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Reform of the British Patent System.\*

THE need for various improvements in the British patent system has been constantly before the public in recent years, and it is generally agreed that the time is ripe for a general overhauling and lubrication of the machinery. The matter is important, for invention is closely, if subtly, connected with unemployment, and, moreover, it is chiefly through patent protection that workers in applied science can hope to win a share of the economic benefits which they confer on the community.

It is therefore satisfactory to learn, from a recent statement by the President of the Board of Trade, in reply to a question asked by Major A. G. Church in the House of Commons, that the Government proposes to take steps to prepare a Bill on this subject.

The history of the movement for reform is familiar to readers of NATURE. In October 1928 the British Science Guild published a report comprising a systematic survey of the needs of the situation, with some fifty or sixty recommendations, large and small. This was widely circulated among persons interested in the subject, and was canvassed, criticised, and mainly endorsed, in reports afterwards issued by various authoritative bodies, notably the General Council of the Bar, a joint committee representing several chemical associations, and the Chartered Institute of Patent Agents. Eventually, in May 1929, the Government set up, under the chairmanship of Sir Charles Sargant, a departmental committee, which issued its report in May last. Since the latter will presumably form the foundation of any legislation that may be introduced, a brief notice of its contents may be of interest.

The Sargant Committee appears to have used the British Science Guild's report largely as the basis of its agenda, and its conclusions, though marked in a certain degree by timidity and conservatism, are in general consistent with the policy put forward by the Guild. There can be little doubt that general support will be forthcoming for legislation on the lines proposed, if the Sargant Committee's recommendations be taken as the minimum rather than the maximum that is expected of the legislature.

The Guild's proposals were somewhat numerous. Among the more important may be mentioned the extension of the scope of the official investigation as to the novelty of inventions; extension of the

\* Board of Trade. Report of the Departmental Committee on the Patents and Designs Acts and Practice of the Patent Office. (Cmd. 3829.) Pp. 104. (London: H.M. Stationery Office, 1931.) 1s. 6d. net.

judicial functions of the Comptroller of the Patent Office; a change in the tribunal for appeals from the Comptroller's decisions; strengthening of the law relating to unwarranted threats of patent litigation; and the institution of a system of cheap short-term patents of narrow scope, analogous to the German *Gebrauchsmuster*. The Sargent Committee rejected the last of these proposals outright, for reasons which are stated fairly and at some length in its report. The evidence tendered before the Committee was rather evenly divided for and against the proposal, and the decision is probably right. Short-term patents would bring advantage to some sections of the community and disadvantage to others, and legislation on such a complicated and uncertain subject would not be justified unless an overwhelming demand for it had followed the British Science Guild's report. Such a demand has not arisen. In view, however, of the German practice, it is well that this proposal should have been thoroughly thrashed out.

As regards the proposed extension of the Comptroller's jurisdiction, the members of the Sargent Committee were divided among themselves. The object of the British Science Guild's suggestion on this head was to provide a way out of the impasse which arises from the high cost of patent litigation and the difficulty of obtaining a suitable arbitrator in many patent disputes. In effect, only the wealthiest corporations can afford to enforce their patent rights or to defend themselves against an action for infringement; for such actions have to be tried in the High Court with the assistance of expensive expert witnesses and of counsel who are capable of dealing with scientific technicalities: thus, for the great majority of those who are entitled to justice in connexion with patents, justice is inaccessible on account of its high cost.

The British Science Guild proposed, as a partial solution of this difficulty, that the Comptroller of the Patent Office should be authorised to deal with infringement actions by consent of the parties. This proposal, together with modifications of it, was rejected by the majority of the Sargent Committee; but although a minority report was not formally appended, the fact is mentioned that "a substantial minority has been so impressed with the desire and the need for providing some less costly method of settling disputes relating to patents that it would like a trial to be made of an extension of the jurisdiction of the Comptroller for this purpose". The reasons underlying the opinion of the progressive minority are convincingly stated, while the reasons given for the majority opinion

amount in large part to a mere description of prejudices of the kind which are known to be directed against innovations in legal practice. The general question of the high cost of patent litigation is waived, as lying outside the Committee's terms of reference; but for our part, we fail to see why there should be at present no prospect of "the immediate constitution of a special Court to deal with disputes relating to patents and other forms of industrial property, with a view to working out a cheaper and speedier method of trying such disputes". A change in the High Court of that character is undoubtedly desirable and practicable. The majority are content, therefore, to leave without attempted remedy what is probably the most serious of all the defects of the existing patent system in Great Britain.

Appeals from the Comptroller's judicial decisions are at present heard by one of the Law Officers of the Crown, and the British Science Guild recommended that these officers should be replaced by a special judge sitting in chambers. This recommendation was adopted by the Sargent Committee in a slightly modified form. The procedure would be as at present, but a judge selected by the Lord Chancellor would be substituted for the Law Officer.

With regard to the protection of manufacturers against unwarranted threats based on alleged patent rights, the Sargent Committee goes somewhat further than the Guild thought it politic to suggest, and there is clearly a strong case for drastic legislation in the sense of the recommendation made. The effect of this would be that when a person, claiming to possess patent rights without really being entitled to do so, threatens to take legal proceedings for infringement against a manufacturer or his customers, either the manufacturer or his customers would be able to carry through an action against the threatener, so as to get an injunction to restrain him and to recover damages. At present this obviously just proceeding is obstructed by certain legal provisions of a somewhat technical character, the result of which is, in particular, that makers of seasonal goods sometimes lose their market for a year, without remedy, in consequence of threats for which there was no legitimate foundation.

At present the Patent Office examiners make a search among British patents not more than fifty years old, to see how far the inventions that come before them are really new. This restricted search was instituted as an experiment more than a quarter of a century ago, and it is very generally

felt that, since the experiment has yielded satisfactory results, the time is ripe for the system to be carried to its logical completion: that is to say, that the Patent Office search should no longer be restricted to British patent specifications, but should comprise other relevant technical documents. The only obstacle is a financial one, for such an extension of the search would cost a good deal of money. The British Science Guild pointed out that the necessary funds are already available in the excess of fees taken every year from the pockets of inventors and used as revenue by the Exchequer, which adopts this singular method of encouraging the inventions on which the progress of industry depends.

The annual surplus of the Patent Office budget is steadily increasing, and for the year 1930 amounted to no less than £154,545. There are indications in the report that the Sargent Committee was sensitive to Treasury opinion in dealing with this subject; for while the members declare in paragraph 404 that "the subject matter referred to them is an essentially technical one, and questions of finance lie outside its proper limits", the Committee does not dare in paragraph 47 to recommend any extension of the search that would cost more than £60,000 per annum, and even of this sum two-thirds is to be raised by an increase in the fees paid by inventors. Reading between the lines, one can guess that if the matter had been decided on technical considerations alone, without reference to financial restrictions, the Committee's recommendations would have gone considerably further. But in these hard times we must be thankful that the Committee had even that much courage, and the somewhat parsimonious improvement recommended by it will at least be a step in the right direction.

The report contains a number of minor recommendations, which are generally in harmony with the recommendations of the British Science Guild and will, if adopted, enable the patent system to work more smoothly. It discusses also two important questions which were brought before it not by the Guild but by the Joint Chemical Committee and the Patent Office. The first of these was the 'dedicated patent' scheme. This was intended to take account of a tradition held by the medical profession to the effect that, while it is legitimate to accept fees for administering new drugs, it is illegitimate to accept patent royalties for inventing them. In an attempt to reconcile this tradition with the interests of chemical research and invention, the Joint Chemical Committee

suggested that medical patents should be compulsorily dedicated to the public and administered by a State department, which should allocate a fair profit to the patentees. The medical profession, after some wavering, showed itself hostile to this scheme, and the Sargent Committee, while reporting adversely upon it, evinced a feeling that medical inventions may quite legitimately be patented in the ordinary way.

The other important new point was somewhat technical, and related to Section 32A of the Patents Acts. Briefly, it may be said that prior to 1919 the invalidity of a single one of the claims which define the scope of a patent was enough to damn the whole patent; but the Act of 1919, in remedying this hardship, made way for an abuse by removing the danger which a patentee had incurred if, in defining the scope of his monopoly, he had tried to cast his net unreasonably wide and to claim more than he had really invented. As a result, there has grown up a bad practice of using unconscionably wide verbal formulæ in patent claims, and the Sargent Committee proposes that this abuse should be checked.

The findings of the Sargent Committee represent the irreducible minimum of reform that will content those who desire to bring the British patent system up to date. The chief danger is that the technical character of the whole subject may blind the public and the legislature to its importance, particularly when parliamentary time is subject to such keen competition on behalf of controversial and party legislation.

#### Hamilton's 'Characteristic Function'.

*The Mathematical Papers of Sir William Rowan Hamilton.* Vol. 1: *Geometrical Optics.* Edited for the Royal Irish Academy by Prof. A. W. Conway and Prof. J. L. Synge. (Cunningham Memoir No. 13.) Pp. xxvii + 534. (Cambridge: At the University Press, 1931.) 50s. net.

THE publication of the mathematical papers of Sir William Rowan Hamilton, to whom no one will deny the title of greatest of Irish mathematicians, is a notable event. This is the first of the four volumes which are expected to be published, and the only regret that its appearance can arouse is that it did not appear until sixty-five years after Hamilton's death and more than a hundred years after some of its contents were written.

Hamilton's name is known to most students in connexion with the general equations of dynamics