

Lord Bledisloe and the Promotion of Science

LORD BLEDISLOE, the Governor-General of New Zealand, has consistently encouraged scientific workers in the Dominion, and has promoted endeavours in all branches of science. As evidence of his keen scientific interest, during the visit of the Byrd Expedition II to Wellington on December 9, Lord Bledisloe promoted a happy scientific colloquium at Government House, when the visiting explorers were entertained along with the permanent scientific workers of the Dominion. It is more than twenty years since so large a number of men belonging to different nationalities, whose researches are outstanding in different branches of science, have been gathered around one table in New Zealand. The function allowed group discussions of all branches of the scientific work of the Expedition, which is probably provided with a larger scientific staff, and has a more extended scientific programme, than any expedition which has so far visited the antarctic. Of outstanding interest is the work projected in cosmic ray determinations, and it is understood that the results on the trip from the United States have verified A. H. Compton's results in the variation with latitude of cosmic ray intensity. The results of observations in the neighbourhood of the magnetic pole and on the polar plateau will be awaited with interest.

The Byrd Antarctic Expedition

AMONG the interesting items in the programme of work of the Byrd Antarctic Expedition are the use of seismic reflection methods for the determinations of ice thickness and depth. For this work, the expedition is well equipped with the latest types of apparatus. Close attention will be devoted to upper air observations as forming a very considerable part of the extensive meteorological research programme which has been outlined. The expedition is also proposing to take the fullest advantage of the opportunities afforded in this region for studying polar aurora. The biological and geological problems associated with Antarctica will also receive close study, and the scientific world should be considerably richer as the result of the labours of the staff of the Byrd Expedition II in the south polar regions.

WE regret that news of the Expedition up to the end of January was not of a wholly reassuring nature. According to the *Times*, the larger of the two vessels of the expedition, *Jacob Ruppert*, was caught in the pack-ice and drifting in the Ross Sea. Apparently the ship had met with much difficulty on account of ice but had reached the proximity of the Ross Barrier by January 27; it began to discharge cargo on to the ice whence it was to be sledged by dogs and tractor to the base at Little America on the Bay of Whales. The following day, however, rifts appeared in the ice and several drums of petrol were saved with difficulty. The ship had to cast off, leaving a large party of men on the ice. The time now available for landing supplies is short since the ice is likely to freeze together at any time

now, thus endangering the safety of the ship or at least its chance of getting away before the winter sets in.

Research and the Electrical Industry

THE thirteenth annual report of the British Electrical and Allied Industries Research Association for the year ended September 1933 gives an interesting résumé of the many problems on which it is engaged. In a foreword, Mr. C. C. Paterson, the chairman of the Council, says that the electrical industry has been built up by research, and by research only can it continue to prosper. This research must be made on a scale commensurate with its growth. Some of the researches described have a longer outlook than others, but none of the researches can be abandoned or even delayed without definite loss to the industry as a whole. Much of the work done is in co-operation with other organisations. It is a pity that a number of large authorised electrical undertakings have not yet seen their way to become full subscribing members. The subscription assessment agreed to, at a recent conference, was £10 per £25,000 of revenue. It is certainly not onerous. Research has often the effect of appreciably, and sometimes largely, reducing capital and working costs and hence non-subscribers are benefiting from work, the cost of which has been borne by others. The High Commissioners in London for the Dominions and Colonies have shown an active interest in the work of the Association, particularly the Indian Government. Applications for membership have been received from several local State Governments and Public Works Departments. We are glad to hear that the Association is taking an active part in locating the causes of radio interference. The solution of these urgent problems has involved sacrifices by the staff. They have been able to mobilise a squadron for field work and a mobile laboratory at short notice and are obtaining useful information.

Industrial Health in Japan

IN Japan the pressure of a growing population has focused attention on the further development of industry, since in the next decade Japan has to find food and employment for nearly ten million more people than she does to-day. That the problem of industrial efficiency is being seriously tackled is evidenced in the annual report of the Director of the Japanese Institute of the Science of Labour at Kurasaki. This Institute was founded some years ago to undertake research into the physiological, psychological and environmental conditions affecting workers and their output. Research committees have recently been organised to investigate problems such as the rationalisation of labour, industrial fatigue, factory conditions and the appropriate qualifications to be desired of workers in every branch of Japanese industrial life. This latter investigation has already led to the establishment of standard norms for the mental and physical development of young Japanese workers aged 12-20 years. Occupational diseases

(Continued on p. 253.)

have also been studied, and in this connexion special attention has been paid to skin diseases among typical Japanese manual workers such as stevedores, octopus fishers, plasterers, carpenters and blacksmiths. Every effort is made by the Institute to maintain close contacts with industry, and its *Journal* is now to be issued bi-monthly instead of quarterly, so that the results of its researches may be available as soon as possible. Recently also the Japanese Association of Industrial Hygiene—an organisation which is closely connected with the Institute—has considerably increased its activities.

The Rockefeller Foundation

THE Rockefeller Foundation's report for 1932 is a tale of activities which, in extent, variety and momentum, are probably unmatched by those of any other agency for world betterment. Of the aggregate disbursements during the year, amounting to nearly 14 million dollars, about one fifth was for public health work carried on in almost every country of the globe. The report of the director of the international health division covers some two hundred pages and includes a retrospect of the past ten years. This is followed by reports of the directors for the medical sciences, natural sciences, social sciences and humanities, and in each case the recital of events of the year is elucidated by reference to previous years' achievements. The chapter on the social sciences is of special interest at the present time, showing, as it does, that the framers of President Roosevelt's administration's schemes for national recovery, however handicapped by lack of precedents, were at any rate in a position to draw upon the results of elaborate academic research, to the financing of which the Foundation has for some years made very substantial grants. In addition to grants to various institutions for current expenses, including in 1932 grants amounting to 450,000 dollars to the Social Science Research Council in New York City, the Foundation has recently promoted research in specific fields recognised as of specially vital importance, namely, economic planning and control, international relations, and community organisation. In 1932, substantial grants were made for research in such subjects as industrial hazards, history of prices, unemployment, employment exchanges, the gold standard, cyclical fluctuations and employment stabilisation.

Progress of Agricultural Research in Great Britain

THE collected reports on the work done during the year 1931-32 at agricultural research institutes in the United Kingdom which receive State grants has just been published. The volume contains in addition reports on special agricultural investigations for which funds have been allotted. Among these the following may be cited: investigations on improved grassland management at the Welsh Plant Breeding Station, Aberystwyth, and the University of Bristol, seed potato production at the University College of North Wales, Bangor, land reclamation with *Spartina townsendii* (rice grass) by the Essex County Council,

grey squirrel problems at the Department of Zoology, University of Oxford, and the efficacy of chlorates as weed killers at the North of Scotland College of Agriculture. A list of papers published by each research institute or centre and the names and addresses of the directors or persons in charge of the investigations are supplied, so that further information on special points can be obtained if desired. The report can be obtained from H.M. Stationery Office or through any bookseller, price 6s. net.

THE Royal Agricultural Society, 16, Bedford Square, W.C.1, has published the eighth of its annual summaries of the research work carried out in the leading branches of agriculture. In previous years the publication has been issued in book form, free on application to members of the Society, and available at a nominal charge to the general public. In the present year, and for the future, "The Farmer's Guide to Agricultural Research" will form part of the Society's *Journal* and will, therefore, automatically be received by every member. A limited number of copies, however, are still being bound separately for distribution to the Press and to agricultural education and research centres. The survey of scientific work which it provides is not limited to research conducted in the British Isles, but also includes references to results obtained in any part of the world which may have a bearing upon the problems of British agriculture. The character of the volume is similar to that of the previous year (1931), except that the section on farm crops which was then omitted has been reintroduced. The other sections, namely, dairy farming, diseases of animals, farm economics, the breeding of livestock, farm implements and machinery, pests and parasites, and soils and manures remain as before. A few copies of previous issues for the years 1925-1931 are stated to be still available.

A Natural History Society in Northern England

WHILE interest in museums appears to be growing, many societies devoted to natural history find it difficult to retain the membership of former years. The Northumberland, Durham and Newcastle-upon-Tyne Society is fortunate in having raised its membership, by a small addition, to 613, but even so the cost of running the Hancock Museum is mainly responsible for a raiding of the Maintenance Appeal Fund to the extent of £245, so that the Fund is on the verge of extinction. The Museum does good work, and under the guidance of T. Russell Goddard and many helpers, is alive to the need for interesting the public by wild-flower exhibits, seasonal exhibitions of Lepidoptera, an observation hive, lectures and the like. Unless further support is forthcoming, it would appear from the financial statement that the activities of the Museum run the danger of curtailment.

First Aid in the Laboratory

WE have received a copy of a pamphlet entitled "Safeguards in the Laboratory", together with a notice suitable for exhibition in the laboratory, both of which are obtainable, price 6d. post free, from