THE PRODUCT-PROTECTION OF CHEMICAL COMPOUNDS.*

BY J. W. ENGLAND.

The crux of the situation with reference to the patent-protection of chemical compounds, more particularly the synthetics, in this country, is to be found in our system of *product-protection*. We not only permit the copyrighting of the title of a chemical compound and the patenting of the process for making it, but —and this is the vital point—we permit the first inventor to patent the product *as such* and thereby estop all future inventors from marketing the same product no matter how made.

It is hardly necessary, at this time, to cite examples of the thousands of synthetical compounds that are made in Germany and process-patented and productpatented in this country, but, for illustration, we shall call one of these "X," and it is a widely used compound. Prior to the European conflict "X" sold in this country for about 40 or 50 cents an ounce (wholesale) while the price in London was equivalent to about 8 or 10 cents an ounce. To-day, war conditions prevail and a comparison of prices cannot be made.

Personally, I have no criticism to make of the "X" owners for exacting the highest price possible they can of the American public, even if this price is four times as much as that asked for the same compound in Great Britain. They are clearly within their legal rights in so doing. But I do blame the American public for not demanding a revision of the patent laws insofar, at least, as relates to the product-protection of chemical compounds, because the law prevents the growth and development of an American industry.

"X" cannot be marketed and sold in this country except by the owners of the patent, who have product-patented the compound, even if it be made by an entirely new and original process of manufacture and the process has been patented; this has been decided by the Federal Courts.

But in Germany for example, "product patents" are not recognized, and "X" can be made by any other process than that used originally for making it and can be marketed.

Under the U. S. patent laws no one but the owners of "X" can market and sell it in this country, and as these owners alone have the monopoly of sale, they can fix the selling price. American manufacturers generally might make this compound by new and original processes, but under the consistent rulings of our courts they could not sell the product they made in this country; they could make and sell it in Germany.

The U. S. Patent Laws as applied to chemical compounds are in need of radical revision if the growth of the organic chemical industry of this country is to be promoted. These laws have not been revised for years and are distinctly inferior in their protection of native industries to the patent laws of foreign countries.

The patent laws of our country should be amended to provide:

^{*} Read before the Philadelphia Branch, American Pharmaceutical Association, January 17, 1917.

(1) That no grant of American patents be made to citizens of foreign nations unless the foreign nation represented grants similar patents to American citizens.

(2) That no grant of American patents to citizens of foreign nations be made except by agreement that the patented invention be manufactured in this country and within two years of date of letters-patent.

(3) That all patent grants be limited to processes, machinery and apparatus, leaving the products themselves uncontrolled.

In other words, our system of patenting "products" should be abolished or limited. It should be remembered that a chemical compound differs fundamentally from a piece of machinery in that it has an exclusive individuality. There are no two of a kind. A piece of machinery has individuality, also, but it is not exclusive. Any number of pieces of machinery may be devised to perform the same function. Hence it would seem reasonable that the inventor of a process patent of a compound should have product-protection, but the door should not be closed to new inveptions. The Commissioner of Patents should be authorized to "suspend" the life of a "product patent" if it can be demonstrated that the product can be made by an entirely new and original process, and it might be desirable to provide, also, that the inventor of the new process shall pay the original inventor an equitable royalty (to be determined by the Commissioner of Patents) so long as the "life" of the *process patent* of the original invention lasts. In this way, the original inventor could lose no property rights, if he has any.

(4) That capital in the development of new inventions relating to synthetic chemical compounds be protected as provided in the German Patent Law, which reads as follows:

"If the invention relates to a process for the production of a new substance, all substances of like nature are considered as having been made by the patented process until proof to the contrary is given." This means that the burden of proof legally is upon the new inventor.

(5) That the copyright, patent and trademark laws be amended to specifically state that the generic titles of medicines are not copyrightable or patentable. Circular No. 19 issued by the Librarian of Congress gives copyright information, but it is not a part of the law. It reads as follows:

"Copyright laws contain no provisions under which protection can be obtained under a mere name or title. Entry can not, therefore, be made in the Copyright Office for coined names; names of articles of manufacture; names of games or puzzles; names of substances; names of products or names of medicines."

(6) That the use of trademarks for the purpose of distinguishing between "brands" of articles of commerce is under proper conditions, both legitimate and commendable, as it promotes superiority in the manufacture of products of a like kind.

Doubtless, some improvement could be had by a better enforcement of existing laws.

The business of the U. S. Patent Office is ably and skillfully handled, but it is largely governed, as it must be, by the decisions of courts of law and by precedent.

The determination of patent questions is a technical and scientific matter, and the greatest obstacle in the way of patent reform is the ignorance of the legal fraternity, including both the Bench and the Bar, in the sciences of medicine, pharmacy and chemistry and the arts or technical applications of the same.

Take the Adrenalin Case for example. The Court frankly confessed itself incompetent to pass a correct judgment, but as the law provided no way whereby the Court could call on expert advice, it was forced to do the best it could.

Unquestionably, when the issues of a patent case bear upon technical or scientific knowledge and judgment, as do many patent cases, the law should provide a method, both for legal and administrative work, whereby a technical expert or referee or board of referees, could be called upon to examine the evidence and report findings of facts, at the expense of the Federal Government. The Government employs lawyers to pass upon technical questions of law; why should it not employ technical referees to assist the court to pass judgment upon questions beyond the ability of court and jury to properly understand?

If this were done, the technical and scientific defects of patent legislation would be disclosed and remedial measures could be readily adopted.

A DISCUSSION OF THE PAIGE BILL, RELATING TO A PROPOSED REVISION OF THE PATENT LAW.*

BY F. E. STEWART.

In the House of Representatives, February 21, 1916, Mr. Paige of Massachusetts introduced a bill for the revision of the patent law, which was referred to the Committee on Patents and ordered to be printed. This bill is known as H. R. 11967. It is a bill to amend Sections 4886 and 4887 of the Revised Statutes relating to patents. It provides:

(r) That no patent shall be granted on any application filed subsequent to the passage of this act upon any drug, medicine, medicinal chemical, coal-tar dyes or colors, or the dyes obtained from alizarin, anthracene, carbazol, and indigo, except insofar as the same relates to a definite process for the preparation of said drug, medicine, medicinal chemical, coal-tar dyes or colors, or dyes obtained from alizarin, anthracene, carbazol, and indigo.

(2) That in case any drug, medicine, medicinal chemical, coal-tar dyes or colors or dyes obtained from alizarin, anthracene, carbazol, and indigo, on which a patent for a definite process for the preparation thereof has been granted on any application filed subsequent to the passage of this Act is not manufactured in the United States by or under authority of the patentee within two years of the granting of said patent, and after the commencement of said manufacture the same is not continuously carried on in the United States in such a manner that any persons desiring to use the article may obtain it from a manufacturing establishment in the United States as against any citizen of the United States who may import such drug, medicine, medicinal chemical, coal-tar dyes or colors, or dyes obtained from alizarin, anthracene, carbazol, and indigo into the United States, or who may produce or manufacture the same in the United States or who may handle for sale or use such article so imported or manufactured.

Now what do these provisions mean in common language?

Briefly, they mean that if the bill is passed, no patents can be granted in the future for the kinds of chemical products mentioned in the bill, but patents for processes for producing the same may be granted, and that the patentee of a new process for manufacturing any one of the said kinds of chemicals, shall manufacture

^{*} Read before the Philadelphia Branch, A. Ph. A., January 17, 1917.