



A New Patent-Selling Scheme.

More than once we have had occasion to call attention to the numerous traps skillfully laid for the unwary inventor by promoters and brokers whose ostensible business it is to assist him in selling his patent rights, but whose actual purpose it is to fleece him to his last dollar, if possible. An inventor who has been once shorn is not apt to be caught a second time; the lesson has been too dearly paid for. But since not every inventor takes out two patents, it will not be out of place briefly to refer to one of the most recent schemes for inducing an inventor to part with his money.

The inventor, whose name and address have been published in the Official Gazette, together with a picture of his device, and a copy of his allowed claims, will receive from a New York firm of "designing, constructing and consulting engineers" a polite letter in which it is stated that something like the device in question is wanted in Europe. Contrary to the usual practice, the firm admits with refreshing candor that it has no facilities for disposing of the article itself. Nevertheless, it is willing to undertake the sale of the patent on a commission basis. This tempting offer is not without its results. With pardonable eagerness the inventor replies, giving as full a description of his invention as he can, and an account of its merits as he sees them. Then comes a comparatively harmless letter from the firm of brokers, holding out a most alluring bait to the inventor. The firm has read the inventor's communication "with interest." It believes that the device could be developed in certain foreign countries, and graciously offers its services in selling patents in those countries. It truthfully confesses with disarming frankness that the disposal of the patents must be effected partly at the inventor's expense. But the firm is generous. For a certain commission to be paid on sales actually made, it magnanimously undertakes to share with the inventor part of the expense incurred in taking out European patents. How much the firm is willing to contribute toward the cost of the patents is stated in terms the liberality of which must seem to the inventor above reproach. The inventor is requested to pay the remaining sum. After a display of such touching generosity, how can he refuse? His invention is undoubtedly valuable. His doubts, if he ever had any, have vanished. Why the offer to share the expense of foreign patents if the invention were worthless?

Curiously enough the countries stipulated by the firm are those in which patent fees are low and those in which the languages the people are considerate enough to speak are so exactly alike, that only one specification need be drawn up. If the offer to share the patent expense is critically examined, it will be found that the share which the inventor is required to pay not only meets the actual expenses but leaves a liberal profit to the firm. We have called attention to this scheme for the reason that it has been so cunningly devised that an inventor unpractised in the ways of promoters will surely be ensnared, and for the reason that we have received a great number of letters from inventors upon this matter we feel it our duty to explain the system in all its workings. The worst feature of the whole scheme is the fact that because of the prior publication of the U. S. patent the foreign patents so secured will be void and the money spent in securing them might with better advantage be used in lighting the fire.

Working of Patent Acts.

Prof. R. H. Thurston in a recent number of Science discusses the patent laws of various countries in a manner which is both interesting and instructive. Probably no single influence, says Prof. Thurston, has had more to do with the advancement of the industrial interests of the United States and with the resultant prosperity of the nation than the Patent Acts. They were fundamental elements of primary legislation on the organization of the government, and Hamilton and other of those early statesmen to whom so much is due initiated a patent system as a first and most effective instrument in the development of manufactures in a country previously deprived of those industries through the repressive legislation of the mother country. The patent system of the United States became a model for the world, and, very slowly, but none the least steadily, other nations, one by one, took up its most distinctive methods. The United States promptly secured a lead, as great in its field as has become, meantime, that of Germany in industrial education. During late years, the patent system of Great Britain, formerly exceedingly crude, costly to the inventor and

the nation, and in all ways unsatisfactory to those who were unselfishly and honestly interested in the advancement of British trade, has been greatly modernized and liberalized; but it has not, even yet, been made fairly comparable with that of the United States.

An important commission, appointed by the Board of Trade and composed of some of the ablest experts and best known men in the kingdom, has just reported upon its operation, and it is perhaps possible to deduce from this report conclusions that may be useful in promoting the still further improvement of our own system, of late years reduced rather than improved in its efficiency by legislation and by official interpretations of doubtful provisions of law. After examining into the operation of the British patent laws and receiving the testimony of officials of the patent office, of referees, litigants, users of patented articles, patent agents and experts, the commission reported.

It was found that, of patents issued, only 57.6 per cent were actually novel and unanticipated by previous invention. Nearly 7 per cent had been fully anticipated in all details; 35 per cent had been partially anticipated; a few were claims on old devices and others described no method of manufacture. Forty-two per cent had thus been anticipated, in whole or in part.

The commission states its opinion that the granting of invalid patents is thus a very serious evil and one which should be at once abolished. A method of examination like that of the United States Patent Office is recommended, and a scrupulous system of detection and elimination of anticipated claims. It recommends, however, a curious limitation: That "the publication of an invention in specifications of letters patent granted in the United Kingdom dated fifty years or more previous to the date of the application, or in a provisional application, of any date, of the kind before mentioned, shall not in itself be deemed an anticipation of the invention."

It is recommended that time, not to exceed two months (one year's time is given in the United States Patent Office) should be allowed for amendment of a claim, and that a system of appeal, very like that long in operation in the United States, be allowed in case of rejection. This provision, restricting amendment to a period of two months, if it had been adhered to in the United States, would have prevented the litigation now in progress over the Berliner and other patents in this country, and would have saved a vast amount of expense to the litigants and insured a larger employment of inventions in improvement of existing practice and would have saved enormous injury to patentees and to the nation.

This British commission also considers the matter of compulsory licenses. It often happens, in that country, as in this, that valuable patents are purchased by wealthy and powerful interests and simply held, unused, to prevent their competition with the holders and to evade that serious difficulty often met with in the compulsory replacement of existing and fairly satisfactory apparatus by the improved device. Every great corporation and many smaller organizations hold patents thus concealed and out of use, until their own special interests make it desirable to put them into use; and the public is thus defrauded of all that advantage, meantime, which is its proper compensation for the establishment and maintenance of a patent system. The British patent laws have, for nearly twenty years, provided, as have not those of the United States, against this abuse. It is made the duty of the proper officials to grant an order compelling the holder of the patent to grant licenses on terms to be adjudged fair and equitable by the proper government officials. This provision has been subject to some criticism in its details, and the commission advises its amendment and improvement; adhering, however, to the underlying principle that the public should not lose its rights or the advantage assumed to be gained by it when providing the legal forms of a patent system and of protection to the inventor. It is recommended that the "High Court" shall receive and consider complaints reciting the facts, if they so prove, that the applicant is interested in the invention, that the reasonable requirements of the public have not been satisfied, by reason of the refusal or neglect of the patentee to work, or to grant licenses to work, the patent, and that the court, if the assertions of the claimant appear to be justified by the facts, shall make an order conferring a license upon the applicant on terms found by the court itself to be just and reasonable.

Reciprocity in patent matters is advised as between Great Britain and other countries prepared to offer similar facilities and protection for the foreign patentee. It would be an excellent reform could a real international reciprocity, based on the best practice of the United States, be arranged to include Germany, which country has illustrated some very objectionable and inequitable patent law methods.

Should the recommendations of the commission be accepted and the British office be reconstructed as proposed, it will provide as practically satisfactory a

system of protection as does that of the United States; changing thus from one of the most useless to one of the best of patent systems of the time. It will be interesting to note whether Great Britain, after all, will ultimately provide a more equitable system in regard to purposely delayed issues and unworked patents—the two main defects and abuses of the existing law of the United States—than our "pioneer" code now offers. It will be most discreditable if our committees of Congress and our Commissioners of Patents do not initiate, and Congress perfect remedies for these two radical and inexcusable defects in our own patent law.

The Inventor of the Thermometer.

Like many another invention, before and after it, the origin of the thermometer is rather nebulous, although the instrument has hardly been known for more than 300 years. As a general rule this invention is ascribed to Cornelius Drebbel, who lived in Alkmaar, in North Holland. The date of the invention is usually given as 1638. Viviani and Castelli have refuted Drebbel's claim and ascribed the invention of the thermometer to Galileo, giving the year of the invention as 1597. In a recent monograph published by H. C. Bolton, the results of Viviani and Castelli's investigations are confirmed, with the exception, however, that 1592 is fixed upon as the date of invention. The instrument which Galileo invented seems to have been an air thermometer; at all events such is the reasonable conclusion to be drawn from a description published by P. Castelli in 1638. A pupil of Galileo, Sagredo, mentions a device for measuring heat as early as 1613 and ascribes its invention to Galileo. Sanctorius, a contemporary of Galileo's, speaks of the thermometer "as a very old instrument." The thermometer received its present form at the suggestion of the Accademia del Cimento of Florence; and Grand Duke Ferdinand II. used such an instrument in 1641 in carrying out experiments in incubation. At that time various cities in Italy had become more or less familiar with the new device for measuring heat. In 1662 Robert Boyle exhibited a thermometer to the Royal Society. Hooke was the first to determine the zero point of the scale so that it could always be ascertained, the standard used being the melting point of ice. The second fixed point was determined by C. Rinaldini in 1694. The use of mercury as a thermometric fluid was known to the Florentine academicians. The most accurate mercury thermometers were first made in 1714 by Fahrenheit at Danzig. In spite of the manifest inadequacy of the Fahrenheit scale, it is still used to this very day in England and North America.

Electrical Invention.

In reply to those critics of the progress of electricity who have reached the melancholy conclusion that invention is on the wane, that the great progressive steps in the development of electricity have all been taken, leaving to inventors of this generation only the insignificant opportunity of improving upon the work of their predecessors, our contemporary, The Electrical Review, asserts that never before in the history of the electrical arts has the activity of inventors resulted in such an outpouring of patents and such a bringing to the surface of new devices and new ideas as at present. It is true that we have failed to develop anything very revolutionary in the last six months, but the 20th century has already started in with a notable record in electrical invention. Since the beginning of the year a number of patents have been granted by the United States Patent Office, which seem in the light of contemporary observation, at least, to cover masterpieces of invention. It is necessary to mention only the Nernst lamp, the Pupin telephone circuit and the Edison storage battery. With an increase of the field of operations for electricity the prospects for radically new inventions become more and more promising. Every new development brings with it a source of new possibilities and points the way to new directions of endeavor.

Agricultural Implements Wanted for an Agricultural Museum in Cuba.

The Department of Agriculture is in receipt of a communication from Mr. R. J. Alfonso, agronomical engineer in Cuba, and secretary of the provincial "Junta" of agriculture, commerce, and industries of the Province of Puerto Principe, in which he expresses his desire to be brought in contact with some of the leading manufacturers of agricultural implements in the United States in the hope that some of them may be induced to contribute to the agricultural museum his association is in process of organizing, some of their implements, or models of the same. He expresses the hope that their enterprise and liberality in this respect would not go unrewarded, as such exhibits would serve a very useful purpose in the way of advertising their manufactures. Mr. Alfonso's address is Puerto Principe, Cuba.