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**ECONOMICS
OF
OUR PATENT SYSTEM**

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New York
THE MACMILLAN COMPANY

1925

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Set up and electrotype by
Published April, 1925.

Printed in the United States of America by
J. T. LITTLE AND IVES COMPANY, NEW YORK

Cambridge, Mass.

Macmillan com.
2-22-23, + post.

To
MY FATHER

FOREWORD

THE patent system has been bent to purposes and has facilitated results never intended or expected by the framers of the Constitution and the patent statutes. Patents have been exploited in defeating the object of the anti-trust laws. They have been used as the basis of pools which restrain trade. Corporations, by acquiring practically all patents relating to their respective industries, have obtained monopolies. Patents have been used as a pretext for engaging in unfair methods of competition. The utilization of patents in this manner has led to the suppression of many. Various evils connected with the patent system, though not necessarily a part of it, have actually discouraged invention. Lastly, these abuses have been accompanied by a waste of human and material resources. The social and economic cost of our patent system—industrial monopolies, suppression of patents, discouragement of invention, and economic waste—constitute a tremendous liability in appraising its net utility. This cost constitutes the subject matter of seven chapters of this book. The last chapter is devoted to the remedies for the situation.

A study of the economics of our patent system immediately raises controversial questions, to some of which no definite answers can be given. This statement applies particularly to the discussion of the causes of invention. It has seemed desirable in such instances to quote the opinions of economists, judges, inventors, patent lawyers, and others. In most cases an attempt has been made to criticize their opinions.

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**ECONOMICS OF
OUR PATENT SYSTEM**

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CHAPTER I

BACKGROUND OF PROBLEM

INVENTION is "an exceedingly complex phenomenon, depending as it does, not only on one, but on a plurality of causes."¹ The patent system, despite the assertions of its zealous defenders, is obviously not the sole or principal explanation of inventions. It is really impossible to disentangle the various causes, and to arrange them in the order of their importance. Inventors give conflicting testimony as to the reasons for their inventive activity. The number of inventions in proportion to population varies greatly in different sections of the United States. The early history of this country, in contrast with more recent times, is marked by the lack of inventions. The causes of invention as described by inventors, economists, and others will accordingly be presented in order better to appraise the part that patents play in bringing inventions into being. Subsequent parts of the chapter will relate the history of patents, the salient features of the present patent law, and the economic philosophy according to which the existence of patents is justified.

CAUSES OF INVENTION

Instinct of Contrivance. One explanation of the cause of invention is the instinct of contrivance or workmanship. Ac-

¹ House Report No. 1082, 63rd Cong., 2nd Sess., p. 2; hereafter referred to as Oldfield Report of 1914.

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According to Veblen, "The instinct of workmanship . . . occupies the interest with practical expedients, ways and means, devices and contrivances of efficiency and economy, proficiency, creative work and technological mastery of facts."² Another writer declares, "The 'instinct of contrivance,' as it has been called, is irrepressible, and very few inventors indeed can resist spending the money gained by one invention on some new one."³ Taussig states that "the biographies of inventors give abundant illustrations of the state of inward happiness which comes from the exercise of the contriving bent."⁴ According to Walker, the power to invent, which inheres to so remarkable a degree in our people, was created altogether irrespective of, and long antecedently to, a system of patent legislation.⁵

Inventors have testified as to the influence of the instinct of contrivance upon invention. "A man who is possessed or obsessed by the inventive faculty invents because he cannot help himself."⁶ Also, "the inventor invents because he cannot help himself. He is simply imbued with the creative spirit, with the spirit of creative research, and if there is any opportunity for him to exercise that creative spirit he will do it regardless of reward he may receive for it."⁷ Edison once stated that the inventor will continue to invent "as long as he commands a dollar. This is a natural peculiarity of the inventive mind."⁸

Reputation. Other factors, such as the desire for fame and the sense of altruism, are conducive to invention. According to one inventor, "the great, prime stimulus to invention is reputation. The fact that makes men work at almost any-

² *Instinct of Workmanship*, p. 33.

³ Reid, "The Influence of Patent Laws upon Industry," *Journal of the Society of Chemical Industry*, Vol. 35, 1916, p. 804.

⁴ *Inventors and Money-Makers*, p. 15.

⁵ *Discussions in Economics and Statistics*, Vol. II, p. 182.

⁶ Hearings before House Committee on Patents, Oldfield Revision and Codification of the Patent Statutes, 1912, No. 3, p. 5; hereafter referred to as Oldfield Hearings of 1912.

⁷ Oldfield Hearings of 1912, No. 21, p. 14.

⁸ Hearings before House Committee on Patents, United States Patent Office, 1919, p. 173; hereafter referred to as Nolan Hearings of 1919.

thing in this world, when they are men of the proper stamp, is the reaching for reputation and the credit for having accomplished something. It is true that the greatest sculptors and painters and workers in all lines who were striving to accomplish something superior and get the reputation of having done so, no doubt were also necessarily interested to some degree in the monetary return, and that is also true of the inventor. I do not think that the great inventors are principally led to their work by the money reward; on the contrary, I think that they are principally impelled by the desire to establish reputation of having accomplished something.”⁹

The effectiveness of emulation, altruism, and other factors that foster inventions is largely dependent upon the attitude of the public towards inventors and their creations. Inventors have often complained of the lack of appreciation of their efforts. “For inventors have ever been depreciated in their day; even at the present time, despite the known facts as to what inventions and inventors have done for every one of us, the inventor as an inventor is lightly regarded. . . . So are his inventions until they have ceased to be regarded as inventions, and have been accepted as constituent parts of the machine of civilization. By that time the inventor has often been forgotten.”¹⁰ Failure to appreciate the accomplishments of inventors, whatever the cause, reacts unfavorably on invention.

Division of Labor. Adam Smith described the effect of the division of labor on invention, as follows:

“I shall only observe, therefore, that the invention of all those machines by which labour is so much facilitated and abridged seems to have been originally owing to the division of labour. Men are much more likely to discover easier and readier methods of attaining any object when the whole attention of their minds is directed towards that single object than when it is dissipated among a great variety of things. But in consequence of the division of labour, the whole of every man’s attention comes naturally to be directed towards

⁹ Oldfield Hearings of 1912, No. 4, p. 11.

¹⁰ Fiske, *Invention, the Master-Key to Progress*, p. 19.

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some one very simple object. It is naturally to be expected, therefore, that some one or other of those who are employed in each particular branch of labour should soon find out easier and readier methods of performing their own particular work, wherever the nature of it admits of such improvement. A great part of the machines made use of in those manufactures in which labor is most subdivided, were originally the inventions of common workmen, who, being each of them employed in some very simple operation, naturally turned their thoughts towards finding out easier and readier methods of performing it. Whoever has been much accustomed to visit such manufactures must frequently have been shown very pretty machines, which were the inventions of such workmen in order to facilitate and quicken their own particular part of the work. In the first fire-engines, a boy was constantly employed to open and shut alternately the communication between the boiler and the cylinder, according as the piston either ascended or descended. One of those boys, who loved to play with his companions, observed that, by tying a string from the handle of the valve which opened this communication to another part of the machine, the valve would open and shut without his assistance, and leave him at liberty to divert himself with his playfellows. One of the greatest improvements that has been made upon this machine, since it was first invented, was in this manner the discovery of a boy who wanted to save his own labour."¹¹

Hobson states that "nearly all the great textile inventors were practical men, most of them operatives immersed in the details of their craft, brought face to face continually with some definite difficulty to be overcome, some particular economy desirable to make."¹²

Some of the exceptions to the alleged importance of the division of labor in fostering inventions were enumerated by Hearn. For example: "The founder of the cotton manufacture was a barber. The inventor of the power loom was a clergyman. A farmer devised the application of the screw-

¹¹ *The Wealth of Nations*, Bk. I. Chap. I.

¹² *The Evolution of Modern Capitalism*, p. 80.

propeller. A fancy-goods shopkeeper is one of the most enterprising experimentalists in agriculture. The most remarkable architectural design of our day has been furnished by a gardener. The first person who supplied London with water was a goldsmith. The first extensive maker of English roads was a blind man, bred to no trade. The father of English inland navigation was a duke, and his engineer was a millwright. The first great builder of iron bridges was a stonemason; and the greatest railway engineer commenced his life as a colliery engineman."¹³

Intellectual Inquiry. Adam Smith, however, realized that division of labor as exemplified by manual labor was not the only cause of invention. Men possessed of intellectual curiosity, who represent one aspect of the division of labor, may bring forth inventions of the most fundamental sort. As he said,

"All the improvements in machinery, however, have by no means been the inventions of those who had occasion to use the machines. Many improvements have been made by the ingenuity of the makers of the machines, when to make them became the business of a peculiar trade; and some by that of those who are called philosophers or men of speculation, whose trade it is not to do anything, but to observe everything; and who, upon that account, are often capable of combining together the powers of the most distant and dissimilar objects. In the progress of society, philosophy or speculation becomes, like every other employment, the principal or sole trade and occupation of a particular class of citizens. Like every other employment too, it is subdivided into a great number of different branches, each of which affords occupation to a peculiar tribe or class of philosophers; and this subdivision of employment in philosophy, as well as in every other business, improves dexterity, and saves time. Each individual becomes more expert in his own peculiar branch, more work is done upon the whole, and the quantity or science is considerably increased by it."¹⁴

¹³ Hearn, *Plutology*, p. 279.

¹⁴ *The Wealth of Nations*, Bk. I, Chap. I.

Professors Henry of Princeton and Babcock of Wisconsin discovered the principles of the telegraph and the cream separator respectively while in the pursuit of academic investigations, and both of them gave their inventions to the world. The patent system evidently played no part in stimulating their intellectual inquiries. Henry said, "I never myself attempted to reduce the principles to practice, or to apply any of my discoveries to processes in the arts. My whole attention, exclusive of my duties to the College, was devoted to original scientific investigations, and I left to others what I considered, in a scientific view, of subordinate importance—the application of my discoveries to useful purposes in the arts. Besides this I partook of the feeling common to men of science, which disinclines them to secure to themselves the advantages of their discoveries by a patent."¹⁵ Franklin likewise had a mind of the inquiring bent, and "never deigned to patent any of his inventions."¹⁶ Cartwright—"a man leading a life of thought"—was one of the great textile inventors.¹⁷

Scientific Progress. Scientific progress must also be considered among the factors that stimulate invention. There is, historically speaking, a correlation between the advancement of science and the arts, and the amount and kind of invention. The former present the possibilities of commercial application by the latter. The dissemination of this learning by means of general education enlarges, of course, its effect on invention. John Stuart Mill, in explaining inventions, stated that "much more depends on general intelligence and habitual activity of mind, than on exclusiveness of occupation."¹⁸ According to Veblen, "There is, indeed, a curiously pervasive concomitance, in point of time, place, and race, between the modern machine technology, the material sciences, religious skepticism, and that spirit of insubordination that makes the substance of what are called free or popular institutions."¹⁹ Further, "Any new technological departure

¹⁵ Thompson, *The Age of Invention*, p. 200.

¹⁶ *Ibid.*, p. 9.

¹⁷ Hobson, *The Evolution of Modern Capitalism*, p. 80.

¹⁸ *Principles of Political Economy*, Bk. I, Chap. VIII, Sec. 5.

¹⁹ *The Instinct of Workmanship*, p. 201.

necessarily takes its rise in the workmanlike endeavors of given individuals, but it can do so only by force of their familiarity with the body of knowledge which the group already has in hand." ²⁰ Another writer expresses the opinion that "the material progress of mankind rests upon an ever-deepening and widening study of natural phenomena, from which results a corresponding increase in the wealth of means at a man's disposal for his own emancipation, and for the improvement and embellishment of his life." ²¹ The inventors of the steam engine received inestimable aid from physics. "It was by the knowledge which they gleaned regarding the properties of steam and air and water and iron, regarding the laws of motion and heat and work and force and weight and mass, that the inventors' experiments were guided." ²² An inventor recently said, "A modern inventor has first to be well acquainted with his subject; most of them have studied mechanics, engineering, chemistry, physics, and electricity, or what not, directly or indirectly." ²³

A considerable part of the knowledge which furnishes a foundation and stimulation to invention is invention itself. It is cumulative in its effect: nothing invents like invention. One inventor writes that "it has been plainly impossible for any material invention to exist without directly and indirectly contributing to the improvement, and even to the birth, of others." ²⁴ Moreover, "inventions have the faculty of self-improvement to a degree far greater than men have it; for the reason that each new man must begin where his last ancestor began, whereas each new invention begins where his last ancestor finished." ²⁵ An anthropologist states, "Every art that is used to minister to our comfort in this present vastly complex civilization has been brought forward step by step, beginning with the simple needs of cruder times." ²⁶

²⁰ *Ibid.*, p. 104.

²¹ Thomas, *Source Book for Social Origins*, p. 426.

²² Fiske, *Invention, The Master-Key to Progress*, p. 156.

²³ Nolan Hearings of 1919, pp. 88-89.

²⁴ Fiske, *Invention, the Master-Key to Progress*, p. 108.

²⁵ *Ibid.*, p. 253.

²⁶ Hough, *Synoptic Series of Objects in the United States National Museum Illustrating the History of Inventions*, p. 2.

Also, "the development of invention is like the unfolding of the human mind."²⁷ Hobson declares, "No one of the inventions which were greatest in their effect, the jenny, the water-frame, the mule, the power-loom, was in the main attributable to the effort or ability of a single man; each represented in its successful shape the addition of many successive increments of discovery; in most cases the successful invention was the slightly superior survivor of many similar attempts."²⁸ Another writer declares, "Now and then a path-breaking invention, such as the sewing machine, the reaper, or the electric telegraph, has opened a new way for the application of power in the arts; each such contrivance at once commands attention and leads a throng of contrivers to work which has for its object the improvement of the particular machine. In this way it has come about that American invention from decade to decade has set in certain directions."²⁹

Divine Inspiration. Some individuals, inventors particularly, have maintained that invention is the result of divine inspiration. Goodyear wrote, "He who directs the operations of the mind can turn it to the development of the properties of Nature in his own way, and at the time when they are specially needed. The creature imagines he is executing some plan of his own, while he is simply an instrument in the hands of his Maker for executing the divine purposes of beneficence to the race."³⁰ These words, as a recent author has appropriately remarked, "are a fitting preface for the story of the years that followed, which is a tale of endurance and persistent activity under sufferings and disappointments such as are scarcely paralleled even in the pages of invention, darkened as they often are by poverty and defeat."³¹

According to one inventor, "the only new thing evidenced in the telegraph so far as anyone could know, was the invention itself. God had wrought that through the agency of Morse."³²

²⁷ Hough, *Synoptic Series of Objects in the United States National Museum Illustrating the History of Inventions*, p. 3.

²⁸ *The Evolution of Modern Capitalism*, p. 79.

²⁹ *The United States of America*, Vol. II, p. 137.

³⁰ Thompson, *Age of Invention*, p. 165.

³¹ *Ibid.*, p. 165.

³² Fiske, *Invention, the Master-Key to Progress*, p. 232.

Furthermore, "in the case of each basic invention, an idea seems to have come unbidden to the mind, and grown and developed there."³³ The author of these statements, after asserting that Christianity "was an inspiration from On High," asks the question: "But dare anyone assert that the wonderful conceptions that have come unbidden to the minds of the great inventors were not, in their degree, also inspirations from On High?"³⁴

A recent writer quotes Livingstone to the effect that "the existence of various implements which are in use among the Africans and other partially civilized races, points to the communication of an instruction which must have proceeded at some time or another from a superhuman being."³⁵

Accident. A convenient way of interpreting inventions is that they arise from accident or mere chance. Hobson states that "the origin and application of inventive genius is largely independent of known laws, and may provisionally be relegated to the domain of 'accident.'"³⁶ Hubert tells a story concerning Goodyear in which chance plays an important part. "Standing before a stove in a store at Woburn, Mass., he was explaining to some acquaintances the properties of a piece of sulphur-cured india-rubber which he held in his hand. They listened to him good-naturedly, but with evident incredulity, when suddenly he dropped the rubber on the stove, which was red hot. His old clothes would have melted instantly from contact with such heat; but, to his surprise, this piece underwent no such change. In amazement he examined it, and found that while it had charred or shrivelled like leather, it had not softened at all. The bystanders attached no importance to this phenomenon, but to him it was a revelation."³⁷ Some of Benjamin Franklin's discoveries relating to electricity are partly attributable to accident. However, his conceptions, like those of other inventors, came into being as the result of pertinent lines of inquiry. This interpretation of

³³ *Ibid.*, p. 21.

³⁴ *Ibid.*, p. 50.

³⁵ Thomas, *Source Book for Social Origins*, p. 431.

³⁶ *The Evolution of Modern Capitalism*, p. 77.

³⁷ *Men of Achievement—Inventors*, pp. 167-168.

the significance of accident in connection with invention is borne out by a recent remark of an inventor: "A combination was presented to me by which I solved my particular difficulty, but the perception of that solution was not accident; the combination was accidentally presented, but the observation of the thing, which is invention, was not accidental."³⁸

Economic Conditions. The factors of production—land, labor, capital, and the enterpriser—are necessary in the conception and development of inventions. Capital and labor particularly are prerequisites to invention. The process of conceiving and contriving inventions requires time or waiting, and this presupposes a fund of capital goods. Individuals who live from hand to mouth could not invent even though other conditions, such as the instinct of contrivance, division of labor, etc., were most favorable. Moreover, specific kinds of capital are indispensable in the execution or application of inventive concepts. Inventions resemble the stones composing a pyramid in that each of them rests upon the others. The aeroplane, for example, utilizes the internal combustion engine and other prior inventions, and also the machinery and tools—the result of invention—necessary in putting the various parts together.

"Knowledge, both theoretical and practical, and dexterity are essential to invention. But knowledge implies leisure; and dexterity implies practice; and both leisure and practice imply in turn the means of subsistence. Besides, inventions are seldom produced in a complete state. They are generally the growth of time; they involve many partial and many complete failures; and they are the subjects of continual improvement. In most cases the cost of the instruments through which the invention has to operate is very considerable. A solitary man therefore or a small and poor community can never be very inventive. It is only where the inventor can obtain the aid both of capital and of co-operation that he can with any reasonable hope of success attempt to extort her more important secrets from nature. In a state of isolation, no such aid is at all procurable. In a poor community, it may

³⁸ Oldfield Hearings of 1912, No. 3, p. 15.

to some small extent be obtained. In any case the inventor himself has seldom the means of carrying out his projects. His pursuits are not conducive to wealth. The time and the absorbing attention which any great invention demands, furnish very little opportunity for present gain. Where people are poor, or where the want as compared with the circumstances of the population is not very urgently pressing, few persons will consent to risk any considerable sum on the untried projects of a dreamer. Even at the present day almost every important patent is worked by the aid of some capitalist. But if an example be sought of the different rates at which inventive talent grows where capital is abundant and where it is scarce, it is sufficient to compare the England of the nineteenth with the England of the eighteenth century."³⁹

"No invention can be considered absolutely," for "its success has relation to the existing state of the arts."⁴⁰ For example, "the art of navigation depends upon certain astronomical observations, and so upon the art of constructing astronomical instruments. The latter art in its turn depends upon the art of manufacturing glass; and the glass manufacture again involves several other distinct arts."⁴¹ Another author expresses the opinion, "Until the effort of building a machine can be transferred to other shoulders, further invention is practically impossible. The powers of an inventor can thus be given a more adequate expression in conjunction with significant technical capacities in society at large."⁴²

That invention requires labor as well as capital is self-evident. Inventive power "depends in the first instance upon the state of the physical sciences, upon the practical ingenuity available for carrying into effect the results of that science, and upon the dexterity that can be applied to the manual processes thus involved."⁴³ Also, "inventions require work, work, and more work, and expense, expense, and more ex-

³⁹ Hearn, *Plutology*, pp. 267-268.

⁴⁰ *Ibid.*, p. 192.

⁴¹ *Ibid.*, p. 192.

⁴² Usher, *The Industrial History of England*, p. 339.

⁴³ Hearn, *Plutology*, p. 187.

pense." ⁴⁴ The inventor "frequently has to do much research work; he works in a laboratory and has to spend money and spend it freely." ⁴⁵

The factors of production, labor and capital, especially, define the technical boundaries of inventions and in this sense limit the supply of them. On the other hand, the demand for inventions tends to determine the channels of inventive activity into which the factors of production flow. This fact often leads to the saying, "Necessity is the mother of invention." The demand for the aid that invention renders "springs from the perception of some want, and the belief that this want can be most efficiently satisfied by the operation of some physical agency." ⁴⁶ Walker states, "It was the wants of the higher nature, which it was not impossible to satisfy in some increasing degree by labor and pains and forethought, which afforded the most acute stimulus to the scheming, devising, calculating faculty in early American life, out of which, in the course of generations, was developed that inventive power which so clearly characterizes the population of today." ⁴⁷ In a given trade "where there are several important processes, an improvement in one process which places it in front of the other stimulates invention in the latter, and each in its turn draws such inventive intelligence as is required to bring it into line with the most highly-developed process. Since the later inventions, with new knowledge and new power behind them, often overshoot the earlier ones, we have a certain law of oscillation in the several processes which maintains progress by means of the stimulus constantly applied by the most advanced process which 'makes the pace.'" ⁴⁸ The motive of invention is "the assistance that it renders to industry. It is therefore likely to be the most sought when industry most requires assistance." ⁴⁹ The Commissioner of Patents in 1919 stated, "It is remarkable to

⁴⁴ Nolan Hearings of 1919, p. 88.

⁴⁵ *Ibid.*, p. 89.

⁴⁶ Hearn, *Plutology*, p. 187.

⁴⁷ *Discussions in Economics and Statistics*, Vol. II, p. 183.

⁴⁸ Hobson, *Evolution of Modern Capitalism*, pp. 80-81.

⁴⁹ Hearn, *Plutology*, p. 187.

notice the close connection between the business conditions of the country and the number of applications received in the Patent Office." ⁵⁰ The present Commissioner has asserted, "The inventive activity and industrial expansion go hand in hand. Up to recently these were almost entirely confined, to any noticeable extent, to the northeastern portion of the country. Lately there has been a considerable extension of manufacturing or other forms of industry toward the interior, affecting particularly the states of Illinois, Ohio, Michigan, Wisconsin, and Indiana, as well as the far western states of California, Washington, Oregon, Nevada, Utah, and Wyoming, all of which show corresponding increased relations with the Patent Office." ⁵¹

Conditions which facilitate the expression of demand, as exchange, are indirectly favorable to invention. There are "indications of the stimulus which exchange, when it is facile, quick, and extensive, gives to invention." ⁵² Further, "The influence of exchange upon invention arises mainly from the extension which the latter agency gives to wants. One of the most powerful influences upon invention is demand; and demand is, as it were, collected and concentrated by exchange." ⁵³

The influence of economic and other conditions upon inventions is attested by the conception of a particular invention by different inventors at the same time. "It has often been remarked as a sort of mysterious coincidence that important inventions and discoveries have been made almost simultaneously by independent inquirers. But there is nothing mysterious in this fact. There is a concurrence of the conditions under which inventions take place. Some advance in science, or some improvement in art is effected. A sufficiency of means to prosecute the particular line of inquiry is forthcoming; or the stimulus of some new want is felt. Many minds of a similar character are thus set upon the same train of thought

⁵⁰ Nolan Hearings of 1919, p. 201.

⁵¹ Report to Congress, Dec., 1921, p. 21.

⁵² Hearn, *Plutology*, p. 287.

⁵³ *Ibid.*, p. 286.

and investigation. It is therefore natural that these similar inquiries should in at least some cases lead to the same conclusion. Truth is single; and if circumstances have placed earnest inquirers of the truth upon the narrow path that leads to it, they can hardly fail, although they may be unconscious of the presence of any other traveler, equally to reach their common destination."⁵⁴

Evidence may be adduced, however, to show that inventions are not necessarily born of economic conditions. "It is often said that 'necessity is the mother of invention,' but the history of the constructive work of this country appears to disprove the aphorism. At no time in the life of our people has the need of labor-saving contrivances been so great as during the first hundred years after the settlement of the country; yet, as we have noted, this was, as far as mechanical contrivances were concerned, a peculiarly barren period."⁵⁵

According to another writer, "The invention of the sewing-machine was one rich in influence on subsequent progress; and all the story connected with it is interesting in many ways. But the most wonderful fact connected with the invention is that it was not made before! Many inventions have not been made because the conditions at the time did not demand them, or make their successful utilization possible: and yet some inventions, like the Voltaic arc, were made despite the unfavorable conditions. But what conditions were unfavorable to the utilization of Howe's sewing-machine, even as far back in history as the days when the pyramids were built? The Howe sewing-machine was not so complicated an apparatus as the ballista, or the chariot, used by the Assyrians and the other nations in the 'fertile crescent,' that curved from Alexandria to Babylon; and it was much easier and cheaper to make. Its construction required immeasurably less scientific knowledge and carefulness than the printing press, the gun, the telescope, and the microscope, and a score of appliances that had preceded it by several centuries. Why

⁵⁴ Hearn, *Plutology*, pp. 195-196.

⁵⁵ *The United States of America*, Vol. II, p. 135.

was the sewing-machine not invented before? Why, why? This question continually presents itself to the mind, when certain simple inventions appear, that (so far as we can see) could have been invented and ought to have been invented, long before."⁵⁶

It is interesting to note Veblen's reversal of the relation that exists between necessity and invention. "And here and now, as always and everywhere, invention is the mother of necessity. The complex of technological ways and means grows by increments that come into the scheme by way of improvements, innovations, expedients designed to facilitate, abridge, or enhance the work to be done. Any such innovation that fits workably into the technological scheme, and that in any appreciable degree accelerates the pace of that scheme at any point, will presently make its way into general and imperative use, regardless of whether its net ulterior effect is an increase, or a diminution of material comfort or industrial efficiency. Such is particularly the case under the current pecuniary scheme of life if the new expedient lends itself to the service of competitive gain or competitive spending; its general adoption then peremptorily takes effect on pain of damage and discomfort to all those who fail to strike the new pace."⁵⁷

Economic Reward. The most prevalent explanation of the cause of invention is the desire for economic reward. It is in consideration of this factor that governments have granted money and patents to inventors. Proudhon stated, "Everybody is not in a position to make a present to his fellow-citizens of a road or a machine: generally the inventor, after exhausting his health and substance, expects reward."⁵⁸ A former United States Senator said, "The inventor is no more a philanthropist than is the agriculturist. He works for his support. He works to achieve a competency."⁵⁹ One writer, in discussing the cause of invention, declared, "But reward

⁵⁶ Fiske, *Inventions, Master-Key to Progress*, pp. 236-237.

⁵⁷ *Instinct of Workmanship*, p. 314.

⁵⁸ Proudhon, *The Philosophy of Misery*, p. 276.

⁵⁹ Senate Document No. 6, 59th Cong. Sp. Sess., p. 49; hereafter referred to as Senate Document No. 6.

in this as in other things is the great incentive." ⁶⁰ Furthermore, the condition under which most inventions are made at present—in costly laboratories and by highly paid scientists and inventors—suggests the necessity of reward to the private corporations that bear the expense. One treatise on patents states, "The framers of the Constitution perceived that the progress of science and the useful arts could best be promoted by furnishing an incentive to make improvements, and that the best incentive is some personal reward or advantage to the inventor." ⁶¹ A former Commissioner of Patents expressed the opinion that "the protection afforded by the patent and the hope of reward have proved the incentives to invention." ⁶²

HISTORY OF PATENTS

An understanding of the nature of patents requires an inquiry into their history not only in the United States but in England, for the patent laws of this country have been greatly influenced by those of the mother country. A brief history of the origin and development of the patent system will be therefore presented.

In England. The promotion of trade and industry formed one of the early policies of England, manifested first in the grant of special privileges to the towns and to the merchant and craft guilds. Later, especially during the reign of Elizabeth, monopolistic privileges were employed to promote foreign trade, as illustrated by the grants to the East India Company, and to foster new industries, as exemplified by monopolies on the importation of playing cards and other articles. ⁶³

There are several explanations of these patents of monopoly. During the sixteenth century, England, as compared

⁶⁰ Hallidie, *Patent Laws—The Inventor and The Nation*, American Assn. of Inventors and Manufacturers, p. 152.

⁶¹ *Patents*, Machinery's Reference Series, p. 16.

⁶² Senate Document No. 6, 59th Cong., Sp. Sess., p. 53.

⁶³ An able exposition of these privileges may be found in Price, *English Patents of Monopoly*; and Ravenshear, *English Patent System*, pp. 36-41.

with France and other parts of Europe, lagged behind in economic development. The introduction of new industries required, it seemed, a special stimulus in the guise of monopolistic privileges. In the second place, the desire of Elizabeth to strengthen the political power and prestige of the nation partly explains her willingness to create monopolies that were national in scope and subservient to the crown. Furthermore, the sovereigns of the time, continually embarrassed by a depleted exchequer, contrived many devices to replenish it, one of which consisted of the granting of exclusive monopolies in return for royalties. In most instances, however, the expense of protecting the patentee from infringement left little revenue. A fourth reason for these patent monopolies was the desire to reward favorites of the court, many of whom had performed valuable services for the crown. The presence of unscrupulous favorites and the need of revenue eventually led to an abuse of the patent system; the promotion of new industries gave way to a scheme of odious exploitation. For a small pittance most of the life necessities were farmed out as private monopolies. In 1601, Queen Elizabeth, owing to threatened action by Parliament, summarily cancelled the most objectionable patents, and allowed the courts of law to pass judgment upon the remainder.⁶⁴

The first opportunity of the court to exercise this new prerogative came in 1602, when a certain manufacturer, Darcy by name, brought suit against Allin for the infringement of his exclusive patent for importing, making, and selling playing cards.⁶⁵ The consequent decision defined the conditions under which a right to a monopoly would be upheld: "Now, therefore, I will show you how the judges have heretofore allowed of monopoly-patents,—which is that when any man by his own charge and industry, or by his own wit or invention doth bring any new trade into the realm, or any engine tending to the furtherance of a trade that never was used before; and that for the good of the realm;—that in such cases

⁶⁴ Sewell, *Law of Patents*, pp. 4-5.

⁶⁵ *Darcy v. Allin*, 11 Coke 846.

the king may grant to him a monopoly-patent for some reasonable time, until the subjects may learn the same, in consideration of the good that he doth bring by his invention to the commonwealth, otherwise not."

Sir Edward Coke, the judge of the case, described a monopoly so as to leave a loop-hole for patent grants: to-wit, "A monopoly is an institution or allowance by the King—by his grant, commission, or otherwise, to any person or persons, bodies politic or corporate, of or for the sole buying, selling, making, working, or using of anything whereby any person or persons, bodies politic or corporate, are sought to be restrained of any freedom or liberty that they had before, or hindered in their lawful trade."⁶⁶ Thus, a patent grant for a few years, covering either an invention or a new trade, does not restrain the people of any freedom or liberty that they had before, nor does it hinder them in their lawful trade. The American colonies, as will be noted later, incorporated the spirit of Coke's decision and definition into their own patent laws.

The successor to Elizabeth, James I, disregarding the decision of the court, greatly exploited the patent system in an effort to secure pecuniary aid; so mischievous and oppressive became the practice, that in 1623 Parliament wrung from him the Statute of Monopolies. This declared all monopolies contrary to the laws of England, but provided a wise exception, as follows: "That any declaration beforementioned shall not extend to any letters-patent or grants of privilege for the term of fourteen years, or under, hereafter to be made of the sole working or making of any manner of new manufacture within this realm, to the true and first inventor of such manufactures, which others, at the time of making such letters-patent and grant, shall not use, so as also they be not contrary to the law nor mischievous to the State by raising prices of commodities at home or hurt of trade, or generally inconvenient; the said fourteen years to be accounted from the date of the first letters-patent or grant of such privilege hereafter to be made; but that the same shall be of such force as they should be, if this act had never been made, and of none

⁶⁶ Coke, 3 Institutes 181.

other." This exception constitutes the foundation of the present patent laws of England and the United States.⁶⁷

In the Colonies. The special monopolies granted by the original thirteen colonies were not limited to new inventions, but like the British laws were used to encourage the introduction of new manufactures from other countries, or to assist a manufacturer to engage in a familiar industry, or to facilitate inspection.⁶⁸ The early legislators, however, prescribed definite boundaries to these privileges. The colonial law of Massachusetts, for example, stipulated, "No monopolies shall be granted or allowed amongst us, but of such new Inventions that are profitable to the Countrie, and that for a short time."⁶⁹

Massachusetts and the other colonies granted numerous monopolies, some of which will be briefly described. In 1641 the General Court of Massachusetts Bay issued a patent for a novel method of making salt. In 1646 the same court granted the following monopoly:

"In ans^r to a petition of Joseph Jenkins for liberty to make experience of his abillities and inventions for y^e making of engines for mills, to goe wth water, for y^e more speedy dispatch of worke than formerly, & mills for y^e making of sithes & other edged tooles, wth a new invented sawemill, that things may be afforded cheaper than formerly, & that for fouerteene yeeres wth out disturbance by any others setting up the like inventions, that so his study & costs may not be in vayne or lost, this petition was graunted, so as power is still left to restrayne y^e exportacon of such manufactures, & to moderate y^e prizes thereof if occaeson so require."⁷⁰ The

⁶⁷ For an exposition of the early English experience with patents of monopoly, consult: Martin, *English Patent System*, pp. 10-24; Rogers on *Patents*, Vol. I, pp. 1-5; *Two Centuries' Growth of American Law*, pp. 391-392; Report of Investigation of U. S. Patent Office, President's Commission on Economy and Efficiency, 1912, House Document No. 1110, 62nd Cong., 3rd Sess., p. 213; Avram, *Patenting and Promoting Inventions*, pp. 28-35.

⁶⁸ Clark, *History of Manufactures of the United States, 1607-1860*, p. 47.

⁶⁹ *Body of Liberties of Mass.*, 1641, Liberty 9.

⁷⁰ *Records of the Colony of Mass. Bay*, Vol. 3, p. 65, May 6, 1646.

colony retained the power to restrain the exportation of the inventions and to moderate their prices: the monopoly, in other words, was not exclusive. Moreover, the spirit of the grant demanded the concrete introduction, not a mere disclosure, of the invention. In 1750 Massachusetts granted a "ten year patent to a manufacturer of sperm candles and other whale products, requiring him to teach at least five apprentices during that period, of whom two should be nominated by the General Court."⁷¹

In 1691 Connecticut "offered a monopoly of salt making to any person who would set up the first works." In 1717, it "conditioned a monopoly of making molasses from cornstalks upon the petitioners producing 'as good molasses and as cheap as comes from the West Indies.'"⁷² This colony was the most liberal in the number of its grants for the promotion of the useful arts.

"New sources of trade were always encouraged in Rhode Island, and patent rights were readily granted to any who would introduce desirable branches of industry. James Lucena, a Portuguese subject, was naturalized by the Assembly, and an exclusive right for ten years was bestowed upon him to manufacture soap, similar to that made in Castile, of which he knew the process. At the expiration of his patent, he was to reveal the secret to the Assembly."⁷³ The disclosure of the invention, it should be noted, was to occur when the patent expired and not when it was granted.

Plows were patented and in use in Virginia before the assembling of the First Congress under the Constitution of the U. S.⁷⁴ Moreover, Virginia granted money to several inventors as a consideration for their inventions. One inventor, for example, addressed a petition to the Governor and Council "setting forth that he had at great trouble and expense invented a new compass and protractor, by which an angle may

⁷¹ Clark, *History of Manufactures of the U. S., 1607-1860*, p. 50.

⁷² *Ibid.*, p. 50.

⁷³ Arnold, *History of the State of Rhode Island, Vol. II, 1700-1790*, p. 228.

⁷⁴ *Patent Centennial Celebration, 1891*, p. 65.

be measured both in surveying and platting with greater Accuracy than by any other instrument hitherto discovered and praying such Bounty as the Legislature may think he deserves and the said petition was read." The Legislature allowed him £30 as a consideration for his useful invention.⁷⁵

It appears that South Carolina alone gave patent protection to new machinery during the last century of colonial history. In 1691 it enacted the first general patent law in America, "for the better encouragement of the making of engines for the propagating the staples of this colony." After the Revolution, mechanical improvements received more public attention in all the colonies. Fitch and Rumsey were allowed patents for steamboats by several states, and in 1787 the important improvements made by Oliver Evans in mill machinery were similarly protected. Mechanical inventions received relatively less legislative protection during the colonial period than later because tools rather than machinery were used for manufacturing, and power was employed in but few industries.⁷⁶

"New York appears to have been the only colony where monopolies were used as subsidiary to the inspection laws, to assure standard products. This is probably the explanation of the tanning monopoly in New York City granted in 1676 by Governor Andros to two tanners, for it was given at the same time that laws were passed regulating the industry."⁷⁷

The temporary and local effect of these special monopolies may have been at times considerable, but their permanent and general influence upon colonial manufacturers might almost be disregarded. Their common use, in New England especially, to encourage new industries appears to have been due to an acquired habit of legislation rather than to successful experience. After 1750 there was less of this method of promoting industries. Exclusive privileges continued to be granted to inventors; but these latter laws mark the transition

⁷⁵ *Journal, House of Burgesses*, Dec. 6, 15, 1764.

⁷⁶ Clark, *History of Manufactures of the U. S.*, 1607-1860, pp. 49, 50.

⁷⁷ *Ibid.*, p. 52.

from the monopolies of an earlier date to the patent rights which play so important a part in modern legislation affecting manufactures.⁷⁸

In the United States. Each colony had granted patents independently of the others. The Articles of Confederation of 1781 permitted the continuation of this policy. The arrangement led to conflict, confusion, and uncertainty; and therefore suggested the desirability of a national patent system. The Constitution accordingly empowered Congress "to promote the progress of science and the useful arts by securing for limited times to authors and inventors, the exclusive rights to their respective writings and discoveries."⁷⁹ Under authority of this provision, Congress passed its first patent law in 1790.

An examining board, composed of the Secretary of State, the Secretary of War, and the Attorney-General, were henceforth authorized to grant a patent if they considered the invention useful and important. Sixty-seven patents were granted under this act. The members of the cabinet experienced difficulty in giving careful study to the increasing number of applications. Moreover, their strict standards and their decisions that the states could not grant patents rendered the Act of 1790 unpopular. The year 1793 marks the passage of the second patent law—the only one ever passed in this country which provided for the issuance of patents and inventions without an examination into their novelty and utility. According to this arrangement, known as the registration system, any one who swore to the originality of his invention and paid the stipulated fees could secure a patent; its validity was decided in the courts. The Act of 1836 repealed the law of 1793 and marked the beginning of our present patent system. It provided for the close scrutiny of each application for patent—in other words, for the examination system. It created the Patent Office, with a Commissioner of Patents at its head. The law of 1870 was largely a consolidation of the

⁷⁸ Clark, *History of Manufactures of the U. S., 1607-1860*, p. 53.

⁷⁹ Constitution, Art. 1, Sec. 8, Par. 8.

Act of 1836 and supplementary statutes; with slight changes, it is in operation today.⁸⁰

SALIENT FEATURES OF PRESENT PATENT LAW

Subject-matter of Patent. Three prerequisites—conception, novelty, and utility—must be met in order to secure a patent. The present law states that “a patent may be obtained by any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof, not known or used by others in this country before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country before his invention or discovery thereof, or more than two years prior to his application, and not patented in a country foreign to the United States on an application filed by him or his legal representatives or assigns more than twelve months before his application, and not in public use or on sale in the United States for more than two years prior to his application, unless the same is proved to have been abandoned, upon payment of the fees required by law and other due proceedings had.”⁸¹ Some of these terms require definition.

An art may be “any process, or series of steps or operations, for accomplishing a physical or chemical result”—for example, telephoning and casting car wheels. A machine is “any assemblage of mechanical elements having a law of action of its own”—for illustration, a steam engine and a jack knife. “A manufacture is anything made by the hand of man that is not an art, machine, or composition of matter,” as a safety pin or a tooth brush. “A composition of matter is any mixture or combination of chemical elements, whether solid,

⁸⁰ The various patent statutes of the United States are described in Investigation of the U. S. Patent Office, President's Commission on Economy and Efficiency, 1912, pp. 214-240; Avram, *Patenting and Promoting Inventions*, pp. 35-55; and *Report of Commissioner of Patents to Congress*, Dec. 31, 1900, pp. 12-19.

⁸¹ Revised Statutes of the United States, Sections 4886 and 4887.

liquid, or gaseous"—for example, calcium carbide and soap.⁸² "An improvement is a modification of an instrument or art already existing."⁸³ Also, a patent may be conferred for a design, which "is an ornamental shape or configuration impressed, imprinted, or otherwise imposed upon an article of manufacture."⁸⁴ The subjects for which patents are granted exclude, however, any idea or principle not embodied in concrete form, such as mathematical formulae, laws of nature, and philosophical abstractions.

Application for Patent. The application for a patent consists of six parts: the petition, the power of attorney, the specification, the claims, the official drawings, and the oath.

The petition is a request addressed to the Commissioner of Patents asking him to grant a patent to the applicant. The power of attorney signifies the legal appointment of an attorney to represent the inventor before the Patent Office. The specification describes the invention in connection with the drawings. The claims, which constitute the most important part of the application, consist of an enumeration of what the inventor claims as his invention. The official drawings include different views of the invention and its parts from various angles. The oath sets forth the applicant's belief that he is the original and first inventor of the thing for which he solicits a patent.

An examiner of the Patent Office scrutinizes the application and usually rejects some of the claims. The inventor through his attorney modifies the claims and within a year submits them again. Then the examiner usually makes other objections, and the applicant seeks to remove them. This process may be repeated again and again. If the application is finally rejected, the inventor may make appeals to the Board of Examiners in Chief, then to the Commissioner of Patents, and finally to the Court of Appeals of the District of Columbia. Again, the patent applications of two or more inventors may partly or entirely cover the same invention, whereupon the

⁸² Prindle, *Patents as a Factor in Manufacturing*, pp. 20-23.

⁸³ Sewell, *Law of Patents*, p. 23.

⁸⁴ *Ibid.*, p. 23.

Patent Office determines to which one the patent should be issued by means of a proceeding known as an "interference." "While the general rule is that the first inventor is he who first reduced the invention to practice, an exception is recognized in favor of a party who was the first to conceive the invention, but the last to reduce it to actual practice, provided he was using reasonable diligence in perfecting and adapting the same."⁸⁵ The fee on filing each original application for a patent is \$15; on issuing each original patent, \$20. The owner of a patent "must mark the patented articles plainly with the word 'Patented,' or a similar word, together with the date of the patent, or otherwise give sufficient notice to the public that the device is patented." A patentee may transfer his rights by means of an assignment, grant, or license.

Rights of Patentee. "A patent contains a grant to the patentee, his heirs or assigns, for a term of seventeen years, for the exclusive right to make, use, or sell the invention or discovery throughout the United States."⁸⁶ It confers the right to restrain others in making, using, and selling the invention. The patentee has "a right of action in the U. S. Courts to restrain others from making profitable use of the invention without the owner's consent, or for recovering damages for unauthorized use. It extends no further. All other rights in the property that may result from the invention remain to be adjudicated in the same manner as if this right created by Congress did not exist."⁸⁷ "A charge of infringement of a patent puts in issue either (1) the title of the patentee; (2) the validity of the patent; or (3) the identity of the alleged infringing product or process with that claimed in the patent."⁸⁸

Relation of Patent to Competition. A patent confers a monopoly in a specific invention. It does not sanction a monopoly of kindred and competitive patents or a restraint of trade other than in the particular article to which the

⁸⁵ *Patents*, Machinery's Reference Series, pp. 23-24.

⁸⁶ *Ibid.*, p. 17.

⁸⁷ *Ibid.*, pp. 33-34.

⁸⁸ *Ibid.*, p. 39.

patent relates. The Constitution provides for the granting of monopolies to inventors only upon "limited terms," and the patent statute is in harmony with this restriction.

Patented products may be in competition both with patented and unpatented goods. In fact, the patent law is conducive to competition in that it stimulates individual initiative and private enterprise. "Often have small producers, by the use of patented machinery, trenched steadily on the business of great combinations, till they themselves became great producers, secure in the possession of a large field and abundant profit."⁸⁹ Moreover, "there are innumerable instances where patents by conferring the protection of a limited monopoly upon individuals or companies have made them independent of their stronger opponents and indifferent to the arguments inviting combination. Two examples most familiar to the public are the printing press and the typewriter. In both those arts many efforts have been made to form combinations, resulting always in failure because each of the companies exclusively owned some distinctive special features which some part of the public wanted, thereby enabling it to continue its independent existence and to compete with all the other concerns."⁹⁰

The House Committee on Patents reported in 1912 that patents, normally, tend to stimulate competition. "The patent law was enacted before any of our trusts came into existence; when competition was the accepted law of trade, and when combinations in restraint of trade were not in contemplation. So long as such conditions continued and the avenues of competition were kept open, the monopoly granted by the patent law, limited as it was, in time tended to stimulate competition. It incited inventors to new effort, and capitalists and business men were encouraged to develop inventions. Under these conditions a patent, while granting a monopoly in a specific article, had rarely a tendency to monopolize any branch of the trade, because few inventions were so fundamental in character as to give the owner of the patent a

⁸⁹ Clark. *Essentials of Economic Theory*, pp. 367-368.

⁹⁰ Patent Law Assn. of Washington, *Revision of Patent Laws*, p. 7.

monopoly in any branch of the trade, and every great financial success arising from an individual patent was sure to result in rival inventions."⁹¹

JUSTIFICATION OF PATENTS

The economic philosophy of patents deserves careful consideration in order to have a basis for approving or condemning the acquisitive practices based on patents and described in subsequent chapters. It will constitute a point of departure in studying the economic effects of our patent system. The justification of patents may be analyzed from the following points of view: disclosure of invention, reward of inventor, development of invention, and social welfare.

Disclosure of Invention. The statesmen who designed the patent system said, "We will give this inventor something if he will disclose his secret."⁹² The facts are that the patent laws of this country have rested from the beginning on the "fundamental principle of securing for the public benefit the disclosure of an invention."⁹³ A patent is given to an inventor "in return for his making known and, therefore, making available to the public, his discovery, or creation."⁹⁴ The government, in creating the patent system, said to the inventor, "If you have got a new thing which is good, do not keep it secret for yourself; publish your invention; give the Nation the benefit of it, and it will stimulate further inventions."⁹⁵ There is in addition "a kind of impetus given by the publication of a patent which accelerates the thinking and dynamics of a nation."⁹⁶ Further, "one of the great advantages of the patent system is this, that the more ideas you get into the Patent Office Gazette the more the commu-

⁹¹ House Report No. 1161, 62nd Cong., 2nd Sess., pp. 2-3; hereafter referred to as Oldfield Report of 1912.

⁹² Oldfield Hearings of 1912, No. 3, p. 19.

⁹³ Patent Law Assn. of Washington, *Revision of Patent Laws*, p. 4.

⁹⁴ H. A. Toulmin, Jr., *Protection of Industrial Property*, p. 5.

⁹⁵ Nolan Hearings of 1919, p. 84.

⁹⁶ *Ibid.*, p. 84.

nity is stimulated to invention.⁹⁷ It has frequently happened that a patented idea which was foolish and never would have amounted to anything has germinated in the mind of another man and resulted in a great invention."⁹⁸

Reward of Inventor. Others express the belief that patents constitute a reward to inventors and therefore stimulate their conception of inventions. Some contend that the inventor, as a matter of justice, is entitled to a reward for his contribution to society. "The great foundation idea upon which rests the constitutional provision for granting patents at all and the great fact upon which they are granted is just compensation to the inventor."⁹⁹ Further, "the moral right of an inventor to a patent is based upon a primary principle of justice, viz.: that if he gives the public a valuable improvement, the public ought to pay him for it."¹⁰⁰ Again, "the sense of right among civilized nations demands the legal protection of intellectual work."¹⁰¹

According to Mill, "the condemnation of monopolies ought not to extend to patents, by which the originator of an improved process is allowed to enjoy, for a limited period, the exclusive privilege of using his own improvement. This is not making the commodity dear for his benefit, but merely postponing a part of the increased cheapness which the public owes to the inventor, in order to compensate and reward him for the service. That he ought to be both compensated and rewarded for it, will not be denied, and also that if all were at once allowed to avail themselves of his ingenuity, without having shared the labors or the expenses which he had to incur in bringing his idea into a practical shape, either such expenses and labors would be undergone by nobody except very opulent and very public-spirited persons, or the state must put a value on the service rendered by an inventor, and

⁹⁷ *The Gazette* contains a description of inventions recently patented.

⁹⁸ Oldfield Hearings of 1912, No. 26, p. 27.

⁹⁹ Senate Document, No. 6, p. 71.

¹⁰⁰ Whitney, *The Patent Office and the Problem of Reform*, p. 5.

¹⁰¹ Senate Document No. 20, 56th Cong., 2nd Sess., p. 224; one of the resolutions adopted by Patent Congress held at Vienna exposition of 1873.

make him a pecuniary grant. This has been done in some instances, and may be done without inconvenience in cases of very conspicuous public benefit; but in general an exclusive privilege, of temporary duration, is preferable; because it leaves nothing to any one's discretion; because the reward conferred by it depends upon the invention's being useful, and the greater the usefulness the greater the reward; and because it is paid by the very persons to whom the service is rendered, the consumers of the commodity. . . . It would be a gross immorality in the law to set everybody free to use a person's work without his consent, and without giving him an equivalent."¹⁰²

Jeremy Bentham held that a patent affords a reward peculiarly well adapted to the nature of the service.¹⁰³ Bentham further asserts, "With respect to a great number of inventions in the arts, an exclusive privilege is absolutely necessary, in order that what is sown may be reaped. In new inventions, protection against imitators is not less necessary than in established manufactures protection against thieves. He who has no hope that he shall reap, will not take the trouble to sow."¹⁰⁴

According to List, "the granting of patent privileges offers a prize to inventive minds. The hope of obtaining the prize arouses the mental powers, and gives them a direction towards industrial improvements."¹⁰⁵ Alexander Hamilton stated, "The propriety of stimulating by rewards the invention and introduction of useful improvements is admitted without difficulty."¹⁰⁶

Development of Invention. One interpretation of patents is that they foster the development and introduction of inventions by manufacturers. The mere conception of an invention is not sufficient to bring forth new ways of satisfying human wants. Inventions progress according to the three

¹⁰² Mill, *Principles of Political Economy*, Bk. V, Ch. X, Sec. 4.

¹⁰³ *Rationale of Reward*, p. 92.

¹⁰⁴ *Manual of Political Economy*, p. 28.

¹⁰⁵ *The National System of Political Economy*, p. 307.

¹⁰⁶ Hamilton, *Report on Manufactures*, *Senate Documents*, Vol. 22 Misc. III.

stages of conception, development, and production. The embodiment of the idea in a concrete product and the education of prospective purchasers with respect to its merits require the expenditure of considerable capital and labor and the assumption of appreciable risk. A special stimulus, as patent protection, is needed, therefore, to justify the manufacturer in attempting to develop and market the invention. The patent system "has established itself, not primarily as a stimulus for invention or for disclosure, but for utilization and development of new methods requiring the investment of capital and the guarantees which shall make such investment possible."¹⁰⁷ The inventor is given "an exclusive right to make and sell an economical appliance for a term of years that is long enough to pay him for perfecting it and to pay others for introducing it."¹⁰⁸ In 1878 the Senate Committee on Patents issued a report stating, "No change should be made in the patent law to weaken the inducements which it offers to those who will successfully invent, and to those who by perseverance and expenditure will perfect the inventions and the machines in which they are embodied, and push their introductions so far as to put the public in possession of perfectly working machines, or perfectly finished products."¹⁰⁹

In this connection, Adam Smith expressed the opinion that "when a company of merchants undertake, at their own risk and expense, to establish a new trade with some remote and barbarous nation, it may not be unreasonable . . . to grant them, in case of their success, a monopoly of the trade for a certain number of years . . . A temporary monopoly of this kind may be vindicated upon the same principles upon which a like monopoly of a new machine is granted to its inventor."¹¹⁰ Fisher states that "Herbert Spencer once invented an excellent invalid chair, and, thinking to give it to the world without recompense to himself, did not patent it. The result was that no manufacturer dared risk undertaking

¹⁰⁷ Hadley, *Economics*, p. 134.

¹⁰⁸ Clark, *Essentials of Economic Theory*, p. 360.

¹⁰⁹ Oldfield Hearings of 1912, No. 8, p. 21.

¹¹⁰ *Wealth of Nations*, Bk. V, Ch. I.

its manufacture. Each knew that, if it succeeded, competitors would spring up and rob him of most or all of his profits, while, on the other hand, it might fail."¹¹¹

It will be seen, then, that the purpose of patents is somewhat similar to that of a protective tariff. The latter is necessary, according to the infant industry argument, to attract labor and capital to a new industry. The tariff, in other words, negatives the prospective unprofitableness of labor and capital which would prevail if foreigners experienced no restrictions in selling their goods in this country. After the industry has been well established, its efficiency alone should be the means by which it can exist in the future. A patent furnishes similar protection to an inventor by excluding competitors for a period of seventeen years. It is necessary to justify the expenditure of labor and capital in the conception and development of an invention. The likelihood of loss, in the absence of such protection, would be so great as to discourage attempts to make and introduce an invention. At the expiration of the monopoly the inventor becomes one of many competitors in a particular industry, and he must survive or perish according to his efficiency.

Social Welfare. Without specifying any particular objective, such as disclosure of invention, reward of inventor, or development of invention, one may justify patents on grounds of public welfare. "Private property is established and maintained for social purposes."¹¹² It has two aspects, the individual and the social, which are mutually dependent one upon the other. Property rights in the form of patents are granted to inventors so as to promote inventions and therefore the social welfare. The extent to which this is accomplished measures the justification and stability of a patent system. Patent rights and social weal must harmonize if they are to exist together. The Supreme Court stated in an early decision, "It is undeniably true, that the limited and temporary monopoly granted to inventors was never designed for their exclusive profit or advantage; the benefit to the public or community

¹¹¹ Fisher, *Elementary Principles of Economics*, p. 331.

¹¹² Ely, *Property and Contract*, p. 165.

at large was another and doubtless the primary object in granting and securing that monopoly."¹¹³ One defender of the patent system declared, "In no sense can a patent be considered an injustice to the public, because it takes nothing from them which they had ever before possessed: on the contrary, it gives them something new, some increased facility, some more advantageous method, or a cheaper substitute for a rare and costly article."¹¹⁴

A patent monopoly involves a contractual relationship of mutual benefit between the inventor and the public. The consideration to the inventor is an exclusive monopoly in his invention for seventeen years; while that to the public consists of an immediate and complete disclosure of the invention, an unlimited right to the invention after the expiration of the patent, and the encouragement of invention. The fundamental purpose of this contractual relation proceeds from the one word "promote." Our forefathers, having in mind the public welfare in framing the Constitution desired "to promote the progress of science and useful arts," the accomplishment of which required a reconciliation of private and public interests. Securing for limited times to inventors the exclusive rights to their discoveries in return for the promotion of invention harmonized the private interest of the inventor and the welfare of society.

CONCLUSION

This chapter has described the causes of invention, the history of patents, the salient features of the present patent law, and the justification of patents. The author has made no attempt to assign degrees of importance to the causes of invention. It is doubtful whether a single invention may be attributed to only one of them. However, the desire for economic reward appears as one of the most important and one of the most frequent causes of invention. Patents furnish the means by which the expectation of pecuniary gain

¹¹³ Kendall v. Winsor, 21 How. 322, 327-328.

¹¹⁴ Perry, *A Defense of the Patent System of the United States*, p. 15.

may be fulfilled, and to this extent promote the progress of the industrial arts and the economic welfare of society. In return for this advantage, the people grant to the inventor, according to the theory of the patent law, the right to exclude others for seventeen years from making, using, and selling his invention.

The evils connected with our patent system—industrial monopolies, suppression of patents, discouragement of invention, and economic waste—form a tremendous liability in appraising its net utility. They constitute the subject-matter of the next seven chapters.

CHAPTER II

PATENT POOLS

PATENTS have been used to further the restraint of trade between the owners of patents and others, and to help create industrial monopolies. The exploitation of patents in this fashion has been most pronounced since the passage of the Sherman Act in 1890. This law, together with the Clayton Act of 1914, both denouncing restraint of trade and monopoly, many corporations have sought to evade. Some of them have proceeded on the assumption that patents might lend legal immunity to their designs because patents themselves confer legal monopolies—the exclusive right to make, use, and sell. Patents have been used to defeat the purpose of the anti-trust laws by means of pools, consolidations, and unfair competition. These three methods furnish the subjects of the next four chapters. This chapter is devoted to a description of patent pools.

A patent pool is an arrangement by which former competitors partake of the privileges conferred by one or more patents according to some pre-arranged basis designed to restrain trade. The pool, the typical form of combination during the early nineties, was employed by the owners of patents, as well as others, in trying to eliminate competition.¹

CLASSIFICATION

Those in control of the patents of pools may be grouped according to whether they are assignees or owners, individuals or companies, manufacturers or mere possessors of patents. In some instances an assignee controlled the patents; in others,

¹ See Haney, *Business Organization and Combination*, p. 165.

the owners of them. The Consolidated Seeded Raisin Company and the Motion Picture Patents Company illustrate the former, and the Rubber Tire Wheel Company and Indiana Manufacturing Company, the latter. In one instance—the liquid door check combination—various owners of patents pooled them by agreement and without assignment. In the bath-tub pool an individual controlled the patents; in other pools, a company. Those in charge of the patents of the rubber tire and coaster brake pools were also engaged in manufacturing the products covered by the respective groups of patents; whereas those in control of the patents of the harrow, seeded raisin, wind-stacker, bath-tub, and motion picture pools confined themselves to the possession of patents and the supervision of licensees.

The details of patent pools differed as to the number of business units that contributed patents to further this form of combination. The Rubber Tire Wheel Company and the Indiana Manufacturing Company were the sole owners of patents in the rubber tire and wind-stacker pools; the former used one patent as the basis of license agreements, while the latter employed several patents. Two or more concerns, but not all the members of the pool, furnished patents as a basis for the arrangement in the bath-tub and motion picture pools. Each member contributed one or more patents in the harrow, seeded raisin, liquid door check, and bath-tub pools. Not all of the patents pooled, however, were necessarily used as a basis for license agreements; for example, in the bath-tub pool, although three companies assigned their patents, only one of them was employed. In the harrow pool, each company received licenses based only on the patents it assigned, whereas in the other pools all the members partook of the rights of the same patents.

The remainder of the chapter describes the patent pools already mentioned.

SEWING MACHINE

The sewing machine industry started in the United States about 1850. It was not very profitable at first owing to the

expense of perfecting the machine and introducing it to the public. In 1856 the manufacturers of sewing machines agreed to pool their patents for the purpose of more effectually protecting the business against infringers, and of granting licenses under the patents to others who desired to engage in the business. The license fee was fixed at \$15 per machine. In the year 1860, this license was reduced to \$7 per machine; and at this rate twelve additional licenses to manufacture were granted. In 1868 it was again reduced to \$5 per machine, and lastly, in 1870, to \$3 per machine.² The members of the pool were Elias Howe, Wheeler and Wilson, Grover and Baker, and I. M. Singer; and they dominated the field until after 1877, when the majority of the basic patents expired.

HARROW

The National Harrow Company of New York was "a combination of six manufacturers of harrows for the purpose of holding patents and licensing the respective manufacturers under them. Eighty-five patents were acquired by assignment from the several manufacturers."³ The National company acquired control of most of the spring tooth harrow business in the United States. Bement and Sons was one of the manufacturers of harrows that assigned its patents to this company. The former obtained, under definite conditions, an exclusive license to make the harrows described in the patents which it assigned. Bement and Sons was required to pay a royalty of \$1 for each harrow sold; to make verified monthly reports of their business to the plaintiff; to make and sell only that type of harrow covered by the license; to sell harrows only at the prices stipulated by the agreement; and to pay \$5 for each of the articles sold contrary to the terms of the license. The National company assumed these rights and duties: to reserve the privilege to decrease the selling price or

² Perry, *A Defense of the Patent System of the United States*, pp. 24-25.

³ House Report (minority) No. 1161, 62nd Cong., 3rd Sess., 1913, part 2, p. 3.

the royalty; to furnish counsel to the defendant in any suit brought for an alleged infringement; and to grant no other license to manufacture the harrow in question.

The National company accused Bement and Sons of violating these conditions and demanded a large amount of damages and a specific performance of the contract. The defendant denied many of the charges and maintained that since it and the plaintiff, together with other manufacturers of harrows, were members of a combination to regulate the output and price of harrows, their contract was null and void. The New York Supreme Court held the license contracts void as against public policy and in contravention of the New York anti-trust law.⁴

The case was appealed to the United States Supreme Court in 1902.⁵ The evidence, examined by a referee, failed to show either that other manufacturers of harrows entered into the same kind of contract with the National Harrow Company, or that a general combination among the dealers in patented harrows existed to regulate the prices of this commodity. The court declined to assume that "there was a general combination among the dealers in patented harrows to regulate the sale and prices of such harrows."⁶ It stated that these contracts "are to be judged by their own contents alone and construed accordingly."⁷ Moreover, "the plaintiff, according to the finding of the referee, was at the time when these licenses were executed the absolute owners of the letters patent relating to the float spring-tooth harrow business."⁸

The court held that the contract between the National company and Bement and Sons was not illegal.

"The general rule is absolute freedom in the use or sale of patent rights under the patent laws of the United States. The very object of these laws is monopoly, and the rule is, with few exceptions, that any conditions which are not in their very nature illegal with regard to this kind of property, imposed by the patentee and agreed to by the licensee for the

⁴ 21 App. Div., N. Y., 290, 1897; 47 N. Y. S. 462.

⁵ 186 U. S. 70.

⁶ *Ibid.*, p. 85.

⁷ *Ibid.*, p. 85.

⁸ *Ibid.*, p. 88.

right to manufacture or use or sell the article, will be upheld by the courts.⁹ The fact that the conditions in the contract keep up the monopoly or fix prices does not render them illegal."¹⁰

The tribunal added that a license agreement may also stipulate the kind and number of harrows that the licensee must manufacture. The whole arrangement, therefore, as interpreted by the court, merely constituted a contract between a patentee or licensor and a licensee; the patentee, enjoying the legal right to monopolize his patented commodity, may license another to manufacture and sell this commodity upon certain conditions.

Earlier judicial decisions involved the National Harrow Company of New Jersey. It was a holding company and preceded the National Harrow Company of New York just described. The purposes of the two companies, however, were apparently identical: namely, to pool the patents relating to harrows in order to suppress competition between individual manufacturers. One of these decisions, *National Harrow Company v. Hench*, may be cited to substantiate this statement.¹¹

Hench had assigned two patents to the harrow company and received an exclusive license to manufacture and sell his former style of harrows upon conditions like those described in the *Bement* case. The company brought suit to compel the performance of this contract.¹² The court first considered the purpose of the organization, and expressed it as follows in its decision:

"It is manifest, as well from the contract as from the proofs outside of it, that the purpose of the parties was to form a combination between the various manufacturers of these harrows, to prevent competition in business and enhance prices;

⁹To forbid a licensee from using any patents which are legally obtained by him and which do not infringe other patents, illustrated, according to the court, a condition illegal in its very nature.

¹⁰ 186 U. S. 70, p. 91.

¹¹ 83 Fed. Rep. 36, C. C. A., 1897. Other decisions are: 67 Fed. Rep. 130, C. C., 1895; 76 Fed. Rep. 667, C. C., 1896; 84 Fed. Rep. 226, C. C., 1898.

¹² For a more detailed statement of facts, see 76 Fed. Rep. 668-669.

and such is the effect of their agreement. The corporation, provided to hold the legal title of the several patents, is merely an instrument to effect this object. The prior owners are still the beneficial owners, with right to continue their business, subject only to the restraint in its management imposed by the contract. The provision for licenses is made necessary by the transfers of titles, and is simply another part of the scheme for combination and control of the business of the several patentees. The result would be the same in legal contemplation if the corporation and licenses had been dispensed with, and the contract had provided simply, as it does, for combination and restraint of competition. That such a contract would be unlawful seems clear."¹³

Moreover, the decision declared in effect that a patent monopoly does not warrant various owners of different patents in suppressing competition and enhancing prices:

"The fact that the property involved is covered by letters patent is urged as a justification; but we do not see how any importance can be attributed to this fact. Patents confer a monopoly as respects the property covered by them, but they confer no right upon the owners of several distinct patents to combine for the purpose of restraining competition and trade. Patented property does not differ in this respect from any other. The fact that one patentee may possess himself of several patents, and thus increase his monopoly, affords no support for an argument in favor of a combination by several distinct owners of such property to restrain manufacture, control sales, and enhance prices. Such combinations are conspiracies against the public interests, and abuses of patent privileges. The object of these privileges is to promote the public benefit as well as to reward inventors."¹⁴

SEEDED RAISIN

In 1900 eight manufacturers engaged in seeding and processing raisins assigned their respective patents relating to this art to the Consolidated Seeded Raisin Company, a mere

¹³ 83 Fed. Rep. 36, 38.

¹⁴ *Ibid.*, p. 38.

dummy, and received in return uniform licenses based upon all of them. The licenses declared this corporation or licensor the owner of these patents, and required it to inspect the books of the licensees and to prosecute infringers of the patents; it imposed upon the licensees the payment of royalties and also certain conditions as to the use and ownership of the patented machines, prohibiting their use of any others. Moreover, the licensor agreed not to license other parties without the consent of one-half the licensees: a committee of four was to decide to whom licenses should be issued.

One of the manufacturers, charged with a violation of the license agreement, pleaded the illegality of the contract.¹⁵ The court forthwith declared this case analogous to *Bement v. National Harrow Company*, saying, "That such a contract is not void as against public policy, in that it tends to create a monopoly, has been decided by the Supreme Court in the case of *Bement v. National Harrow Company*."¹⁶

"We think the principles announced in that case must control our decision of the question which is here presented, and under its authority we hold that the contract in question in the present case is not void as against public policy, as tending to create a monopoly, or as obnoxious to the provisions of the Sherman Anti-Trust Act."¹⁷

This decision recognized the legal right to convey patents covering similar inventions to a single patentee, who then issues licenses upon them to their owners. The court based its argument upon *Bement v. National Harrow Company*; but in that case, only the relation of a patentee to a licensee entered. Therefore it was illogical to employ that decision as a criterion in the present case, in which the owners of patents for similar inventions assigned them to a single company and received in return licenses based upon all patents thus pooled.

RUBBER TIRE

The Rubber Tire Wheel Company, the owner of a patent on rubber tire wheels, entered into uniform license agreements,

¹⁵ 126 Fed. Rep. 364, C. C. A., 1903.

¹⁶ *Ibid.*, p. 368.

¹⁷ *Ibid.*, p. 369.

with eighteen—practically all—of the manufacturers of tires in the United States. The contract provided for a considerable advance in the selling price of tires, and limited the production of each licensee to a certain percentage of the output of all. If a licensee made less than his quota, he received a rebate of 20 per cent of the value of the shortage; if more, he paid a royalty of 20 per cent of the excess. Furthermore, each manufacturer paid a royalty equal to 4 per cent of the net selling price of his tires. The licensor received 2 per cent of all royalties. The contracts also provided for a commission appointed by the licensor to supervise and audit the operations of the licensees, and with their majority consent, to sell tires, purchased from any or all of them, at prices considered best for the interest of all. This body received the royalties, other than the 2 per cent already mentioned, and after deducting their expenses and compensation for services, disbursed the rebates for shortage. It was directed to accumulate a fund of \$50,000, and distribute monthly an excess of this amount to the licensees on the basis of apportioned output.

The company, soon after the formation of this pool, brought suit against the Milwaukee Rubber Works Company, one of the licensees, to recover unpaid royalties. The circuit court¹⁸ declared the license agreement illegal owing to the pronouncement by the Sixth Circuit Court of Appeals of the invalidity of the patent in question and owing to the creation of a fund to promote the scheme of underselling and, hence, crushing competitors.¹⁹

This case, appealed to a Circuit Court of Appeals, received a very different interpretation. After elaborating the idea that a patentee enjoys an exclusive monopoly, the court proceeded to answer the query: Does the requirement that the licensee join other licensees in a combination or pool to control prices and output of an innocuous article violate the Sherman law? using this language: "The only grant to the patentee was the

¹⁸ 142 Fed. Rep. 531, January 23, 1906.

¹⁹ According to law, this decision was effective only in the Sixth Circuit. All Circuit Courts must pass upon the invalidity of a patent before it becomes void throughout the United States.

right to exclude others, to have and to hold for himself and his assigns a monopoly, not a right limited or conditioned according to the sentiment of judges, but an absolute monopoly constitutionally conferred by the sovereign law makers. Over and above an absolute monopoly created by law, how can there be a further and an unlawful monopoly in the same thing? If plaintiff were the sole maker, how could plaintiff's control of prices and output injure the people, deprive them of something to which they have a right? Is a greater injury or deprivation inflicted, if plaintiff authorizes a combination or pool to do what plaintiff can do directly?"²⁰

But the plaintiff alone could not directly secure a monopoly of rubber tires. Its patent was only one of many outstanding and pertaining to rubber tires. Its insignificant and questionable nature is suggested by the announcement of its invalidity by the Sixth Circuit Court of Appeals. The argument quoted would be sound if the plaintiff had held a patent monopoly of the rubber tire as a commodity—a proviso contrary to fact, for there were at least eighteen other manufacturers of tires. The scheme brought rubber tires as such, as well as the particular invention relating to rubber tires, within the realm of a monopoly. The acceptance of the court's argument would lead to a monopoly of every product for which one or more patents had been issued. It would only be necessary for one manufacturer who had a patent relating to a certain product to license other manufacturers of the same product upon certain conditions with respect to price, etc., as the plaintiff did. For example, a patent covering a pocket knife, no matter how trivial, might be made the legal basis of a combination of all manufacturers of pocket knives. The failure to distinguish between a product and a patent relating to the product accounted for the weakness of the court's argument.

Later this case reached the United States Supreme Court, where it was dismissed, per stipulation.²¹

²⁰ 154 Fed. Rep. 358, 363. Compare with *Goshen Rubber Works v. Single Tube Tire Co.*, 166 Fed. Rep. 431, C. C. A., 1908.

²¹ 210 U. S. 439, June 1, 1908.

WIND-STACKER

The Indiana Manufacturing Company gradually acquired practically all patents pertaining to wind or pneumatic straw stackers, and issued uniform licenses to all the manufacturers of threshing machines in the country. They were given the right to use any and all inventions covered by such patents and by any other patents subsequently acquired. The company stipulated a uniform price (\$250) for its product and the payment of a royalty. Not all these patents could be used conjointly in a single machine; some of them were of no practical value.

This company brought suit against the Case Manufacturing Company for infringement of its patents and violation of the license agreement between the two companies. The Circuit Court held that the sundry patents in suit were capable of independent use in an independent mechanism of the art, but since the patent law grants a monopoly in only the "beneficial use of a specific invention," the acquisition of competing patents must be "brought within the inhibition of the general law."²² The tribunal pronounced the Indiana company the promoter of a two-fold combination of numerous patent properties and of all manufacturers of threshing machines, which made its agreement with the licensees illegal. The court considered, therefore, not only the relation existing between the plaintiff and the defendant, as in *Bement v. National Harrow Company*, but also the general relation of the complainant or licensor to all its licensees. It announced in a forceful way that the patent statute does not furnish the foundation for a combination of the manufacturers of any single commodity. The court declared that it would not consider the infringement suit in question since it grew out of an illegal agreement.

The Circuit Court of Appeals rendered a decision diametrically opposed to that of the Circuit Court. The judge who wrote the opinion was the same one as in the rubber tire case, and his argument was much the same; both decisions were

²² 148 Fed. Rep. 21, 25-26, Aug., 1906.

promulgated the same day. The court stated that articles covered by patents are never articles of trade or commerce within the operation of the Sherman law.²³ The court attempted to answer the objection to the large number of licensees: "All the makers of threshing machinery have come into the system. That this resulted, without any concert of action on the part of the licensees, solely from a policy pursued by appellant through a course of years, is virtually admitted and is clearly proven. Appellant started out to supply the trade. That was its exclusive right."²⁴

This reasoning, truly, was open to criticism, for what difference did it make to the public whether the result—the control of output and price—came quickly or slowly? Moreover, what was meant by the exclusive right to supply the trade? Did this right relate to each specific invention or to the acquirement of all inventions relating to a certain product? Further, with respect to each specific invention, did this right pertain to the wind-stacker as a commodity or to a patented invention covering one aspect of the stacker?

The court treated the question as to the number of patents owned by the Indiana company in an untenable fashion. It assumed, for the sake of argument, that an individual owned two patents, and then stated that the contention of the Case company comes to this: "If he owned either alone, over that he would have complete domination; owning both, he controls nothing. The public has no right in either invention; therefore the public has the right to have them both in the market competing for buyers. Naught plus naught; the sum of two naughts is a substantive quantity."²⁵ One legal writer has criticized this argument by showing its application in a similar situation. "There are two bakeries in a town and only two; they constitute the sole source of the bread supply. The 'public has no right in either'; it cannot force either to sell bread, much less both. Suppose the two proprietors enter into an agreement to raise the price of bread to ten cents a loaf. Naught plus naught; the sum of the two naughts is a crime.

²³ 154 Fed. Rep. 365, April 16, 1907.

²⁴ *Ibid.*, p. 370.

²⁵ *Ibid.*, p. 371.

That is not the Threshing Machine case, but it is a fair test of the strength of the argument expounded."²⁶

This case, after an appeal to the Supreme Court, was dismissed per stipulation without cost to either party at the request of counsel, December 16, 1907.²⁷ In the interim—between the appeal and the dismissal—the directors of the Case company had purchased a majority of the stock of the Indiana company and thus had acquired control of it, a fact which partly explains the interest of both parties in dropping the suit.

The Bureau of Corporations conducted an investigation and presented a report in March, 1915, on Farm Machinery Trade Associations, one chapter of which is entitled Concentration in Ownership of Wind-Stacker Patents. This contained a detailed statement of the origin and development of the Indiana company and the relations between this concern and its licensees, the Case company in particular. This chapter substantiated and supplemented the facts presented in the judicial decisions already examined. It stated that in 1908, after the rendition of these decisions, the Indiana company "submitted a supplemental contract to each licensee, known as the patents purchase agreement by which it was agreed that any licensee who would agree to turn over to the Indiana company all patents which he might own or acquire during the term of the license contract, would be allowed the sum of \$5 on each stacker manufactured by him as licensee of the Indiana company."²⁸

This report concerning the Indiana Manufacturing Company and its licensees indicates that this company derived its strength from a patent pool.²⁹ Although manufacturing wind-stackers itself at first, this company soon discontinued the practice and confined itself exclusively to acquiring wind-stacker patents and licensing others to manufacture stackers. It stipulated a uniform price for the product and the payment

²⁶ Gladney, *Restraints of Trade in Patented Articles*, pp. 364-365.

²⁷ 207 U. S. 603.

²⁸ Bureau of Corporations, *Report on Farm Machinery Trade Associations*, pp. 122-123.

²⁹ *Ibid.*, pp. 111-127.

of a certain royalty. Some patents were purchased outright, and in other cases arrangements were made to acquire manufacturing rights for the licensees. The first 100 patents thus acquired cost \$600,000, in addition to royalties paid to patentees.

These patents could not all be used in a single machine. Some were used, others suppressed. The control of the basic patents on wind-stackers, for example the Buchanan, made it easy to secure control of patented improvements. In any case an improvement is of no value without the basic invention; if the latter is covered by a patent, the utilization of the former depends on the permission of the possessor of the basic patent or else it must be suppressed until the basic patent expires. By controlling the basic patents it became possible for the Indiana company easily to acquire all patents on improvements—a sort of purchasing monopoly, as it were. The “patents purchase agreement” by which the Indiana company contracted for the future wind-stacker inventions of the licensees helped to insure the continuity of its monopoly.

It is unfortunate that the legality of the Indiana company—its license system and control of patents not capable of conjoint use—was not passed upon by the Supreme Court, for the consequent decision would establish a precedent for judging other industrial monopolies based upon a number of incongruous patents.

LIQUID DOOR CHECK

In the decision of *Blount Manufacturing Company v. Yale and Towne Manufacturing Company*,³⁰ the so-called lock case, one finds an excellent exposition of the patent and Sherman laws and of their relation to each other and the public. The plaintiff and the defendant, the owners of patents on liquid door checks, together with two kindred manufacturers, entered into contracts which restrained each other in the exercise of rights conferred by their respective patents and authorized each of them to use the patents of the others. The plan comprehended, in the language of the courts, “the maintaining of

³⁰ 166 Fed. Rep. 555, C. C., Jan., 1909.

prices, the pooling of profits, the elimination of competition, and the restraint of improvements.”³¹ The Yale and Towne Company, sued for violating the agreement, pleaded its illegality.³² This, according to the court, involved the following question: Is the Sherman Act inapplicable because the agreements related to articles embodying patented inventions? The Bement decision, not passing upon this question but relating solely to restraints and conditions imposed in connection with the grant of patent rights, the tribunal refused to follow as a criterion; it also discarded the rubber tire and threshing machine cases, as not directly in point.

The difference between patent monopoly and combination received considerable attention from the court, as the following shows: “It seems self-evident that a contract which is only coextensive with the monopoly conferred by letters patent, and which creates no additional restraint of trade or monopoly, does not conflict with the Sherman Act. The monopoly granted by letters patent is of a particular invention. Devices thus protected by patents are, as a matter of fact, in commercial competition with both patented and unpatented devices. A contract whereby the manufacturers of two independent patented inventions agree not to compete in the same commercial field deprives the public of the benefits of competition, and creates a restraint of trade which results, not from the granting of letters patent, but from agreement. While the monopoly of the patented articles is not increased, the monopoly of the commercial field is increased by the ‘unified tactics’ as to prices.”³³

This quotation presents the proposition that inasmuch as

³¹ *Ibid.*, p. 556.

³² The Yale and Towne Manufacturing Company, in 1914, produced over 100,000 different articles, and practically none of them were covered by patents, the foundation patents having expired many years ago. In 1914 there were about 100 patents still in force; none of them related to anything that was controlling. Cf. Hearings before House Committee on Judiciary, Trust Legislation, 63rd Cong., 2nd Sess., Vol. II, p. 522; from statement of Henry R. Towne, President of Yale and Towne Manufacturing Company.

³³ 166 Fed. Rep. 555, 557. In this connection the court cites: *National Harrow Co. v. Hench*, 83 Fed. Rep. 36; *Same v. Quick*, 67 Fed. Rep. 130.

the patent statute confers a monopoly only upon a specific invention, it does not warrant a restraint of trade by independent manufacturers, even though letters patent protect their respective commodities. In other words, a combination cannot enjoy the halo of the law merely because its constituent parts are legal monopolies.

Also, the court contrasted the purposes of a patent monopoly with those of a combination, as follows: "If, as a result of mutual licenses, there is put upon the market an article embodying the inventions of both patentees, so that as the effect of exchange of licenses a new article of commerce is developed, it is doubtful if the public is thereby unlawfully deprived of any of its rights or expectations of free competition. Where, however, each patentee continues to make his own goods under his own patents, and seeks to enhance his profits by an agreement with competitors, who make either patented or unpatented articles, then it seems to follow that the agreement of each to restrain his own trade cannot be regarded merely as an incident to the assignment of patent rights. The patentee then restrains his own trade, not for the purpose of enhancing the value of the license which he grants, but for the purpose of enhancing the value of his trade by removing competition. A sale or license with a covenant not to compete, made as an ordinary incident to enhance the value of the thing conveyed, is not within the Sherman Act."³⁴ The monopoly, in other words, arose from combination and not from the exercise of rights granted by letters patent.

This led to the next point—the relation of the Sherman law to the patent law. "The Sherman Act is not inconsistent with any rights acquired by the patentee when it prevents agreements in restraint of trade which are not designed to make valuable the right to use. There is no inconsistency between the grant of an exclusive and assignable right to make, use, and vend, and the prohibition of an agreement restraining or suppressing the sale of the article in interstate commerce, because

³⁴ 166 Fed. Rep. 557-558. In this connection the court cites: *National Harrow Co. v. Hench*, 83 Fed. Rep. 36; *Same v. Quick*, 67 Fed. Rep. 130.

any profit from such an agreement does not arise from the value of making, using, and vending. There is no inconsistency between the proposition that an inventor may withhold his invention from use as he sees fit, and the proposition that he may not make an agreement whereby, for the advantage of a competitor, trade in his patented article is restrained or suppressed."³⁵

This quotation stresses the supplementary character of the patent and Sherman laws. Each has a limited field. The one grants a certain kind of monopoly but not everything that the other forbids. In this instance the patentees passed beyond the exclusive right to make, use, and vend—all that the patent statute confers—by combining or pooling their patents, and hence violated the Sherman Act.

BATH-TUB

The Standard Sanitary Manufacturing Company, which in 1912 controlled about one-half the output of enameled ware in the United States, was incorporated in 1899 under the laws of New Jersey "to consolidate the business and acquire the plants of a number of manufacturers of plumbers' enameled iron ware, brass work, and other plumbers' supplies."³⁶ This company and two other manufacturers of enameled iron ware—the J. L. Mott Iron Works and the L. Wolff Manufacturing Company—assigned their patents for an enameling process to the secretary of the association of enameled ware manufacturers, Wayman by name; and on the basis of one of them—the one assigned by the Standard Sanitary Manufacturing Company, the others being regarded as infringing patents—Wayman issued licenses to manufacturers of enameled ware and jobbers in this commodity, which brought 85 per cent of the former and 90 per cent of the latter into a network of license agreements. According to these contracts, a committee of six, chosen from the manufacturers entering

³⁵ *Ibid.*, p. 561.

³⁶ In 1913 it acquired the two plants of the Great Western Pottery Company at Kokomo, Indiana, and Tiffin, Ohio; in 1917, four other manufacturers of enameled ware.

the combination, determined the selling prices of both manufacturers and jobbers. They also provided for territory pools, for the payment of royalties, and for rebates and penalties to prevent the violation of the license compact. The manufacturers could sell their enameled ware only to those jobbers belonging to the combination; while the latter could buy such goods only from the former. Wayman, the licensor, was the one from whom all the licenses radiated. He had contracts with both the manufacturers and jobbers and thus all came under his direct control. In addition, the manufacturer and jobber were the two parties to an agreement approved by the licensor. Wayman was accordingly the central figure of the scheme; in his hands were the licenses that cemented enameled ware manufacturers and jobbers into a strong combination.

The Standard company, charged in a Circuit Court with a violation of the Sherman Act, pleaded that the combination was immune from this law because it was based upon a patent. The tribunal set forth the two main questions in the controversy: "Would such a combination as was attempted, and in large part brought about, have violated the Sherman Act, had patents on automatic dredgers [i.e., devices for distributing the enamel on the bath-tub in the process of manufacture] played no part in it? If it would, did the part played by those patents make lawful what otherwise would have been forbidden?"³⁷

In answer to the first query it pointed out that both motive and result in this instance indicated an unlawful combination, for no defendant entered into the agreement without knowing that at least 13 of the other corporate defendants had executed it, or intended to do so. Without this knowledge no one of them would have become a party to it. Not only did the agreements raise prices, they prevented reductions that would otherwise have been made.³⁸

To the second question, "Did the part played by those patents make lawful what otherwise would have been forbidden?" the court gave a negative answer; first, because the

³⁷ 191 Fed. Rep. 172, 177-178, Oct., 1911.

³⁸ *Ibid.*, pp. 174, 181.

patent covered only a minor part of the manufacturing process, not essential in making enameled goods; second, because the finished product or enameled ware itself was unpatented. That this patent covered only a minor part of a manufacturing process and that the finished product itself was unpatented, made the reasoning in this case different from that in other decisions.

The Supreme Court, to which the case was appealed from the Circuit Court, also declared the combination illegal, but gave little attention to the points most emphasized by the lower court. After reviewing the facts, the Supreme Court concluded that this monopoly arose primarily from combination, and hence condemned it as it had other combinations that had violated the Sherman Act: "The added element of the patent in the case at bar cannot confer immunity from a like condemnation, for the reasons we have stated. And this we say without entering into the consideration of the distinction of rights for which the government contends between a patented article and a patented tool used in the manufacture of an unpatented article. Rights conferred by patents are indeed very definite and extensive, but they do not give any more than other rights a universal license against positive prohibitions. The Sherman law is a limitation of rights, rights which may be pushed to evil consequences and therefore restrained."³⁹

Of the six decisions cited in the opinion, only two—*Bement v. National Harrow Company*, and *Henry v. A. B. Dick Company*—related to patents. The court refused to use the *Bement* case as a precedent, as it involved merely the contractual relation between a patentee and a licensee; and added that the *Dick* decision contravened none of its views of the case at hand. It mentioned *Montague and Company v. Lowry*, *United States v. American Tobacco Company*, and similar decisions to substantiate its argument, and therefore placed this combination in the category to which other unlawful monopolies belong.

It is likely, according to a commentator on this case, that an

³⁹ 226 U. S. 20, 49.

important element in influencing the court in reaching its decision was that Wayman interjected himself into the situation and procured the patents and arranged the contrivance. If the corporation controlling the patent had itself made these arrangements, a different result might have been reached.⁴⁰

MOTION PICTURES

The motion picture business arose from pioneer inventions near the end of the nineteenth century, and since then has enjoyed a phenomenal growth. The different factors engaged in this business are: (1) manufactures of motion picture films, cameras, and exhibiting machines; (2) rental exchanges or distributors of these films and machines to the exhibitors; and (3) exhibitors of these films to theater patrons.

In 1908, there were ten manufacturers or importers of motion pictures in the United States: namely, American Mutoscope and Biograph Company, New York City, a New Jersey corporation, known as the Biograph Company; Edison Manufacturing Company, Orange, N. J.; Essanay Film Manufacturing Company, Chicago, Ill.; Kalem Company, New York City; George Kleine, Chicago, a large importer of films, representing nine foreign companies; Lubin Manufacturing Company, Philadelphia; George Melies Manufacturing Company, Chicago, an important importer of foreign films, and also a producer of American films; Pathé Frères, New York City, a New Jersey corporation, an importer of films and an important producer of domestic films; Selig Polyscope Company, Chicago; and Vitagraph Company of America, Brooklyn, N. Y.⁴¹ They sold and shipped their reels to exchanges throughout the United States, which in turn distributed them to thousands of exhibitors. For a while keen competition existed among all of these ten companies in selling their films to the exchanges and their projecting machines to exhibitors.

⁴⁰ *Univ. of Penn. Law Review*, Vol. 62, Jan., 1914, p. 169.

⁴¹ *U. S. v. Motion Picture Patents Co.*, Original Petition, pp. 7-8.

The pooling of a few patents, license agreements, and their expeditious enforcement, however, soon brought this competition to an abrupt conclusion.

It came about in this way. The ten manufacturers organized the Motion Picture Patents Company to acquire patents relating to the motion picture art. Four of the ten companies—the Edison, Biograph, Armat, and Vitagraph—assigned their sixteen patents to the Patents company. This company never owned any property except the patents assigned to it, and these it agreed to reassign, upon dissolution, to their former owners without consideration.⁴²

The Patents company granted uniform licenses to the ten companies, which gave them the right to manufacture and use motion picture cameras and to manufacture and lease motion pictures embodying the inventions covered by its patents. They agreed, among other things, to lease their films only on condition that they be used in exhibiting machines licensed by the Patents company; to lease films to exchanges in accordance with terms subsequently described; to lease films only to those exchanges that deal exclusively in the films of the ten manufacturers; and to lease films to exchanges at prices not lower than those stipulated in the agreement. Moreover, each manufacturer contracted to mark conspicuously on labels placed on all boxes containing films the conditions under which they could be leased by a rental exchange. Among others, (a) it might sublet but not sell the films; (b) it might permit the films to be exhibited only on motion picture projecting machines licensed by the Patents company; (c) it must not sublet the films at a lower price than that agreed upon in its contract with the manufacturer; (d) a violation of any of the conditions entitled the manufacturer to immediate possession of the films. The Patents company agreed to collect royalties of \$2.00 a week from all exhibitors using motion picture projecting machines embodying its patents, to issue licenses to make and sell such machines upon the condition that they be used solely for exhibiting films leased by one of the ten

⁴² U. S. v. Motion Picture Patents Co., Brief for the U. S., p. 72.

manufacturers, and to charge a royalty of \$5.00 on every such machine.⁴³

George Kleine, one of the nine licensees, but an importer and not a manufacturer, was licensed to import positive films, not exceeding 3,000 feet per week. In addition, he agreed to confine his purchases to two foreign manufacturers, Gaumont and Urban, although previously he had imported the films of nine or ten foreign manufacturers in amounts largely in excess of 3,000 per week. Later the Patents company licensed Gaston and George Melies to import not to exceed 1,000 feet of new subjects per week made in France by George Melies. These two individuals, defendants in the legal action brought by the United States against this company, did business in the name of the Melies Manufacturing Company, which became a licensee—the tenth—after nine of the manufacturers had received licenses from the Patents company.⁴⁴

The next gradation of license agreements included the Patents company and the rental exchanges or distributors of motion pictures. As already indicated, the manufacturers could lease their motion pictures only to licensed distributors—those that complied with requirements prescribed by the Patents company. The license agreement between the Patents company and the distributors contained a complementary provision that the latter could lease motion pictures only from licensed manufacturers—those that conformed to restrictions already described.⁴⁵

The licensed distributors submitted to conditions previously suggested, like those imposed upon the manufacturers. They agreed to sublease films for use only on projecting machines licensed by the Patents company; to deal exclusively in licensed motion pictures; to distribute pictures but not to sell or exhibit them; to distribute pictures only to exhibitors licensed and approved by the Patents company; to furnish pictures only to exhibitors not supplied by another distributor; to return to each licensed manufacturer on the first day of

⁴³ Original Petition, pp. 18-19. The parts of the contract relating to the Eastman Kodak Company are considered in detail in Chapter IV.

⁴⁴ *Ibid.*, pp. 17-20, 52-78.

⁴⁵ *Ibid.*, pp. 9, 10, 21, 80.

every month, commencing seven months from the first day of the month on which the agreement was executed, an amount of motion picture film in running feet equivalent to that obtained the seventh preceding month; to pay prices stipulated in the license agreement; etc. The Patents company agreed that all licensed distributors should be subject to uniform restrictions. It reserved the right to terminate or change the license agreement on fourteen days' written notice to the distributor.⁴⁶

The Patents company granted licenses to about one hundred distributors; the remainder, some thirty or forty, were driven out of business. One should remember that the Patents company had the arbitrary power to cancel the distributor's license without cause upon fourteen days' notice. Circulars issued by the Patents company contained the names of distributors and exhibitors whose licenses had been cancelled.⁴⁷

The Patents company, a few months after it granted licenses to most of the rental exchanges in the United States, proceeded to monopolize more completely the distributing end of the motion picture business. A corporation, the General Film Company, was organized to carry out the scheme. It had a capital stock of \$2,000,000, later reduced to \$1,000,000; each incorporator and director had business connections with one of the ten manufacturers of licensed pictures. The purpose of the corporation was to distribute all motion pictures and therefore to supplant the other rental exchanges. It bought 68 rental exchanges and drove others out of business by refusing to supply films to them and by employing other tactics. The withholding of films alone was sufficient to exterminate the small distributor, since the continuity of his business depended on a constant stream of new films. Other tactics consisted of price-cutting, discrimination, threats, and intimidations.⁴⁸ In

⁴⁶ *Ibid.*, pp. 22-23.

⁴⁷ Brief for the U. S., pp. 219-229.

⁴⁸ Brief for the U. S., pp. 164-219; Hearings before House Com. on the Judiciary, Trust Legislation, 63d Cong., 2nd Sess., Serial 7, Vol. 2, pp. 475-485, 755; Supreme Court of the State of N. Y., N. Y. County, Greater N. Y. Film Rental Co. v. Motion Picture Patents Co. (exhibit special).

1909 only one of the former rental exchanges remained; with this one exception, the General Film Company became the sole distributor of motion pictures. It established 52 branches and the territory was divided among them.⁴⁹

Twelve manufacturers of projecting machines became licensees of the Patents company. Each of the contracts enumerated 13 patents as the legal basis of certain restrictions and other provisions. The manufacturer agreed to sell its exhibiting machines, except those for export, under the condition that they should be used solely for exhibiting or projecting motion pictures leased by the ten manufacturers, and to attach a plate to each projecting machine setting forth this condition. Furthermore, the manufacturer contracted to sell each exhibiting machine at a stipulated price (\$150), and to pay a royalty of \$5.00 to the Patents company on every machine sold. The Patents company agreed that any additional licenses granted to other manufacturers of projecting machines would not be more favorable than the existing ones.⁵⁰

One should next note the relationship between the Patents company and the exhibitors. Only exhibitors who secured licenses from the Patents company could show the films of the ten manufacturers. The exhibitor agreed to use upon his machines only pictures manufactured by the licensed manufacturers, and to pay to the Patents company a royalty of \$2.00 per week on every exhibiting machine owned by him. As previously described, the manufacturers and distributors could furnish film only to those exhibitors who contracted neither to display films other than those made by the ten manufacturers nor to use projecting machines not licensed by the Patents company—in other words, films would be furnished only to licensed and approved exhibitors. Moreover, no two distributors could lease pictures to the same exhibitor.⁵¹

This system of licenses gave the Patents company the power

⁴⁹ Brief for the U. S., pp. 5, 246, 247, 250.

⁵⁰ Original Petition, pp. 26, 95.

⁵¹ *Ibid.*, pp. 87-93.

of life and death over 7,000 exhibitors.⁵² A new theater could not make a start, an old one could not continue business, unless the Patents company saw fit to grant a new license or extend the existing one, as the case might be.⁵³ The company cancelled many licenses because exhibitors showed unlicensed films. It used circulars or bulletins in informing and warning exhibitors of the license restrictions and other things concerning its plans and activities, such as a list of licensed exchanges, applications for licenses from old and new theaters, replevin suits, etc.⁵⁴

The underlying factors of the foregoing account may be briefly summarized. Ten manufacturers of motion picture films sought to dominate the motion picture business, including its three phases of manufacture, distribution, and exhibition. The subterfuge consisted of a patent pool. They organized the Motion Picture Patents Company, to which four of them assigned several patents. These patents were used by this company as a "legal" basis for interlocking licenses granted not only to manufacturers of motion picture films and projecting machines, but also to distributors and exhibitors of these films. By leasing instead of selling films, and by enforcing stringent restrictions and conditions pertaining to them, the control of the motion picture industry seemed assured. Competition was practically eliminated both from within and without the combination; for example, no two distributors could supply films to the same exhibitor, and the various strata of the industry were compelled to use all or none of the machines and films of the monopoly. Moreover, contracts, royalties, penalties, etc.—all prescribed by the Patents company—were uniform as between any two of the four factors in the monopolistic hierarchy; namely, the Patents company, manufacturers, distributors, and exhibitors. Further, a manufacturer could not distribute or exhibit films, a distributor could not make or exhibit films, and an exhibitor could not make or distribute films—a situation which brought about functional specializa-

⁵² Brief for the United States, p. 74.

⁵³ Original Petition, p. 24.

⁵⁴ Brief for the U. S., pp. 210-215, 219-239.

tion within the industry. The organization of the General Film Company changed the existing arrangements to a slight extent in that it meant control of the distribution of films by means of a subsidiary company instead of by a network of license agreements with rental exchanges.

The government, as one would expect, brought suit against this monopoly for violation of the Sherman Act. The district court stated, "The end and purpose of the combination, and in this sense the motive or moving cause, further was not to protect the patent rights, which the Motion Picture Patents Company was organized to take over; but the control of the patents was made a feature of the scheme, in the belief, or at least the hope, that this would render the scheme (otherwise illegal) not open to the condemnation of the law."⁵⁵

The court announced that either unlawful means or unlawful results may constitute "conspiracy" under the Sherman Act, saying: "If the end is monopoly, and the means the restraint of trade, the inquiry is directed to the character of the restraint. If that is undue and unreasonable, and was directly intended, and the monopolistic result flows as a direct, and not a merely incidental consequence, the combination through which it is brought about is illegal. The same conclusion follows a finding that the end is illegal, because reached through the same means. Indeed, the two things come to be, nearly, if not quite, the same, although there is room for a difference."⁵⁶

The court concluded that the combination was illegal. "We conclude with the formal finding, in the language of the Act of Congress, that the contracts enumerated in the petition, and the combination there described, were a conspiracy in restraint of trade or commerce among the several states and with foreign nations, and were and are illegal, and that the defendants . . . have monopolized . . . a part of the trade or commerce among the several states and with foreign nations, consisting of the trade in films, cameras, projecting machines, and other accessories of the motion picture business."⁵⁷

⁵⁵ 225 Fed. Rep. 800, 811. Oct., 1915.

⁵⁶ *Ibid.*, p. 809.

⁵⁷ *Ibid.*, p. 811.

RAILWAY DEVICE

According to the testimony of a lawyer who appeared before the Oldfield Committee in 1912, a man had invented, several years before, a device for use in connection with the operation of railroads. He patented and manufactured and sold it. Soon competition sprang up until there were four manufacturers of this class of device; each had a patent on his particular form of the device. After two or three years of fierce competition, these various manufacturers got together. They assigned their patents to a trustee whose actions were controlled by a majority vote of the four manufacturers. They voted to eliminate some of the forms of the device then on the market, and confined themselves to the manufacture of one or two of the most efficient. Furthermore, they agreed that one of the parties should manufacture the device; that another should have charge of the sales; that the other two should retire; that the prices should be raised; and that the profits should be divided among them.⁶⁸ The individual who told of this pool would not reveal the names of its members. The author does not know of any government action designed to test its legality.

COASTER BRAKE

The New Departure Manufacturing Company and five other corporations were separately engaged in different states in the business of manufacturing bicycle and motorcycle coaster brakes and accessories, of a distinctive type and design from those made by other concerns, under certain patent license rights owned by them separately. By granting licenses to competitors, they sought to restrain trade in coaster brakes. A District Court in 1913, in passing upon the legality of this scheme, stated that "the asserted culpability of the defendants is primarily based upon the allegation that the defendant corporations were separately owners of patents and patent rights for improvements in the coaster brake and other bicycle

⁶⁸ Oldfield Hearings of 1912, No. 23, pp. 5-6.

and motorcycle accessories, differing from those held by the other corporation defendants, but that the defendants, to effectuate their plan or scheme to restrain trade, feigned the making of a license agreement ostensibly covering a part, but not the whole, of the coaster brake manufactured by the New Departure Manufacturing Company."⁵⁹ The indictment against the combination included the discontinuance of pending litigation between the various defendants, and agreement not to question the validity of any patents owned by licensees. This, in effect, meant the forced validity of all their patents per agreement. The court declared that "by the methods and acts complained of, the commingling of separate interests in separate patent rights, by the issuing of a pretended license for a pretended basic patent, with the intention of fixing uniform prices and discounts and imposing other conditions, benefits and advantages were secured which may be enjoyed only by a separate patentee in the protection of his true monopoly. It was such courses of procedure by industrial interests in whatever form or guise that the Anti-Trust Act was designed to check and prevent."⁶⁰

OIL COMPANIES

The first indications of a patent pool maintained by oil companies was brought to the attention of the public in 1923. According to the LaFollette report on the high cost of gasoline and other petroleum products, the Standard Oil Company of New Jersey and the Standard Oil Company of Indiana, now owe a part of their power to the control of patents relating to the "pressure" or "cracking" process of manufacturing gasoline. According to this process, the residue which remains after the removal of gasoline from the oil by distillation, is subjected to great pressure and heat. It is "cracked," thus releasing the lighter elements, and a further supply of gasoline is obtained. This process may be repeated as often as found to be commercially profitable. "The testimony on this subject shows that a refinery which has the additional equipment

⁵⁹ 204 Fed. Rep. 107, 112.

⁶⁰ *Ibid.*, pp. 110, 115.

necessary to operate what is called the "cracking" process can produce substantially double the amount of gasoline out of the same grade of oil as can the refinery which has not that process. In this situation it is obvious that so long as gasoline is the controlling factor in the value of a barrel of crude oil, that refinery which is without a cracking process cannot compete with one that has it."⁶¹

According to this report, the Standards of New Jersey and Indiana control what they claim to be basic patents, and the right to operate them, they lease to other companies under some royalty basis, usually with the provision that the gasoline produced by the patents shall not be sold except in certain territory and with the right reserved to the leasing company to buy back a certain proportion of the gasoline thus produced at an agreed price. Both of these companies are active in warning all the independents against the use of cracking processes, claiming, in some cases at least apparently without justification, that the cracking processes which independents were seeking to use were in violation of Standard patents, and thus for years, through threats and institution of suit, the industry generally has been deprived of processes by which the production of gasoline could be doubled.⁶²

In June, 1924 the United States brought suit against the Standard Oil Company of Indiana, Standard Oil Company of New Jersey, Texas Company, Gasoline Products Company, and forty-seven other oil concerns.⁶³ The defendants, according to the government's brief, have formed a patent pool for the purpose of restraining trade in gasoline, kerosene, and other hydro-carbon products. The patents in question relate to the "cracking" processes of making gasoline.⁶⁴ However, the government contends that they are not basic in character,

⁶¹ Senate Report No. 1263, 67th Cong., 4th. Sess., pp. 49-50.

⁶² *Ibid.*, p. 50.

⁶³ U. S. vs. Standard Oil Co. (Indiana), Standard Oil Co. (New Jersey), Texas Co., Gasoline Products Co. et al., In the District Court of the U. S., Northern District of Ill., Eastern Division, 1924, government's petition.

⁶⁴ For an additional description of these processes, consult *Ibid.*, pp. 9-13.

and therefore are but a device to lend color of legality to the combination.⁶⁵

The defendants are classified as primary and secondary. The "primary" includes the oil companies already mentioned, and in addition the Standard Development Company;⁶⁶ and the "secondary" embraces all other defendants. The primary defendants are so-called for these reasons: (1) the broad scope and importance of their asserted patent rights; (2) their alleged patent rights are, by a system of cross agreements, handled substantially as a unit or pool in dealing with their licensees, assignees, and grantees; (3) they are primarily responsible for the institution and continuation of the unlawful conditions and practices in question. The secondary defendants are parties to agreements with one or more of the primary defendants by which they have been given certain alleged patent rights, privileges, or immunities as assignee, grantee, or licensee. They are, according to the government, subscribers to rather than the promoters of the combination, "they being unable to secure manufacturing privileges under any of the alleged patent rights controlled by the primary defendants without agreeing to such trade restrictions and other terms as the primary defendants see fit to impose, and they being unwilling to incur the hostility of the primary defendants by employing the cracking processes without their consent."⁶⁷

The primary defendants entered into, one with another, a series of agreements according to which alleged rights were conveyed to each other under their respective patents. "By granting rights under prospective as well as existing patents provision was made for extending the combination and monopoly beyond the life of any patents now owned by the defendants. Each thus protected its patents and asserted rights against attack by the others and they were enabled to present a solid front to all manufacturers of gasoline who

⁶⁵ Senate Report No. 1263, 67th Cong., 4th. Sess., pp. 12-13.

⁶⁶ To the extent that its parent company, Standard Oil Company of New Jersey, has conveyed to it patents relating to the cracking processes.

⁶⁷ *Ibid.*, p. 14.

were compelled by competition to avail themselves of the economies resulting from the use of the cracking process.”⁶⁸ These agreements provide for the payment of royalties ranging from a half of a cent to a cent and a quarter per gallon on gasoline produced by the cracking process for domestic consumption. Moreover, they include numerous oppressive conditions which directly impede and restrain trade by restricting production and by securing a virtual monopoly in particular territories to certain defendants, more especially the Standard Oil Company of Indiana. These agreements not only purport to convey manufacturing rights but also authorize the respective licensees to grant sublicenses containing like onerous restrictions.

The government contends that the secondary defendants, per necessity, have accepted licenses under the pooled patents of the primary defendants. They have agreed to the huge royalties and oppressive conditions already mentioned. In addition, each secondary defendant “has estopped itself from hereafter questioning the validity of the patents under which it is licensed, and in a majority of instances such licensees have reciprocally agreed to license the primary defendants under any patents relating to the cracking arts which they have or may obtain in the future.”⁶⁹

“The effect of the foregoing agreements,” according to the government’s brief, “has been to pool a large number of patents and alleged patent rights relating to minor processes in a long practiced art which, if valid at all, constitute no or but slight improvements in the art—improvements so insignificant as to afford no consideration for contracts in restraint of trade; to estop all parties to the plan both primary and secondary from in any manner contesting the validity of said asserted patents and patent rights; to burden the interstate and foreign trade and commerce in gasoline, kerosene, and other hydrocarbon products by levying thereon heavy charges in the guise of royalties; to provide for the perpetuation of the plan beyond the life of any of the existing alleged patent rights by providing for a pooling of after-acquired patents; to restrict

⁶⁸ *Ibid.*, p. 15.

⁶⁹ *Ibid.*, p. 16.

many of the licensees in the amount of gasoline which they may produce for interstate sale and transportation by fixing a limitation of the production or by imposing a graduated scale of royalties which penalize production over a certain amount by making it unprofitable; to restrain interstate and foreign trade and commerce by prohibiting directly the movement of large supplies of gasoline and other unpatented commodities in such commerce; and to secure to the defendant, the Standard Oil Company of Indiana, a virtual monopoly of trade and commerce in said commodities in the fifteen States referred to as its territory."⁷⁰

This patent pool, involving practically all the oil companies in the United States, is, it would seem, the most inclusive and important one of which any record exists. The case is now in a District Court of the United States, and it is likely that the public will wait several years before the rendition of a final judicial decision.

RADIO CORPORATION

The Marconi Wireless Telegraph Company of America, organized in 1899, was the first company in the United States created for the purpose of engaging in the transmission of messages by wireless. It had a capitalization of \$10,000,000, of which about 25 per cent was owned by the Marconi's Wireless Telegraph Company of Great Britain. The American company had the exclusive right to use and exploit the patents controlled by the British corporation. It enjoyed practically a monopoly of the ship-to-shore communication business. The United Fruit Company obtained a few radio patents and a license from the Marconi company under certain of its patents. Its vessels, operated in connection with its tropical fruit business, were equipped with wireless apparatus. It constructed stations in Boston, New Orleans, and a few points in Central America from which a commercial service was maintained. The Federal Telegraph Company of California, organized in 1911, operated a ship-to-ship and ship-to-shore service on

⁷⁰ Senate Report No. 1263, 67th Cong., 4th. Sess., pp. 52-53.

the Pacific coast. These three companies already mentioned were the principal manufacturers of radio apparatus. The three large electrical companies—General, Westinghouse, and Western—did not, prior to the war, sell radio apparatus, although they had done considerable research work relating to it.⁷¹

In 1917 the British Marconi Company began negotiations for the exclusive rights to an invention of the General Electric Company, useful especially in long-distance communication. The officials of the Navy Department suggested that an American radio corporation be formed to which the rights in this machine be sold and thus enable it to compete with British interests. The General Electric Company commenced negotiations for the purchase of the British Marconi Company's holdings in the Marconi Wireless Telegraph Company of America, with a view of organizing a new company to carry on the radio business. It was largely responsible for the organization of the Radio Corporation of America, October 17, 1919, with a capital of \$25,000,000 of preferred stock and 5,000,000 shares of common stock without par value. In 1922 there was outstanding on the books of the corporation 5,734,000 shares of common stock and 3,955,974 shares of preferred stock distributed largely as follows:

Name	Common	Preferred
General Electric Company.....	1,876,000	620,000
Westinghouse Electric & Manufacturing Company	1,000,000	1,000,000
American Telephone & Telegraph Company.	400,000
United Fruit Company.....	160,000	200,000

The remainder of the stock is held largely by the former stockholders of the American Marconi Company.⁷² On No-

⁷¹ Radio Industry, 1923, Federal Trade Commission, pp. 1-2, 11-18.

⁷² The American company subsequently disposed of its stock because, according to its vice-president, "brokers were advertising this stock ownership to induce the public to invest in the stock, which tended to create a moral obligation on this company's part which it did not wish to assume." *Ibid.*, pp. 20-21.

vember 20, 1919, the Radio Corporation issued 2,000,000 shares of preferred stock in exchange for the physical properties, patents, licenses, and good will of the Marconi company. The companies mentioned are represented on the board of directors.⁷³

"The Radio Corporation has entered into agreements with the various companies which own or control practically all patents covering radio devices considered of importance to the art. The number of patents involved approximates 2000. Agreements of this character have been entered into with the General Electric Company, Marconi's Wireless Telegraph Company (Ltd.), American Telephone and Telegraph Company and its subsidiary, the Western Electric Company, the United Fruit Company and its subsidiary, the Wireless Specialty Apparatus Company, the International Radio Telegraph Company, the Westinghouse Electric and Manufacturing Company, and the Radio Engineering Company of New York. With certain minor limitations, the Radio Corporation under these agreements has secured an exclusive divisible right to sell and use the radio devices covered by the patents involved or by patents which these companies may acquire before the termination of the agreements. The agreements with the American Telephone and Telegraph Company and the Western Electric Company are to terminate in 1930, while the remainder are to terminate in 1945. Provision is made for the mutual exchange of information relating to radio, and, in most instances, the Radio Corporation has granted to the other Company a license under its patents to make and use devices in the particular field in which the other Company is interested."⁷⁴

The Radio Corporation, under these agreements, is made the selling company for practically all radio devices to be sold the public under the hundreds of patents involved. The General Electric Company and the Westinghouse Electric and Manufacturing Company are to manufacture and to sell to the Radio Corporation only, these devices and apparatus, the

⁷³ Radio Industry, 1923, Federal Trade Commission, pp. 2-3, 18-22.

⁷⁴ *Ibid.*, pp. 3-4.

Radio Corporation agreeing that 60 per cent of its annual requirements would be purchased from the General Electric Company and 40 per cent from the Westinghouse Company. In the sale of receiving sets the Radio Corporation has competition from seventeen concerns. In communication by radio between ships at sea and the shore, it is the dominant factor.⁷⁵ Moreover, this company is "the only concern now engaged in transmitting and receiving radio messages between the United States and foreign countries and contends that in order to function properly it must of necessity secure a monopoly in this field. The company has secured a virtual monopoly and controls all the high-power stations with the exception of those owned by the Government. In addition, it has entered into traffic agreements with the various foreign Governments and radio companies, the majority of these agreements providing that all messages intended for the United States shall be transmitted only through the facilities owned by the Radio Corporation of America."⁷⁶

"The refusal to sell or lease apparatus to competitors for international communication purposes is included in the well-defined policy of the Radio Corporation of America. It also affixes to the apparatus sold a license notice, the object of which is to restrict the purchaser's use of the device to amateur and experimental purposes. In supplying ships with apparatus, devices, and appliances, the ship owners are required to execute an agreement which provides that the apparatus or appliances furnished by the Radio Corporation are licensed only for use on board ships and aircraft in communications destined to or originating on such ships or aircraft."⁷⁷

The Radio Corporation distributes its products chiefly through wholesale concerns handling electrical supplies. There is no substantial evidence to indicate that it attempts full line forcing, or compels other companies to admit the legality of its patents. The Federal Trade Commission submits no conclusions in its report as to whether the facts disclosed constitute a violation of the antitrust laws.⁷⁸

⁷⁵ *Ibid.*, p. 4.

⁷⁶ *Ibid.*, p. 5.

⁷⁷ *Ibid.*, p. 6.

⁷⁸ *Ibid.*, pp. 6-7, 75-76.

DEFECTS

The foregoing account of the harrow, seeded raisin, rubber tire, wind-stacker, and liquid door check pools reveals suits against members who violated the terms of their license agreements; it clearly shows the lack of stability and endurance of this form of organization. Some of these pools, notably the liquid door check, bath-tub, motion picture, and coaster brake were actually illegal. These two defects of patent pools, instability and illegality, led to other schemes to defeat the Sherman Act by means of patents, as set forth in the following chapters.

CHAPTER III

PATENT CONSOLIDATIONS

THE instability and illegality of patent pools indicated the necessity of other forms of organization. These defects, it seemed, could be avoided by the outright ownership of all patent rights pertaining to a particular industry.

TWO METHODS OF ACQUIRING PATENTS

Two general methods of carrying out this scheme may be distinguished. The first consisted of the consolidation of former competitors by means of a merger or an amalgamation.¹ One corporation, according to this plan, acquired completely the plants, patents, etc., of competitors. Without patents the result would have been monopolistic in character; with patents, it was assured of the strength of its position. Competition could not appear readily because a competing line of inventions as well as a large supply of capital would be necessary.

The other method was the purchase only of the patent rights of individuals and companies, without any attempt to acquire the plants of competitors. This method was most expedient and effective for a concern which already occupied a prominent position in its field. By acquiring the patents of others it ultimately attained a monopoly.

These two methods—the consolidation of companies possessing patents, and the securing of patents only from miscellaneous sources—were employed at the same time in some instances. For example, the Eastman Kodak Company purchased the plants, patents, etc. of other companies at the same

¹For a description of these forms, see Haney, *Business Organization and Combination*, p. 241.

time that it acquired patents from individuals and others. Furthermore, the second method was usually a sequel of the first. After the consolidation of various companies, it was necessary, in order to perpetuate its monopolistic power, to acquire other and relevant patents.

REASONS FOR ACQUIRING PATENTS

The Oldfield Committee in its report of 1912 stated, "Capital seeking to control industry through the medium of patents proceeds to buy up all important patents pertaining to the particular field. The effect of this is to shut out competition that would be inevitable if the various patents were separately and adversely held. By aggregating all the patents under one ownership and control, using a few and suppressing the remainder, a monopoly is built up that is outside of and broader than any monopoly created by the patent statutes. It is 'monopoly of monopolies' and is equivalent to a patent on the industry as such."²

Other considerations may encourage the acquisition of patents either by consolidation of various companies or by the purchase of patent rights by a single company. An industrial monopoly may acquire a rival and basic invention in order to prevent the scrapping of its existing equipment. The American Telephone and Telegraph Company, it is said, obtained the patents on the automatic telephone after its installation in several cities, so that it would not displace telephone equipment of the old type in which millions of dollars were invested. Until the Clayton Act of 1914 and subsequent decisions of the Supreme Court declared tying clauses illegal, many corporations obtained patents in order to have apparently a legal basis for dictating the use of supplementary supplies, and maintaining resale prices of their patented articles.

The president of the Boyleston Manufacturing Company, in discussing the leasing of machines by the United Shoe Machinery Company stated in 1914 that the United company had a provision in its leases which gave it

² Oldfield Report of 1912, p. 5.

the right to add new parts to its machines and therefore extend its patent protection. For example, if the patent on a machine was about to expire, this company could take off any part of the machine, put on another part recently patented, and therefore extend its patent monopoly. In some instances a new but insignificant device would be attached to the old machine without removing any of its parts. Practices of this sort enabled the United company to maintain a "legal" basis for the enforcement of its tying clauses.³

A consolidation makes possible the distribution of special processes and patents. The good inventions of several companies may be combined and the poor ones discarded, with the consequent improvement of the machines, etc., to which they relate. Improvement patents subsequently acquired may be incorporated into the inventions already in use. The acquisition of patents solely for the purpose of perfecting machines, processes, and the like should not be confused with acquisition for obtaining a monopoly. The one may be justifiable while the other deserves condemnation.

Another cause of the acquisition of patents arises from litigation. A patent may be purchased because it presents some offensive possibility as the basis of an expensive suit for infringement. Further, if litigation is waged between equal competitors, the "long-continued uncertainty due to the necessarily protracted proceedings, and the huge expense, are apt to suggest combination as a solution of their differences; and in the end they join together in exploiting the public."⁴

SOURCES OF PATENTS

Independent Inventors. The corporation acquires its patents from various sources by assignments and licenses. Many patents are obtained from independent inventors and other companies. Patents as issued appear in the Official Gazette of the Patent Office, and therefore are advertised free throughout

³Oldfield Hearings of 1914, Part 8, p. 150; these tying clauses are described in the next chapter.

⁴Oldfield Report of 1912, pp. 22-23.

the United States. If the patent is deemed of sufficient importance, a corporation may advance offers to the individual inventor for his patents. Usually, however, the inventor solicits the corporation to buy his patents.

The industrial monopoly usually purchases its patents at bargain prices. It enjoys a monopoly in buying patents that relate to the particular industry and therefore can practically dictate their prices. Moreover, it controls basic and important improvement patents. Improvements cannot be legally used in connection with them without its consent. Thus the corporation has an additional advantage in bargaining with those who have made slight improvements. This situation arose when Edison, Blake, and Berliner improved Bell's telephone. Their improvements, though very important, could not be utilized without employing the basic invention. The result was that their patents came under the control of the owners of the Bell patents.⁵

Further, the amount and expense of patent litigation serve as a handmaid to the large corporation in quest of patents. As Edison has stated, "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."⁶ The Inventors' Guild asserted, in 1912, that under existing methods of trying patent cases an inventor of average means could not, at his own expense, carry to a conclusion an average patent litigation against a wealthy opponent, and therefore a few large corporations usually acquire practically all important patents in their field.⁷

If the monopoly refuses to buy patents, as it often does, the inventor is practically helpless, in that the only possible purchaser of his patent has given him a negative answer. Slight improvements dependent on its patents present little or no possibilities of competition, and therefore it may well afford to ignore them. A basic and rival invention may be purchased and suppressed to prevent the scrapping of existing

⁵ Prindle, *Patents as a Factor in Manufacturing*, pp. 28-29.

⁶ Oldfield Hearings of 1912, No. 23, p. 32.

⁷ Oldfield Report of 1912, p. 24.

equipment. If it is not acquired and is later developed by another company, the monopoly may resort to other tactics.

In 1912 the editor of the *Inventors' Outlook* stated before the Oldfield Committee that Delaney, the inventor of a system of automatic telegraphy, tried for years to get the Western Union and Postal Telegraph companies to adopt it. The installation of the system, according to his opinion, would be desirable. These companies, however, refused to adopt it, as they thought its introduction would result ultimately in the reduction of dividends. Delaney, after a bitter fight, organized the Telepost Company. This company, after securing a foothold in New England, failed because its credit was influenced by other interests. The Western Union and the Postal installed the night and day letter system, which was really compelled by the Delaney service and the Telepost Company.⁸

Inventors Employed by Corporation. Another source of inventions, especially of those that insure the continuation of the monopoly, is the corps of scientists and inventors employed by the corporation. These men usually receive fixed salaries for their inventive endeavors in return for the assignment of patents covering their inventions to the corporation. The inventors attack the problems as they are presented and work them out in well-equipped laboratories. Moreover, an industrial monopoly based largely on patents may easily prosecute its applications in the most approved manner, make validity searches, and carry through elaborate and expensive interference and infringement suits. The corporations, keeping in view the time when the patents on their present products will expire, endeavor to have new ideas similarly protected and ready to put on the market when the patents under which they are at present working expire.

Former Examiners of Patent Office. Some of the experts of the corporation who further its designs to continue its monopolistic power are former examiners of the Patent Office. According to the Commissioner of Patents in 1919, some of these men resign from a division and go into practice for a

⁸ Oldfield Hearings of 1912, No. 6, p. 19.

corporation having applications in that same division. They are not only familiar with all its applications for patents, but they have studied the cases of rival companies or of independent inventors.⁹ Finally, the corporation usually requires its laborers, those who attend machines and perform other kinds of manual labor, to agree that any inventions which they may conceive shall be assigned to it.

Illustrations of the methods of acquiring patents, the reasons for obtaining patents, and the sources of them, will be presented in the following description of companies which represent patent consolidations.

THE AMERICAN TOBACCO COMPANY

This company, created in 1890 and capitalized at \$25,000,000, represented a consolidation of five manufacturers of cigarettes which made 95% of the total output of the United States.¹⁰ This combination owed its success in no small degree to the control of important patents relating to the tobacco industry. In fact, the possibility of acquiring exclusive control of certain cigarette-making machines furnished a strong incentive to its creation.

The American company, a short time after its formation, contracted with the Bonsack Machine Company for the exclusive use of its machine, the most successful one on the market. It was stipulated that the American company might cancel this agreement if the Ponsack company failed to secure for it such exclusive use before March 1, 1891, or if as many as 100 million cigarettes should be made in the United States in factories of other concerns on machines not controlled by the Bonsack company. The American company was to pay a royalty of \$250,000 annually during the life of the contract; it covered three years with the privilege of renewal at the expiration of this time by the tobacco company.

Pursuant to this agreement, the Bonsack company terminated its outstanding contracts with other manufacturers.

⁹ Nolan Hearings of 1919, p. 241.

¹⁰ 221 U. S., pp. 106, 156-157.

In 1895, owing to adverse judicial decisions, the American Tobacco Company lost its exclusive right to the use of the most important parts of this machine. It ceased to pay royalties January 1, 1896 and purchased the Bonsack machines it was then using. However, in spite of this fact, it should be borne in mind that this combination had the exclusive use of this machine for five years, a period long enough to enable it to acquire a dominant position in the cigarette business.

Moreover, the control of other cigarette machines helped the combination to attain its goal. It acquired the patents on the Allison cigarette machine. But this machine, not proving satisfactory, was not used. This combination also obtained exclusive control of the Emery cigarette machine in its acquirement of Goodwin and Company.¹¹ In 1892 it secured the exclusive American rights to the De Coufle patents pertaining to a crimping attachment to the cigarette machine.

The general policy of the American Tobacco Company to obtain any and all patents relating to any phase of the tobacco business is borne out by the purchase of other patents. It purchased a majority of the stocks and bonds of the Health Tobacco Company, incorporated in the previous year, 1898, with an authorized capital of \$1,000,000, the owner of an alleged invention for rendering tobacco harmless to the smoker. It continued to own a controlling interest in this company, although the enterprise itself was a failure. Also, in 1899 the American Tobacco Company began to buy the stock of the Standard Tobacco Stemmer Company, and in 1906 held nearly all of the outstanding stock. The Standard company had secured a patent for a tobacco-stemming machine, and the American company wished to prevent its possible development and use by competitors. In 1899 the American company also bought \$75,000 of the stock of the Golden Belt Manufacturing Company, increasing its investment until it held in 1907 \$652,100 of the \$700,000 outstanding stock of this company. The Golden Belt Company owned patents for the

¹¹ Report of the Commissioner of Corporations on the Tobacco Industry, Part I, pp. 64-67.

manufacture of tobacco bags and the cloth from which they are made, and its business was very profitable.¹²

The tobacco trust dominated the cigarette business first owing to "the special adaptability of the cigarette making to the use of machinery, the exceedingly rapid growth of the cigarette industry, its concentration in a few large factories, the intensity of competition among these, and the control of the best cigarette machines by a few men through patents."

The greater efficiency realized in manufacturing cigarettes by machines was set forth in an annual report of the United States Commissioner of Labor. The labor cost of a certain cigarette made by hand in 1876 was 96.5 cents per thousand; by machine in 1895, only 8.1 cents. By 1884 the daily output of a single Bonsack machine was 120,000 cigarettes—fifty times as many as a rapid cigarette roller could produce in a day by hand. The output of cigarettes increased from 599 millions in 1882 to 2.5 billions in 1890, a total which shows the tremendous growth in the importance of the cigarette branch of the tobacco business.¹³ The domination of this one branch meant initial success in the attempt to control the tobacco industry—a success due to the use of machinery in cigarette making, and to the control of such machinery through patents.

The strength of this combination in the little cigar business since 1899 was chiefly attributable to its control of patented machinery which could be used in making little cigars.¹⁴

The importance of the adaptability of the tobacco business to machinery, and of the control of such machinery through patents, was shown by the difficulties of this monopoly in acquiring domination of the cigar business. In all but the cheaper grades of cigars the greater part of the process was carried on by hand, so that the small concern was at little disadvantage in competing with a large company. Only the introduction of machines to manufacture completed cigars, and control of the patents covering such machines giving a

¹² Report of the Commissioner of Corporations on the Tobacco Industry, Part I, p. 85.

¹³ *Ibid.*, Part I, p. 63.

¹⁴ *Ibid.*, Part I, p. 31.

greater efficiency in production, would have enabled the trust to become the master of the cigar business.

The American Tobacco Company, realizing this situation, purchased in 1899, 52 per cent of the outstanding stock of the United States Cigar Machine and Manufacturing Company, a corporation for the development and manufacture of cigar machinery. In 1901, the American Tobacco Company incorporated a new concern, the International Cigar Machinery Company, taking 51 per cent of the stock. In 1905 it transferred part of this stock to the American Cigar Company, which experimented with cigar machinery; it used machines in manufacturing the cheaper grades of cigars and in supplementing hand labor in making the better grades.¹⁵

But the experiments with machines for making the better grade of cigars ended in failure, and even to-day machinery is little used in making them. Primarily for this reason the tobacco trust was never successful in maintaining substantial control of the cigar business.

In 1911 the United States Supreme Court ordered the dissolution of the American Tobacco Company, but gave no specific attention to patents.

THE AMERICAN STEEL AND WIRE COMPANY

The American Steel and Wire Company of New Jersey was organized in 1899 with a capitalization of \$90,000,000. Its most important precursors were the Consolidated Steel Wire Company of Illinois and the American Steel and Wire Company of Illinois. The former, organized in 1891, was merged with the latter in 1898. The latter in turn, with several competitors, was consolidated into the New Jersey company in 1899.¹⁶ This company manufactured principally barbed wire, woven wire, plain wire, and wire nails. It furnishes the illustration par excellence of an industrial monopoly built up largely through the control of many patents, as revealed in

¹⁵ *Ibid.*, Part I, p. 38.

¹⁶ House Report No. 1127, 62nd Cong., 2d Sess., Investigation of U. S. Steel Corporation.

the following testimony of the chairman of the company, John W. Gates:

"Q. There has been, as I said before, a very decided increase in the difference of price between barbed wire and smooth wire, and also between steel and smooth wire, but no increase in the difference between wire and wire nails; what is the explanation of that? A. The price of barbed wire has advanced more than the price of smooth wire, has it not?

"Q. Yes; by 50 per cent. A. That is no doubt due to the fact that we have a monopoly of the barbed wire. We practically own every patent on barbed fence wire and machinery in existence in the United States, and we claim that no one can manufacture barbed wire without infringing our rights. We paid a great many hundred thousand dollars for these patents, a great many hundred thousand dollars more in litigating and sustaining them. We sustained one recently in the Supreme Court.

"Q. So that, so far as the price of barbed wire is concerned, you have a decided advantage in having practically a complete monopoly of the patents? A. Yes. . . .

"Q. The price of wire nails has not gone up, while the price of smooth wire and barbed wire has doubled almost. A. We claim a perfect right to put any price on barbed fence wire that would seem justifiable, on the ground that we have paid out hundreds of thousands of dollars for patents. We do not claim that right on the others.

"Q. You have acquired a patent monopoly, and you justify it then? A. Yes. The granting of a patent gives a man a monopoly, as I understand it, if he has a good patent."

This monopoly controlled 85 per cent of the manufacture and sale of barbed wire in the United States. In justifying the high price of this commodity, the following testimony was given by Mr. Gates:

"But our control has been acquired by patents, which we have either gone and bought in the open market or paid others for, and we have paid out—in purchases of patents and in the litigation to establish them in the last 20 years—I should suppose, \$5,000,000 or \$6,000,000. They have paid out millions of money, and if you would eliminate that, I presume that prices might have been lower. I am willing to concede that."

By means of patents the American Steel and Wire Company also acquired a monopoly of woven wire fencing as well as barbed wire, disclosed by the following testimony:

"There is a great deal of woven wire fencing made in this country. We claim a monopoly under patents of most of the woven wire fencing. We made the past year about 25,000 miles of woven wire fencing under patents that we purchased, and we get a very much larger profit on that than we do on the plain fence wire or even barbed wire or wire nails, for the reason that we own the patents on the machines and the patent on the product."¹⁷

Mr. Gates also testified that the elimination of much patent litigation was one of the advantages derived from the formation of the New Jersey company.¹⁸

There is no available record of any other concern which has spent as much money in getting patents and in defending them in the courts as the American Steel and Wire Company of New Jersey and its predecessors. One cannot find a better illustration of the abuse of the patent system than the practice of this company in acquiring an aggregate monopoly of what might otherwise have been a set of individual monopolies in competition with each other.



UNITED SHOE MACHINERY COMPANY

The most important group of machines for making shoes are the lasting machines, the welt-sewing machines, the outsole-stitching machines, the heeling machines, and the metallic-fastening machines.¹⁹ Other shoe machines include the cutting-out and eye-letting machines.²⁰ These machines are used in attaching soles to uppers, a process called the bottoming of shoes.²¹ In 1899 the Consolidated and McKay Lasting Machine Company under letters patent made 60 per cent of the lasting machines manufactured in the United States; the Goodyear Shoe Machinery Company, 80 per cent of all the welt-sewing and outsole-stitching machines; the McKay Shoe Manufacturing Company, 70 per cent of all the

¹⁷ U. S. Industrial Commission, Report, 1900, Vol. I, pp. 1009, 1010, 1033.

¹⁸ *Ibid.*, p. 1030.

¹⁹ 227 U. S. 202, 215.

²⁰ A description of these machines may be found in 195 Fed. Rep. 589, and in U. S. v. United Shoe Machinery Co., Brief for the United States No. 207, pp. 7-15.

²¹ 247 U. S. 32, 35.

heeling machines, and 80 per cent of all the metallic-fastening machines.²²

In 1899 the United Shoe Machinery Company was incorporated under the laws of New Jersey, with an authorized capital stock of \$25,000,000. It acquired all the stock of the following concerns: Goodyear Shoe Machinery Company, International Goodyear Shoe Machinery Company, Consolidated and McKay Lasting Machine Company, McKay Shoe Machinery Company, Davey Pegging Machinery Company, Eppler Welt Machine Company, International Eppler Welt Machine Company.²³ The last two companies were acquired by the new company after its formation, but they may be regarded as constituent companies.²⁴ The United company represented an amalgamation of these seven concerns; it acquired all their assets, including extensive patent rights.²⁵ The United company, as an operating concern, concentrated its manufacture of shoe machinery at Beverly, Massachusetts. A circular letter was sent by the directors of the Goodyear company to the stockholders of that company announcing the organization of the United company and inviting their participation; excerpts from this letter may indicate the purpose of the United company:

"The great advantages to be secured by the control in one corporation, both in the United States and foreign countries, of the most efficient types of shoe machinery have been for several years recognized by the officers of the principal shoe machinery companies. For more than a year your directors and large stockholders have been in negotiations to accomplish this end.

"The United company will also from time to time acquire other shoe machinery properties, either by direct ownership or by purchase of shares of their stock."²⁶

²² 227 U. S. 202, 215.

²³ Brief for the United States, No. 207, pp. 4-5.

²⁴ 247 U. S. 32, 39.

²⁵ The United Shoe Machinery Corporation, a holding company incorporated in New Jersey in 1905, acquired substantially all of the capital stock of the United Shoe Machinery Company. Brief for the U. S., pp. 5-6.

²⁶ *Ibid.*, p. 54. Also 247 U. S. 32, 41-42.

The United States Supreme Court did not regard this letter as evidence of illegal intent.²⁷ Justice Clarke, however, in a dissenting opinion, stated, "I cannot share in estimating this circular as simply a naïve expression of unusual business foresight. It was a confidential circular, boldly phrased, perhaps because its authors thought that their combination had been given a character of merger which could withstand Government attack, but which this court has since repeatedly held is a mere subterfuge of form. The circular is an accurate description of what had been accomplished and of what, as we shall see, the evidence in the record shows, was intended to be done in the future."²⁸

After the formation of the United company, it acquired the shoe machinery business and assets of 57 individuals, partnerships, and corporations.²⁹ For example, "On January 30, 1900, the company purchased, for the sum of \$38,000, the business and assets, including twenty United States and foreign patents and 138 lasting machines, of the Seaver Process Lasting Company. This was the only independent company putting lasting machines on the market after the combination was formed, and it removed the last vestige of competition in the lasting machine business. . . .

"The history of the first year of this company would not be complete without reference to the fact that the combinations and purchases made during that year resulted in collecting under one control many hundreds of patents covering every 'shadow of a shade' of variation in the parts of the many machines used in the manufacture of shoes."³⁰

The most important purchase by the United company involved the Plant assets. In 1910 Thomas G. Plant, after several years of effort, had developed a complete line of shoe machines for manufacturing welt, turn, and McKay shoes, with which he successfully equipped a shoe factory. With this new competition threatening the monopoly of the United

²⁷ 247 U. S. 32, 43; considered later in greater detail.

²⁸ *Ibid.*, pp. 83-84.

²⁹ *Ibid.*, p. 86.

³⁰ *Ibid.*, pp. 86, 87, Justice Clarke's dissenting opinion with which Justices Day and Pitney concurred.

company, the latter proceeded to purchase the Plant assets. The most important part of the property acquired, from the standpoint of the power and perpetuity of the United company, consisted of Plant's patents, as follows: (a) 206 United States patents; (b) 28 applications for United States patents; (c) 74 British patents; (d) 21 applications for British patents; (e) 73 French patents; (f) 14 applications for French patents; (g) 42 German patents; (h) 47 applications for German patents; (i) 26 Austrian patents; (j) 58 applications for Austrian patents; and (k) 33 Australian and 11 New Zealand patents.³¹ The United company also acquired the shoe machinery and shoe factory of Plant and certain business contracts, for all of which it paid \$6,000,000.³² According to the government's brief, the United company bought these properties because they belonged to a growing competitor; Plant's patents and machines represented, to a great extent, new means of accomplishing results already efficiently attained by the machinery of the United company. Its apparent object was to acquire and suppress them and therefore prevent competition.³³

The United company sought to acquire the patent rights and inventions of professional inventors and employees. It contracted with 95% of the inventors of shoe machinery for the entire product of their inventive skill.³⁴ The employees of the United company agreed to assign to this company all their inventions pertaining to shoe machinery which they might conceive while in its employment. These two classes—professional inventors and employees, those who have invented and those who may invent shoe machinery—bring forth nearly all the inventions. By controlling this fountain of inventive genius, it was possible for the United company to perpetuate its monopoly of patents on shoe machines.

The history of the United company—the original consoli-

³¹ Brief for the United States, pp. 105-106.

³² *Ibid.*, pp. 106-109, 110, and 247 U. S. 32, 49.

³³ *Ibid.*, pp. 122-125.

³⁴ *United Shoe Machinery Company v. La Chapelle*, 99 N. E. 289, 290. Illustrations of this policy may be found in the dissenting opinion of Justice Clarke in 247 U. S. 32, 84-85, May, 1918.

dation of seven shoe machinery companies, the 57 other acquisitions, and procurement of the patents of professional inventors and employees—suggests that its policy was to obtain practically all patents relating to shoe machinery—to acquire a monopoly of individual monopolies relating to a particular industry. It should be remembered that shoe machines have been invented and perfected within the past few decades. Basic patents covering some of them had not expired and improvement patents covering all of them were still in force. The United company controlled nearly all of these patents—thousands of them. Moreover, the United company leased its machines subject to “tying” clauses which compelled the shoe manufacturer to obtain either all or none of the shoe machinery required in his factory from this company.³⁵ In order to compete effectively with the United company it was necessary, in view of its control of shoe machinery patents and its system of tying clauses, to invent shoe machines and perfect others—in other words, to offer a complete and new line of shoe machinery to the shoe manufacturers. This meant a tremendous and hazardous undertaking; it was attempted only by Thomas G. Plant.

The patents and the tying clauses of the United company enabled it to control more than 95 per cent of the entire business of shoe machinery in the United States.³⁶ It was the only company which manufactured a full line of shoe machinery. The degree of monopoly is shown by the numbers of various types of machines which the United company and its competitors had out March 1, 1911. (See table, page 84.)

The United company in twelve years, as shown by dividends and surplus, earned in excess of \$50,000,000 upon a total investment, in cash or its equivalent, of about \$20,000,000—another indication of the monopoly which it enjoyed.³⁷

The judicial history of the United Shoe Machinery Company has been extensive. The Supreme Court, in 1913, upheld the legality of this company as a consolidation of several shoe

³⁵ These clauses are described in the next chapter.

³⁶ *United States v. United Shoe Machinery Co.*, 264 Fed. Rep. 138, 163.

³⁷ Brief for the United States, p. 6.

Machines	By United company	By all others
Clicking machine.....	3,655	..
Pulling-over machine.....	1,032	..
Lasting machine.....	7,496	7
Standard screw machine.....	409	..
Pegging machine.....	146	..
Tacking machine.....	3,488	6
Welt sewing machine.....	2,527	142
Outsole stitching machine.....	2,676	758
Loose-nailing machine.....	1,835	24
Heeling machine.....	2,019	17
Slugging machine.....	1,876	23
McKay sewing machine.....	898	8 ³⁸

machinery concerns.³⁹ The court stated the point in controversy. "The only question before us is whether that combination taken by itself was within the penalties of the Sherman Act. The validity of the leases or of a combination contemplating them cannot be passed upon in this case."⁴⁰

That the combination led to greater efficiency, that manufacturers made non-competing groups of machines, and that the machines were patented, constituted apparently the factors which determined the opinion of the court.

"On the face of it the combination was simply an effort after greater efficiency. The business of the several groups that combined, as it existed before the combination, is assumed to have been legal. The machines are patented, making them a monopoly in any case, . . . and it may be assumed that the success of the several groups was due to their patents having been the best. As, by the interpretation of the indictment below (195 Fed. Rep. 591) and by the admission in argument before us, they did not compete with one another, it is hard to see why the collective business should be any worse than its component parts. . . . We can see no greater objection to one corporation manufacturing seventy per cent of three non-competing groups of patented machines collec-

³⁸ Brief for the United States, p. 150.

³⁹ U. S. v. Winslow, 227 U. S. 202; also, see decision of lower court, 195 Fed. Rep. 578.

⁴⁰ 227 U. S. 202, 217.

tively used for making a single product than to three corporations making the same proportion of one group each." ⁴¹

The Supreme Court in May, 1918 announced again, by a vote of four to three, the legality of the United company as a consolidation of manufacturers of shoe machinery.⁴² The Supreme Court upheld the decision of the District Court, 222 Fed. Rep. 349, from which the government had appealed. The line of argument was like that in *United States v. Winslow*.⁴³ It stated that the constituent companies were not competitive and that their machines were protected by patents. It held that subsequent acquisitions, 56 all told, gave a false impression by their number. "They added nothing of obnoxious power to the United company nor in any practical or large sense removed competition."⁴⁴ The court pointed out that some of the acquisitions arose from a desire to end patent litigation.⁴⁵ Justice Clarke gave a strong dissenting opinion, with which Justices Day and Pitney concurred. He declared that competitive concerns had been acquired by the United company and that its patents could not excuse the consequent monopoly.

AMERICAN CAN COMPANY

In the formation of the American Can Company, patents played a secondary rôle though not an unimportant one. Incorporated March 19, 1901, in New Jersey, it issued \$82,466,600 of capital stock, half preferred and half common. Of this amount \$78,000,000, equally prorated between preferred and common stock, was used in obtaining 73 competing concerns engaged in the can business, including their real property, plants, buildings, fixtures, machinery, patents, trademarks and good-will, and also the machinery, patents, good-will, and other property of 19 other concerns. Later, during the same year, this company secured 21 additional companies,

⁴¹ *Ibid.*, p. 217.

⁴² 247 U. S. 32.

⁴³ 227 U. S. 202, Feb., 1913.

⁴⁴ 247 U. S. 32, 54.

⁴⁵ *Ibid.*, pp. 49, 52.

together with the patents of other concerns.⁴⁶ These plants made about 90 per cent of the cans then manufactured for sale in the United States. During the subsequent years the company pursued the policy of acquiring other competing concerns engaged in the can business; but, even so, many competitors sprang up through the inducement of high profits, until in 1913 it controlled only about 50 per cent of all tin cans manufactured for sale. This statement does not take into account tin cans manufactured by concerns for their own use.⁴⁷

The great majority of the concerns whose plants and businesses were acquired by the American Can Company in 1901 were manufacturing cans for sale. Most of the others of any importance were engaged in the manufacture of can-making machinery or owned valuable patents for such machinery.⁴⁸

One of the can manufacturers whose plant was acquired by the American Can Company testified that those interested in the can-making business feared that they might be excluded from getting tin-plate, or can-making machinery. In 1900 this manufacturer purchased can-making machinery, so that, in case the American company secured control of it, he would be well equipped. He did not increase his output of cans, but merely obtained a good supply of machinery in anticipation of any possible contingency.⁴⁹

The American company, soon after its formation, by purchase or contract, acquired control of the business or output of all concerns engaged in the manufacture of the automatic body maker—the most important machine in the manufacture of packers cans. It acquired also most of the leading concerns engaged in making automatic side-seamers, headers, floaters, and end-seamers, all of which were important machines in the manufacture of packers cans.

The company purchased the assets, including patents, of Crosby and Company, Norton Brothers, Robbins Press Works, Sprague Canning Machinery Company, and Sleeper Machine

⁴⁶ Petitioner's Summary of Evidence in *U. S. v. American Can Co.*, No. 40, pp. 73-76, D. C., D. Md.

⁴⁷ *Ibid.*, pp. 149-150.

⁴⁸ *Ibid.*, p. 78.

⁴⁹ *Ibid.*, p. 108.

Company, all engaged in manufacturing automatic can-making machinery. By contract it acquired control first of the output of the automatic can-making machinery of E. W. Bliss Company, and second of the can machinery of the Adriance Machine Company and the Ferracute Machine Company. The nature of these contracts is indicated by the list of cancelled orders by E. W. Bliss Company, amounting to \$91,842 and covering machinery which it contracted to deliver but could not by reason of its agreement with the American Can Company. According to the petitioner's summary of evidence, it acquired practically all of the commercially valuable patents for the manufacture of automatic can machinery.

The control of the automatic can-making machinery by this combination, secured in the fashion just described, did not continue unchallenged, for within a few years other concerns equipped themselves to make such machinery. New companies, together with new machinery, came into being to make the so-called sanitary cans. The combination resorted again to its former policy of obtaining the businesses of such competitors. It acquired not only the Sanitary Can Company in 1908, the largest concern engaged in making and marketing such cans, but also the control of the Max Ams Machine Company, the chief manufacturer of the machinery for making such cans, by means of a restrictive agreement, December 15, 1909. Further, the machinery output thus controlled was covered by a number of patents. Other patents in aid of said control were also acquired, some as late as 1912.⁵⁰

After the purchase of competing plants, the American Can Company dismantled many of them—105 prior to March 31, 1903.⁵¹ Some of the machinery of the acquired plants was worthless. Moreover, the sledge hammer was freely used in breaking it up so that it could not be used again as can machinery, a fact which points to the intent of this combination to prevent any would-be competitors from obtaining can-making machinery.

Another scheme of the American Can Company consisted

⁵⁰ *Ibid.*, pp. 117-120.

⁵¹ *Ibid.*, p. 130.

of getting control of the inventive genius that might be exercised, if unfettered, in further development of the can industry. Most of the can manufacturers who sold out to the American Can Company agreed not to engage in the can business for a period of fifteen years within three thousand miles of Chicago, Illinois, except in connection with the American Can Company or its assigns.⁵² Moreover, it contracted for the inventive genius of individuals. For example, the Adriance Machine Company contract included \$25,000 per annum for Adriance's inventive genius.⁵³

This company, in other words, sought to monopolize the tin can industry by acquiring control of the manufacture of cans and can-making machinery. In this way, existing competition would be largely removed and the possibility of future competition lessened. Can factories not obtained would soon be reduced to impotence after the wearing out of their existing machinery, owing to the apparent impossibility of obtaining any new can-making machinery to replace the old. The control of can-making machinery covered by patents was, therefore, its chief source of strength. Such patents were obtained by purchase and by exclusive licenses. A monopoly of such patents was further assured by contracting for the future inventive genius of former competitors, also by getting concerns whose property it purchased to agree not to engage in this business again within a certain number of years. Patents on can-making machinery were further exploited in the case of the salmon industry by stipulating that its can-making machinery might be used only in making cans from parts furnished by the American Can Company.⁵⁴ The formation of this monopoly resulted in considerable advances in the prices of cans.

The United States, as one would expect, brought suit against this company, charging it with a violation of the anti-trust laws. The District Court, in 1916, handed down the decision: "One who sells only one-half of the cans that are sold does

⁵² Petitioner's Summary of Evidence in *U. S. v. American Can Co.*, No. 40, p. 78.

⁵³ *Ibid.*, p. 119.

⁵⁴ See Chapter IV.

not, of course, possess a monopoly in the same sense as he would if he sold all or nearly all of them. Yet he may have more power over the industry than it is well for any one concern to possess. No one can say with any certainty that anybody would be better off if defendant had never, in any way, restrained or controlled absolutely free competition in cans. All that can be argued is that, in view of the declared policy of Congress, the legal presumption must be that that which was done was against the public weal."⁵⁵

The court, holding that the dissolution of the trust would serve no public interest, allowed the suit to stand open until future events and actions should warrant a definite decision.⁵⁶ The case was appealed to the United States Supreme Court.

A. B. DICK COMPANY

No monopoly based on patents has received more publicity than the A. B. Dick Company, largely on account of *Henry v. A. B. Dick Company*, known as the Dick or mimeograph case, in which a decision was handed down by the Supreme Court on March 11, 1912.⁵⁷ It recognized the legal right of this company to dictate the ink and other supplementary supplies used on its patented stencil duplicating machine.⁵⁸ The Supreme Court reversed its position in 1917 in the projecting machine case.⁵⁹ Prior to this, however, the Dick company enjoyed, by legal right, a monopoly in the manufacture and sale of stencil duplicating machines and supplies used in connection with them. In 1915 this company controlled, in money value of sales, approximately 85.1 per cent of the commerce in the United States in stencil duplicating machines,

⁵⁵ *U. S. v. American Can Company*, 230 Fed. Rep. 859, 901, D. C., 1916.

⁵⁶ *Ibid.*, pp. 901-904.

⁵⁷ 224 U. S. 1; appeal from decision of Circuit Court, 149 Fed. Rep. 424. Until 1916 the A. B. Dick Company of New Jersey was the holding company of the A. B. Dick Company of Illinois and the Neostyle Company of New Jersey. In 1916 the first and third companies were dissolved, and their assets taken over by the A. B. Dick Company of Illinois. See Report of the Federal Trade Commission, 1917, Exhibit 5.

⁵⁸ See the next chapter for a detailed discussion of this point.

⁵⁹ 243 U. S. 502. Three of the judges gave a minority decision, following the line of argument employed in *Henry v. Dick*, 224 U. S. 1.

approximately 88.2 per cent of such commerce in stencil duplicating paper, and approximately 79.9 per cent of such commerce in stencil duplicating ink.⁶⁰ It represented an integration of this particular industry, including both patented and unpatented goods, both machines and supplies. It should be pointed out that there are duplicating machines other than stencil, such as movable type and composition.

The patents of the Dick company, 128 in all, were originally issued to about thirty different inventors; 67 of them to A. B. Dick, and the remainder to other individuals. The fact that nearly one-half of these 128 patents were issued to other parties, later coming into the possession of the A. B. Dick Company, points to a policy of acquiring any and all patents pertaining to duplicating machines and supplies so as to secure a monopoly of them. The extent of the suppression of these patents is brought out in Chapter VI.

EASTMAN KODAK COMPANY

In 1878 George Eastman entered the field of photography, organizing a small company for the manufacture and sale of wet collodion plates for the making of negatives.⁶¹ Later he abandoned this process and organized the Eastman Dry Plate and Film Company, predecessor of the Eastman Kodak Company. The period dating from the introduction of the gelatine dry plates in 1878 to the advent of the "Bullseye" camera in 1894 constitutes the formative period in amateur photography—a period characterized in all industries "by activities of inventors and pioneers, each pushing forward with his particular device or improvement until a standard is reached which is sufficiently fool-proof and sufficiently inexpensive to find steady acceptance."⁶²

The Eastman Kodak Company of New Jersey, organized in 1901 with a capital of \$35,000,000, is owner of the capital

⁶⁰ Annual Report of the Federal Trade Commission, 1917, Exhibit 5, p. 61. The "mimeograph" is the principal type of duplicating machine.

⁶¹ U. S. v. Eastman Kodak Company, 226 Fed. Rep. 62, 66, Aug., 1915.

⁶² U. S. v. Eastman Kodak Co., D. C., W. D. of N. Y., Brief for the U. S., Part I, p. 159.

stock of the Eastman Kodak Company of New York, a corporation engaged in the manufacture of photographic materials and supplies, and of two other corporations, one English and one Canadian, similarly engaged.⁶³ Within about 15 years the Eastman Kodak Company of New York acquired some twenty competing concerns in the United States; the plants were dismantled and their business discontinued or transferred to the Eastman plants in Rochester, New York. The officers and partners of these corporations and partnerships agreed not to engage in competing business for periods of from 5 to 20 years. Also the Eastman company, by contract with the makers, "obtained entire control in the United States of the imported raw paper which was recognized as the only standard paper for the manufacture of photographic printing-out paper, and by refusing to sell to other manufacturers compelled several competing companies to sell or go out of business. It acquired stock houses in the larger cities, which handled chiefly its own products, and by contracts with other dealers to whom it sold, fixed resale prices and required them to sell its goods exclusively."⁶⁴

It is necessary to study in considerable detail the various steps which led to the acquisition of various companies.

The Bullseye camera, introduced in 1894 by Blair and Turner of the Boston Camera Company, became the most prominent product in the camera market. It constituted a turning point in the development of film photography on account of its simplicity, efficiency, and cheapness.⁶⁵

"The Bullseye was the camera of extreme simplicity. It carried the films in the waste space in front of the focal plane, thus shortening the camera fully one-third. It had no cumbersome indicating or straining device because the film curved naturally away from the lens and followed the curvature of the lens. By using black paper on the outside of the film it was possible to mark the exposure number on the paper itself, which could be viewed from a peephole in the rear of the camera, which peephole was covered with red celluloid. The

⁶³ U. S. v. Eastman Kodak Co., 226 Fed. Rep. 62, 63.

⁶⁴ *Ibid.*, pp. 62-63.

⁶⁵ Brief for the U. S., Part I, p. 13.

lens could be a cheap one because it did not have to correct any aberrations due to the curvature of the film. It had the so-called two-way shutter, that is to say, a shutter that was always set and worked by a lever which made an exposure at each movement. Hence, there were no films lost or pictures untaken by reason of forgetting to pull any string. It had the daylight loading cartridge."⁶⁶

The superiority of the Bullseye affected the sales of the Eastman Kodak Company in a pronounced fashion. From 1892 to 1894 the sales of the kodak, introduced by the Eastman company in 1888, steadily decreased. In 1892 the sales of kodaks and apparatus amounted to \$207,212.51, and in 1894 to \$74,594.33, while the sale of films amounted to \$102,404.29 in 1892 and to \$81,319.48 in 1894. The government attributed this decline in business to the competition created by the appearance in the market of the Bullseye camera.

With this situation prevailing, the Eastman company secured in 1894 a preliminary injunction against Blair and Turner, alleging that the "Bullseye" infringed the Eastman-Walker patents on roll holders. The injunction, apparently without foundation, was to restrain the Boston company from manufacturing and selling this camera.⁶⁷ The restraining order was vacated and the suit was not further pressed.

According to the government's brief in its suit against the Eastman company, this litigation, vexatious and malicious, was for the purpose of forcing the Boston company to sell out to the Eastman company; although the court held that the evidence was insufficient to support this view.⁶⁸ To accomplish the same object but in a different way the Eastman company proceeded to manufacture and sell a camera called the "Bullet," very similar to the "Bullseye," and put on the market its first pocket kodak—a miniature Bullseye camera. The Eastman company marketed these two cameras in a new and aggressive fashion which meant, according to the government's brief, initial infringement in great quantities. As Eastman himself stated, it was sent to the dealers on ap-

⁶⁶ Brief for the U. S., Part I, p. 13.

⁶⁷ *Ibid.*, p. 15.

⁶⁸ 226 Fed. Rep. 62, 69.

proval, and the country was deliberately flooded with them. To make the scheme effective before any injunction or other legal restraint could interfere, the cameras were secretly made up in large quantities before being announced.⁶⁹ Turner, perplexed and embarrassed it would seem, granted in June, 1895, a license to the Eastman company to make cameras under his patent for a film roll, the invention which revolutionized film photography, and released it from all damages based on alleged infringements of this patent.⁷⁰ In August of the same year, he sold out completely the patent and business of the Boston company to the Eastman concern; and in addition agreed for a period of five years not to engage in the manufacture or sale of cameras or supplementary supplies in the United States.⁷¹

In August, 1895, the Eastman company held a special meeting to consider the advisability of purchasing the business and patents of the Boston Camera Company with a view of reducing competition and securing control of the S. N. Turner spool patent. Mr. Eastman reported in 1895: "We have secured an additional hold on the business by the purchase of what is known as the Turner cartridge patent . . . such as is used in the pocket kodak . . . and will probably control the future of film photography as it is the only practical daylight cartridge."⁷² In speaking of the acquisition of Turner's business, Mr. Eastman admitted that it was necessary in obtaining the entire right to his patent.⁷³

The Eastman company, in 1898, also acquired the American Camera Manufacturing Company, capitalized at \$25,000 and organized a few years previously by Blair of the Turner and Blair already noted. It began to manufacture and sell the Buckeye camera, very similar to the Bullseye and made under the Houston patent, which covered the device of carrying the spool film in front of the focal plane.

According to the government's brief, the Eastman company had made infringing devices, though duly notified of their

⁶⁹ Brief for the U. S., Part I, p. 16.

⁷⁰ U. S. v. Eastman Kodak Co., Vol. 5, Govt. Ex. 95, p. 2165.

⁷¹ Brief for the U. S., Part I, p. 17.

⁷² *Ibid.*, p. 19.

⁷³ *Ibid.*, p. 19.

infringement; moreover, it had attempted to enjoin Blair from making the Buckeye camera, but had failed.⁷⁴ This situation led to the sale of the American company.⁷⁵ Blair now agreed to remain in the employ of the American company and not to engage on his own account in the manufacture of cameras or photographic supplies in the United States for a period of five years.⁷⁶ Blair also agreed to assist the Eastman company to acquire the Houston patents; as a result of his services, for which he received \$15,000, these patents were assigned to the Eastman company and it was released from liability for past infringement. Within a short time the Eastman company dismantled the plant of the American company and discontinued the sale of the Bullseye camera. "Mr. Eastman stated with candor that the purchase of the plant was merely incidental to the primary object of acquiring the Houston patents, which were regarded as of great value."⁷⁷ Moreover, Mr. Eastman testified in court that "they wished to buy the Houston patents and found that Blair had certain contracts with Houston which prevented Houston from dealing with them, and therefore they had to deal with Blair."⁷⁸

In 1898 the Eastman company acquired the Blair Camera Company, which Blair, although no longer connected with it, had organized a number of years previously. From 1878 to 1898 this company made dry plates, photographic paper, films, amateur plate, and film cameras. At the time of its sale it owned the Crane patents for improved roll holders employing black paper at each end of a perforated film. Mr. Eastman gave as a reason for acquiring the Blair company that he wished to obtain the Crane patents in order to develop a better method for exposing film, and declared that prior to such purchase the Blair Camera Company was infringing the Houston patents.⁷⁹ The acquisition of this third concern gave

⁷⁴ Other instances of intentional infringement by this company are given in Chapter V.

⁷⁵ U. S. v. Eastman Kodak Co., Vol. 5, Govt. Ex. 1.

⁷⁶ Brief for the U. S., Part I, p. 26.

⁷⁷ U. S. v. Eastman Kodak Co., 226 Fed. Rep. 62, 70.

⁷⁸ Brief for the U. S., Part I, p. 28.

⁷⁹ U. S. v. Eastman Kodak Company, 226 Fed. Rep. 62, 70.

the Eastman company a dominating position in the film camera business.⁸⁰

By means of contracts and purchases the Eastman company also extended its control over photographic supplies, as suggested in a summary statement by the court. "In the years 1895, 1898, and 1899, the Eastman Kodak Company acquired the businesses of the Boston Camera Manufacturing Company, the American Camera Manufacturing Company, and the Blair Camera Company, including their plants, properties, secret formulæ, and trade-marks, entered into contracts with foreign raw paper concerns with regard to the importation of raw paper into the United States and acquired plate camera and sensitized photographic paper concerns, the card stock business of Taprell, Loomis and Company, and 15 stock houses, and also imposed restrictions on dealers to the retail trade with regard to price, etc."

The government, in its suit against the Eastman Kodak Company for violation of the Sherman law, secured a favorable decision from the District Court. The tribunal held that there was nothing illegal in the way in which the Eastman company acquired its patents on cameras and film.⁸¹ It rested its argument upon other factors, as will be seen from the following:

"The record abounds in compiled figures showing that large amounts of money were paid to acquire the competing concerns to which reference has herein been made, and to show their standing in the trade to prove that such acquisitions were not merely amalgamations of small concerns; also to show the amount of business transacted in different materials by the Eastman Kodak Company, its great gains and profits, which for the year 1912 amounted to \$15,633,551.33, or about 171 per cent, on total sales amounting to \$24,763,407.65, and showing the large disproportion between the cost of manu-

⁸⁰ A recent manifestation of this company's policy to control all patents relating to cameras consists of its purchase of Gaisman's patent covering the device for writing anything on a camera film while it still remains in the camera, for which \$300,000 was paid. *Literary Digest*, Aug. 8, 1914.

⁸¹ 226 Fed. Rep. 62, 67-70.

facture and the price paid by the consumer. Whatever reduction the Eastman Kodak Company may have made as to price, on portions of the photographic paper or other materials sold by them, does not compensate for the suppression of competition in the industry as a whole, and it is no justification of an illegal monopoly to assert that it has reduced the price of an article produced by it, as this may have been done simply to injure a rival . . .

"But all these matters require no further special attention, save in so far as they bear upon the monopolization of the interstate trade in cameras, film, plates, and photographic paper; and as to these articles it is undisputed that the Eastman Kodak Company controlled approximately between 75 per cent and 80 per cent of the entire trade at the time of filing the bill, and had accordingly attained a monopoly thereof. The burden rested upon the defendants to prove that this was accomplished by lawful methods, that is, that it resulted from normal processes of growth, from the mere acquisition of property, or from the superior merit of the products, assuming this to have been an important factor; and after careful consideration of the various defenses interposed I have concluded that such burden has not been borne, but that, on the contrary, the government has shown affirmatively that interstate trade and commerce have been unjustly and abnormally restrained by the defendants by the formation of a monopoly induced by wrongful contracts with regard to raw paper stock, preventing the trade from obtaining such stock, by the acquisition of competing plants, businesses, and stock houses, accompanied by covenants restraining the vendors from re-entering the business, and by the imposition on dealers of arbitrary and oppressive terms of sale inconsistent with fair dealing, and suppressing competition. Such acts, when taken together, are most significant and seem to me to indisputably disclose an intention to violate section 2 of the Sherman Act."⁸²

This decision was handed down August, 1915. A final decree by the same court in January, 1916, demanded the discontinuance of the monopoly and the establishment of com-

⁸² 226 Fed. Rep., pp. 62, 79-80.

petitive conditions, a plan for which the defendants were requested to submit to the court within a given period.⁸³ The Eastman company appealed the case to the United States Supreme Court, where on January 31, 1921, it was dismissed on motion of counsel for appellants.⁸⁴ The Federal judge in Buffalo, where the case was first heard, on February 1, 1921 directed the dissolution of the company. The decree required the Eastman company within two years to sell its Premo and Century plants at Rochester, New York, its Artura brand of photographic paper, and its Seed, Stanley, and Standard brands of photographic dry plates. "The purchaser," according to the decree, "must be a responsible person, firm, or corporation approved by the United States Attorney-General and intending to manufacture the line purchased. If any of these properties are not disposed of within two years at private sale the company is required to dispose of them at public sale to the highest bidder, the minimum price, however, to be agreed upon by the company and the Attorney-General, and in case of disagreement fixed by the court. The properties required to be sold are the principal ones acquired by the company from other manufacturers of photographic goods in the United States."⁸⁵

It is interesting to note, in connection with this decree, that the Federal Trade Commission issued a complaint, April 23, 1923, against the Eastman Kodak Company and minor film companies. They are charged with a conspiracy as a result of which the Eastman company has acquired a virtual monopoly in the manufacture and sale of cinematograph film in the United States.

STANDARD OIL COMPANY

According to the report of the United States Industrial Commission of 1900, patents played a part in bringing this

⁸³ 230 Fed. Rep. 522, 524-525.

⁸⁴ 255 U. S. 578.

⁸⁵ U. S. v. Eastman Kodak Co., etc., Final Decree, Decree of Dissolution and Injunction, etc., In the D. C. of the U. S., W. D. of N. Y., In Equity No. A-51; Poor's and Moody's Manual, consolidated, 1921, Industrial Section, Vol. I, p. 1398.

monopoly into being and in maintaining it. The solicitor of the Standard Oil Company in answering the inquiry, "What patents, machines, or processes of any kind formerly used exclusively by one plant are now used by all adapted to use them?" enumerated 135 patents. Moreover, the question, "What by-products, if any, are available to your organization which could not profitably be made by separate plants?" produced the reply, "All products are made by separate plants, but most of them were at one time protected by patents the use of which became available to all plants."⁸⁶

INTERNATIONAL HARVESTER COMPANY

McCormick, the founder of the harvester industry, had many competitors when the industry was in its infancy. But he purchased patents on improvements from others; and his employees—professional inventors and manual laborers—conceived many inventions, the patents on which were assigned to McCormick's concern. One might think that patents were largely responsible for the creation, in 1902, of the International Harvester Company, an amalgamation of the five leading manufacturers of harvesting machines. It acquired control of complicated machinery, all the result of numerous inventions. However, the basic patents on nearly all the chief lines of harvesting machines⁸⁷ had expired before the organization of the International company; the corn harvester, appearing in the nineties, was the only exception. Minor patents covering improvements on all these machines had not expired; but they furnished no important incentive in the formation of the company.⁸⁸ A lawyer stated, in 1914, before the Oldfield Committee, "The 17,000 patents which the International Harvester Company holds sound more formidable than they really are. Very few of them will stand the test of litigation. They are mostly a lot of weak patents taken out simply to preserve the equilibrium of the concern and to prevent its inventions

⁸⁶ Report of United States Industrial Commission, Vol. I, 1900, p. 798.

⁸⁷ Binders, reapers, mowers, rakes.

⁸⁸ *The International Harvester Co.*, Bureau of Corporations, p. 45.

from being wrongfully appropriated by people who never made them."⁸⁹ Patents, therefore, have not constituted an important factor in the recent history of the harvester industry.

GENERAL AND WESTINGHOUSE ELECTRIC COMPANIES

The General Electric Company represents a consolidation of a large number of concerns that were originally small; for instance, the Edison Electric Company, the Thompson-Houston Company, the Brush Electric Company, the Sprague Electric Company, the Stanley Electric Company, the Northern Electric Company, and the Fort Wayne Electric Works. The General Electric Company, in acquiring these concerns, secured, of course, all their patents. In addition, it has maintained a corps of inventors for the purpose of obtaining other patents.⁹⁰ Furthermore, it appears that this company has bought patents to prevent competition with its own product.

From 1897 to 1911 the General Electric Company and the Westinghouse Electric Company maintained an agreement called the "board of patent control." They both agreed that neither one of them would acquire any license under any patent except by giving at the same time an option for the term of six months, by which the other one should get a license on the same terms. One inventor stated, in 1912, "I myself have dealt with them on four or five different unimportant licenses in which I was obliged to give this right to the Westinghouse Company to get the same kind of license that I gave to the General Electric Company."⁹¹ Under this agreement these two companies had no interest in the patents of outside inventors from the standpoint of acquiring them to compete more effectively with each other. The same inventor described his own experience with these companies: "Now, 15 years ago if I had an invention as I did have, and had no difficulty in getting 24 different license fees in the course of

⁸⁹ Oldfield Hearings of 1914, Part 6, p. 112.

⁹⁰ Oldfield Hearings of 1912, No. 15, p. 12.

⁹¹ *Ibid.*, No. 3, p. 23.

two or three years, on certain patents, I honestly believe that if I had that very same patent to deal with over again, under exactly the same state of the art as was then, that I would have been in the same position then as I am to-day, namely, that I would be merely negotiating and negotiating, and never would I meet with any serious effort on their part to acquire a right; they would infringe; they never hesitate to infringe." ⁹²

OTHER AMERICAN COMPANIES

In 1907 one of the officials of the Draper Company stated that recent investigations indicated that his company acquired more patents every year than any other concern, outside the electrical field. This would seem to show, he said, that cotton machinery inventions have been concentrated under one management to a greater extent than in any line outside electrical developments.⁹³ The American Car and Foundry Company, at the time of its organization, stated that the benefits of the consolidation would be a common enjoyment of the patents and the processes of each of the constituent companies. The Bell Telephone Company built itself up on patents. Other companies which occupy predominant positions in their respective industries owe their power to the control of important patents. These include Westinghouse Air Brake Company, National Cash Register Company, Pullman Car Company, and Diamond Match Company.

THE KRUPPS

The War Department recently made an investigation of patents obtained by German citizens and assigned to Frederick Krupp of Germany. The organization which he represents pursued the policy of acquiring United States, German, and other patents relating to war materials until it attained a dominant position in the manufacture and sale of them.

⁹² Oldfield Hearings of 1912, No. 4, p. 12.

⁹³ G. O. Draper, "Patents," *Eleventh Annual Convention of American Cotton Manufacturers' Association*, Philadelphia, 1907, p. 185.

The War Department, May 20, 1921, authorized the publication of the following: "The Secretary of War has caused an investigation to be made of the patents and applications for patents recently announced as having been obtained by German citizens and assigned to Frederick Krupp. The investigation disclosed a rather striking circumstance in view of the conditions which Germany is supposed to observe as to disarmament and manufacture of war materials under her treaty obligations.

"Of the 228 patents and applications for patents assigned to Krupps, 26 were found to relate to artillery fire control devices, 18 to electric control apparatus, 9 to fuses and projectiles, 6 to gas engines and appurtenances, 17 to guns and their appurtenances, 3 to processes for the production of metals, 10 to naval fire control devices, 3 to projectiles and machines for handling same, 14 to railroad artillery, and the balance to varied uses, most of which might well relate to military use.

"Incident to making this investigation, it was noted that a large number of patents and applications for patents had been assigned to numerous other German companies, and a casual examination indicates that a considerable number relate to aeroplanes and their accessories, chemicals, dyes, radio apparatus, and naval equipment."

CRITICISM

Evils of Monopoly. This chapter reveals the extent to which patents have assisted in the formation and continuation of some of the most objectionable monopolies. The author takes the position that competition in the industrial field promotes economic progress and protects the people against extortion. It is not the purpose of this study to discuss the evils of monopoly—high prices, the delimitation of economic opportunity, etc. They represent an economic cost, and a tremendous one, and therefore a liability in estimating the net worth of the patent system.

Commercialization of Learning. The great corporations, in

employing scientists and inventors of the highest order and in furnishing them excellent laboratory facilities, have become rivals of colleges and universities. A well-known inventor has stated that there are "industrial research laboratories which have cost millions for buildings and equipment alone, offering means for experimentation and research, which have never been possessed by any university, or even governments. All this has been provided by private corporations."⁹⁴ The possibility of securing patents and utilizing them in making money, rather than the pursuit of pure science as such, defines the boundaries of the activities of their inventors and constitutes the common denominator to which the value of their efforts is reduced.

Carl Barus, Graduate Dean of Brown University, has recently said,

"In the end, I fear, the trusts, as we fondly call them, will have absorbed and assimilated *l'elan vital*, the soul of the university. It is they who will point out to our bewildered gaze the sweep of new horizons and the flotsam from undiscovered shores. Our faculties will have to teach what they have been taught by the great business corporations. These will hereafter break new pathways into the unknown, and it will be for us to tell the uninformed the Ultima Thule of their progress. The university will be the humble expository mechanism of the intellectual accomplishments of commercial enterprise. In brief, there will be a complete inversion of the method by which the world's knowledge has deepened in the past.

"If one looks, for instance, at the highly ingenious contrivances by which the marvels of the Hertzian wave have recently been brought to the appreciation of the people, one is struck by the appearance on every clamp, every ferule, every coil, every tube, almost on every plate and screw, of the mysterious symbol, PAT. This PAT. is a cipher more potent than any formula of Cagliostro. It is behind an array of PAT. that the wisdom of the future will be entrenched, and above which so much of it as may be vouchsafed us will be

⁹⁴ Nolan Hearings of 1919, p. 89.

broadcast. Our function will resemble the town crier's, to herald the information somebody else has wrested from the infinite. We shall still be interested and keenly watchful, no doubt, like the little cherubs with rapt gaze at the feet of the Sistine Madonna; but the great inspiration will float majestically above us."⁹⁵

Retardation of Invention. The interest of a patent trust in new inventions is confined primarily to the desire to prolong its monopolistic power. The conception of inventions and the extent of their embodiment in products do not proceed from the existence of competition, but from the fear of rivals in the future and the desire to prevent the scrapping of old equipment. An industrial monopoly built upon basic patents is continued by means of patented improvements. The conception and adoption of a rival invention of a basic nature would mean financial loss. The automatic telephone and wireless telegraphy, for example, were not invented under the auspices of the American Telephone and Telegraph Company; it has sought, however, to control the patents covering them in order to protect its monopolistic position and prevent the scrapping of present equipment. Again, the greatest impetus to the improvement of shoe machinery subsequent to the creation of the United Shoe Machinery Company came from without, not within, this company. Thomas G. Plant did not have millions of dollars invested in leased machines, as the United company had, to deter him in the improvement of shoe machinery. The principal or pioneer inventions in the tin can industry were made by concerns outside the pale of the American Can Company. The greatest improvements in the can-making art occurred prior to the formation of this company. As one inventor has well said, "My own thought and observation has been that the greatest difficulty with regard to trying to promote progress in the line of invention is the fact that there is no limit to the combination of patents."⁹⁶

⁹⁵ Bulletin of Brown University, Report of President to Corporation, Oct., 1922, pp. 33-34.

⁹⁶ Oldfield Hearings of 1912, No. 3, p. 23.

Waste of Economic Resources. The efforts expended in creating patent trusts, on the one hand, and in exposing and destroying them, on the other, constitute a drain on our economic resources. All of the industrial monopolies described in this chapter have been the subjects of investigation and attack on the ground of violation of the Sherman and Clayton laws. Many employees of the Federal Trade Commission and other governmental departments have busied themselves in ascertaining the facts concerning these corporations. Able lawyers have expended their talents in prosecuting and defending them, and judges have devoted an appreciable part of their time to hearing the cases. Stenographers, clerks, and others have contributed to the total of labor resources directed along acquisitive and corrective lines. One group of individuals has tried, in the name of public welfare, to nullify what another group has attempted to attain in the spirit of acquisitiveness. Their activities constitute an economic cost which must be borne by society and which detracts from the net utility of our patent system.

CHAPTER IV

UNFAIR COMPETITION

DEFINITION

THUS far no standard definition of unfair competition has been formulated. Early judicial decisions seemed to regard "passing off" the goods of one business concern for those of another—in other words, selling them through fraud and misrepresentation—as the essence of unfair competition; but this definition is inadequate in that it does not include other practices, such as the maintenance of re-sale prices, which are considered unfair and undesirable. Moreover, "business ethics" cannot serve as a criterion in classifying some methods of competition as fair, and others as unfair, for the connotation of "unethical" varies from place to place and time to time. A definition of unfair competition should be stated in terms of economic philosophy, since competition itself is an economic institution. Hence, the general criterion should be economic welfare. One may posit the thesis that the economic interests of society rest upon the maximum satisfaction of human wants at the least cost.¹ To secure this result efficient units of organization must be preserved and inefficient units destroyed.² Methods of competition which prevent the realization of these two objects are economically unfair.

¹ Robert Liefmann, "Monopoly or Competition as the Basis of a Government Trust Policy," *Quarterly Journal of Economics*, XXIX (Feb., 1915), 311.

² Stevens, *Unfair Competition*, p. 6. Also consult Federal Trade Commission, *Unfair Competition at the Common Law*; and Montague, *Business Competition and the Law*.

UNCERTAINTY OF LEGAL STATUS

A patent furnishes an effective weapon for unfair competition. It is difficult in many instances to ascertain the legal rights of a patentee. The disagreement of the lower courts and the vacillation of the Supreme Court as to what constitutes the privileges of the patentee lend support to this statement. Witness, for example, the judicial history of the attempt of the patentee to dictate the auxiliary supplies for his patented product and to prescribe its re-sale prices. Most people realize that patents confer exceptional rights, and not knowing their exact boundaries they are easily induced to observe restrictions and heed threats that really have no legal foundation. The three preceding chapters indicate the use of patents as a weapon for unfair competition. The description of license agreements, like those of the United Shoe Machinery Company and the Motion Picture Patents Company, revealed their exclusive and conditional character. The right of the monopoly to cancel the agreement without notice furnished the club which obliged its licensees to submit to ruthless treatment. Patent monopolies have employed nearly every means of competing unfairly. They have tended to destroy competitors and discourage would-be rivals regardless of their efficiency. The various kinds of unfair competition committed in the name of patents will be enumerated, described, and discussed in the following order: monopolistic agreement concerning purchases and sales, dictation of supplementary supplies, control of complementary goods, maintenance of re-sale prices, litigation, interference proceedings, forced validity of patents, forced royalties, false marking, and piracy.

MONOPOLISTIC AGREEMENT CONCERNING PURCHASES AND SALES

Patents Company—Eastman Company Contract. Previous chapters presented the various steps in the formation of two of the most powerful monopolies based on patents—the Mo-

tion Picture Patents Company and the Eastman Kodak Company. One factor which facilitated their success as monopolies was a contract between them by which the Patents company agreed to buy its sensitized films exclusively from the Eastman company and the Eastman company agreed to sell its sensitized films exclusively to the Patents company. The minutes of the Eastman company dated a short time before the consummation of this contract contained this resolution: "Resolved, that this company enter into an agreement in writing with the Motion Picture Patents Company for the term beginning June 20, 1909, and ending July 1, 1912, or thereabout, providing for and granting the exclusive right to this company to manufacture non-inflammable sensitized motion picture film and sell the same to licensees of said Motion Picture Patents Company."³ Further, the agreements between the Patents company and the licensed manufacturers of motion pictures contained provisions which supplement the preceding minutes: the licensed manufacturers agreed to use exclusively sensitized film made by a manufacturer authorized by the Patents company; and the Patents company agreed to "obligate such manufacturer" not to sell sensitized film to any one but the licensed manufacturers of motion pictures.⁴

The Patents company granted to the Eastman company the exclusive right to manufacture the "licensed film," and with a few minor exceptions, the Eastman company agreed not to sell motion picture film to any but licensees of the Patents company. This exclusive contract gave a *buying* monopoly to the Patents company and a *selling* monopoly to the Eastman company. The Patents company depended partly upon this contract to control the motion picture business, for the Eastman company was the only manufacturer in the United States at that time making suitable film for the use of motion pictures. One man testified in the court proceedings that representatives of motion picture concerns told him that they had made arrangements with the Eastman company to get the

³U. S. v. Eastman Kodak Company, Vol. 5, Govt. Exhibit 216, pp. 2638-2639.

⁴U. S. v. Motion Picture Patents Company, Original Petition, p. 17.

exclusive use of the Eastman stock, and that a competitor would have but little chance to enter the field.⁵

The contract between the Patents and Eastman companies was considerably modified February 15, 1911, when Jules E. Brulatour, the assignee of the Lumière Company, a French manufacturer of film, entered into a contract with the Eastman Kodak Company by which the latter agreed to supply sensitized film to the New York Motion Picture Company, Powers Company, Carlton Motion Picture Company, Thanhauser Company, American Film Company, Gaumont Company, Centour Film Company, Independent Moving Picture Company of America, Champion Film Company, Atlas Film Company, Yankee Film Company, and Rex Motion Picture Manufacturing Company.⁶ Brulatour had the exclusive sale of sensitized film to these companies, which the Lumière Company assigned to him. This company had previously secured exclusive contracts with the various motion picture concerns.⁷ Moreover, as a result of the supplemental agreement of June 6, 1912, the manufacturers of motion pictures licensed by the Motion Picture Patents Company were no longer compelled by the agreement to purchase film from one manufacturer.⁸

The district court which declared that the Eastman Kodak Company violated the Sherman Act held that the above contract between the Eastman and Patents companies was not unlawful in that it did not bind two competing companies and therefore did not restrain trade. The court attempted to reason by analogy from the decision of the United States Supreme Court in the shoe machinery case⁹ that a combination of non-competing parts constituted no violation of the Sherman Act.¹⁰

⁵ U. S. v. Motion Picture Patents Company. Brief for the United States, pp. 218-219.

⁶ U. S. v. Eastman Kodak Company, Vol. 5, Govt. Exhibit 142, pp. 2413-2419. Also see *Ibid.*, Exhibits 143-145.

⁷ For example, the exclusive contract of this company with the Independent Moving Picture Company of America, may be found in *Ibid.*, Vol. VI, Govt. Exhibit 312, pp. 3241-3243.

⁸ U. S. v. Motion Picture Patents Company, Brief for the United States, pp. 240-241. *Ibid.*, Article 8, pp. 4-5.

⁹ 227 U. S. 202.

¹⁰ 226 Fed. Rep. 62, Aug., 1915.

This agreement between the Eastman and Patents companies was exclusive in character. It confined the market for films, from the standpoint of both selling and buying, to these two companies. The whole arrangement tended to preserve their power, regardless of their efficiency and to discourage the development of other film companies and manufacturers of motion pictures.

DICTATION OF SUPPLEMENTARY SUPPLIES

A patent, as previously explained, confers the exclusive right to make, use, and vend the invention—that is, the right to exclude others from making, using, and vending the invention. These rights, especially those relating to use and sale, have been exploited in the past by imposing certain conditions with respect to them which unduly extended the monopoly granted by the patent law. More specifically, these conditions involved attempts to dictate supplementary supplies and control complementary goods on the one hand and to maintain re-sale prices on the other. It may be stated in advance that the lower Federal courts generally upheld these marketing practices until the Supreme Court pronounced their illegality a few years ago.

Button-fastener Case. The first decision of a Federal court which sanctioned the patentee's dictation of supplementary supplies for his invention was in the case of Heaton-Peninsular Button Fastener Company v. Eureka Specialty Company, known as the button-fastener case.¹¹ It served as a

¹¹ 77 Fed. Rep. 288 (1896), reversing 65 Fed. Rep. 619. The circuit court of appeals cited the cotton tie case as its authority, 106 U. S. 89 (1882). In that instance the cotton bale ties were sold, each bearing the words stamped in the metal: "Licensed to use only once." These words did not have anything to do with the rights of the parties in the suit. "The defendants were held liable as infringers in that case, not because they violated a 'license to use only once,' but because they reconstructed and remade the invention after it had been destroyed." (Gladney, *Restraints of Trade in Patented Articles*, p. 113.) Also the button-fastener case cited *Morgan Envelope v. Albany Perforated Wrapping Paper Co.*, 152 U. S. 425 (1894). Although the issues in these two cases did not exactly coincide, the decision in the latter indicated, not the legality, but the illegality, of the patentee's attempt to dictate the supplementary supplies for his invention, and presented a line of argument analogous to that in the projecting machine case.

precedent in many decisions of the lower courts relating to both the stipulation of other products and the maintenance of re-sale prices by the patentee.

The case was decided in 1896 by Judge (later Mr. Justice) ~~Low~~ton, Judge Hammond, and Judge (later Chief Justice) Taft. The button-fastener company owned several patents on a device for fastening buttons to shoes with metallic fasteners. A restriction inscribed upon a metal label was affixed to each machine:

"Conditions of Sale. This machine is sold and purchased to use only with fasteners made by the Peninsular Novelty Company, to whom the title to said machine immediately reverts upon violation of this contract of sale."¹²

The fasteners or staples were not patented. The manufacturer of the devices or machines sold them at cost to shoe dealers; it expected to receive its profit from the sale of the staples for them. The Eureka company, knowing of the patents and notice of the Peninsular company, sold staples adapted for use with the latter's machines. The Peninsular company sued the Eureka company as a contributory infringer, as one who had coöperated in a use forbidden by the notice. Important excerpts from the court's decision are presented:

"In view of the conspicuous character of both the machine and the notice permanently affixed thereon, every one buying must be conclusively presumed to have notice that the owners of the patents intended by the inscription on the machine to grant only a restricted license for its use, and it is difficult to see why such purchaser is not to be regarded as acquiring and accepting the structure subject to this restriction. The buyer of the machine undoubtedly obtains the title to the materials embodying the invention, subject to a reverter in case of violation of the conditions of the sale. But, as to the right to use the invention, he is obviously a mere licensee, having no interest in the monopoly granted by the letters patent."¹³

¹² 77 Fed. Rep. 288, 290.

¹³ *Ibid.*, p. 290.

Note the foregoing distinction between the materials embodying the invention and the use of the invention.¹⁴ It may be properly asked how one may become the owner of the materials embodying an invention and not of the use of the invention. The materials are bought as a unified product for a particular use and not for the metal, wood, etc., which they represent. An economic good may be defined as the sum of its uses. Therefore, how can one be the owner of the matter which it contains and only a licensee to use it?

To resume: "It must follow, therefore, that the purchaser of one of complainant's machines subject to a restricted use takes the structure with a license to use the invention only with staples made by the patentee. That the complainant sells the machine through jobbers, and not directly to those who buy for use, is immaterial, under the facts stated on the face of the bill. The jobber buys and sells subject to the restriction, and both have notice of the conditional character of the sale, and of the restriction on the use."¹⁵

The court then outlined the conditions under which the licensee became an infringer. "The control reserved by the patentee as to the use of the machine has the effect of continuing it within the prohibition of the monopoly. The license defines the boundaries of a lawful use, and estops the licensor from the assertion of his monopoly contrary to its terms. On the other hand, a use prohibited by the license is a use in defiance of the monopoly reserved by the patentee, and necessarily an unlawful invasion of the rights secured to him by his patent."¹⁶ The tribunal declared that those who aided such infringement by intentionally and maliciously persuading and inducing the licensees to exceed their licenses by furnishing them with the means for such infringement were themselves infringers. It concluded that the patents were infringed, and that all engaged directly and intentionally became joint infringers.¹⁷

¹⁴ In the Dick case (224 U. S. 1), discussed in a later part of this chapter, the Supreme Court made a similar distinction.

¹⁵ 77 Fed. Rep. 288, 290-291.

¹⁶ *Ibid.*, p. 291.

¹⁷ *Ibid.*, p. 297.

The court indicated the possible economic effects of its decision, as follows:

"The inventions covered by complainant's patents are not of such character as to enable them, by retaining the exclusive use, to absorb either the making of shoes, or the minor work of fastening buttons to shoes. In the exercise of the right of exclusive use, they have put on the market a structure embodying their devices, and licensed the purchaser to use the invention 'only with staples' made by themselves. In other words, they have chosen to fix the price for the right of use at the profit resulting from the sale of staples. As observed by counsel for complainant, 'The fasteners are thus made the counters by which the royalty proportioned to the actual use of the machine is determined.' This method of licensing their mechanism may or may not result in the engrossment of the market for staples. So long as their invention controls the market for button-fastening appliances, and to the extent that their machines shall supersede other modes of clinching staples, just so long will they be enabled to control the market for staples. Their monopoly in an unpatented article will depend upon the merit of their patented device, and the extent to which other clinching devices are superseded by it."¹⁸

The Supreme Court in 1912 sanctioned this interpretation of patent rights in the Dick case;¹⁹ and in 1917 overruled it in the projecting machine case.²⁰ The Supreme Court in the latter case criticized the button-fastener decision in this fashion:

"This decision proceeds upon the argument that, since the patentee may withhold his patent altogether from public use, he must logically and necessarily be permitted to impose any conditions which he chooses upon any use which he may allow of it. The defect in this thinking springs from the substituting of inference and argument for the language of the statute, and from failure to distinguish between the rights which are given

¹⁸ 77 Fed. Rep. p. 296.

¹⁹ 224 U. S. 1.

²⁰ 243 U. S. 502, Motion Picture Patents Co. v. Universal Film Co.

to the inventor by the patent law and which he may assert against all the world through an infringement proceeding, and rights which he may create for himself by private contract, which, however, are subject to the rules of general, as distinguished from those of the patent, law."²¹

Crown Cork and Seal Company Cases. This corporation, of Baltimore, Maryland, owned several patents relating to an automatic crown machine for applying crown corks or caps to bottles. It "licensed" the purchaser of the machine, who paid \$1800 for it. One provision of the "License to operate" will be noted:

"Upon the granting of the license we agree and obligate ourselves that the system and machine shall only be used and operated by us in connection with crown corks, purchased from the Crown Cork & Seal Co., and bottles made, by properly authorized manufacturers, with the company's standard finishing tools."²²

This restriction gave the company a monopoly of the corks or caps used with its patented machine and of the finishing tools employed in manufacturing all the bottles used with this machine.

The United Cork and Seal Company, a small competitor, was unable, in view of the license restrictions of the Crown company, to market its bottle stoppers in sufficient quantities to make a fair profit on the capital invested.²³ Lower Federal courts upheld these license restrictions.²⁴ They are no longer valid, however, in view of the projecting machine decision in 1917.

The Dick or Mimeograph Case. The A. B. Dick Company, the manufacturer of a patented stencil duplicating machine known as the "rotary mimeograph," sold it subject to the following license restriction:

²¹ 243 U. S. 502, 514.

²² Hearings before the House Com. on the Judiciary, Patent Legislation, Serial No. 1, 1912, p. 165.

²³ *Ibid.*, p. 177.

²⁴ *Crown Cork & Seal Co. v. Brooklyn Bottle Stopper Co.*, 172 Fed. Rep. 225; *Ibid. v. Standard Brewery Co.*, 174 Fed. Rep. 252; and *Ibid. v. Greenberger*, 174 Fed. Rep. 252.

"This machine is sold by the A. B. Dick Company with the license restriction that it may be used only with the stencil paper, ink, and other supplies made by A. B. Dick Company, Chicago, U. S. A."²⁵

A similar restriction, also appearing in the form of a printed notice, was placed upon the "rotary neostyle," a machine much like the "rotary mimeograph."²⁶ Further, the A. B. Dick Company sold its patented stencil duplicating papers upon the following condition:

"This composite stencil sheet is sold by the A. B. Dick Company with the license restriction that it may be used only on Edison's rotary mimeograph No. 75, and only with ink made by said company. (This stub is licensed for use only once.)"²⁷

In addition, the cans of stencil ink sold by this company were subject to a restriction:

"Notice to mimeograph users: Every mimeograph is sold with a proper license restriction covering the use of stencil paper, ink, and other supplies, and is so marked."²⁸

The Supreme Court considered the printed notice on the "rotary mimeograph" in announcing its decision because the case arose from the violation of it. Henry, the defendant, had made a special ink designed for use on the mimeograph, and, with knowledge of the printed restriction, had sold this ink to an owner of one of complainant's machines. The court declared him guilty of contributory infringement.²⁹ Its decision furnished a legal foundation to a monopoly in both patented

²⁵ Appeal from Circuit Court, Jan. 11, 1907, 149 Fed. Rep. 425.

²⁶ Annual report of the Fed. Trade Commission, 1917, Ex. 5, which contains complaint of Fed. Trade Commission v. A. B. Dick Co.

²⁷ *Ibid.*, p. 60.

²⁸ Agreements between the Dick Company and dealers in mimeographs provided for the carrying out of the above restrictions. *Ibid.*, p. 60

²⁹ Contributory infringement is the making and selling of one element of a combination covered by a patent with the intention and for the purpose of bringing about its use in such a combination. (Rogers on Patents, Vol. I, p. 150.) Some of the most liberal interpretations of the patent laws by the courts pertain to this subject. The early judicial decisions stated that contributory infringement included the making and selling of only those articles to be used as parts of a patented combination, thus excluding from this category articles of general use and of a varied suitability. For example, Rumford v. Hygienic, 148 Fed. Rep. 862, 866.

and unpatented goods by allowing the patentee to stipulate that he alone shall furnish the supplies used with his invention. It should be added that the rule thus announced in the Dick case had been applied in a number of instances in the lower courts.³⁰

The Supreme Court pointed out that a patent includes the distinct rights of making, selling, and using, and that each is a separable and substantial right. In addition, the greater right of exclusive use of the patentee embraces the lesser one of permitting the licensee to use only upon prescribed conditions. Also the tribunal differentiated property right in the machine and property right in the monopoly covering the machine; it held that the patentee, though selling the former in its entirety, may not part with the latter or may part with it only upon certain conditions. This principle, which the lower courts, in other cases, had indicated, it expressed as follows:

“The property right to a patented machine may pass to a purchaser with no right of use, or with only the right to use in a specified way, or at a specified place, or for a specified purpose. The unlimited right of exclusive use which is possessed by and guaranteed to the patentee will be granted if the sale be unconditional. But if the right of use be confined by specific restriction, the use not permitted is necessarily reserved to the patentee. If that reserved control of use of the machine be violated, the patent is thereby invaded. This right to sever ownership and use is deducible from the nature of a patent monopoly and is recognized in the cases.”³¹

This reasoning is untenable, for, as a practical matter, how can the property right to a patented machine pass to a purchaser with no right to use? Would one buy the machine for any other purpose than to use it? The materials of which a mimeograph is built would cost much less than the mimeograph.

The court placed on the same plane sundry restrictions upon the use of a patent. “The conclusion we reach is that there is

³⁰ A list of these cases may be found in Appendix II.

³¹ 224 U. S. 1, 24-25.

no difference, in principle, between a sale subject to specific restrictions as to the time, place, or purpose of use, and restrictions requiring a use only with other things necessary to the use of the patented article purchased from the patentee. If the violation of the one kind is an infringement, the other is also. That a violation of any such restriction annexed to a sale by one with notice constitutes an infringing use has been decided by a great majority of the Circuit Courts and Circuit Courts of Appeal, and has come to be a well-recognized principle in the patent law, in accordance with which vast transactions in respect to patented articles have been conducted.”³²

Lastly, the decision set forth what constitutes infringement. “Undoubtedly a bare supposition that by a sale of an article which, though adapted to an infringing use, is also adapted to other and lawful uses, is not enough to make the seller a contributory infringer. Such a rule would block the wheels of commerce. There must be an intent and purpose that the article sold will be so used. Such a presumption arises when the article so sold is only adapted to an infringing use. It may also be inferred where its most conspicuous use is one which will cooperate in an infringement when sale to such user is invoked by advertisement.”³³

The court tried to answer the argument that the legality of such license restrictions might give the patentee the “practical monopoly of the market” for supplementary but unpatentable supplies. It reasoned:

“The market for the sale of such articles [i.e., unpatented supplies] to the users of his machine [i.e., the patent owner’s patented machine], which, by such a condition, he takes to himself, was a market which he alone created by the making and selling of a new invention. Had he kept his invention to himself, no ink could have been sold by others for use upon machines embodying that invention. By selling it subject to the restriction he took nothing from others and in no wise restricted their legitimate market.”³⁴

“The public is always free to take or refuse the patented

³² 224 U. S. 1, pp. 35-36.

³³ *Ibid.*, p. 48.

³⁴ *Ibid.*, p. 32.

article on the terms imposed. If they be too onerous or not in keeping with the benefits, the patented article will not find a market. The public, by permitting the invention to go unused, loses nothing which it had before, and when the patent expires will be free to use the invention without compensation or restriction.”³⁵

A fundamental weakness in this argument lies in the extent to which a patented machine or other article may be unpatented. All the patents covering it, except a few insignificant ones, may have expired. In this particular instance all the basic patents had terminated, as subsequent paragraphs of this chapter reveal; but apparently this did not affect in the least the legality of the license restrictions as described. The result was the monopolistic control of the stencil duplicating machine, most of the physical parts of which were unpatented, and in addition of the unpatentable products used with the machine.

This opinion of the Supreme Court, though agreeing with precedent as established by the lower courts, aroused a storm of protest from the public. Unfortunately this majority opinion was handed down by only four of the nine judges.³⁶ Two of the judges were absent, and the other three—Chief Justice White and Justices Hughes and Lamar—joined in a very pronounced and vehement dissenting opinion. These three judges maintained that the majority opinion contained the potentialities of dire consequence, for—

“Take a patentee selling a patented engine. He will now have the right by contract to bring under the patent laws all contracts for coal or electrical energy used to afford power to work the machines, or even the lubricants employed in its operation. . . . Take a patented cooking utensil. The power is now recognized in the patentee to bind by contract one who

³⁵ *Ibid.*, pp. 34-35.

³⁶ Lurton, who wrote the decision in *Heaton-Peninsular Button Fastener Company v. Eureka Specialty Co.*; Van Devanter, in *National Phonograph Co. v. Schlegel*; McKenna, in *Continental Paper Bag Co. v. Eastern Paper Bag Co.*; and Holmes, who dissented in *Dr. Miles Medical Company v. Park*. Three of these cases are described in this and other chapters.

buys the utensil to use in connection with it no other food supply but that sold or made by the patentee." . . .³⁷

The Supreme Court, in 1917, reversed this (Dick) decision, in the projecting machine case.³⁸ "It is obvious that the conclusions arrived at in this opinion are such that the decision in *Henry v. A. B. Dick Co.* must be regarded as overruled."³⁹ This reversal did not affect the control of stencil duplicating machines by the A. B. Dick Company, although it took away the legal prop for dictating the supplies for the machines, also for stipulating the machines for the patented supplies.

A few months before the projecting machine decision, the Federal Trade Commission issued a complaint against the Dick company to prevent its use of the tying clauses already described as in violation of section 3 of the Clayton Act. Soon after the Commission had taken testimony in the case, the Supreme Court announced the projecting machine decision, whereupon the Dick company dropped its defense in the Commission's proceedings. The Commission, therefore, issued an order "prohibiting the respondent from selling its machines and paper upon the condition, agreement, or understanding, whether embodied in a so-called license restriction or in a contract, or otherwise, that the purchaser should not use therewith the machines or supplies of a competitor."⁴⁰ The A. B. Dick Company reformed the conduct of its business to conform with the Commission's order.⁴¹

a. Analysis of Dick Patents. The mimeograph case and the consequent public discussion emphasized the important part played by the patents of the Dick Company. A somewhat detailed study of them will accordingly be helpful.

In 1916, a few months before the overruling of the mimeograph decision, it had 128 patents, distributed among different subjects as follows: duplicating machines, 66; type-printing

³⁷ 224 U. S. 1, 55.

³⁸ 243 U. S. 502. Three of the judges gave a minority decision, following the line of argument employed in *Henry v. Dick*, 224 U. S. 1.

³⁹ *Ibid.*, p. 518.

⁴⁰ Annual Report of the Fed. Trade Commission, 1917, p. 9.

⁴¹ *Ibid.*, p. 9.

machines, 3; sheet feeding apparatus, 24; delivery device, 2; ink, 2; stencil sheets, 28; miscellaneous, 3. Of these 128 patents, 31 had expired, 97 were unexpired. These ranged as follows: duplicating machines—11 expired, 55 unexpired; printing machines—3 unexpired; sheet feeding apparatus—24 unexpired; delivery device—2 unexpired; ink—2 expired; stencil sheets—16 expired, 12 unexpired; miscellaneous—2 expired, 1 unexpired.

In 1916 it seemed that within four years all of the important patents on stencil duplicating machines would expire; the basic ones had already expired. It appeared at that time—certainly within a few years—that a machine constructed from expired patents would give satisfactory results. The recent Dick patents, issued shortly before 1916, on these machines covered mere improvements upon the basic patents. This fact was practically admitted in the following quotation from a pamphlet of the A. B. Dick Company:

“This apparatus (duplicating machine) may be an exceedingly simple affair, made up of little more than a flat bed and a hand roller, with a capacity of but a few score copies an hour. Or it may be an electrically driven, automatically fed rotary device, capable of producing more than a hundred perfect copies per minute. . . .

“For more than thirty years we have been making duplicating devices—following the fundamental idea contained in the original patents of Mr. Thomas A. Edison and Mr. A. B. Dick.” One of the recent additions to the most complete duplicating machine, Model 78, pertained to the propelling power. But this, like the other patented improvements, was not essential to the operation of the machine. “The electric motor and the mechanism by which the mimeograph is driven is really a separate unit and may be added or not, as may be desired.”⁴² Models 75 and 76 did not have this and other improvements—they seemed practically unprotected by patents.

In 1916 the unexpired patents relating to paper-feeding ap-

⁴² Better Duplicating at Less Cost, pp. 4-6.

paratus covered the following points: (1) automatic paper feeder; (2) paper-stop; (3) movement of sheet-pile in vertical direction as sheets are taken from it; (4) feeding of one sheet at a time; (5) support, guide, holding, forwarding, positioning, and non-curling of sheets; (6) adjustment of time in feeding sheets; (7) registration of the sheets fed; (8) non-action if no sheet present. Only Model 78, which represented, in 1915, about 40 per cent of the Dick sales of stencil duplicating machines, included an automatic feeder; the others—Models 75, 76, 77, and 80—had no automatic feeders.⁴³ Therefore, the 23 patents on such apparatus, all unexpired, protected only Model 78. The delivery device, still protected by patents in 1916, was not essential to the operation of the machine. Models 75 and 76 did not have such a device.

All the patents on ink, two in number, had expired, the last one January 10, 1916. This fact is significant in view of the part played by the patented ink of the A. B. Dick Company in sustaining and promoting its monopoly. In 1916 there were no patents to lend legal sanction to the prohibition of its use on any other than Dick duplicating machines. This company emphasized the desirability of using only its ink to obtain the best results from its machines.

A majority of the important patents concerning stencil sheets had expired. (1) Wax stencil sheets in 1916 no longer enjoyed the protection of patents. Likewise, there had been an expiration of all the patents covering (2) the formation of characters in stencil by means of heat, adhesion, pressure, abrasion, and extraction; and (3) sheets used in front and rear of wax stencil in the preparation of the stencil sheet. One can safely conclude that in 1916 wax stencil, together with the formation of characters in it, no longer enjoyed any substantial protection of patents.

The unexpired patents pertaining to stencil sheets included in 1916 only one original line of invention, namely, (1) dermatype stencil sheet; and this constituted merely a new variety of stencil paper. The fact is that the sales of stencil sheets by the A. B. Dick Company consisted in 1916 of the

⁴³ Better Duplicating at Less Cost, pp. 11-16.

dermatype almost exclusively. This company in 1916 recommended and advertised the superiority of the new dermatype—"the wonderful sheet of paper that has absolutely revolutionized duplicating processes," and stated that it was waxless and possessed greater indestructibility and accuracy of impression than the wax stencil.⁴⁴ The company added, however, that it would furnish the wax stencil if demanded, and quoted prices thereon. Whether this change from wax to the dermatype was due to the expiration of patents on the former and the existence of new patents on the latter, or to the genuine superiority of the latter, or both, is an interesting question. A complete change would have meant a new patent monopoly on stencil paper and hence the legal right, under the Dick decision, of dictating the machine on which the supplies must be used.

Other unexpired patents relating to stencil sheets covered (2) a stencil-moistening composition, and (3) sheets in front and rear of stencil for moistening, absorbing, protecting, etc., and (4) placing, protection, and arrangement of a stencil (invalid in Great Britain). The only one on (5) wax stencil covered a coloring material incorporated in the wax to facilitate the cutting of the stencil—a very minor invention.

These facts would indicate that in 1916 and earlier years the monopoly of the A. B. Dick Company in stencil duplicating machines and its legal right to dictate supplementary supplies rested upon a few minor patents, all covering slight improvements.

The Projecting Machine Case. The Motion Picture Patents Company owned a patent on a projecting machine and attempted to defue the films with which it must be used. This company licensed the Precision Machine Company to manufacture and sell these machines upon the conditions set forth in the "notice" which the manufacturer attached to each machine:

"The sale and purchase of this machine gives only the right to use it solely with moving pictures containing the invention of Reissued

⁴⁴ *Ibid.*, p. 1.

Patent No. 12,192, leased by a licensee of the Motion Picture Patents Company, the owner of the above patents and reissued patent, while it owns said patents, and upon other terms to be fixed by the Motion Picture Patents Company, Patent No. 12,192, leased by a licensee of the Motion Picture Patents Company, is in use and while the Motion Picture Patents Company owns said patents. The removal or defacement of this plate terminates the right to use this machine.

"MOTION PICTURE PATENTS COMPANY,
"New York, N. Y., U. S. A." 46

After the foregoing patent on moving pictures had expired, the Universal Film Company made films embodying the invention and sold them to a rental exchange, which in turn furnished them to an exhibitor for use. The films were exhibited by means of a projecting machine on which the notice quoted appeared. The Motion Picture Patents Company as a result brought suit against the Universal Film Company on the ground that the use of such films upon this machine constituted infringement.⁴⁶ The Circuit Court of Appeals pronounced the license notice in conflict with that portion of the Clayton Act of 1914 which forbids the lease or sale of products upon the condition that the lessee or purchaser shall not use or deal in the products of a competitor.

"The testimony shows that the complainant has a monopoly under its patents of projecting machines so that, if no films not manufactured by complainant can be used upon these machines, the complainant will obtain an absolute monopoly of the film business, in spite of the fact that its patent on films has expired. If the prohibitions of the Clayton Act mean anything at all, this case falls within them, and the restrictions as to use of films other than complainant's with the projecting machines are therefore void."⁴⁷

This case was appealed to the Supreme Court.⁴⁸ It declared that the two questions for decision were as follows:

⁴⁶ Motion Picture Patents Company v. Universal Film Manufacturing Co., 235 Fed. Rep. 398, 399, C. C. A., 1916.

⁴⁷ *Ibid.*, p. 399.

⁴⁸ *Ibid.*, p. 400.

⁴⁹ 243 U. S. 502 (1917). Three of the judges gave a minority decision, following the line of argument employed in *Henry v. Dick*, 224 U. S. 1.

"First. May a patentee or his assignee license another to manufacture and sell a patented machine, and by a mere notice attached to it limit its use by the purchaser or by the purchaser's lessee, to films which are no part of the patented machine, and which are not patented?

"Second. May the assignee of a patent, which has licensed another to make and sell the machine covered by it, by a mere notice attached to such machine, limit the use of it by the purchaser or by the purchaser's lessee to terms not stated in the notice but which are to be fixed, after sale, by such assignee, in its discretion?"⁴⁹

The court held that in interpreting the patent law, it would be of service to keep in mind three rules:

1st. The scope of every patent is limited to the invention described in the claims contained in it, read in the light of the specification;

2nd. The patentee receives nothing from the law which he did not have before, and the only effect of his patent is to restrain others from manufacturing, using or selling that which he had invented;

3rd. The primary purpose of our patent laws is not the creation of private fortune for the owners of patents, but is "to promote the progress of science and useful arts."⁵⁰

In view of these rules the court decided that the patent granted on a machine is restricted "to the mechanism described in the patent as necessary to produce the desired results. It is not concerned with and has nothing to do with the materials with which or on which the machine operates." Further, "Whatever the right of the owner may be to control by restriction the materials to be used in operating the machine, it must be derived through the general law from the ownership of the property in the machine, and it cannot be derived from or protected by the patent law, which allows a grant only of the right to an exclusive use of the new and useful discovery which has been made, this and nothing more."⁵¹ The court decided that, "by virtue of the patent law, one who

⁴⁹ *Ibid.*, pp. 508-509.

⁵⁰ *Ibid.*, pp. 510-511.

⁵¹ *Ibid.*, pp. 512, 513.

had sold a patented machine and received the price, and had thus placed the machine so sold beyond the confines of the patent law, could not, by qualifying restrictions as to use, keep under the patent monopoly a subject to which the monopoly no longer applied."⁵² The tribunal did not base its decision upon the Clayton Act: "Our conclusion renders it unnecessary to make the application of this statute to the case at bar which the Circuit Court of Appeals made of it, but it must be accepted by us as a most persuasive expression of the public policy of our country with respect to the question before us."⁵³

The economic evils which could arise from license restrictions like the one in question received consideration, as the following extract from the decision shows: "The perfect instrument of favoritism and oppression which such a system of doing business, if valid, would put into the control of the owner of such a patent, should make courts astute, if need be, to defeat its operation. If these restrictions were sustained, plainly the plaintiff might, for its own profit or that of its favorites, by the obviously simple expedient of varying its royalty charge, ruin anyone unfortunate enough to be dependent upon its confessedly important improvements for the doing of business."⁵⁴

The Motion Picture Patents Company argued that the license restrictions redounded to the economic welfare of the public, and the court gave a very effective answer: "It is argued as a merit of this system of sale under a license notice that the public is benefited by the sale of the machine at what is practically its cost, and by the fact that the owner of the patent makes its entire profit from the sale of the supplies with which it is operated. This fact, if it be a fact, instead of commending, is the clearest possible condemnation of, the practice adopted, for it proves that under color of its patent the owner intends to and does derive its profit, not from the invention on which the law gives it a monopoly, but from the unpatented supplies with which it is used, and which are wholly without the scope of the patent monopoly,

⁵² *Boston Store v. American Graphophone Co.*, 246 U. S. 8, 25.

⁵³ 243 U. S. 502, 517-518.

⁵⁴ *Ibid.*, p. 515.

thus in effect extending the power to the owner of the patent to fix the price to the public of the unpatented supplies as effectively as he may fix the price on the patented machine."⁵⁵

Certain facts in this particular case supported the "condemnation of the practice adopted." As the court stated, "It was admitted at the bar that 40,000 of the plaintiff's machines are now in use in this country, and that the mechanism covered by the patent in suit is the only one with which motion picture films can be used successfully."⁵⁶

The Motion Picture Patents Company was shorn of its monopolistic power other than that which the patent law confers—the exclusive right to make, use, and sell its patented inventions; this was the result of the decisions of both the lower and the supreme courts—one based on the Clayton Act and the other on the interpretation of the patent and anti-trust laws. Moreover, this decision in effect pronounced the illegality of all attempts to dictate the supplementary supplies of patented articles, and therefore brought to an end a trade practice of many manufacturers of patented articles that had prevailed since the early nineties.⁵⁷ For approximately twenty-five years the people had paid tribute to them, an economic loss which must be considered in making an appraisal of the net worth of the patent system.

Criticism. In the writings of patent lawyers and decisions of courts relating to the right of the patentee to dictate supplementary supplies, considerable emphasis has been placed on the economic necessity of such a privilege. One argument for the stipulation of supplies, even at high prices, was that the recompensation received by the patentee depended entirely on the amount of benefit which the licensee derived from using the patented article,—in other words, the best measure of the

⁵⁵ *Ibid.*, pp. 516-517.

⁵⁶ *Ibid.*, p. 508.

⁵⁷ For example, the American Can Co., in leasing its patented can-making machinery to salmon packers, stipulated that the "machines may only be used in making cans . . . in connection with can ends furnished by the American Can Co." Also, on some of the kodak film of the Eastman Kodak Co., there was the notice that "when used for autographic purposes this film is licensed for use in the Autographic Kodak only."

benefit was the quantity of supplies used. This would be true if the entire remuneration of the patentee came from this source, as is true of the United Shoe Machinery Company. But the Peninsular, Dick, and other sellers of patented articles, in whose behalf mainly these arguments were made, charged initial prices for them. The Peninsular company, it was claimed, sold its button-fastening machines at cost; and the Dick company, its duplicating machine at \$32. somewhat below cost.

An alleged advantage of this practice to the licensee was that it distributed the financial cost over a long period, and therefore made payments easier and encouraged the introduction of the patented article. The weight of this point, like that of the preceding one, depended upon the extent to which the financial reward of the patentee came from this source. Moreover, such an advantage to the licensee was offset, it seems, by the inconvenience of the restriction. Many licensees of the Dick, shoe machinery, and other companies have indicated their preference for the acquisition of their patented articles without restrictions of any sort.

This practice enabled the patentee to reap high profits from his supplies and hence increased the total financial return from his invention. It meant greater prospective gains and therefore greater efforts to invent and maintain fundamental patents so as to continue the practice. But this argument overlooks the fact that it discouraged invention and other kinds of initiative with respect to the supplies. For example, one might have invented ink, stencil paper, etc., even superior to those produced by the Dick company, in the absence of its restrictions affecting these commodities.

This privilege, according to another argument, made possible a superior grade of supplies and repairs, for the manufacturer understood better than others the needs and possibilities of his patented article. The Dick company, for instance, argued that its restriction insured excellent ink, paper, and other supplies, and therefore satisfactory results to the user of the duplicating machine. It declared that the ink sold by others was inferior and ill adapted to the Dick machine.

The Peninsular company, by way of contrast, charged that the Eureka company intentionally sold staples specially adapted for its machine and therefore was an infringer. The inconsistency and weakness of this argument is evident. It should be remembered that patentees exercised this privilege with reference to both patented and unpatented supplies for their machines or other patented articles. It is true that the owner of a patented chemical process should furnish the delicate materials required and that the manufacturer of a very intricate article, whether patented or unpatented, should supply the parts and general repairs for it. However, general instructions from the manufacturer to this effect, together with the self-interest of the purchaser of the article, should suffice.

It was maintained that the inventor of a machine or other good created the demand for the accessories used with it; that the demand for them did not exist previously; and that he had, therefore, the exclusive right to sell them. The Oldfield report of 1912 ridiculed this idea by asking, "How is it possible to say that the inventor of a patented mail chute creates the demand for the letters and packages deposited therein?"⁵⁸

[In the final analysis any attempt to tie one commodity to another in selling either of them is fundamentally unfair.] It makes the sale of the subsidiary article depend upon the tying clause instead of its own merits. Any article which has not the necessary attributes—price, quality, etc.—to stimulate its sale and use, does not deserve a contractual or other arrangement which will enforce its sale and use. The very existence of such restrictions suggests that in its absence a competing article of equal or better quality would be offered at the same or at a lower price; necessarily so, for otherwise there would be no occasion for the restriction. Tying clauses attached to the use of a patented article, illustrated by those already described, introduce an artificial element. In short, they lessen competition and prevent the manifestation of economic efficiency.

⁵⁸ Oldfield Report of 1912, p. 11.

CONTROL OF COMPLEMENTARY GOODS

United Shoe Machinery Company. This concern acquired patents and other property relating to shoe machinery (see Chapter III) and leased its machines to shoe manufacturers upon conditions that were very exclusive in character. These conditions were known as "tying" clauses.⁶⁹ The manufacturers agreed to the following:

"(1) Shall not use the machine in the manufacture or preparation of footwear which has not had certain essential operations performed upon it by other machines leased from the lessor.

"(2) Shall use the leased machine to its fullest capacity.

"(3) Shall use exclusively the leased machine for the class of work for which it is designed.

"(4) Shall obtain from the lessor exclusively, at such price as it may establish, all duplicate parts and mechanisms needed in operating the leased machines and all supplies in connection with them.

"(5) Shall use patented insoles made on defendant's [United company's] machinery only in connection with certain footwear manufactured by machinery leased from the lessor.

"(6) Shall lease from the lessor any additional machinery which he may need for work in the same department as that of the machine leased.

"(7) Shall permit the lessor to determine whether the lessee has in his factory more machinery adapted for doing the same work than he needs, and, if so, to remove such machines as, in the opinion of the lessor, are unnecessary.

"(8) Shall, at the election of the lessor, suffer a termination of all leases which he may have and the removal of all machines leased by him from the defendants, in the event of the violation of any term of any one of the leases."⁷⁰

"It is hard to see how the ingenuity of man could have devised a scheme that would more effectually create a mon-

⁶⁹ These clauses appear in full in Appendix III.

⁷⁰ A description and discussion of these conditions and other aspects of the United company appear in: (1) Hearings before the House Committee on the Judiciary, Trust Legislation, Serial No. 2, Patent Legislation, Serial No. 1, 1912, pp. 31-32, 45-47, 55-129, 131-162, 179-189, 190-205; (2) *Ibid.*, Trust Legislation, Serial No. 3, Patent Legislation, Serial No. 2; (3) *Ibid.*, Letter and Memorandum of Louis D. Brandeis, Trust Legislation appendix to Serial Nos. 2 and 3; (4) House Report, No. 627, 63rd Cong., 2nd Sess., Anti-trust Legislation (Clayton Report), 1914, p. 13; (5) Oldfield Report of 1912, p. 16.

opoly."⁶¹ Some of the restrictions did not seem objectionable when considered alone, yet when taken together they tended to produce a cumulative monopolistic effect. Apparently they were designed to compel the shoe manufacturers to use exclusively the machines and repairs of the United company.⁶² The manufacturer had the choice of obtaining either all or none of the shoe machinery required in his factory from this company. No other company could furnish a full set of shoe machinery. It was necessary, therefore, to use exclusively the machines of the United company in order to engage in the manufacture of shoes.

Other manufacturers of shoe machinery could supply certain kinds of shoe machinery but not a complete set. The United company, by means of patents, controlled the manufacture of lasting machines, which were essential in the manufacture of shoes. But a shoe manufacturer, in order to use the lasting machine of the United company, had to consent to use exclusively the stitcher, welter, metallic-fastener, and other machines of this company.⁶³ Would-be competitors of this company, therefore, experienced great difficulty in selling or leasing their specific machines.⁶⁴ They could not compete effectively without a complete and efficient set of shoe machinery based largely upon a new line of inventions.

The Shoe Manufacturers' Alliance, organized in 1911 and

⁶¹ 227 Fed. Rep. 507, 511.

⁶² It has been stated that the various parts of the machine were not made on the ordinary standards; for example, that the bolts for these machines were off-sizes, so that they could not be purchased at a hardware store. Hearings before the Committee on Interstate Commerce, 62nd Congress, Vol. I, p. 1186.

⁶³ An opinion to the contrary was expressed by L. D. Brandeis in Hearings before the House Committee on the Judiciary, 63rd Congress, 2nd Session, Trust Legislation, Serial 7, Vol. 2, pp. 654-660.

⁶⁴ One of the competitors was the General Shoe Machinery Company, Boston, Mass., successor to Boylston Manufacturing Company. The experience of the Boylston company in trying to sell its machines is described in Hearings before the House Committee on the Judiciary, 63rd Congress, 2nd Session, Trust Legislation, Serial 7, Vol. 3, pp. 1033-1045. R. H. Long Company of Framingham, Mass., a manufacturer of shoes and shoe machinery, has had litigation and controversy with the United company since 1906. (Personal correspondence.) The Standard Shoe Machinery Company was another shoe machinery concern.

composed of many shoe manufacturers in the United States, attempted to secure relief from the tying clauses of the leases. In 1914, when trust legislation was pending in Congress, the Alliance wrote to the Attorney-General:

"Whereas monopolies have grown up under what we believe to be an unwarranted interpretation of existing patent law, we respectfully call your attention to the fact that the 'trust' and 'patent' situations are very closely interwoven, and that the permission which many of the 'trusts' claim is granted them by patent ownership to insist upon 'exclusive-use' clauses and of 'tying' up a number of machines by restrictive leases, so that one or more machines cannot be used without the others, is responsible for many onerous conditions which are now enforced, and which are distinctly in restraint of trade. . . .

"The lease system is a greater invention than the shoe machinery'; but for its existence, in our judgment, there would be in a short time substantial and potential competition in the shoe-machinery field."

It should be pointed out that the shoe manufacturers as a class objected to the tying clauses and not to the leasing system. The Shoe Manufacturers' Association of Brockton, Massachusetts, declared that it was in favor of a continuance of the present lease system as used by the United company, provided that such provisions of the lease as operated to exclude the use of competitive machines be abolished, and that the penalty or charges for returning used machines be modified or wiped out.⁶⁵ The Supreme Court stated that the United company furnished machines of excellent quality; that it rendered valuable services in the installation of machines, instructions to operators, promptness in furnishing machines, and in making repairs and replacements.

The leasing of machines was especially favorable to the small manufacturer in that it tended to place him on an equal footing with a large competitor. Mr. Winslow, the president of the United company, testified that the royalties had been the same for all, whether they used a thousand machines or one; that they were charged by the pair; and that the service

⁶⁵ Oldfield Hearings of 1914, Part 10, p. 173.

was uniform.⁶⁶ The leasing system, therefore, has tended to make shoe manufacturing subject to constant expenses and has reduced the amount of capital necessary to engage in the business. These conditions have both stimulated competition in the shoe industry.⁶⁷

A manufacturer of tacks, rivets, nails, etc., and the owner of patents, described the effect of the tying clauses on his business in the following words:

“Representing as I do, a company which is directly affected (and, we believe, unjustly) by what we also believe an unwarranted interpretation of the existing patent law by which we are prevented from disposing of a considerable part of one of our staple products to the shoe manufacturers of the country, many of whom are not only willing but would be glad to deal with us if they were not prevented from doing so because of certain tying and exclusive-use clauses existing in leases made by the owners of certain patents on certain classes of machinery which the shoe manufacturers are compelled to use, although our products are not in any way covered by the patents referred to, are obviously extending their monopoly beyond the point contemplated by the patent laws, etc.”⁶⁸

The “exclusive right to use” of a patent furnished the basis for the tying clauses, although the restrictions were more comprehensive and burdensome than those found in the Dick case. The former indirectly controlled the stages of manufacture of a particular product; the latter, only the auxiliary supplies used directly with its duplicating machines.

The judicial history of these tying clauses may be found in several decisions. First, it should be pointed out that the Supreme Court did not pass upon their legality in *United States v. Winslow*. “It is to be observed that the conditions now inserted in the leases are not alleged to have been con-

⁶⁶ Brief for the U. S. in *U. S. v. United Shoe Machinery Co.* (No. 207), p. 201.

⁶⁷ In 1915, \$35,000,000 of property of the United company was in the hands of shoe manufacturers. It financed them to that extent. 222 Fed. Rep. 349, 359.

⁶⁸ Hearings before the Committee on Interstate Commerce, United States Senate, 63rd Cong., 2nd Sess., Vol. II, p. 1013.

temporaneous with the combination, or to have been contemplated when it was made. The district court construed the indictment as confined to the merger of the companies, without regard to the leases subsequently made; and we have no jurisdiction to review this interpretation of the indictment."

The government in its suit against the United Shoe Machinery Company instituted in 1911, specifically attacked the "tying" clauses of the leases of this company. The District Court, in 1915, held that these clauses were in conformity with the patent rights enjoyed by this company.⁶⁹ The Supreme Court, May 20, 1918, upheld the opinion of the lower court although by a vote of four to three.⁷⁰ The Clayton Act of 1914 played no part in either decision, as the government instituted the suit prior to its passage.

After the passage of the Clayton Act, the government brought suit against the United company on the ground that the tying clauses of its leases violated that section of this law which makes it unlawful to lease or sell machinery, etc., on any condition or agreement which will tend to prevent the lessee or purchaser from dealing with competitors of the lessor or seller. Several decisions unfavorable to the United company were handed down by the Federal courts.⁷¹ An appeal was taken to the Supreme Court and it approved the decision of the lower court.⁷² The following quotation summarizes the objectionable parts of the leases of the United company, and presents the decision of the court.

"Turning to the decree, it will be found that the court enjoined the use of (1) the restricted use clause, which provides that the leased machinery shall not, nor shall any part thereof, be used upon shoes, etc., or portions thereof, upon which certain other operations have not been performed on other machines of the defendants; (2) the exclusive use clause, which provides that if the lessee fails to use exclusively machinery of certain kinds made by the lessor, the lessor shall have the

⁶⁹ 222 Fed. Rep. 349 (1915).

⁷⁰ 247 U. S. 32.

⁷¹ 227 Fed. Rep. 507; 234 Fed. Rep. 127; and 264 Fed. Rep. 138.

⁷² 258 U. S. 451, 456-458.

right to cancel the right to use all such machinery so leased; (3) the supplies clause, which provides that the lessee shall purchase supplies exclusively from the lessor; (4) the patent insole clause, which provides that the lessee shall only use machinery leased on shoes which have had certain other operations performed upon them by the defendants' machines; (5) the additional machinery clause, which provides that the lessee shall take all additional machinery for certain kinds of work from the lessor, or lose his right to retain the machines which he has already leased; (6) the factory output clause, which requires the payment of a royalty on shoes operated upon by machines made by competitors; (7) the discriminatory royalty clause, providing lower royalty for lessees who agree not to use certain machinery on shoes lasted on machines other than those leased from the lessor. The defendant's restrictive form of leases embraces the right of the lessor to cancel a lease for the breach of a provision in such lease, or in any other lease or license agreement between the lessor and the lessee. The lessor in such case is given the right, by notice in writing to the lessee, to terminate any and all leases or licenses then in force to use the machinery, and this notwithstanding previous breaches or defaults may have been unnoticed, waived, or condoned by or on behalf of the lessor. The district court held that the United company had the right to cancel a lease for a violation of the terms of the particular lease, but could not, without violating the act, reserve the right to cancel a lease because the lessee had violated the terms of some other lease. This part of the decree must be read in the light of the circumstances shown as to the necessity of procuring shoe machinery from the United company, and the danger of a lessee losing his ability to continue business by a forfeiture incurred from the breach of a single covenant in one lease.

"While the clauses enjoined do not contain specific agreements not to use the machinery of a competitor of the lessor, the practical effect of these drastic provisions is to prevent such use. We can entertain no doubt that such provisions as were enjoined are embraced in the broad terms of the Clayton Act, which cover all conditions, agreements, or understandings

of this nature. That such restrictive and tying agreements must necessarily lessen competition and tend to monopoly is, we believe, equally apparent. When it is considered that the United company occupies a dominating position in supplying shoe machinery of the classes involved, these covenants, signed by the lessee and binding upon him, effectually prevent him from acquiring the machinery of a competitor of the lessor, except at the risk of forfeiting the right to use the machines furnished by the United company, which may be absolutely essential to the prosecution and success of his business."

The control of complementary goods as illustrated by the tying clauses of the United company constitutes an ingenious sort of unfair competition. It is somewhat analogous to the dictation of supplementary supplies, because both represent an attempt to dominate other products and both deserve condemnation for the same reasons.

CHAPTER V

UNFAIR COMPETITION (*Continued*)

MAINTENANCE OF RE-SALE PRICES

IN 1896 a Federal court for the first time sanctioned the patentee's dictation of supplementary supplies for his invention.¹ It was thought that this interpretation of "the exclusive right to use" would justify analogous restrictions concerning re-sale prices based upon "the exclusive right to sell." Therefore, scores of manufacturers sought to dictate the re-sale prices of their patented products: for example, watches, cameras, fountain pens, safety-razors, baseballs, tire chains, phonographs and records, drugs, sadirons, gas jets, carpet sweepers, vacuum cleaners, underwear, and pencil sharpeners.² Many decisions of the lower courts (the first one in 1901) and of the Supreme Court involved the legality of this practice.

Edison Phonograph Company v. Pike. The Edison company, the owner of two patents relating to improvements in phonographs and records, entered into an agreement with the Eastern Talking Machine Company which forbade the latter to sell patented phonographs below a certain schedule of prices. In addition, the agreement contained these clauses:

"Jobbers must not sell or supply, either directly or indirectly, Edison phonographs or parts thereof, records or blanks, to any dealer who will not sign the agreement governing and controlling the sale of the same, nor to dealers who are on our suspended list.

"All Edison phonographs, records, and blanks are covered by United States patents, and are sold under the condition that the license to use and vend them implied from such sale is dependent

¹ Button Fastener case, 77 Fed. Rep. 288.

² Copies of contracts, notices, etc., involving these articles appear in Appendix IV.

on the observance by the vendor of all the foregoing conditions. Upon the breach of any of said conditions the license to use or vend said phonographs, records, and blanks immediately ceases, and any vendor or user thereafter becomes an infringer of said patents and he may be proceeded against by suit for injunction or damages or both."

The Eastern company purchased phonographs and records from the Edison company. On each box containing a phonograph the following appeared:

"Notice to Dealers: This record is sold subject to restrictions as to the persons to and the prices at which it may be sold. Any violation of such restrictions makes the seller or user an infringer of the Edison Patents."³

An individual by the name of Pike knew of the agreement and the restriction; and having such knowledge, and without signing the agreement, bought phonographs and records from the Eastern company, and sold them. As a result the Edison company brought suit for infringement. The Circuit Court decided that it was forced to hold that the Eastern company, "by selling phonographs to the defendant in violation of its agreement with the complainant, became guilty of an infringement, and that by reason of this sale the patented phonographs so sold were no longer covered by the license originally granted to the Eastern Talking Machine Company. In selling these phonographs, now unlicensed, the defendant, who bought them with the knowledge of the restriction and of its breach, is also an infringer."⁴ Hence, the jobber became an infringer by violating his agreement with the Edison company; the retailer infringed by disregarding the restrictions contained in the agreement and suggested by the printed notice.

*Victor Talking Machine Company v. The Fair.*⁵ Another decision relating to the maintenance of re-sale prices of patented articles will be presented. The Fair, a department store

³ Edison Phonograph Company v. Pike, 116 Fed. Rep. 863, C. C., June, 1902.

⁴ *Ibid.*, p. 867.

⁵ 123 Fed. Rep. 424, C. C. A.; Apr., 1903, reversing 118 Fed. Rep. 609. Also see 166 Fed. Rep. 117, C. C. A., 1908.