of a protected product would act as a brake on further scientific research which, in view of the right, could not lead to the development of new manufacturing processes independently of the wishes of the patentee of the new product. For example, where the manufacturing process

German Empire.—Law of 1877.

No patents granted for chemical products; but processes for manufacturing such products patentable.

Germany (Federal Republic).—Law of July 18, 1953.

Substances prepared by chemical processes are not patentable but specific processes for their manufacture are patentable—alloys are treated outside the class of chemical products and are patentable.

Germany (Democratic Republic).—Patent Law of 6th September 1950.

Art. 1—Patents for substances of chemical origin not granted but special processes of manufacture patentable.

Holland.—Patent Law of 7th November 1910.

Part I—Art. 4—Patents are not granted for chemical products; alloys, glass and cement are not patentable. Processes for producing such products are allowed.

Hungary.—Patent Law of July 1895, as subsequently amended.

Articles produced by chemical processes are not patentable though processes themselves might be patentable.

Italy.—Law of April 1941.

Product claims are permitted for chemical inventions.

Japan.—Basic Law No. 96 of 1921 as subsequently amended.

Substances manufactured by chemical processes are not patentable but the processes for their manufacture are patentable.

Mexico.—Law of 1st January 1943.

Art. 6(5)—Chemical products *per se* not patentable but new processes used in obtaining these products are patentable.

Norway.—Act of 1910 with subsequent amendments.

The Norwegian Act excludes from patentability inventions relating to chemical compounds although processes themselves are patentable.

Poland.—Act of March 1928 as subsequently amended.

Claims for products obtained by chemical processes are not patentable but special processes used to obtain such products are patentable.

Spain.—Law of July 26, 1929.

Under Art. 48(2) chemical products are not patentable as such. However, processes, apparatus or machine for producing such products are patentable.

Sweden.—Act of 1884 as subsequently amended.

Inventions relating to chemical compounds are not patentable but special processes for manufacturing them are patentable.

developed by the inventor of the new product proved to be uneconomical, the patent of invention granted in respect of the product would prevent the exploitation of a better manufacturing process invented by another person.

For the above reasons, we are not in favour of the proposed new Article 4 *quater*".

64. The observation of the Hungarian Government to this proposal was on the same lines—

"* * * We do not agree with the proposal concerning the patentability of chemical products. If this proposal were accepted it would hinder technical progress, because the protection of the product itself might restrict the work of inventors in the future".

65. The Government of Yugoslavia observed—

"* * * the problem of the patentability of chemical products as such and the protection of the process for their production should be assessed from the point of view of the economic interest of each State of the Union, and it clearly follows that the decision on this question and its regulation belong to the domain of national law.

Apart from that, we are in no way convinced that, in accepting the principle of patentability of chemical products, one would be contributing to industrial development and to work in the field of scientific research; on the contrary, we think that the protection granted to these products as such would present, not only a brake upon, but an obstacle to their production by new processes."

66. Before however passing from this topic, it is necessary to mention one matter. According to the German law and the law of most of the other countries—barring U.S.A. and a few others—a patent for a process affords protection to the patentee not merely against the use of the process by others but also against the sale of the products produced by such process.

History of the Law relating to chemical Patents in the U.K.

67. Since a reference has been made to the U.K. law on the subject and Clause 3(d) in the Bill is derived from Section 38A(1) of the

Switzerland.—Patents Act of 1954.

Chap. I, Part I: Sec. 2—Patents shall be refused for the following— *** Inventions of chemical substances are unpatentable but chemical processes for obtaining them are patentable.

U.S.S.R.—Soviet Patent Law of March 5, 1941.

Chapter I: Para 2: Author's certificate and patents are not issued for any chemically obtained products but only for new methods of preparing these products.

Yugoslavia.—Ordinance of November 1920 & Law of December, 1948.

Substances produced by chemical means are not patentable but new processes for their manufacture may be patented.

U.K. Patents Acts, 1907-46, it would be useful to advert to the history of the law in relation to the patenting of chemical substances in that country.

68. In the United Kingdom, the law as to patentability of chemical products was for a longwhile a matter of great uncertainty. The test of patentability in that country was whether the invention was a "manner of new manufacture" within the meaning of the Statute of Monopolies. For over two centuries since the passing of that statute, claims to products *per se* were considered not allowable, but as it appears that no applicant had sought a patent for a product during the period, there was no definite decision on the question. Terrell in the 5th Edition of his work on Patents (1909) summed up the law as regards this point thus—

> "* * * Doubts have been expressed as to whether a patent can be granted for a new product irrespective of the manner in which it had been brought into existence. It is submitted that such a grant would be wholly invalid, since it would not be for a manufacture at all. For example, a new metal might be smelted from some well-known mineral, which metal might possess extraordinary qualities, and become indispensable. A valid patent could be obtained for the process of smelting, if novel in itself, which would probably receive a wide construction so as to cover any substantially similar process. But if some one discovered a vein of the metal in a pure state requiring no smelting, the person who had actually first discovered the metal, and patented the process of smelting, could not have a patent to prevent the owner of the vein from selling the produce of his mine. The same remarks apply to a chemical product".

There were, however, some observations which sounded the other way—see for instance the speech of Lord Davey in the *Acetylene Illuminating Coy's case* (22 R.P.C. 145 at 153)—but these were only by way of *obiter* and were also expressly dissented from in later judgments of the House of Lords (see per *Lord Shaw in British Thomson-Houston Co. Ltd.* vs. *Charlesworth, Peebles Co.* 42 R.P.C. 180 at 207).

69. This was the condition of the law or rather the understanding among the lawyers, when the Patents Amendments Acts of 1902 and the consolidating Patents and Designs Act of 1907 were passed. Those enactments were, as I shall be explaining later, passed to meet the threat of German competition to Britain's industry, particularly in the chemical field. These enactments made provision for the compulsory licensing of patents, and for the revocation of patents for non-working. No attempt was, however, then made to make any statutory changes in the law regarding the patentability of chemical inventions presumably because it was assumed that the law in the U.K. did not differ very much from the law in Germany on that point. In this connection it is necessary to bear in mind that from a very early date, it was ruled authoritatively that a patent for a process protected not merely the use of that process but also the sale of the product made by that process. As already stated this was

expressly provided in the German Patents Law of 1877 and this was copied in the law of several other countries, but whether or not there was a specific provision to that effect in the statute, the law was held to offer that protection. This had been held to be the law in England from as early as 1835 (*Minter* v. *Williams*, 4 A. & E. 251). In *Elmslie* v. *Boursier* (1869 L.R. 9 Eq. 217), which was the first case in which the point was seriously argued and decided, James V. C. rested the rule on the rights conferred on the patentee by the Letters Patent, and stated,

> "The obtaining from abroad and selling in this country an article manufactured according to the specification of a patent is a violation of the privileges granted by the Letters Patent".

This was expanded by Kerry C. B. in *Wright* v. *Hitchcock* in upholding the claim of the Patentee—

> "* * * When a man has patented an invention another might merely crossing the channel and manufacturing abroad and selling in London.....articles made by the patented process wholly deprive the patentee of the benefit of his invention" (Per Kelly C. B. in *Wright* v. *Hitchcock*, 1870 L.R. 5 Ex. 37).

And, in *Von Heyden* v. *Neustadt* [(1880) 14 C.D. 230], the Court of Appeal, whose judgment was delivered by James L.J., affirmed *Elmslie* v. *Boursier*. The headnote of the report of this case runs—

> 'Where a patent has been granted in England for a process for producing more cheaply a chemical product which was previously known, the importation and sale in England of this substance made abroad according to the patented process is an infringement of the patent".

70. There is, however, all the difference between the grant of a patent for a product and the grant of a patent for a process—even though the process patent conferred an exclusive right on the patentee to vend the product made by the patented process. In the latter case, the process has to possess the patentable characteristics of novelty and subject matter and therefore, as pointed out earlier, the grant of a process patent does not hinder the evolution of new processes for producing the same product, subject, however, to the doctrine of chemical analogues.

71. The judgment of Lord Davey in the *Acetylene Case* (22 R.P.C. 145) in which appeared an obiter which favoured the view that products produced by chemical process could be a "manner of new manufacture" provided of course the product was new was rendered in 1905, and within a decade thereafter came the first World War. Germany was no doubt defeated but her industrial potential was by no means shattered. The result was that the fear of German penetration in English industry, particularly the chemical industry, by means of patents owned by German nationals did not disappear.

U.K. Amendment Act of 1919

72. Early in 1917, a committee known as the Law Amendment Committee was constituted under the presidency of Lord Parker to

suggest a reform of the British Patent law so as to strengthen it against this danger. The Committee's recommendations resulted in the Patents Bill of 1917, which, however, though introduced in the House of Commons, was not proceeded with owing to the pressure of other business in the House.

73. A Bill, in terms almost identical with the lapsed Bill of 1917, was introduced into the House of Commons in 1919 and this ultimately became the Patents Amendment Act of 1919, which received Royal assent at the end of that year.

74. The major amendments effected by this legislation included (1) an expansion of the grounds on which compulsory licences could be obtained, (2) special provisions dealing with the patentability of inventions relating to articles of food and medicine and for the grant of compulsory licences for working such patents, and (3) special provisions regarding patents for inventions relating to chemical products. I shall be referring in some detail to the first two matters later, but what is of relevance to the present discussion is the last one. The law enacted in regard to patentability of chemical inventions was contained in Section 11 of the Amending Act which introduced Section 38A(1) into the Patents and Designs Act, 1907, reading as follows:—

> "38A. (1) In the case of inventions relating to substances prepared or produced by chemical processes.....the specification shall not include claims for the substance itself, except when prepared or produced by the special methods or processes of manufacture described and claimed or by their obvious chemical equivalents:
>
> Provided that, in an action for infringement of a patent where the invention relates to the production of a new substance, any substance of the same chemical composition and constitution shall in the absence of proof to the contrary be deemed to have been produced by the patented process."

75. In the notes on the clauses of the Bill prepared by the Board of Trade, the purpose of this provision was explained thus—

> "This clause relates to chemical products and substances intended for food or medicine and confines the patentee in his specification to claims for what he has actually invented, namely, the substance as produced by the process he has discovered; and not the substance generally by whatever process it may be made. This amendment will bring the law of England into greater agreement with the law of the majority of foreign countries (including Germany) and prevent our giving a wider protection to foreign chemists than our own chemists receive.
>
> It further provides for the grant of licences in respect of inventions for the production of food or medicine in order to give the public the benefit of such inventions, and prevent monopoly".

76. Lord Parker, however, who is stated to have actually drafted the Bill, explained as follows the origin of this provision to clarify the law. Addressing the Institute of Patent Agents in January 1918, the learned Lord explained the purpose of the corresponding clause in the infructuous Bill of 1917 in these terms—

> "There was an old controversy as to whether one could get a patent for a process and at the same time for the product of the process. He had always maintained, in such discussions on Patent law as he had taken part in, during the course of his professional career, that one could not, but he knew there were other people who took a different view. In the case of a chemical patent for a drug which might be represented by a chemical formula, the patentee would describe the process and the formula, and if it was new, there was no doubt he could get a patent for the process. But could he get for the product? The product might be such that another man by another and absolutely different process might evolve the same product, and if an individual could get a patent for the product he would have a monopoly of that product, and no one else could make it even by quite different means which might be equally ingenious and beneficial to the public. It was an open question whether in circumstances of that sort a patent could be obtained for the product as well as for the process".

Section 38A of the U.K. Act, 1919 construed

77. The origin of the clause and its terms were thus due to two circumstances: (1) To clarify the law and remove the uncertainties that surrounded the subject of patents for chemical substances in a manner which would not be much of a departure from the law as generally accepted before that date;

(2) To approximate the law to that which prevailed in Germany. The granting of patents for products *per se* would have resulted in an advantage to the German chemists for it would be mainly they that would have benefited from the extended patentability. Notwithstanding, therefore, the somewhat complex phraseology employed in Section 38A(1), the intention therefore was that a chemical invention in order to qualify for patent protection should be an 'invention' as defined in the Act, i.e., should possess novelty and subject matter in the 'process' by which the product was obtained.

78. This was achieved by the statutory requirement that a claim to the product would be allowed not *per se* but only "when prepared or produced by the special methods or processes of manufacture *described* and *claimed*". These words were explained by Sir Ernest Pollock, S.G. (later Lord Hanworth, M.R.) in disposing of an appeal against an order of the Comptroller refusing an application in the following passage:—

> "What is the meaning to be placed upon the word "special" in the sub-section? It is clear to my mind that it does not merely mean "specified in the specification". The identity of the method or process referred to with what is contained

in the specification is sufficiently designated by the word "described". Nor do I think that the word "special" indicates, as has been suggested, some particular treatment which would not be effective in the absence of special directions. The specification—if it is to be of any service —must always contain directions which are to be followed with precision. In my judgment the word "special" is introduced, in addition to the word "described", in order to connote that the particular method or process set out in the specification must contain the essentials of a valid patent—novelty, a manner of new manufacture—a process which produces by its own chemical reaction a new substance. It must be a method, or process, which has such attributes that it is the proper subject of a claim for letters patent, one that has some intrinsic characteristics which are the invention of the inventor and for which a patent may be properly and legitimately claimed and granted". (*M's application*, 39 R.P.C. 261 at 262).

79. This interpretation was expressly affirmed by him sitting in the Court of Appeal in *Sharp and Dohme Inc.* v. *Boots Pure Drug Company Limited*. (1928—45 R.P.C. 153) where he said (p. 175)—

"* * * Further consideration of the word "special" and of the proviso to the section confirms my opinion as to the interpretation of the section which I gave when Solicitor-General. [See M's Application (1922) 39 R.P.C. 261]. The section was intended to give the security of a patent to substances in respect of which a method or process was described in the specification, "that has some intrinsic characteristics which are the invention of the inventor and for which a patent may be properly and legitimately claimed and granted".

80. The scope of Section 38A was considered also by Sir Thomas Inskip, S.G. in N.V.I's Application (42 R.P.C. 503 at 504), where he said: "It is well known that it was designed to prevent the appropriation by a patentee of certain substances in such a way as to preclude other explorers in the same field from devising improvements in the preparation or the quality of the substance in question. The terms of the sub-section which I have quoted prohibit claims for the substance itself except within strict limitations". In a later passage (p. 505) he stated: "The distinction between process claims and product claims may be a fine one and difficult to draw, but in my opinion it is one that must be remembered. Section 38A (1), is not, as I read it, designed to prohibit or restrict bare process claims, and if every claim for a process were to be regarded as a claim for a substance prepared or produced by the process claimed, the scope of Section 38A (1), would be unduly extended".

Sargant Committee Report and the U.K. Amending Act of 1932

81. The year 1931 was a year of great depression which was reflected in a fall in the number of applications for patents in the United Kingdom—it fell by over 3000 compared to 1930. There was

also the example of the U.S.A. The meteoric rise of the American Chemical industry dates from the end of the First World War when it was released from the deadening effect of the German owned patents in that field being dealt with as enemy property. As already mentioned the U.S.A. granted patents to chemical products *per se*. The impact of the advance of America together with the feeling that Britain could hold its own against German invention were factors that favoured the grant of a more extended monopoly. More than all Sargant L.J. had in 1928 in the *Sharp and Dohme case* (45 R.P.C. 153—I have quoted earlier a passage from the judgment of Hanworth M.R.) expressed himself thus as to the meaning of Section 38A(1):—

"It would seem, on principle, that, in the case of a patent for a substance, just as much as in that of any other patent, there must be an element, a 'scintilla', of invention in connection with the process and the material, *at any rate, in combination* and this would appear to be in accordance with the implications of Section 38A." (The italics are mine).

These words meant that if the product was new, the process need not possess the scintilla of invention *viz.*, novelty and patentable subject-matter and that a claim for a new product as made by the process described might be patented even though the process did not constitute an invention.

82. A Departmental Committee to suggest desirable improvements to the Patents and Designs Act was appointed in 1929 under the Chairmanship of Sir Charles Sargant. On the report of this Committee (which submitted its report in 1931), the Patents and Designs Act, 1907 was amended by an Amending Act of 1932. In their report the Committee said:

"Prior to the Act of 1919, it was customary for British specifications dealing "with the manufacture of new chemical substances to include claims for the substances themselves independently of the actual process of manufacture. And, though the weight of authority may have been against the validity of such claims, there was not any reported decision to that effect and the subject was not free from doubts, which it was very desirable to remove, particularly in view of the numerous claims of this class made in the British specifications of German inventions in relation to dye-stuffs".

* * * *

"Evidence was given to us that, although the provisions of the section have in fact been of considerable value in encouraging the development of British Chemical industry, difficulties have arisen from the interpretation placed in a decision (*In the matter of M's Application for a patent*— 39 R.P.C. 261) of the Law Officer on the word 'special' in

the phrase "the special methods or processes of manufacture'".

* * * *

"It was submitted to us that such a limitation was not contemplated by the framers of Section 38A, that the ambiguous wording of the section has involved considerable unnecessary expense to applicants for patent, and that the presence of the word 'special' has led in some cases to the refusal of patents for inventions for the production of new substances, when such substances were produced by processes which might be said to contain no features of substantial novelty in themselves. The unofficial evidence on this subject was that the difficulty would be overcome, and the sub-section cured, by excision of the word 'special' or "alternatively (though this was not quite so acceptable), by the substitution for it of the word 'particular'". (paras 176, 179 and 180).

It would be seen that if the Board of Trade explained the object of the amendment introduced by Section 11 of the Amending Act of 1919 which inserted Section 38A(1), in the Patents and Designs Act, 1907 (*vide* para. 75 *ante*) was to achieve an approximation to the law in relation to chemical patents in Germany, the word "special" was designedly used to designate novelty and an inventive step in the process. But as I said earlier, British industry was considered to have sufficiently advanced by 1931 to justify a more extended patent grant.

This recommendation of the Sargant Committee was accepted and Section 38A(1), was amended so as thereafter to read:

"38A(1). In the case of inventions relating to substances prepared or produced by chemical processes, the specification shall not include claims for the substance itself, except when prepared or produced by the methods or processes of manufacture particularly described and ascertained or by their obvious chemical equivalents."

83. The result of the deletion of the words "special" and "claimed" and their substitution by the words "particularly described" was that thereafter a claim for a product was not required to be based on a special process claimed and that it was sufficient if the method of preparing or producing the product was merely described in the specification. It was not required that the method described should be new or show an element of invention. In other words, protection could be had for a new product even though the method described for its production was not "a manner of new manufacture". The description of the method in the specification was thus reduced to a formality and it became the practice in drawing up a specification to cover all known and possible alternative processes for obtaining the product so that in effect, after 1932, the section practically recognised the patentability of a product *per se*, if it was new.

Removal of the limitation as to product claim recommended by the Swan Committee.

84. The effect of this provision in the context of maintaining the advance of the United Kingdom in the field of chemical industry was the subject of consideration by the Swan Committee. This Committee recommended the deletion of section 38A(1), and suggested that no distinction need be made between products which were the result of chemical processes and of other processes and that in both cases claims for products should be patentable *per se*. Several arguments were urged before the Committee for this change in the law. The first was that in the case of a new substance, the real invention consisted in the production of the substance, the process by which it was produced being in most cases only those which were well known. If the novelty consisted in the product, the argument ran, there was no point in protecting the novel substance only in conjunction with a process which was old and well-known.

85. It was pointed out that if a claim to a new product was admissible, even though it was obtained by a process which was old and well known, there was no meaning in the law requiring the describing of the well known process as a condition of the allowance of the product claim.

86. The second objection was that the existence of this limitation was not of any real use since if all the well known methods of producing a product were described in the specification it would virtually amount to a claim for the substance itself particularly when taken in conjunction with the phrase "or its chemical equivalents" occurring in the sub-section.

87. Lastly, it was pointed out that the expression "obvious chemical equivalents" was vague and led to difficulties of interpretation and that taking into account the developments in the fields of physics and chemistry, there was considerable difficulty in defining what a "chemical process" was.

The Committee expressed themselves thus:

"We are impressed by the arguments which have been advanced in support of the proposal for removing this limitation on the claiming of new substances produced by chemical processes, and we recommend that this limitation be repealed."

88. The acceptance of this recommendation has resulted in the deletion of the provision in section 38A(1) from the U.K. Patents Act, 1949. The history of section 38A in the U.K. Act of 1907 to 1949 set out above should suffice to show that the form of claim introduced by the U.K. Act of 1919 was the result of a striving to express a compromise between the plausible interpretation of the expression 'manner of manufacture' in the U.K. Acts as including claims for chemical products and the German rule restricting chemical patents to process claims; on the other hand the U.K. Amendment Act of 1932 was a shift in the other direction being an approach though guarded to the American model of patents extending to claims for product *per se*, reflecting the progress made by the British Chemical Industry

in the inter-war period. No useful purpose will therefore be served by the adoption in the Indian Bill of a provision on the lines of section 38A of the U.K. Acts 1909—1946.

Practice of the Indian Patent office regarding patents for chemical products.

89. To appreciate the effect of amending the law as suggested in clause 3(d) of the Bill, it would be convenient to refer to the position as it exists under the Indian Patents and Designs Act, 1911. As "invention" is defined in section 2(8) of the Act to mean "any manner of new manufacture" the doubts expressed in the U.K. as regards the patentability of products *per se* to which I have already adverted would appear to surround this definition. The practice of the Indian Patent Office does not appear to have been uniform. Michel in his Supplement to "The Principal Patent Systems of the World" refers to a patent granted by the Indian office in which product claims were allowed, though a close examination of the particular specification shows that it is capable of being read as a claim to a product as made by a process described. I however understand from the Controller that in effect the Indian Patent practice proceeds on the basis of section 38A(1) of the U.K. Act of 1907 as amended in 1932. So that practically clause 3(d) of the Bill makes little or no change in the law save that what was merely a practice of the Patent Office is sought to be given statutory force.

90. As the Swan Committee pointed out, this form of claiming for new products, was in effect to render such products patentable *per se;* only the specification as regards the process had to be drafted so as to satisfy the statute, and that as many processes as could be thought of could be "described".

Recommendation for adoption in India; claims for chemical substances not to be patentable.

91. The question is whether such a system is desirable for adoption as part of the law of an under-developed country like India. In considering this, I have not omitted to take into account—

(1) the fact that a large number of those who answered the questionnaire issued by me, as well as those who forwarded memoranda to the Patents Enquiry Committee favoured a provision on the lines of section 38A(1) of the U.K. Act of 1907 and

(2) the sub-committee of the Pharmaceutical Development Council which met me at Madras, by a majority suggested the adoption of section 38A(1) of the U.K. Act particularly for pharmaceutical chemicals. In this connection I would only add that the few who answered my questionnaire and those who made representation to the Patents Enquiry Committee as well as the Pharmaceutical Development Council were not in favour of granting patents for products *per se* and considered that such a law would unduly hamper research in the country.

92. I have considered the matter with the utmost care and have reached the conclusion that the chemical and pharmaceutical industry of this country would be advanced and the tempo of research in that field would be promoted if the German system of permitting only process claims were adopted. In this connection I will recall the remarks of Dr. Van Ing as to the effect of the adoption of the German Patent Law of 1877 on German chemical industry. I would accordingly recommend that the relevant provision in clause 3 might run:

> "No patent shall after the commencement of the Act be granted in respect of inventions claiming substances produced by chemical processes including alloys but excluding glass."

with a proviso permitting the patenting of claims to processes. I have in my redraft of clause 3 and the notes to that clause endeavoured to explain the details of my recommendation.

93. Before however passing from this topic it is necessary to deal with an objection that has sometimes been raised to the expression "a substance produced by a chemical process" as too vague to be used in a statute and that this vagueness was itself a ground for the grant of patents for substances *per se*. It is true that the development of modern physics has somewhat blurred the borders between physics and chemistry but nevertheless there is no doubt that for all practical purposes the border does exist. The accepted view in modern chemistry is that it could not be predicated of a process that it is a chemical process, unless a chemical reaction takes place and a chemical reaction requires that a chemical individual or individuals should react so as to produce another chemical individual or other chemical individuals (see per Lord Evershed M.R. *Anglo Levy Patent*, 62 R.P.C. 97). I do not, therefore, consider that any confusion would be caused by the use of these words in the statute. There is, however, one matter which is required to be mentioned in this connection. In the case of alloys and glass, it is a matter of some doubt whether the processes by which they are produced might be termed as chemical processes. In several countries inventions relating to alloys and glass are treated as outside the general class of chemical compounds, *e.g.*, West Germany and Switzerland. On the other hand, in Holland for instance alloys are not excluded from the scope of the restrictive provision as to patenting of chemical products. Having regard to the present state of metallurgical industries in India and the urgent need for the development of this field of industrial activity, I consider that the law in relation to the patentability of alloys should be placed in the same position as that in regard to other chemical inventions of which it really forms a part. In regard to glass however, I see no objection to patents being granted for the product itself.

Patents for inventions relating to food or medicine; restrictions in other countries.

94. So far I have been dealing with patents for chemical substances regardless of the use to which these products could be put. The next matter to be considered is in relation to patents for articles of food and medicine. Barring the U.S.A. there are few countries in the world that do not have special provisions as regards the patentability of inventions in respect of articles of food and medicine or as to the licensing and working of patents in this class.

95. The patent laws of every country in Europe contain special restrictions on the patentability of articles of food and pharmaceutical products. The French law of 1844 which permitted the patenting of chemical products as such, however confined patents for articles of food and medicine to process claims. Belgium in its Patents law of 1854 adopted the French model. The German law of 1877 denied patents to articles of food, medicinal products, though processes for their preparations were patentable. The Swiss Law was recently amended in 1954 and under it inventions of medicine including medicinal mixtures and forms of medicine and inventions of food products are not patentable, but the processes for manufacturing medicine or food are patentable. The law in Sweden and in Spain is similar and so is the law in Japan. As I said earlier, in none of the countries of Europe are patents granted for product claims for articles of food or medicine and in a few (Denmark for articles of food and Italy under the law of 1957 for medicinal products) even claims for processes for producing them are unpatentable. For the law of these and other countries see the note below.[1]

96. In every country where its laws impose restrictions on the grant of patents in respect of chemical inventions by confining patentability to the invented processes, there is a similar or even greater restriction on the grant of patents to inventions in relation to articles of food and medicine. There is nothing surprising in this because most of the pharmaceutical preparations are the products of chemical processes. But what is more to the point is that even in a large number of countries in which *per se* product claims for chemical substances are allowed, the laws permit only claims for processes so far as articles of food and medicine are concerned.

Footnote[1].

Law relating to patentability of inventions for medicine and foodstuffs

Argentina.—Law of 1864 as subsequently amended. Medicines and pharmaceutical compositions including food, beverages are not patentable but processes for their preparation are patentable.

Austria.—Law of 1950. Articles serving for human nourishment, medicines and disinfectants not patentable. Processes for producing them are patentable.

Belgium.—Basic law—May 1854. Foodstuffs and medicines for men and animals not patentable but processes for their production patentable.

Chile.—Law of 1925 as subsequently amended. Art. 5—Beverages and foods for men or animals, all kinds of medicaments and pharmaceutical and medicinal preparations not patentable but processes for their preparation are patentable.

Czechoslovakia.—Patents Law No. 34 of 1957. Inventions relating to foodstuffs and medicaments not patentable but the processes for their production are patentable.

Denmark.—Patent Act of 1-9-1936 with subsequent amendments. Inventions of medicaments, articles of food and all edible, drinkable, smokable or such like articles which cannot be considered articles of food and which are usually consumed for the sake of pleasure and of processes in connection with the production of articles of food are not patentable but processes for the production of medicaments are patentable.

Egypt.—Law No. 132 of 1949.
Inventions relating to foodstuffs and pharmaceutical preparations are not patentable. The processes for these products however are patentable.

Finland.—Law of Patents, 1st Jan. 1944. Medicinal product claims are not patentable but processes for producing them are patentable.

France.—Basic law—5th July 1844.
Pharmaceutical compositions and remedies, vaccines, sera and biological products are not patentable but processes for producing the same are patentable (Art. 3). Foodstuffs however are patentable *per se*.

German Empire.—Law of 1877. Articles of food, medicine not patentable but processes for producing them patentable.

Germany (Federal Republic).—Law of July 18, 1953 as subsequently amended. Articles of food and for consumption whether for nourishment or enjoyment and medicines are not patentable but definite process for preparing them patentable.

Germany (Democratic Republic).—Art. 1(3) (Law of 6th December 1950). Inventions of victuals, luxury goods or medicaments are not patentable but special processes of manufacture are patentable.

Holland.—Patent Law of 7th November 1910. No special laws with regard to foodstuffs and medicines but as no product claims are allowed, the result is that only processes for producing food or medicine are patentable.

Hungary.—Patent Law of July 1895 as subsequently amended.
Medicines are not patentable, also inventions relating to food for men or animals are not patentable, but processes by which such articles are made are patentable.

Italy.—Law of April 1941. (Italian Patents Acts are governed by special laws.)
Under the law as prevailed till 1957, processes for the preparation of medicines were patentable though product claims were not allowed but since that date even the processes for the manufacture of medicines are not patentable.

Japan.—Basic law No. 96 of 1921 as subsequently amended. Food, drinks, stimulants or medicine or methods of prescriptions thereof are not patentable but processes for producing them are patentable. (Art. 3).

Mexico.—Law of 1st January 1943.
[Art. 6(5)]. Patent applications relating to food, drugs and medicines are not allowed by the Mexican Patent Law unless the products in question have been registered by the Mexican Board of Health. In so far as these articles of food etc. are made by chemical processes, the products would not be patentable and even for the process to be patented, registration of the Board of Health would be needed.

Norway.—Act of 1910 with subsequent amendments. The law prohibits the granting of patents to medicaments and foodstuffs *per se*. Inventions relating to processes for producing such articles are patentable.

Poland.—Act of March 1928 as subsequently amended. Claims for inventions relating to medicines or articles of food are not patentable but processes for obtaining the same are patentable.

History of the Law as to patents for food and drugs in the U.K.

97. In the U.K., when the Patents and Designs Amendment Act of 1919 introduced Section 38A(1) that sub-section contained the same restriction as to patenting of substances intended for food or medicine as applied to substances prepared or produced by chemical processes.

98. The origin of this provision in the U.K. Patents and Designs Amendment Act, 1919 was to implement an undertaking given to her allies in the World War I by Great Britain promising to bring the provisions of her Patent law into accord with what prevailed in laws of those countries—France, Belgium and Italy. Lord Parker in addressing the Chartered Institute of Patent Agents (I have already extracted another passage from this address), said:

> "....Some if not all of our Allies had in their Patent Laws provisions which excluded, at any rate in the case of medical products and food, patents for the product as well as the process. That clause was introduced in order to bring English law into line. . . . . There might be many objections to the form in which the clause was put, but that was its *raison d'tere*. In France, and he thought also in Italy, there were provisions which prevented an individual from getting a complete monopoly, at any rate with regard to articles of food and surgery, it being felt that they were so important to the State that in matters of that sort the inventor ought not to be benefited at the cost of the State. If the Institute could frame a clause which would be acceptable to themselves and would also meet the wishes of our allies in modifying our Patent law so as to bring it more into accord with theirs, he had no doubt it would be very useful."

A slightly different explanation of the origin of this provision was offered by the Sargant Committee.

> "During the War it became apparent that Great Britain was suffering from a lack of medicine and drugs, many of which were the subject of patent rights in this country. On the other hand, it was found that in many European countries (*e.g.* France, Germany, Switzerland) such substances were not capable of protection under the patent laws of those countries. In this state of things it was considered expedient to modify to some extent the monopoly consequent on the existence of patent rights in regard to such substances." (para 186).

99. Besides sub-section (2) of section 38A enacted special provisions for the grant of compulsory licences for such articles, the details of which I shall reserve for consideration a little later. The special provisions regarding the patentability of these "substances" underwent the same modification as the other "substances" included in section 38A (1) by the amendment effected by the U.K. Patents & Designs Amending Act, 1932 with however a provision denying patents for admixtures and processes for admixture of substances intended for food or medicine and finally when the restrictions on patenting of substances prepared or produced by chemical processes were removed by the U.K. Patents Act, 1949 the same rule was applied to articles of food and medicine. The only remnants of the previous law in respect of these substances were two: (1) the provision in section 41 of the U.K. Patents Act of 1949 regarding the grant of compulsory licences under patents for these inventions which was virtually a continuation of the provision in section 38A(2) as introduced in 1919; (2) the continuance of the ban on claims for admixtures and the processes for preparing admixtures slightly extended to cover cases of substances *capable of* (not merely as formerly *intended for*) being used for food and medicine (section 10(1)(c) of the U.K. Act of 1949).

Restriction to process claims in respect of patents for food and medicine recommended.

100. I have made this digression to explain the history of the law in the United Kingdom for pointing out that the degree of patentability of inventions relating to articles of food and medicine has generally been more restrictive than in regard to patents for chemical inventions in general and never more extensive.

101. The reason for this state of law is stated to be that the denial of product claims is necessary in order that such important articles of daily use as medicine or food which are vital to the health of the community should be made available to every one at reasonable prices and that no monopoly should be granted in respect of such articles. It is considered that the refusal of product patents would enlarge the area of competition and thus result in the production of these articles in sufficient quantity and at the lowest possible cost to the public.

Roumania.—Law of Jan. 1906 as amended.
Inventions relating to articles of food or of nourishment for men or for animals, pharmaceutical compounds or medicine or disinfectants or insecticides are not patentable. It is not clear whether even process claims are prohibited.

Spain.—Law of July 26, 1929.
Pharmaceutical and medical formulae as well as formulae relating to human or animal food are not patentable but processes themselves and apparatus for obtaining these are patentable.

Sweden.—Act of 1884 as subsequently amended. Inventions relating to articles of food and drugs are not patentable *per se*, but special processes for their manufacture are patentable.

Switzerland.—Patent Act of 1954.
Patents for inventions relating to foods, animal foodstuffs and beverages and inventions of medicines and inventions of processes for the manufacture of medicines other than by chemical methods are refused but chemical processes and methods for the manufacture of such products are patentable (section 2).

U.S.S.R.—Soviet Patent Law of March 5, 1941. Chapter 1, Para 2: Author's certificates only are issued for medical and food preparations prepared by other than chemical means. Patents may be issued only for methods of preparing these products.

Yugoslavia.—Ordinance of November 1920 and Law of December 1948. Product claims of inventions relating to medicines or articles of food for man or animal are not patentable but new processes for their manufacture may be patented.

To render even the process unpatentable is I consider not in public interest as the grant of exclusive rights to the process which an inventor has devised would accelerated research in developing other processes by offering an economic inducement to the discovery of alternative processes leading again to a larger volume of manufacture at competitive prices.

The example of the rest of the world is of undoubted value and not to be disregarded without substantial reasons especially as under the patent laws of these countries, whether they are industrially highly developed or still underdeveloped, whether their economy be capitalist or socialist, claims for processes for inventions relating to articles of food or medicine have always been held patentable. The continuance of this system during the long periods of time and varied conditions could only be explained by its being helpful in furthering the countries' economic and other progress. The only exceptions are—Italy which changed its Law in 1957 by which even process claims for medicine were not allowed though articles of food were outside this ban—and Denmark which, while permitting the process claims for medicaments denied the same for articles of food. We have little knowledge of the factors which led to the change of the Law in Italy, and possibly it is too early to evaluate its effects on that country's progress in the pharmaceutical industry. I would, therefore, recommend that no patents should be granted for claims for articles of food and medicine as such but that processes for producing them should be patentable.

102. I consider that to maximise the benefit, inventions relating to articles of food and medicine—and in the last category I would include insecticides, fungicides etc.—should not be patentable as such but that, as in the case of substances produced by chemical processes claims for the processes for their production should alone be patentable if they satisfy the other tests for patentability.

IV. ANTICIPATION AND NOVELTY

Anticipation

103. I have so far dealt generally on the patentability of inventions with particular reference to inventions of chemical substances and of articles capable of being used as food or medicine. There is a related topic of considerable practical significance, namely, what shall constitute the elements of novelty so as to qualify for the grant of a patent, which requires attention.

104. Questions as to anticipation or lack of novelty as depriving an invention of patentability come up for consideration at four stages: (1) during the examination of an application for a patent; (2) as a ground upon which an application may be opposed; (3) in proceedings for the revocation of a patent; (4) in suits for infringement where the validity of a patent is disputed by the defendent. For all these purposes under the provisions of the U.K. Patents Act, 1949, regard is had to prior publications, prior knowledge and prior use, all restricted to the United Kingdom [*vide* sections 7(2), 14(1) (b), 32(1) (c), 32(4) and 50(1) of the U.K. Patents Act, 1949].

105. The draft bill practically adopts these provisions in the frame of the clauses dealing with these several matters.

Present Indian Law as to anticipation

106. Under the Indian Patents and Designs Act 1911 what constitutes an anticipation is not dealt with clearly. Invention is no doubt defined as "any manner of new manufacture" but what precisely deprives a "manufacture" of novelty and particularly where the previous publication ought to take place, is not specified in any of the provisions. Section 9(1) (d) of the Act enumerates as one of the grounds for opposition to the grant of a patent, that the invention has been publicly used or has been made publicly known in any part of India while sub-clause (1) (e) refers to the invention being published in a document available to the public in India. But when one turns to section 26 the relevant ground for revocation runs:

> "26(1) (d). "that the invention was not, at the date of the patent, a manner of new manufacture or improvement.
>
> (e) that the invention does not involve any inventive step, having regard to what was known or used prior to the date of the patent;"

knowledge or use not being qualified by reference to knowledge or use within India. This is obviously apt to give rise to difficulties of interpretation.

Patents Enquiry Committee's recommendation

107. The Patents Enquiry Committee recommended that there should be a compulsory search for novelty as in the U.K. before applications for patents were accepted (para 144). They however added that the scope of the compulsory search should be limited to Indian patent specifications published during fifty years preceding the date of the application or since 1912 whichever was later. They observed: "We consider that as regards patent literature a search of records for fifty years is sufficient to establish the novelty of an invention and this is also the law in England." Dealing with what should be treated as novelty the Committee recommended [paragraph 139(d)] that "novelty should be determined on the basis of prior knowledge or prior user in India," and that "Patent specifications and official abridgements thereof should not be taken into account if they are more than fifty years old" [paragraph 139 (g)].

108. I shall first deal with the question as to whether it is wise or proper that only public knowledge or public use in India should be taken into account for determining anticipation.

The history of the law as to anticipation in the United Kingdom

109. The rule that for the purposes of constituting anticipation public knowledge should be confined to knowledge within the country is a peculiar feature of the U.K. Patent system. The English Patents law has been the result of historical growth starting from the 16th century onwards. It originated in the desire to stimulate the growth of new industries. In an early leading case *Darcy v. Allein* [(1602) 11 Co. Rep. 85] it was stated "The reason wherefor such a privilege given in law is because the inventor bringeth to and for the commonwealth a new industry". It therefore did not matter whether such an industry was practised outside "the Commonwealth" or not. In the 16th and 17th centuries therefore the crucial test was whether there had been a prior user within the realm (*vide* Hastings Patent 1567). By the end of 18th century there was

a gradual shifting in the emphasis on prior *user* within the realm as the sole test of anticipation. Not merely the practice of the invention within the realm but public knowledge of it within the realm was held to deprive an invention of novelty. Lord Blackburn explained the position thus in *Pateson v. Gas Light & Co* (3 Appeal cases 244):

> "The consideration for a patent is the communication to the public of a process that is new....It is not necessary that the invention should be used by the public as well as known to the public. If the invention and the mode in which it can be used has been made known to the public by a description in a work which has been publicly circulated or in a specification duly enrolled it avoids the patent though it is not shown that it ever was actually put into use."

When the several Patent Acts which had been passed from 1623 onwards were consolidated in the Patents and Designs and Trade Marks Act, 1883 this position was left untouched and the later enactments of 1907 to 1949 provided in express terms for novelty being determined with reference to public knowledge in the United Kingdom.

110. A provision on these lines has not been productive of any inconvenience or mischief in the U.K. because the libraries of the Patent Office and several other public libraries in that country like the library of the British Museum, the Bodleian library and the libraries attached to the major Universities obtain promptly every item of valuable scientific literature published anywhere in the world so that in practice a patent grant does not issue in the United Kingdom where the invention is one which has been published in any part of the world.

Necessity to remove geographical limitation as to anticipation under the Indian law.

111. In India however the position as regards the availability of books and literature in public libraries is not the same as in the U.K. Public libraries are few and most of them are not well equipped with regard to scientific literature, which issues in great volume in the leading industrial countries of the world. It would therefore be apparent that a rule on the lines of the U.K. enactment would act unfairly and be contrary to public interest since such a rule would enable a person to obtain a valid patent in this country in respect of an invention, information in regard to which is before the date of the application available in foreign publications. On the other hand, a provision removing the geographical limitation would take note of the fact that the world has shrunk in size, thanks to the rapid means of communication, and will prevent those who visit foreign countries or get acquainted through foreign periodicals with the inventions which are published abroad, from obtaining patents on the basis of the invention being "novel" in this country. It has sometimes been suggested that as it takes time for foreign specifications to become public in this country, there is some advantage in enabling foreigners to obtain patents on the basis of those published specifications. I consider this, however, as without force. If, as suggested, the patenting of an invention, although published abroad before the application is filed in India, is nevertheless useful and is in the interests of the country since it would result in an earlier disclosure of the invention, it has to be borne in mind that the foreign specification containing complete details of the invention is bound to reach this country very soon, after the filing of the Indian application and the invention would then become available free for use of the public, whereas if a patent were granted for such an invention the public will for a period of 16 years be deprived of the right to use the invention without payment of royalty. I am setting out the details of the precise provision which I would suggest being adopted in relation to the determination of novelty in my notes to the appropriate clauses.

112. In passing I might observe that the rule restricting anticipation by prior publication to documents published within the country prevails only in the U.K. and the Commonwealth countries and even here Canada is an exception to this rule. On the other hand, in most of the other countries** of the world there is no similar geograprical limitation as regards the place where the anticipatory matter should be published. In these countries prior publication in any part of the world is regarded as anticipation depriving the invention of novelty and therefore of patentability. In this connection it is of interest to note that Japan, which till recently followed the U.K. rule that only anticipatory publications within the country would deprive a patent of novelty, has amended her law this year extending anticipatory publications to those published anywhere in the world.

113. I consider that it is not in the public interest that an invention which is published abroad before the date of the corresponding application for a patent in India should qualify for the grant of a patent and that it is necessary to provide that publications which should constitute anticipation should include publications in India and elsewhere, before the priority date. In these publications I would include both publications in the form of patent specifications as well as other scientific literature. The Examiner in the Patent Office might naturally not have adequate facilities for determining novelty on the basis of publications abroad but if the law were that such foreign publications also constituted an anticipation, an opponent who objects to the grant of a patent could cite the foreign publication as depriving the invention of novelty and similarly even if a patent were granted it could be revoked on the same ground and suits for infringement could be resisted on that ground. I have made the necessary changes in clause 12(2) (dealing with examination), clause 16(4) (objections and orders at the examination stage) and clause 21 which I have redrafted providing for an opposition to the grant, to give effect to this recommendation. This would necessarily affect the content of public knowledge in clause 37 (dealing with revocation of patents) and clauses 48 and 49 (anticipations).

**Argentina	Costa Rica	Japan	Sweden
Austria	Cuba	Mexico	Switzerland
Belgium	Czechoslovakia	Netherlands	Turkey
Bolivia	Denmark	Poland	United States
Brazil	France	Portugal	U. S. S. R.
Canada	Germany	Rumania	Yugoslavia
Chile	Hungary	South Africa	
Colombia	Italy	Spain	

Deletion of the "fifty years" rule as to anticipatory documents recommended.

114. The other matter that remains to be considered is the recommendation of the Patents Enquiry Committee that there should be a limitation of 50 years as regards foreign specifications following in this respect the U.K. Patents Act, *viz.*, that no account should be taken of specifications published more than 50 years before the filing of the complete specification in question. This limitation of time originated in England in the Patents Act of 1902 accepting the recommendation of the Committee presided over by Sir Edward Fry. The basis of their recommendation was that it would conduce to practical convenience and would limit the cost of the Patent Office examining staff; and the period was fixed arbitrarily, taking however these factors into account. Considerable opposition was voiced before the Fry Committee by the Patent Agents against the Patent Office being empowered to examine applications with reference to novelty and when the Committee was pressed by the instances of patents being sealed for inventions which were the subject of valid prior grants, they arrived at the 50 years rule as a compromise between conflicting opinions. We have now travelled far beyond that stage and examination not merely for novelty but for obviousness has become the standard procedure in countries adopting the examination as distinguished from the deposit system. In illustration of the effect of the 50 years rule in the U.K. I might refer to a decision of the Court of Appeal in *Page v. Brent Toy Products Ltd.* (67 R.P.C. 4). The case no doubt turned on whether an amendment to the defence in the action, which was for infringement of a patent, could be allowed and other technical points, but what is relevant to the present discussion is as regards the patented invention itself. The invention related to improvement to toy building blocks and had been granted in 1939. The amended defence sought to be pleaded was that the patent was invalid because the specification was virtually a copy of an earlier U.S.A. specification of 1886. This was disallowed principally for the reason that the published American specification was over 50 years old and therefore the patentee was protected. I do not see any advantage to the public by the grant of a patent monopoly to such anticipated inventions. I would also add that the 50 years rule does not obtain outside the U.K. and a few Commonwealth countries such as Australia and New Zealand. I recommend the deletion of this limitation of time which is incorporated in the Bill. In regard to Indian specifications, I have restricted anticipation to those published since 1-1-1912, for the very practical reason that specifications of earlier date were not printed.

Anticipation by prior use to be restricted to use in India.

115. I have so far dealt with publications by documents. Anticipation by public use however stands on a different footing. Of course there are several countries in which even public use outside that country, that is anywhere in the world, is coupled with publications of inventions in printed documents for determining anticipation. The adoption of that rule might in my opinion cause considerable amount of inconvenience and hardship. I am aware that

there is some logic in having the same rule in regard to anticipation by published documents and anticipation by public use. But logic must yield to practical realities and taking the latter into account, I would recommend that public use to constitute anticipation be confined to use within India. In recommending this course I have in mind the difficulties of proof—necessity to take out commissions to foreign countries for examination of witnesses to prove such use and the cost and inconvenience which that would entail. Further, it is only in very rare cases that there would be public use in any country without there being a publication of the same invention in a printed document, be it in the form of a patent specification or other scientific or technical literature.

"True and first inventor" should exclude "communicatee" and "importer".

116. There is a topic closely allied to the rule as to what should constitute "novelty" in an invention to merit the grant of a patent just now discussed, which it would be convenient to consider next. This relates to the definition of the term "true and first inventor". In all the countries of the world outside the United Kingdom and some of the Commonwealth countries the expression is understood in its literal sense as meaning the actual deviser of an invention. In the United Kingdom however it includes besides the actual deviser, two other categories of persons, the "communicatee" and "the importer" of the invention from abroad. Though the expression "true and first inventor" was not defined in the Indian Patents and Designs Act, 1911, the form prescribed under the rules recognised "communicatees" as persons entitled to file applications as "true and first inventors" and it is assumed that "importers" are also included in that expression. The Patents Enquiry Committee recommended that "true and first inventor" should be defined so as to include "the importer" and "the communicatee" from abroad [Chapter VIII p. 113 (2)]. The Bill implements the recommendation in including the suggested definition [*vide* clause 2(s)].

117. The "importer-inventor" is an anachronism and a historical survival even in the English law. Blanco White explains it thus:

> "When the patent system was first set up here, England was a very backward country, and the system was aimed "perhaps primarily at encouraging the setting up here of industries already in existence abroad" (Note 31, p. 161, "Patents for Inventions")

118. As regards the "communicatee" from abroad being considered as "the true and first inventor" the only use to which this extended definition is now put is to enable foreign inventors to make applications through their nominees (generally patent agents) in their own names "as the true and first inventors", though such "communicatees" would hold the patents when obtained in trust for the communicator. The "communicatee-inventor" served a real need when applications for patents could not be filed by assignees of the invention but after the alteration of the law to permit assignees to make applications [*vide* clause 6(1) (b)] there appears to be no purpose in retaining the system of "communicatee-inventor". Blanco White remarks:

> "In consequence of the new provisions allowing assignment of the rights to patent, the real difference between an assignee

and a 'communicatee' goes only to the beneficial ownership of the invention. In due course no doubt the 'communicatee-inventor' will become a matter of history only; for the present he will remain of importance in connection with application procedure".

(Note 33, page 161 "Patents for inventions" by T.A. Blanco White).

119. There are more serious objections regarding an "importer" of an invention as a "true and first inventor". It is a historical survival in the law of the U.K. and one which is bound up with the theory that it is only knowledge and use "within the realm" that constitutes anticipation. Even in the U.K. "the importer-inventor" rule is capable of mischief and abuse as seen from a recent decision— *In the matter of an Application by H.* (1956 R.P.C. 197).

120. A patent for a gas mask which was "disposable", i.e. could be thrown away after a single use, was applied for in the U.S.A. on 14th March, 1950. The applicant for the patent in the U.S.A. granted a licence to an American company for the manufacture of these masks on the 1st April, 1951. Some manufacture took place under this licence and one Mr. Higgs in England having come to know of this invention wrote to the licensee-company at the end of May 1951 asking for a sample of the mask. After the receipt of this sample, there was some correspondence about the price but meanwhile on the 5th July, 1951 Higgs made an application in England for the grant to him of the patent for the manufacture of this mask. This application was accepted and when the specification was published, opposition was entered by the licensees under the American patent. The ground of the opposition was that the applicant had "obtained" the patent from the opponents by asking for a sample from them.

On the other hand, the contention of Mr. Higgs was that he was the "importer" of the invention and that if there was any obtaining, it took place in America. The major part of the argument was therefore devoted to the question, where did the "obtaining" take place. It was common ground that if the "obtaining" took place in America, it would not invalidate the application or be a bar to the grant of the patent, the applicant being in that event an "importer" of the invention; whereas if the obtaining was in England, the opponents would succeed.

121. Dealing with the claim of Mr. Higgs to be an inventor the Assistant Controller said—

> " * * * The reason for granting a monopoly to a person who brings in a new manufacture, which he has not himself devised, from abroad is well understood. The historical background of this aspect of the law is well-known. It is easy to grant that a man who undertook serious financial and even personal risks by foreign travel in order to benefit the trade and industry of this country was deserving of reward. But the position becomes almost an absurdity if a man, without having "to seek out an invention (because Mr. Higgs clearly knew already something of the invention in suit), can, by merely writing a letter, claim rights, to the exclusion of all others, in an invention to which he has made no other contribution. If he is entitled to do so it must be on the footing that his use of the international postal services is equivalent to a personal visit to a foreign country. ..... On these considerations I would have no hesitation at all in finding that Mr. Higgs is not the inventor, by virtue of being the importer of the invention and that he obtained the invention from the opponents in this country, were it not for the well-recognised practice whereby a foreign inventor sends information about his invention to a patent agent or other representative in this country and the agent applies for a patent here, as a communicatee, and describes himself as the true and first inventor. The agent can only be the inventor on the basis that he has, by the mere receipt of the information, imported the invention from abroad. This is precisely the ground upon which Mr. Higgs clims to be the inventor and not an 'obtainer' within the meaning of the Act." (1956 R.P.C. 199, 200).

122. Referring to the public interests involved if the application were granted, he observed:

> " * * It was clearly their (the American licensees') intention to make the invention available here by sale of the masks. If they did this without patent protection, the general public would be free to make, use and vend the invention. The disclosure of the invention to Mr. Higgs clearly was a first implementation of the Opponents' intention to sell the masks here. Mr. Higg's action in seeking a monopoly for himself, far from serving the public interest by introducing a new invention, would have the effect of curtailing rights which the opponents apparently intended to make freely available." (ibid page 201).

123. A provision which lays itself open to such undesirable results requires to be omitted. Besides it is scarcely consistent with the rule that publication in any part of the world constitutes anticipation which deprived an invention of patentable novelty. That explains why the countries which adopt the rule as to novelty which I have recommended do not recognise "importer inventors". I would therefore recommend that the expression "true and first inventor" should exclude the "communicatee" and "importer" inventor, the "communicatee" because it is superfluous and the "importer" on the ground of its being undesirable. As I said earlier, the expression "true and first inventor" is used in the sense of the U.K. law in the Indian Patents and Designs Act, 1911. In view of the existing law it would be necessary to make it clear that a change is being made and I would accordingly suggest that the definition of "true and first inventor" in the Bill be altered by stating that "communicatees" and "importers" are not included in that expression.

V. REMEDIES FOR ABUSE OF PATENT RIGHTS:—COMPULSORY LICENSING AND REVOCATION FOR NON-WORKING

Abuse by non-working of patents

124. Before dealing with the question of the inventions for which patents should be refused, I had discussed the problems which other

countries have had to surmount arising from the non-working of patents, particularly those of foreign nationals who were unwilling to work their patents in the country. I shall now proceed to consider the remedies which these other countries have adopted. In doing so I shall principally trace the history of the provisions in the United Kingdom as furnishing a useful precedent and also with a view to emphasise that even industrially advanced countries are not immune from this type of handicap and that similar measures have been taken in such countries to safeguard the interests of their national economy. I shall then deal with the effectiveness of the remedies which the other countries have adopted and the measures I would recommend for our country to achieve the best results.

Compulsory working and compulsory licensing

125. India is not unique in having to face this problem of patents for vital inventions being owned by foreigners who evince no desire to work them within the country. The problem is common to all under-developed countries which have adopted the patent system of rewarding inventors. Two means for redressing this handicap have generally been adopted, namely, (1) compulsory working, with the revocation of the patent in the event of non-working, and (2) compulsory licensing on terms of royalty settled by an outside authority where the parties do not agree. Michel observes: "The compulsory working system originated in the French Law of 1791 and was adopted by practically all the principal patent systems excepting that of United States at present. The important feature of this system was the invalidation of the patent if the inventor failed to work his invention within two years from the date of the grant unless he could justify his inaction..... The requirement of working the patented invention was originally a prerequisite to patent protection in England and even in the United States. If, in the further development of the U.S. patent system, it was forgotten, the reason for this is to be found in the economic condition and a leaf as to the future trend may perhaps be taken from the development of the British patent system."*

History of the provisions in the U.K. as to compulsory working and compulsory licensing

126. "Upto 1872 England was so predominant in industry that everyone who anywhere in the world had made an invention of any consequence first worked such invention in England where he was able to find the necessary capital, the necessary spirit of enterprise and the necessary skilled labour."* There was then no need for any working requirement in Great Britain and none was contained in her statute. So much so that in the International Conference on Industrial Property at Paris in 1878 Britain was one of the countries that supported the view that a provision for compulsory working was inconsistent with the purpose of the International Convention. "But soon", to quote from Michel again, "these prerequisites for large scale industrial production were also found in

*Michel on "Principal National Patent Systems" Vol. I, Pages 14-15.

the United States and in Germany. In order to prevent her industry from falling behind that of the United States or Germany, Great Britain did not hesitate to embody in her patent statutes the requirement of working". It was adopted in a modified form directed merely to compulsory licensing in the Patents and Designs Act of 1883 but at the turn of the century there was such a volume of opinion expressed against the handicaps from which English industry suffered by reason of a large number of patents being owned by foreigners who were not interested or disposed to work their inventions in the country, that a Committee under the chairmanship of Sir Edward Fry was appointed in 1901 to enquire into this question and suggest suitable remedies.

U.K. Act of 1902

127. In accordance with the Committee's recommendations the Patents Act, 1902 was enacted. Section 3 of that Act for the first time introduced the principle of revocation of a patent for abuse of the monopoly by non-working for three years from the sealing of the patent and the expression used to specify this abuse was "that the reasonable requirements of the public with reference to the patented inventions have not been satisfied". The Act laid down in terms the circumstances when "the reasonable requirements should be deemed not be satisfied". During the passage of the Bill in Parliament the provisions were warmly supported by the several members, and I shall extract a few passages from their speeches which afford an indication of their approach to the question.

Sir William Houldsworth said:

> "Anything like compulsory licence given by a foreign patentee to manufacturers in this country would not meet the case. The foreign patentee acts as a dog in the manger, sends his patented articles to this country, but does nothing to have the patented articles manufactured here. He commands the situation and so our industries are, under our own law, starved in the interests of the foreigner..... Those who feel most strongly on this question think that there should be nothing but an absolute revocation of the patent if it is not worked in this country within two years and the Fry Commission was of that opinion.....The clause as presented in the Bill does not fulfil the ideal which was recommended by the Committee but it goes a very long way in the direction. At any rate it is an immense improvement in the present position and therefor it is acceptable."

Sir Robert Reid supporting this clause said:

> "I entirely agree .....about the necessity of revoking patents granted in this country to foreigners who do not work them here. Nothing can be more absurd or more outrageous than that a foreign patentee can come here and get a patent and use it, not for the purpose of encouraging the industries of this country, but to prevent our people doing what they otherwise would do. To allow our laws to be used to give a preference to foreign enterprise is, to my mind, ridiculous."

Sir Robert Finlay after referring to the eminence of the members of the Fry Committee, said:

> "The existing provisions in reference to patents taken out by foreigners and which are not worked out here have been found to be absolutely inoperative. A patent is supposed to be granted for the encouragement of manufacture in this country but under the existing laws, a large number of patents are taken out by foreigners solely for the purpose of preventing encouragement of manufacture in the country."

Another member Mr. Whitley said:

> "Any one who is actively engaged in commerce, especially those who are acquainted with patent laws, cannot help feeling how very much we are behind other countries, especially France, Germany and America who are our chief competitors in the markets of the world in the matter of patent laws. I had hoped that the Board of Trade, after many years of consideration of this question and the pressure put upon it by the commercial community, would have taken a little more courage in reforming our patent laws. The difficulty of dealing with foreigners to whom patents had been granted in this country for years past and who never intended to work their patents here is certainly great."

I shall end this with three extracts from the speeches of Sir Joseph Lawrence, Mr. Cripps and of Mr. Cawley.

Sir Joseph Lawrence said:

> "We desire the enactment, if possible, of the Belgian Patent law, which requires compulsory working after three years. We know in the case of France and Germany the principle of compulsory working has been carried out harshly."

Mr. Cripps was no less emphatic. He said:

> "...The difficulty in all patent laws is to reconcile on the one side the true rights of inventors, and on the other side not to interfere with general industrial interests...I quite agree that the same laws are applied to patents taken out in this country by everyone whether or not he is a foreigner. Nothing could be worse for this country than that foreign patents should be protected in this country, while the industry is carried on abroad. That is the worst form of protection; and appears exceedingly hard as regards various industries in this country . . . I hope that in future the patent law of this country will serve its proper purpose of encouraging inventors and will not be used for the improper purpose of preventing new industries being established in this country, and of protecting foreigners, who supply this country from abroad with articles, merely because they have paper patents standing in their names."

Mr. Cawley, a member from Lancashire moved an amendment to make the working provision more drastic and in doing so said:

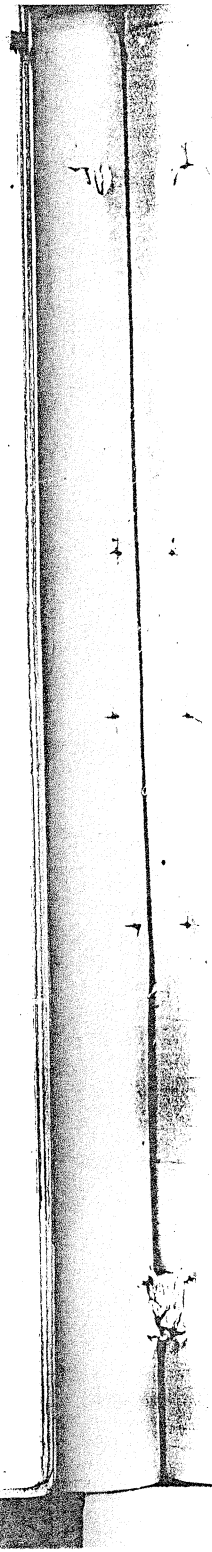
> "Out of every hundred patents granted in this country forty were not applied for in Germany and if applied for would not be granted. The result was that Germans came to this country, got patents, manufactured the articles in Germany and the British customer had to pay very large price for it because it could not be manufactured here as the consumer in Germany can get it at half the price of what the consumer has to pay here."

128. The Tribunal set up under the Act of 1902 to deal with applications for compulsory licences was vested with discretion either to direct the grant of a compulsory licence or to revoke the patent if the reasonable requirements of the public with respect to the patented invention had not been satisfied. An attempt was made to define when this condition was fulfilled—"if by reason of the default of the patentee to work this patent or to manufacture the patented article in the United Kingdom to an adequate extent, or to grant licences on reasonable terms (a) any existing industry or the establishment of any new industry is unfairly prejudiced or (b) the demand for the patented article is not reasonably met"—but these words were too vague and narrow to achieve the objective. Besides the expensive nature of the Tribunal, namely the Judicial Committee of the Privy Council, there were several procedural difficulties in the way of applicants who complained of abuse of monopoly rights and these several factors combined to render the provisions of the Act ineffective.

U. K. Act of 1907

129. The result was that the amendment of the Patent Law in 1902 did nothing to mitigate the evil. In fact no application was filed under these provisions and there was therefore need for further legislative measures. When the Patents and Designs Act was revised in 1907, new clauses were proposed which sought to strengthen the provisions dealing with revocation for non-working and to expand the grounds on which compulsory licences could be ordered. In introducing this Bill in the House of Commons Mr. Lloyd George who was then the President of the Board of Trade, said:

> 'The main object of this Bill is to prevent laws from being used for the hindrance and suppression of British Industrial development. The object of the patent laws is to reward ingenuity and by so doing to encourage invention and to promote British industry. Unfortunately, however, they have been used in many respects to discourage the British inventor and to destroy the British industries.....Out of 14,700 patents issued last year, 6,500 are foreign. I do not object to them. But a good many of these patents had been taken out not for the purpose of working out the patents in this country, but for purpose of preventing their being worked.....In the first place I propose to simplify the procedure of compulsory licences. A second method is that any applicant can go to the Controller three years after the granting of any patent



and apply for the revocation of the patent on the ground that it has not been adequately working within the U.K."

130. Supporting the measure Mr. Cawley said:

"When the first patent was granted in 1626 it was stipulated that if the patentee failed to reduce to practice within three years his scheme of patents, the patent shall then lapse....In Germany if a patent was not worked within three years, it could be revoked and declared void. In France if a patent was not worked within two years it could be revoked. In fact in practically every industrial country including Japan, patentees had to work their patents, or to get them worked within a certain time of their being granted, or the grant might be revoked. We were the only country in Europe that allowed a patentee to take his grant away and work it where he liked, or sell it to whom he liked. The result of this careless liberality was that foreigners came here and got patents granted to them without ever having the slightest intention of working them in this country.....In 1903 we had granted nearly 8000 patents or monopolies to persons residing outside the country. In fact more than half the patents taken out here and the most important ones had been taken out by foreigners. We granted a large number of patents about 5,000 more than Germany did every year, although the population of Germany was one-third greater than our own. Some of these patents were only taken out for blocking purposes and were unscrupulously used when our manufacturers wished to make any article which would compete with a German production. Others which were of importance were taken abroad and were used to start industries there by new and improved processes, and so superseded industries carried on in this country....Although a patent lasted only fourteen years it was long enough to establish the industries abroad, and once established there, with trained labour, experience and an organised system of distribution, it was no easy matter to get it back again...We got no *quid pro quo* for the monopolies we gave, but we allowed the person to whom the monopoly was granted to produce his patented articles solely abroad.....That Germany had made enormous strides could not be denied.....The Chemical industry of Germany had increased rapidly and now amounted to something like 70 million pounds per annum and part of that trade had been taken away from this country.....Most of the labour employed in these works was unskilled labour, and was the very kind of work which would absorb our unemployed if we only insisted that there should be a *quid pro quo* for the monopolies we granted and that they should not be taken away and used to find work for foreign labour in foreign countries at the expense of our fellow-countrymen. Had we said to them, we grant you a patent or monopoly for the sale of this article, you must in turn manufacture the article here, we would by now have much larger works in this county giving employment to a number of labourers, but our patent laws as they are at present are benevolently fostering great industries in Germany to the detriment of the manufacturers, consumers and working classes of this country. We had been granting thousands of patents to foreigners and getting nothing in exchange. We are now going to grant a monopoly but if we do that, the country at least ought to have some recompense for having done it. The patent ought not to be merely a prize to the inventor who applied for it. The country where the man was granted protection ought at least to have some share in the benefit. If a man obtained a patent in this country he ought to manufacture the goods here."

131. I have made these rather long extracts because they contain references to the law in the European countries and this obviates the need for any detailed description by me of the law of these countries as also to emphasise that the problem which this country faces has often been the lot of other countries even though more industrially advanced than ourselves and that the solution usually adopted to counter the difficulties was the enactment of provisions for compulsory working and for compulsory licensing.

U. K. Acts of 1919 and 1949

132. Before I pass on from this topic it would be convenient to make a brief reference to the later history of the provisions in the United Kingdom, a country which has served as a model for the law of our country. Notwithstanding that German industry and therefore competition from that country received a set back as a result of her defeat in the World War I, the U. K. Patents Act of 1907 was amended in 1919 enlarging the grounds on which compulsory licences could be granted, and finally when the Patent Law was thoroughly revised in 1949 as a result of the recommendations of the Swan Committee, far from the right to apply for compulsory licences becoming restricted, there was a further enlargement of these grounds.

Proposal for Free Trade Area in Europe

133. Though the U. K. has been one of the major industrial countries of the post-war world, she clings with tenacity to the provisions regarding compulsory working contained in her Patents Act. In 1957, a proposal was made for a Free Trade Area in Europe. The idea was that the member countries of this Union should have a common Industrial Property legislation, particularly in the matter of patent laws, and one of the important matters which was involved in this scheme was, that the working of a patent in one of the countries of the Union should be treated as a working of it for the purpose of the national laws of all the other member states. The countries which were intended to be included in this area were the United Kingdom, Germany (Federal Republic), France, Italy, Belgium, Holland and Luxemburg. The patent laws of each of these countries

contain provisions for compulsory working of the invention within each of them and provide for the revocation of the patent in the event of the non-working at the end of the period specified in their respective laws. The U. K. did not agree to this proposal. In a memorandum on this subject dealing with the economic effect of the setting up of such a Free Trade Zone with the provision outlined above the Board of Trade is reported to have said:

> "The practice of granting limited monopolies for new inventions is universally regarded as not only a legitimate function of a State to provide the inventor with the means and opportunity of obtaining some reward for his enterprise but one that is of definite value to the industrial and economic development of that State. Quite clearly this second object would be vitiated if the demand for a patented article in the country in which protection had been obtained were met wholly or mainly by importation of that article into that country....One suggestion that will be put forward is that working of a patent in one Free Trade Area country should be deemed equivalent to the working of the corresponding patent in others. Such suggestion would require the profoundest consideration in the light of the international practice of voluntary cross-licensing of patents. Large industrial concerns with considerable holdings of European patents would undoubtedly benefit if the suggestion were adopted. They would be able to concentrate large scale production at home and distribute their manufactures to the other countries within the Area under the protection of their patents in those countries. In assessing the extent of this benefit it would of course be necessary to take into account the loss of royalties they now receive from the various countries as licensors of their patents. In each country however a large section of industry is engaged in working patented inventions as licensees of patents owned by foreigners. To what extent this obtains in the U.K. is impossible to say but it must be quite considerable. If therefore working in one country were regarded as working in the others, the effect on U.K. licensees would be serious since the licences would in most cases be terminated and, thereafter the demand for the goods made thereunder would be met by importation."

Lisbon Conference of the International Union

134. More recently, in 1958, at the Lisbon Conference of the International Union there was a proposal supported by the U.S.A. to introduce into the International Convention an article requiring the member countries to amend their patent laws so as to forbid revocation of patents for non-working, leaving compulsory licensing as the only penalty for abuse of monopoly. This was opposed by practically all the industrially-less advanced countries and was lost. The Turkish Government opposing the move said:

> " * * *We merely put forward the observations quoted in a passage of the Acts of the Conference of London, 1934, page 378—
>
> "The Polish, Czech, Spanish and Yugoslav delegations insist on the importance for countries whose industry is under-developed of the continuation of the sanction of revocation of the patent for non-working, in view of the fact that in these countries the number of patents taken out by foreigners is far greater than that of patents granted to nationals and that foreigners are always inclined not to work their patents to the detriment of national industry and employment.
>
> "Obviously, the present text, while creating an effective monopoly, would strengthen the position of states that are highly developed industrially. That is why the countries whose economic situation is not so satisfactory will also insist on the non-acceptance of the new text; as is well known these same countries showed no interest in the London amendment.....
>
> "The industrialised states, without being exposed to serious difficulties, have gained greatly from the possibility of monopoly given them by their patents. Will the less industrialised states therefore never have the right to benefit from these advantages?"

What, however, is even more pertinent is that the U. K. Government joined these opponents observing—

> "* * * We are in some doubt whether the time is yet ripe to abolish completely the power to revoke patents on the ground of failure to work."

Criticism against compulsory licensing and compulsory working provisions answered

135. Patents must be enabled to fulfil their prime purpose, viz., being worked in the country, and as early as possible after they are granted. Where this is incapable of being achieved the law must enable a patent to be revoked. The history of other countries and particularly of the U. K. which I have set out earlier furnishes a valuable precedent, and affords guidance for the course to be adopted. It has further to be borne in mind that compared to the position of the U. K. vis-a-vis America and Germany in 1907-1919, India is today much less industrially advanced compared to the major industrialised countries, and her laws in respect of compulsory working and compulsory licensing have accordingly to be broader based.

Before discussing the precise changes which are needed to improve the law, it is necessary to refer to one or two matters in connection with the subject of the effectiveness of compulsory licensing to counter the evils of unworked patents. The U. S. A. is perhaps the only country in the world which imposes no restrictions on her patentees by way of compulsory licenses or compulsory working and her industrialists and patent lawyers consequently most often inveigh against such restrictions on the score that they are improper infractions of the rights of patentees and are besides detrimental to

the interests of the country itself which imposes such restrictions. In this connection it is necessary to bear in mind a few facts. The U. S. A. is a country with immense wealth, a super abundance of natural resources, a large surplus speculative capital available for investment in new ventures and highly specialised and diversified technical skill so that the country offers ideal conditions for establishing new industries. The result is that the proportion of patents granted in that country to those that are not worked there but are worked elsewhere is very small. Besides of the number of patents granted every year,—and now this is near the six digit mark—barely about 1|10 are granted to foreign nationals—the lowest among all the countries of the world. Furthermore, any tendency on the part of foreign patentees to work their invention abroad and import their products into the country is countered by high tariff walls. On the other hand, her industries benefit by a large expert market. The U. S. A. can therefore offer us no parallel and the criticism of some of the American patent specialists as to the inadvisability by any restrictions being imposed on patentees have to be understood in the light of this background. Even outside the U.S.A. there are some critics who view with disfavour any restrictions on the rights of patentees —and these are nationals of the more industrially advanced countries—and assert that the provisions for compulsory licensing and even more the provisions for compulsory working have an adverse effect on the economy and industrial progress of the countries adopting them and in any event are ineffective to achieve any useful result. The fact that despite these criticisms, provisions for compulsory working and licensing have been retained in the laws of almost every country in the world including most of the industrially advanced countries affords a sufficient refutation of those theorists.

136. It has sometimes been asserted that if the law of a country contained drastic provisions in the matter of compulsory licensing and compulsory working, it would have such a dampening effect on inventors, that the rate of invention would appreciably diminish which would be reflected in the number of applications for patent grants. But this is hardly borne out by facts and it is sufficient to refer to the figures of applications for patents during the years immediately following the enactment of such legislation in the U.K. and in India. Appendix A Table (7) contains the figures of applications for patents in the United Kingdom during the period 1902 to 1913. Notwithstanding the drastic provisions introduced by the legislations of 1902 and 1907 in the matter of compulsory licensing and revocation for non-working, the number of applications filed show no diminution. I might also mention that in his Report for the year 1909, Mr. Temple Franks, the U. K. Comptroller General, after referring to the provisions for revocation contained in section 27 of the U. K. Act of 1907, said:

> "It may be added in conclusion that the operation of the section has apparently not diminished the applications for patents which numbered 30,603 during 1909, the highest number but one yet on record."

The figures of applications for patents in India since 1950 when the Patents and Designs Act, 1911 was amended expanding the grounds for compulsory licensing on the lines of the U. K. Act of 1949, set out in Appendix A Table (i), and the figures of the patents for inventions in relation to drugs granted subsequent to 1952 when section 23CC was introduced, set out in Appendix A Table (3), should suffice to dispel any apprehensions on this score.

137. Another argument advanced is that compulsory licenses are ineffective and the smallness of the number of applications for the relief is cited to show that the provision satisfies no real need, and achieves no purpose. It is undoubtedly true that the number of applications for compulsory licences have been few in the United Kingdom, and I will add in India also [vide Appendix A Table (8)]. This feature was urged before the Swan Committee as a ground for dropping the provision. The Committee, however, as already stated, recommended not merely the retention of the system but its strengthening by broadening the grounds on proof of which licences could be granted. They attributed the paucity of applications for relief under the statute to the following four main reasons:

(1) The existence of the provision for compulsory licences in the statute book might have had the effect of inducing patentees to voluntarily grant licences on reasonable terms with the result that there was no necessity to approach the Comptroller or the Court for relief under those provisions. In this connection, I may mention that in his Annual Report of the U. K. Patents Office for 1909 the Comptroller General observed:

> "It seems also necessary to add, that while the revocation of a patent is the only direct result contemplated by the section, there are many indirect results which may be expected to follow. The cases already tried show that, even when the patentee does not manufacture himself, orders have been given to British firms and licences offered for the manufacture or carrying on of the article or process in order to meet the requirements of the section. It seems probable also that the mere existence of the section and of the power to revoke has tended to bring about the establishment of manufactories in this country, and an increased employment of British labour."

(2) Notwithstanding the width of the language in which the conditions justifying the grant of compulsory licence was couched in the Patents Act of 1907 to 1946, the courts had placed a narrow interpretation upon some of these phrases with the result that the provisions ceased to be capable of being invoked in a large number of cases for which Parliament had intended. The remedy which the Committee suggested was to alter the language of the provisions so as to put beyond doubt the intentions of the Legislature and also to widen the scope of the grounds on the basis of which the relief could be asked for, thus countering in this respect these decisions.

(3) Very many of the inventions covered by the patents which were not worked within the country or were not worked to an adequate extent, the working in the country being merely a mock working—could not be exploited merely on the basis of the information contained in the specifications. They required in addition a considerable amount of knowledge of other technical details as to

working which are comprehended in the compendious expression 'know-how'. The Committee was of the opinion that in the absence of the imparting of this 'know-how', the patent could not be economically worked, and as there were no means by which the Comptroller or the Court could insist upon the communication of this 'know-how' to the licensee, the grant of compulsory licence was really without use. The Committee thought that this was responsible for the very small number of applications for compulsory licences, but could not offer any solution to the problem created by the unpatentable 'know-how' standing in the way of working of the compulsory licensing provision of the Act.

(4) The last of the grounds which they considered as being responsible for the small number of applications for compulsory licences was based on the provisions of the Trade Marks Act. It was explained that patentees who had been working their inventions abroad, particularly of German nationality, had been vending their goods under trade marks which have become well known in the market and that the applicants for compulsory licences thought that they could not successfully compete with the goods of the patentee vended under their several trade names. The Committee, therefore, suggested that the provisions of the Trade Marks Act might be examined with a view to eliminate this handicap to licensees.

Changes recommended in the Indian law

138. I shall proceed to consider these four factors in the light of the conditions in this country and set out the proposals I would recommend to render the provision for compulsory working and licensing effective. I will premise the discussion by endorsing and emphasising the observations of the Swan Committee that the concept of 'abuse of monopoly' as the justification for the provisions in regard to compulsory working and compulsory licensing is too narrow. In the words of Akerman, "The compulsory license has acquired a positive function in serving the general interest of the community, in itself, and independently of an abuse on the part of the patentee. The concession of a licence is no longer the sanction for the failure of the patentee to live up to his obligations but the form under which the community expresses its right over the invention." (Casimir Akerman L' obligation d'exploiter et la licence obligation en matiere de brevetes d'invention. Paris 1935; pages 311-312 cited by Penrose ibid at p. 184). In other words, these provisions though they might undoubtedly operate to counteract cases of deliberate 'abuse', must, on the other hand, be viewed as a necessary adjustment of the patent system to the demands of an under-developed economy. There is no uniformity in the economic problems which confront different countries at any time or even the same country at different periods of its history and account has therefore to be taken of the actual conditions in the matter of devising the precise adjustments which are needed to rectify the imbalance which the patent system is apt to produce if left uncontrolled.

139. The compulsory licensing provisions in the Indian Patents and Designs Act, 1911 as originally enacted remained almost a dead letter, for reasons explained by the Patents Enquiry Committee, which

I need not repeat. On the recommendation of that Committee, the Act was amended so as to bring it almost into line with the corresponding provisions in the U.K. Act of 1949. These amendments which were effected in 1950 have been in force for over 8 years, and the interval should be sufficient to permit an appraisal being made as to their effectiveness, their defects and the manner in which they might be remedied so that patent grants might fulfil their true purpose, *viz.* promote national economy.

140. As already stated the number of applications in India for compulsory licences have been very few [*vide* Appendix A Table (9)]. It is possible that the enlargement of the grounds and the procedural facilities afforded by the amendment effected in 1950 have tended to induce patentees to grant voluntary licences on reasonable terms to those desirous of utilising the patent and thus obviate the need for applications to the Controller. No statistical information is available as regards the patents which have thus been licensed and so the efficacy of this ground must be a matter merely of surmise. In this connection one matter is worth mentioning. If the possibility of the grant of a compulsory licence acts as an inducement to the grant of a voluntary licence on reasonable terms, it stands to reason that this inducement or pressure must be greater if the grounds on which the licence could be granted were enlarged, or if otherwise the obtaining of the licence were made easier by suitable modification of the adjectival law. In this context the observations I have extracted earlier from the Annual Report by the U.K. Patent office for 1909 appear very apt.

Revocation for non-working

141. This brings me to the fact that neither the Indian Patents and Designs Act, 1911, as now in force, nor the Patents Bill of 1953 contains any provision for the revocation of a patent for non-working. The U.K. Patents Acts have since 1902 consistently carried a provision enabling the revocation of a patent in the event of non-working (*vide* section 42 of the U.K. Patents Act, 1949). I have already drawn attention to the attitude of the U.K. Government at the Lisbon Conference in 1958 regarding the abandonment of this provision. Though the Indian Patents and Designs Act, 1911 as originally enacted contained a provision for revocation, as a relief alternative to the grant by a compulsory licence, the conditions stipulated on which alone these reliefs were available were such as to render the provisions wholly ineffective. The Patents Enquiry Committee in suggesting the reform of the law by modelling the sections on the lines of the U.K. Act of 1949 included a provision for revocation [*vide* the Committee's draft of section 22(11)]. When, however, these recommendations were implemented by enacting Act XXXII of 1950 the relief by way of revocation was omitted and this omission has been continued in the Bill. In the questionnaire which I circulated I made enquiries regarding the desirability of a provision for revocation and the majority of those who answered this query favoured such a course, the opposition being almost confined to either foreign patentees or their professional advisers. I consider that it is very essential that there should be a provision for the

revocation of the patent in the event of continued non-working and in the notes on the relevant clauses I have discussed the precise form this should take.

142. If a country with the industrial progress of the U.K. is unwilling to drop the provision as to revocation for non-working in her law, the need for such provision in the circumstances of our country requires no elaborate argument. Besides such a provision has other advantages to which I shall advert in due course.

Expansion of grounds for compulsory licensing

143. The second reason adduced by the Swan Committee for the paucity of applications was that the conditions which had to be established to obtain a licence were somewhat narrow, besides the phraseology employed to signify them being ambiguous with the result that on the construction adopted, the benefit of the provision could be invoked in very few cases. They recommended a redraft of the grounds which was substantially adopted in the Act of 1949. Eight years have passed since that Act has been in operation but even during this period the number of applications have not been very numerous. The first reason already discussed, namely, that a statutory provision for compulsory licensing might induce voluntary grant of licence, might in part account for this feature, but as I shall point out in detail later, the Courts have also been inclined to follow in some respects the earlier decisions as regards the conditions to be established before an applicant could succeed. I have, therefore, thought it necessary to suggest modification of the language of the conditions to overcome this defect (*vide* notes on clauses 40 to 47).

144. Apart from changes of a drafting character, there are two matters of significance which I consider have to be taken into account in framing provisions suitable for this country, *viz.* (1) elimination of the requirement as to commercial working, and (2) expansion of the ground for compulsory licensing so as to enable an export market to be created.

Test of Commercial working in the grounds for licence to be omitted

145. The first of the grounds on which a compulsory licence or endorsement could be obtained under section 37(2)(a) of the U.K. Act of 1949 [*vide* clause 40 (2) of the Bill]—is "that the patented invention, being capable of being commercially worked in India, has not been commercially worked therein or is not being so worked to the fullest extent that is reasonably practicable". This does not appear to have always been the law in the U.K. When the provision appeared in section 27 of the U.K. Patents Act, 1907, it enabled a patent to be revoked "if the patented article or process was manufactured or carried on exclusively or mainly outside the U.K.", and in such cases the Controller could order revocation "unless the patentee proved that the patented article or process was manufactured or carried on to an adequate extent in the U.K., or gave satisfactory reasons why it was not so manufactured or carried on". Construing this section, Parker J. observed:

> "***It was suggested that if a patentee could prove that an industry in a patented article or founded on a patented process could not be carried on in this country or as profitably as it could be carried on abroad owing to difference in the cost of material or labour, or other local conditions, he would have given a satisfactory reason within the meaning of the section. I do not think this suggestion is entirely correct. Certainly the fact that persons who were carrying on the industry in this country would make smaller profits than persons carrying it abroad would, in my opinion, be no satisfactory reason at all. I can conceive cases in which a patentee having obtained a patent may find it impossible to work it in the United Kingdom because of the nature of the invention, or because of the local conditions which prevail here, but not in other countries. although these cases must, I think, be rare, and may be exceedingly difficult to prove. The extra cost of labour or material may well be counter-balanced by superior skill or in other ways. But it can never, in my opinion, be sufficient for a patentee, defending himself under the section to prove that he cannot now start an industry with any chance of profit. The question really is: could he have done so if he had used his monopoly fairly as between home and foreign trade, or if he had devoted the time and money which he has expended in developing a foreign industry to developing a home industry? It may well be that having developed the industry abroad and given foreigners several years' start, he may find it difficult, if not impossible, to develop the industry on the same lines here, and yet such an industry might well have arisen but for the preference he has given to foreign countries. It was also suggested that the section only contemplates revocation, if revocation would lead to the establishment of a new industry or the further development of an existing industry in this country, so that if the patentee had by an abuse of monopoly succeeded in precluding the possibility of such establishment or development, his patent ought not to be revoked. I dissent entirely from this suggestion. I see no reason why the section should not have been intended to penalise a patentee who has abused his monopoly and by a revocation of the patent, this country becomes at any rate free from restraint on its trade which is opposed to the spirit of its common law"—(In the matter of an application for the revocation of Hatschek's Patents, 26 R.P.C. 228 at 243).

146. Section 27, was, however completely revised when the U.K. Patents and Designs Act was amended in 1919 and Section 27(2)(a) as then revised ran—

> "If (at any time after the expiration of four years from the date of the patent) the patented invention (being one capable of being worked in the United Kingdom), is not being worked within the United Kingdom on a commercial scale, and no satisfactory reason can be given for such non-working."

The other alternative grounds which were set out in Section 27 as amended all proceeded on the basis that the invention should be capable of being worked in the United Kingdom, to sustain an application for compulsory licence, and therefore to an application for revocation.

147. When the Swan Committee revised the conditions which might broadly be termed an abuse of monopoly, they retained the reference to the possibility of commercial working [*vide* Section 37(2) (a)] and suggested a new provision [*vide* Section 37(2) (b)], practically restoring the provision of the 1907 Act under which the working of the invention abroad and the supply of the U.K. demand by importation justified a revocation of the patent. Section 37(2)(b) of the U.K. Act, 1949 runs:

> "(b) that a demand for the patented article in the United Kingdom is not being met on reasonable terms, or is being met to a substantial extent by importation."

It is possible that this ground on its language might be available even in cases where the patented invention was not capable of being worked in the country. But in effect the concept that the invention must be one capable of being worked within the country was brought in by the consideration which the Comptroller has been directed to take into effect under Section 39(2) and in particular para (b) which reads:

> "(b) the ability of any persons to whom a licence would be granted under the order to work the invention to the public advantage."

148. The result is that notwithstanding the wide language of Section 37(2)(b), neither a compulsory licence nor an endorsement, either at the instance of a person interested or a government department, is obtainable in the U.K. unless the invention is capable of being worked within the country and the Comptroller can reasonably contemplate some person as willing to work the invention on a commercial scale. It follows therefore, that as a patent may be revoked only if, after two years subsequent to the granting of a compulsory licence, the conditions set out in Section 37 obtain, no patent could be revoked which is not capable of being worked in the country. In other words, such patents could be utilised to secure solely a monopoly of importation, besides operating to block research and industrial activity in the relevant field.

149. Bearing in view the industrial progress of the United Kingdom, the number of inventions of which it could be predicated that they were incapable of being worked within that country must indeed be very few. But the same could not be said of India. If therefore the law in this country permitted patents to be maintained on the register, regarding which it could be asserted that they could not be worked with profit in this country, so as to adequately meet the demand for the patented article, we would have a number of patents which were worked abroad and which the patentees utilised merely to secure a monopoly of importation.

I therefore consider that the test of capability of being commercially worked within the country as a condition for the grant of relief under the compulsory working provisions should be dropped.

Redraft of clauses in Chapter VIII explained

150. In the redraft of the clauses in Chapter VIII of the Bill I have sought to achieve this omission of the test of commercial working by the combined operation of three provisions: First, by deleting the reference to the invention being capable of being commercially worked in India in the relevant clause setting out the condition on which a compulsory licence or compulsory endorsement could be obtained.

151. Secondly, and this is more vital, by providing for the grant of a compulsory endorsement where the Controller is satisfied that the reasonable requirements of the public with respect to a patented invention have not been satisfied by manufacture in India,—and this includes (a) where factually the invention is not commercially worked in the country, and (b) where the demand for the patented article is met to a substantial extent by importation from abroad—without any reference to whether or not any person in the country is willing to work the invention.

152. Thirdly, by making a provision enabling a patent to be revoked which is not factually worked adequately within the country after two years from the grant of an endorsement, whether or not a licence is granted in pursuance of the endorsement.

153. I need only add that under Section 42 of the U.K. Act, 1949, which provides for the revocation of patents for non-working, that relief can be had only if two years have passed after the "grant of a compulsory licence under Section 37" and the conditions set out in Section 37(2) persist even after such a grant.

154. A question might be asked why inventions which are incapable of being worked in the country should not be rendered unpatentable. This, however, is not feasible because, firstly, it would, if contested, involve complicated enquiries of a kind which it would not be possible for the Controller to conduct; secondly the country is progressing industrially and an invention that could not be worked at the date of the filing of the complete specification, might be worked after the lapse of 3 or 4 years from then; and lastly, it would not be possible to predicate of any invention at the time when the application for patent is made that it was absolutely incapable of being worked in the country. That is why I consider that rendering unpatentable of inventions which might be incapable of being worked in the country, is neither practicable nor desirable.

Ground as to non-supply of export market

155. The second matter in respect of which I would suggest a variation from the law in the U.K. is as regards the purpose which the "working of the invention" ought to achieve, in order to constitute the working 'adequate'. In the United Kingdom, on the recommendation of the Swan Committee, it is provided in the