem Cutlery Co.

Ship to .....via.....When.....
Goods will be expressed unless otherwise specified on this order.
This order contains all agreements between the purchaser and the Gem Cutlery Co.
Terms: F.o.b. New York, strictly 2 per cent 10 days net."

"We hereby agree to strictly maintain the current prices regularly fixed by the Gem Cutlery Company on the above.

Signed (Dealer).....'"[2]

The Gillette Safety Razor Company used the printed notice, as follows:

"Gillette Safety Razor.
(Pocket Edition.)

"Notice:—This razor is only licensed by us for sale and use when sold to the public at a price not less than $5. No license is granted to sell it at a lower price than $5, or to use it if sold at less than such price. Neither must it be included in combined sale with other goods, nor used as a premium upon the sale of other merchandise. Any transfer or sale in violation of these conditions or its use when so sold will constitute an infringement of our United States Letters Patent, Nos. 775134 and 775135, under which this razor is made, and all parties selling or using it contrary to the terms of this license will become infringers of said patents and will render themselves liable to an injunction and damages. The limited license to sell above set forth is good only so long as this label remains upon the package, and erasures or removal of this label will be construed as a cancellation of the license. A purchase is an acceptance of these conditions. All rights revert to the undersigned in the event of any violation thereof.

"Gillette Safety Razor Company.
"(Owners of said patent.)
"King C. Gillette, President."[3]

The Columbia Phonograph Company employed contracts with its dealers and the notice affixed to its products. The following is the notice, which refers to the contract:

[2] Oldfield Hearings of 1912, No. 11, pp. 5-6.
[3] *Ibid.*, No. 7, p. 20.

"Notice to Purchasers of 'Columbia' Graphophones, Grafonolas, Records, and Blanks.

"All 'Columbia' graphophones, grafonolas, records, and blanks are manufactured by the American Graphophone Company under certain patents and licensed and sold through its sole agent the Columbia Phonograph Company (General), subject to conditions and restrictions as to the persons to whom and the prices at which they may be resold by any person into whose hands they come. Any violation of such conditions or restrictions makes the seller or user liable as an infringer of said patents."[4]

The Dover Manufacturing Company placed a notice on its products which, as contrasted with the "notices" of other manufacturers, was not explicit as to the minimum resale price.

"Asbestos sadirons are sold subject to restrictions as to the persons and the minimum price at which they may be resold. Any violation of such restrictions makes seller or user an infringer of the patents controlled by the Dover Manufacturing Co. A purchase is an acceptance of these conditions. All rights revert to the undersigned in the event of any violation."[5]

The Kohler Dye & Specialty Company used the following notice:

"Special Notice.

"This gas jet heater is licensed by us for sale and use only when sold to the public at a price not less than $1.50. No license is granted to sell it to the public at a less price than $1.50, or to use it if sold at less than such price. Any sale in violation of this condition, or its use when so sold, will constitute an infringement of our United States Letters Patent No. 822374 (other patents pending), under which this gas-jet heater is constructed, and all parties so selling or using it contrary to the terms of this license will be treated as infringers of said patent and will render themselves liable to an injunction and damages. The license to sell is good only so long as this label remains upon the package, and erasures or removal of this label will be construed as a cancellation of the license. A purchase is an acceptance of these conditons. All rights revert to the undersigned in the event of any violation.

"Kohler Dye & Specialty Co.
"Sole Licensee."[6]

[4] Oldfield Hearings of 1912, No. 8, pp. 23-24.
[5] Chamberlin, W. H., Patented Articles, *Illinois Law Review*, Vol. 6, pp. 357, 364.
[6] *Ibid.*, Vol. 6, pp. 357, 365.

APPENDIX V

DECISIONS OF FEDERAL COURTS RELATING TO THE RIGHT TO MAINTAIN THE RE-SALE PRICES OF PATENTED ARTICLES

Edison Phonograph Co. v. Kaufmann, 105 Fed. Rep. 960; National Phonograph Co. v. Schlegel, 128 Fed. Rep. 733; New Jersey Patent Co. v. Schaefer, 144 Fed. Rep. 437; Ingersoll v. Snellenberg, 147 Fed. Rep. 522; New Jersey Patent Co. v. Schaefer, 159 Fed. Rep. 171; New Jersey Patent Co. v. Martin, 172 Fed. Rep. 760; New Jersey Patent Co. v. Schaefer, 178 Fed. Rep. 276; Thomas A. Edison, Inc., v. Ira M. Smith Mercantile Co., 188 Fed. Rep. 925; Automatic Pencil Sharpener Co. v. Goldsmith Bros., 190 Fed. Rep. 205; Indiana Mfg. Co. v. Nichols & Shepard Co., 190 Fed. Rep. 579; Waltham Watch Co. v. Keene, 191 Fed. Rep. 855.

APPENDIX VI

EMPLOYER-EMPLOYEE CONTRACT

"In consideration of my employment by the American Telephone & Telegraph Co., a corporation duly organized and existing under and by virtue of the laws of the State of New York, and of the sum of one dollar, to me paid by said company, the receipt whereof is hereby acknowledged, I, Frank F. Fowle, of the Borough of Brooklyn, New York City, N. Y., agree, without charge, but at the cost of said company, to assign, and I do hereby assign to said company, any and all inventions in telephony, telegraphy, or combined telephony and telegraphy, or in any apparatus or appliances adapted for use therein or in connection therewith, that I have heretofore made while employed by said company, and any letters patent securing the same; and any or all such inventions that I may hereafter make during the time I am employed by said company; and agree to do, execute, and deliver any or all acts and instruments that may be necessary and proper to enable said company to obtain letters patent securing such of said inventions as it may wish so to secure.

"Witness my hand and seal this .... day of June, 1899.

.....

"Witnessed by:

.....

"CITY, COUNTY AND STATE OF NEW YORK, ss:

"On this ..... day of June, 1899, before me the subscriber, a notary public in and for the county of New York, personally came Frank F. Fowle, to me personally known, and known to me to be the person described in and who executed the foregoing instrument, and acknowledged the signature to the foregoing instrument to be his signature; and that he executed the same for the purposes mentioned thereir..

.....

"Notary Public in and for New York County."[1]

[1] Oldfield Hearings of 1912, No. 28, p. 47.

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Bloomer v. McQuewan, 14 How. 539.
Blount Manufacturing Co. v. Yale & Towne Manufacturing Co., 166 Fed. Rep. 555.
Bobbs-Merrill Co. v. Straus, 210 U.S. 339.
Boston Store v. American Graphophone Co., 246 U. S. 8.

Coke, 3 Institutes, 181.
Columbia Motor Car Co. v. C. A. Duerr & Co., 184 Fed. Rep. 893.
Continental Paper Bag Co. v. Eastern Bag Co., 150 Fed. Rep. 741; 210 U.S. 405.
Cotton Tie Co. v. Simmons, 106 U.S. 89.
Crown Cork & Seal Co. v. Brooklyn Bottle Stopper Co., 172 Fed. Rep. 225.
Crown Cork & Seal Co. v. Standard Brewery Co., 174 Fed. Rep 252.

Darcy v. Allin, 11 Coke 846.
Dick Co. v. Henry, 149 Fed. Rep. 424.
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