AN INTERNATIONAL INFORMATION COUNCIL*

By PROF. A. F. C. POLLARD

Imperial College of Science and Technology

VALUABLE information on a subject is frequently scattered outside the recognized field of that subject and may appear in unexpected types of literature, as illustrated by the classical example of Mendel's two papers on his famous laws governing the inheritance of characters in plants and animals, which lay in obscurity for thirty years, and the remarkable French patent specification of Penaud and Gauchot of 1876 describing the modern aeroplane in detail, which was not brought to light before 1916.

Extensive search is necessary to gather all the available information on any subject, and the magnitude of the searching and sifting process is beyond the capacity of individual information services. Moreover, most services entirely neglect certain kinds of literature, such as university theses, patent specifications and trade literature, all of which are essential material for particular groups of people. Some services, however, recognize the importance of such literature. The Mellon Institute and the Carnegie library at Pittsburg, for example, have formed large collections of trade literature indexed by subject and name of firm.

The vast task of indexing the current literature alone could only be carried out by a carefully planned international organization by which the contents of all non-fiction literature were analysed, classified and recorded in the form of a simple bibliographical reference, as distinguished from a compound reference in which the simple reference is compounded with notes or an abstract. For the smooth working of the plan to be described, it is essential that these simple bibliographical references should be subject-classified by a standard international code, such as that known as the Universal Decimal Classification now in course of publication as a British Standard by the British Standards Institution, and prepared in a standard form which will shortly be published by the same body.

Bibliography is the work of specially qualified people. Usually the research worker, in whatever domain of learning he may work, is not qualified for bibliographical research, and in any event is denied the facilities open to the professional bibliographer. The intrusion of such work into his otherwise occupied time is resented, and in consequence his references are fragmentary and exert an undesirable influence upon the quality of his output. It was necessary to organize groups of specially qualified persons to analyse and classify man's priceless inheritance of recorded knowledge in order to make full use of it for the benefit of mankind.

In the international organization proposed, a supreme body, the International Information Council, is linked to national information committees situated in the literature-producing countries of the world, and under each national committee a family of national information bureaux carry out the work of recording the contents of the national literature. The essential feature of the plan is that the national

information organization of a country shall deal exclusively with the literature produced in that country.

The organization is intended to serve government departments as well as the public, and the bodies composing it should be governmental or semi-governmental bodies subsidized by government funds. The bureaux under the national information committee of a country would deal with specific domains of the national literature, such as those concerned with general works, science and technology, agriculture, medicine, fine arts, philosophy, theology, sociology and law, commerce, languages, literature, history, etc.

The organization, in fact, is somewhat similar to the system of the Executive Council of the Imperial Agricultural Bureaux, with its twelve sections each concerned with a branch of science bearing on agriculture, which according to the report of the British Commonwealth Science Committee of March 29, 1943, "... has since its inception in 1929 been an outstanding success in providing a vital service, collecting, collating, and disseminating information on agricultural research to workers throughout the Empire and the world. The fact that this organization, administered by a constitutional and representative executive council sitting in London, has been continuously supported since 1929 by the whole Empire on the basis of an agreed contribution, surely implies that governments would be sympathetic towards an extension of such a scheme to other essential scientific services".

The personnel of the International Information Council should include representatives of the national information committees, and the personnel of each national information committee should include representatives of its bureaux, which consist of information officers fully qualified to deal with the literature of their respective subjects.

Assuming that the standard methods of preparing simple bibliographical references and the standard classification have been internationally adopted and that the world organization is in operation, current literature would be dealt with in the following manner. A list of the national material, as and when published, is obtained by the national information committee from the national library enjoying the rights of legal tax, or failing that from publishers' catalogues and other sources. The documents are obtained and roughly classed by the standard classification numbers and distributed to the bureaux. If the bureaux are assigned the classification numbers of their subjects, the distribution by means of these 'bureau numbers' becomes automatic. But some of the documents received by a bureau may contain 'unwanted' matter; in this case it is roughly classed and sent to the correct bureau for action. The bureaux prepare the MSS. of the references, which are printed on the international standard card, by the national committee. Copies of the cards are then distributed by the bureaux to their opposite numbers in other countries by means of air transport, in order to reduce the time of distribution to a minimum. It will be noted that in this process of distribution, it is not necessary for analogous bureaux in the different countries to have precisely the same bureau numbers, since it is only the bureau numbers which are the instruments of selection.

In this way each bureau will accumulate those references to the current literature of the world concerning its specific domain of information, and will

* Substance of a paper on "A Plan for Mobilizing Bibliographical References to the Contents of the World's Non-Fiction Literature" read at a meeting of the British Society for International Bibliography on September 28.

build up a classified subject, or more correctly an 'ideological' card *répertoire* of simple bibliographical references, which can be filed in duplicate to form an author, title, or generally an 'onomastic' card *répertoire*.

Non-current literature could be gradually dealt with in the same way by systematic reference to accession lists and union catalogues. The records for the non-current literature of a country would take many years to complete, but it is important that the current literature should be attacked as soon as possible before the growing mass gets beyond human control.

By an extension of the exchanging process to the national committees, a great central *répertoire* of all information could be formed, but the enormous mass of references which would accumulate and the space required for storage would make such a proposition impossible to entertain, even if any advantages could be gained by having such a colossal and central national *répertoire*. Each bureau must necessarily be established at an information centre where the material and the card *répertoires* may be stored for use by the information officers and the public.

The application of this proposed organization to British bibliography might be made in either of two ways. The countries of the Empire may be regarded either in the geographical sense, each with its own national committee and family of bureaux, or the whole British Commonwealth may be grouped under one national committee, which might be called the British Commonwealth Information Committee. With this arrangement the bureaux probably would function as successfully as the twelve branches under the Executive Council of the Imperial Agricultural Bureaux.

Suitable British information centres should be government and public institutions in London, such as the libraries of the Science Museum—for the bureau or bureaux dealing with science and technology—the Victoria and Albert Museum, the Public Record Office and so on. Other libraries and institutions in different parts of the country should be authorized to obtain copies of any desired domains of the official card *répertoires*, so that the records could be dispersed over the country for the benefit of the nation.

The organization is thus fundamentally concerned with the analysis and classification of information in the form of simple bibliographical references. Other services such as abstracts, progress reports, the provision of photo-copy, translation, special bibliographies on demand, loan services, etc., should be regarded as services outside the activities of the official international organization. Many of these services are in vigorous activity and obviously should be improved and developed by the use of the complete records filed in the card *répertoires* of the official organization. It is stated in the report of the British Commonwealth Science Committee, to which reference was made above, that "The case for collaboration in the production of scientific abstracts of high quality for the common use of the English-speaking world is very obvious, and would have the strong support of the Committee". If the major abstracting services would agree to collaborate and adopt a method of passing on 'unwanted' matter to the appropriate service, in a manner similar to that described for material 'unwanted' by the official bureaux, the case might be made. The official card *répertoires* unquestionably would greatly assist the

abstracting services and help to avoid duplication, more especially if each abstracting service was identified by classification numbers.

This immense international organization with its bureaux all over the world could not, of course, be established in its entirety in the first instance, but there appears to be no reason why the plan should not be initiated by the establishment of an Anglo-Soviet-American organization, primarily concerned with British, Russian and American current literature. The literature of other countries could be divided by agreement among the three members of the United Nations, and the work undertaken for any country in this way could be handed over as soon as its national information committee with the necessary bureaux had been established by the assistance of the International Information Council.

X-RAY ANALYSIS GROUP OF THE INSTITUTE OF PHYSICS

FOR some time past the need has been felt for closer co-operation between the users of X-ray diffraction methods. In industry, for example, many new applications are being found for these methods, and their simplicity and directness make them valuable additions to industrial testing procedure. Their use may sometimes be entirely empirical, but a sound understanding of the theoretical basis is necessary in order that the practical worker shall both recognize the limitations of his methods and be able to tackle the more unusual problems that are bound occasionally to be presented to him. It is desirable, therefore, that there should be some means for the technician to become acquainted with the latest results of theory, and for academic circles to learn of the problems that X-ray analysis is being called upon to solve.

The need has been partly met by the X-ray Conferences of the Institute of Physics, which were held in Cambridge in 1942 and 1943. Though their support, both from industry and from the universities, was evidence of their success, the Board of the Institute has realized that such conferences can be of only limited value, and has now authorized the formation of an X-ray Analysis Group.

Despite its connexion with the Institute of Physics, it is not intended that the membership should be confined to physicists. Since the formation of the Group has been sponsored by the Institute, the present committee has a strong bias on the side of physics, but it is hoped that it will become more truly representative of the different branches of science as vacancies in it are filled by election.

The inaugural meeting of the Group was held on Saturday, October 16, in the Physics Department of the University of Manchester, at the invitation of the Manchester and District Branch of the Institute. Dr. F. C. Toy was in the chair. The papers read illustrated very well the objects for which the Group was formed.

The main lecture was given by the chairman of the Group, Sir Lawrence Bragg, on "The Physical Optics of X-Ray Analysis". Sir Lawrence emphasized the essential similarity between the diffraction of light by a grating and of X-rays by a crystal, and showed how the same principles can be applied to both. He spoke rather regretfully of the tardiness