

It is, he said, a debatable point; is it really an irreversible process? Is it not possibly and conceivably a reversible process? Are there any possible circumstances in which radiation can turn back again into matter? Sir Oliver suggested that irreversibility is not proved, and that the material universe may be a cyclical process after all. Matter has been clashing together under gravitation, developing heat; that seems to be irreversible, but how does the energy get back? Not as matter. If at the confines of the earth the heat so developed could be turned back again into matter, it could form a sort of continual pulsation and cyclical change without beginning and without end.

Sir Robert Hadfield, who was in the chair at the Royal Institution, and with his usual keenness for the affairs of the Faraday Society had prepared an interesting little brochure giving the history of its development and work, mentioned an important matter in connexion with the Royal Institution. There are plans in hand, he said, for improving the building which it is very necessary should be carried out, and he expressed the hope that all the technical and scientific societies would give every assistance in the matter. Sir Robert referred in his pamphlet to important work which has been accomplished by the Faraday Society during the twenty-five years of its existence, laying special stress on its contributions to the solution of the problem of the fixation of nitrogen. When the Nitrogen Products Committee was formed in 1916, largely at the instance of the Faraday Society, the Society was directly represented, and no less than seven other members were also members of the Society, while many of those concerned in the work of that Committee now occupy prominent positions.

University and Educational Intelligence.

BIRMINGHAM.—The Huxley Lecture for 1929 is to be delivered by Sir Humphry Rolleston on Feb. 12, the subject being "The Nature of Disease."

The James Watt Fellowship for 1929 has been awarded to Mr. D. Watson.

CAMBRIDGE.—Dr. T. D. Cockerft, Clerk Maxwell student in the University, has been elected to a fellowship at St. John's College.

The Regent House has decided to accept the offer of the International Education Board of a gift of £700,000 towards the proposed new library and for the development of physical and biological studies. Details of the scheme were given in our issues of Oct. 6, p. 556, and Oct. 20, p. 632.

EDUCATIONAL relations between the United States and Germany will be fostered by a tour to take place next summer under the joint auspices of the International Institute of Teachers College, Columbia University, New York City, and the Central Institute for Education and Instruction, Berlin. Assembling at Hamburg or Bremen, the party are to visit, during the six weeks beginning June 17, schools of different types in various cities under the official direction of the German educational authorities, proceeding afterwards to a conference of the World Federation of Education Associations at Geneva, to be held during the last week in July.

THE Committee of the Leplay House Educational Tours Association announces that during the Christmas vacation a group for historical and social studies will be going to Lisbon, under the leadership of Mr. Barry

Parker, vice-president of the Town Planning Institute. Burgos, Madrid, and Toledo, and other places in Spain, are included in the itinerary. Further, Prof. P. Geddes has again invited friends of Leplay House to go to Montpellier. A few days will be spent in visiting Avignon, Nîmes, and other places of interest. Mr. G. Morris will lead the group. Particulars can be obtained from Miss Margaret Tatton, Leplay House, 65 Belgrave Road, Westminster, S.W.1.

FROM the Universities Bureau of the British Empire we have received a copy of a useful prospectus for 1928-29 of the professional schools, post-graduation courses, and specialist studies in the universities and university colleges of Great Britain and Ireland. This pamphlet gives, in forty pages, first, a summary of information under those headings regarding each university (except Oxford and Cambridge) and university college; secondly, combined lists of their professional schools under the headings—*theology, law, medicine, dental science, veterinary science, pharmacy, music, art, architecture, journalism, librarianship, commercial science, engineering, metallurgy, mining, agriculture, etc., and education*; and, lastly, alphabetical lists of subjects of study to which special attention is devoted in the several institutions. By reference to these lists one can ascertain at a glance where special facilities are to be found for the study of, for example, aviation and aero-engineering (Cambridge, London—Imperial College and East London College—Oxford, and Glasgow), colloidal chemistry (Bristol, Leeds, and Manchester), economic entomology (Liverpool, London, Manchester, and Edinburgh), photography (Manchester), and so on. This pamphlet will no doubt be distributed to universities in other countries, where it should prove extremely useful to advanced students proposing to study abroad.

THE Board of Education has published another of its useful booklets, this time on the supply of literature—that is, reading books and libraries—for public elementary schools ("Books in Public Elementary Schools." Pp. xxii+163. London: H.M.S.O. 1s. 3d. net). It starts from a statement of the admitted inadequacy of the expenditure of the authorities under this heading. The Board's Committee is able to make out an unanswerable claim. The expenditure on books only averages 1s. 7½d. a head, taking elementary schools of all grades in England and Wales together. In the central schools alone, that is, the schools for scholars from twelve to fifteen or sixteen years of age, it amounts to just under five shillings. Even this is small enough, and for the other schools the amount is ludicrous. The report is emphatic that children in elementary schools need more books and books of better quality, though a steady improvement in the quality is noticed. Of the many detailed suggestions that are made it is only possible to mention one or two. There should be a collection of books of reference in every school, both for pupils and teachers, and children should be taught as part of their education how to make use of a book of reference. Arrangements are also suggested by which each pupil might acquire a small selection of books which especially interest him. The last recommendation is that special attention should be given in training colleges to guiding teachers in the right principles for the selection of books, for on them ultimately the choice of nearly all the books in an elementary school must rest. A regret seems justified that no one on the Committee was specially interested or qualified on the subject of books on science, and hence this section, and that on science and invention in the section on history, are conspicuously weaker than the rest.