

ton he held the chair. In December 1944 he was appointed to the chair of physics at University College, Swansea, the appointment to take effect after demobilization; but by the courtesy of the College was released from this and enabled to join Adam Hilger, Ltd., where his specialist knowledge and administrative experience will be of particular value. During the War he was in charge of operational research at the Air Ministry and was deputy director of science and deputy scientific adviser; and, since December 1944, when Sir George Thomson retired from the post, he has been acting as scientific adviser, pending a peace-time appointment. He has specialized in spectroscopy, first in atomic spectra, later in the Raman effect.

Science in the United Nations Organisation

A MEMORANDUM by Mr. Guy B. Gresford, Australian scientific research liaison officer in London, entitled "The Scientist and the Economic and Social Council", after referring to the major part played by the man of science in the Second World War and to some of the achievements which have been among its most striking features, points out that, particularly among the United Nations, scientific workers were called in at the highest level in the prosecution of the War, to help in formulating as well as in the execution of plans. Mr. Gresford's memorandum argues that it is just as important that the man of science should play his part in the international organizations designed to ensure economic and social progress for mankind as a whole. His place in the functional organizations is obvious; but Mr. Gresford points out that it is equally necessary for him to be included within the scope of the Economic and Social Council, which, in securing expanding economic and social progress, must rely largely on scientific and technical knowledge. In planning for the future, the Council must refer to scientific experts, not only to ascertain the present state of knowledge as it affects a particular project, but also to attempt to forecast the progress likely to be made in the future before effect can be given to the plans. Mr. Gresford illustrates his argument by reference to the interaction of rubber production in tropical areas to the manufacture of synthetic rubber, and the relation of long-term hydro-electric schemes to the development of atomic energy.

Accordingly, Mr. Gresford urges that the place of the scientific worker on the Council should be that of a full working partner; only thus can the Council take the longest view and ensure that changes brought about by scientific developments occur gradually and without deleterious effects. Interchange between the economist, the social worker and the man of science must be complete and at all levels. The Council will require the best scientific advice that it is possible to obtain, and should have at its call the leading scientific men of all fields. For this purpose, Mr. Gresford, like Dr. J. Needham (see *Nature*, 156, 401, 558; 1945), suggests the establishment of a standing scientific commission to advise the Council on all scientific matters, as well as a small permanent scientific secretariat, and technical advisory committees of distinguished men of science to deal with particular projects outside the scope of the international functional organizations. The standing commission would consist of twelve to fifteen members with an initial period of service of, say, three years, and the secretariat would be composed chiefly of fairly young scientific workers with an administrative bent, seconded for a few years from national scientific

organizations. If the Council established regional offices in connexion with the specialist organizations of the United Nations, Mr. Gresford suggests that the scientific side might establish an international liaison service, but on rather more modest lines than those proposed by Dr. Needham.

The Industrial Research Bill

THE Industrial Research Bill introduced recently into the House of Lords by Lord Barnby is intended to improve and strengthen the existing machinery for forming and operating industrial research associations in Great Britain. It is an 'Enabling Bill' under which the majority of interests in any industry can, if they so desire, put forward to the Board of Trade a scheme for operating a co-operative industrial research association. The Board of Trade will approve the scheme if adequate arrangements have not already been made to undertake the scientific research provided for by the scheme, if the scheme is in the national interest and if the promoters appear to represent at least half of the industry concerned, but the scheme will only operate if after such approval at least 75 per cent of the firms in the industry vote in favour. Special minority interests will be permitted to obtain exemption if they have already made their own adequate arrangements for scientific research, if they are too specialized to derive any benefit from a research association or if payment of contributions would involve serious financial hardship. The levy is not to exceed one per cent of the turnover or revenue of any firm. While the Bill does not deal with the scale of Government financial contributions towards the funds of the research associations, it is assumed that State aid would be forthcoming on a generous scale, in view both of the present arrangements and categorical assurances as to the intention of the Government to give the maximum support to scientific research and technical development.

Relics of Peking Man

ACCORDING to a New York correspondent of *The Times*, American agents have recovered from the Imperial University, Tokyo, crude tools, a carved tooth, jewellery and other objects looted by Japanese men of science from the cave at Choukoutien, in China, of the Peking man (*Sinanthropus pekinensis*). They will be returned to the National Geological Survey of China. Letters seized with the relics disclosed that the Japanese were never able to discover in a three-year search where the Chinese had hidden the skeleton remains of *Sinanthropus pekinensis*.

Rh and Blood Transfusion

THE future of the blood-transfusion services has been the subject of much anxious thought among those who have helped to create and man them and also among the general public. One important aspect of their future is discussed in a leading article in the *Lancet* (112, July 28, 1945). This is the possibility that *Rh*-positive blood may be transfused into an *Rh*-negative individual. The first transfusion of the *Rh*-positive blood causes the development of anti-*Rh* agglutinins in the serum, so that a subsequent transfusion of *Rh*-positive blood may produce an incompatibility reaction exactly similar to that which occurs when Group A blood is transfused into a Group B person, namely, hæmolysis of the incompatible blood cells and possibly jaundice or hæmoglobinuria. This reaction may be mild, severe or

even fatal. Further, an *Rh*-negative woman may have been sensitized by having an *Rh*-positive baby, or by a transfusion of *Rh*-positive blood; if she then has an *Rh*-positive child, there is increased risk of erythroblastosis or of an allied condition in this child. Also, if an *Rh*-negative mother has an *Rh*-positive child and is sensitized by this child, her first transfusion of *Rh*-positive blood may cause an incompatibility reaction. American work has shown that this *Rh*-sensitivity may last for eight to twenty-two years. In addition to this, anti-*Rh* agglutinins cannot yet be always detected in the blood. R. R. A. Coombs, R. E. Mourant and R. R. Race have, however (*Lancet*, 15, July 7, 1945), described a new method of detecting weak and 'incomplete' *Rh* agglutinins in the blood (cf. also Coombs, R. R. A., and Race, R. R., *Nature*, 156, 233 (1945) and the discussions by A. J. McCall and S. Holdsworth in *Nature*, 155, 788 (1945) of haemolytic disease of the newborn due to the antibody *St*, H. S. Baar (*ibid.*, 789) on the Race-Wiener test in haemolytic disease of the new-born, and G. Plaut, M. Barrow and J. M. Abbott (*Brit. Med. J.*, 273, Sept. 1, 1945)).

The further difficulties of this problem and the measures to be taken to avoid the risks concerned are discussed in the *Lancet* (*loc. cit.*). Obviously they are matters for the expert, and everyone will support the conclusion that blood-grouping, especially when it is related to maternity work, can no longer be left in the hands of an individual pathologist, who may be employed upon this work only for part of his time; nor can supplies of *Rh*-negative blood be left to small panels of local donors. The post-war blood-transfusion service will have to be very carefully organized, not only to meet the known risks involved, but also to provide research facilities and personnel on a scale adequate to the future public importance of the whole problem. Blood-transfusion sources available during the War have provided one of the outstanding examples of the beneficence of scientific discovery. It would indeed be an indictment of our civilization if, now that peace has returned, we failed to give this particular service every encouragement and facility possible.

Religious Instruction in Schools

A COMMITTEE OF REPRESENTATIVES of the Joint Conference of Anglicans and Free Churchmen, the Association of Education Committees and the National Union of Teachers has prepared a pamphlet entitled "A National Basic Outline of Religious Instruction" (London: National Union of Teachers, 1945. 2d.). The pamphlet calls to mind an article bearing the above heading which appeared in *Nature* of November 14, 1942. Much has happened since then, but the article still stands as an explanation of the reasons why a scientific journal should in its own way deal with the problem of religious education. In particular, we retain the conviction that, after all is said and done, the psychological core of the problem lies in the relation of the teacher and the pupil, and that unless one can trust the teachers no precautions will avail. Choose the teachers carefully, train them adequately, and then trust them. The liberty of the well-prepared teacher is the essential condition.

The pamphlet is not a syllabus, but a broad 'outline' of the kinds of material that may by common consent be used in the making of a syllabus. The outline is quite unique in being national, not local (a national syllabus is an absurd idea, but a national outline is another matter). It is unique also in having

been prepared by a committee in which teachers were on equal terms with religious bodies and education authorities. The outline repeatedly states that the true interests of the children have ever been paramount in its production. It might be added in the same breath that the liberty of the teacher is the only way to secure the true interests of the children. The idea of the broad outline, which makes no pretence whatever to be a syllabus, suitable for any school, any teacher, and any social environment, has enabled the committee to make suggestions, especially for the older pupils, in directions that will be welcomed in many quarters, such as comparisons of Christian beliefs with those of other religions, the Bible and science, miracles, and problems of personal and social ethics. "The spirit of enquiry," says the Committee, "should be welcomed, stimulated and fostered." That one sentence sums up the reasons for giving strong approval to this basic outline.

British Bryological Society

ON September 12 the British Bryological Society held its first meeting since June 1939. It was announced that, during the War, the Society lost eighteen members, including H. N. Dixon, P. Allorge, W. E. Nicholson, H. H. Knight, C. H. Binstead and H. G. Jameson; new members during the same period total nearly forty. It has not been possible to renew contact with more than a few of the Continental members. It was decided to have a distribution of specimens during the coming winter, and the time of the next meeting was fixed for about Easter 1946, with a second one to be held during the winter following. Suggestions concerning biological observations on bryophytes which might be usefully undertaken by members were put forward and considered. The advisability of publishing new editions of the Census Catalogues of British Mosses and Hepatics was left to the decision of a special committee. On September 13, Dr. S. Wyard led a party of twenty-eight members on a ramble in the neighbourhood of Newlands Corner in Surrey. Although not a rich district bryologically, it yielded a few interesting plants, including the rare *Dicranum strictum* Schleich., a recent addition to the flora of Britain. In the evening the party gathered at the South London Botanical Institute to hear Dr. P. W. M. Richards give a talk on "The Growing and Cultivation of Bryophytes". Those interested in mosses or liverworts can obtain particulars of the objects of the Society and conditions of membership from the secretary, Mr. A. Thompson, 23 Regent Crescent, Skipton, Yorkshire.

Announcements

DR. HERMAN SHAW, keeper in the Science Museum, has been appointed director and secretary of the Museum in succession to Colonel E. E. B. Mackintosh, who will retire on November 30.

DR. J. S. H. DAVIES, formerly of Imperial Chemical Industries, Ltd., has taken up his duties as director of research of the British Schering Research Institute in succession to Prof. D. H. Hey, who was recently appointed to the chair of chemistry, King's College, University of London.

ERRATUM.—In the communication by Prof. S. V. Kravkov and L. P. Galotchkina entitled "Electrotonus in Colour Vision" published in *Nature* of May 19, 1945 (p. 605), the current used was 0.02 mA., and not 0.2 mA. as stated in the penultimate line of the first column.