took part in the establishment of bases for the Falkland Islands Dependencies Survey in the Antarctic. He received the C.M.G. in 1946 and early in that year was promoted to the post of Under-Secretary in the Gold Coast. He served there, acting as Colonial Secretary for most of the time, until 1948. In 1947 he was chairman of the Gold Coast Committee which recommended the establishment of the present Gold Coast University College. In the following year he retired from the Colonial Service in order to become the first editor of *Corona*, the professional journal of the Colonial Service. Mr. Bradley has, since he came to London, particularly interested himself in the task of spreading knowledge about the Commonwealth and has given many broadcasts and lectures and contributed widely to periodicals in Britain and throughout the Commonwealth. He is a recognized authority on African affairs. He has published several books on African subjects, of which the two best known are "The Diary of a District Officer" (Harrap, 1942; Nelsons, 1948) and "The Colonial Service as a Career" (H.M.S.O., 1950), and has in the press a history of the Roan Antelope and Mufulira copper mines and of the early development of Northern Rhodesia as a whole under the title "Copper Venture".

The Oxford Synchrotron

THE Oxford 140-MeV. synchrotron has recently been undergoing preliminary trials at 60 MeV. This machine was built with funds supplied by the Department of Scientific and Industrial Research. During the past year much trouble has been encountered owing to the charging-up of the orbit tube wall, but these difficulties are now being overcome. The X-ray yield so far obtained is moderate, a thin copper target irradiated to saturation at a metre from the target showing a copper-62 activity of about 10,000 counts per min. per gm.

Science in the University of Glasgow

FOR the present session there have been 225 new admissions to the Science Departments of the University of Glasgow, compared with 232 a year ago. There are about 179 research students. In all sections of the University the total number of matriculated students is now about 5,820. A new feature of the teaching of bacteriology in the University (under Prof. J. W. Howie as its Gardiner professor) is that it now ranks as a science subject for degree courses. It may be taken either as a single or double qualifying course for the ordinary degree, or as a principal subject of an honours curriculum, which includes courses in botany, zoology, chemistry and biochemistry. There is also a combined honours curriculum in bacteriology and biochemistry.

The following appointments have recently been made in the University: Dr. F. E. Moon has been appointed senior lecturer in agricultural chemistry; Imperial Chemical Industries Fellowships have been awarded to Drs. M. F. Grundon and H. J. E. Loewenthal (for work in the Chemistry Department on curare and in the polycyclic field, respectively) and to F. C. Flack (gamma-ray spectroscopy in connexion with the high-tension set in the Natural Philosophy Department).

Synthesis of Vitamin B_{12} by *Rhizobium meliloti*

IT has been shown by M. O. Burton and A. G. Lockhead (*Canad. J. Bot.*, 30, 5, 521; 1952) that, of seventy strains of six species of *Rhizobium*, *R. meliloti* is sharply distinguished from the others by its ability to synthesize significantly larger quantities of vitamin B_{12}, one strain producing 1,000 mμ gm. per ml. of liquid culture medium. No correlation was observed between the vitamin-synthesizing capacity of individual strains and their effectiveness in nitrogen fixation.

Bristol Museum

THE annual report for 1951 of the City Museum, Bristol, is a good example of how provincial institutions accepted the challenge presented to them by the Festival of Britain. In Bristol it was decided to stage an exhibition portraying to some extent the topography and natural history of the city in 1851. One part of the large gallery was arranged realistically with lay figures and furniture to simulate the essential features of a drawing room. In addition, material and lay figures showed a hatter's and a sailmaker's workshop, while side panels depicted aspects of the railways, shipping, natural history and geology of the Bristol area in 1851. The report also describes new developments at the Museum during 1951, chief of which was the opening of a room specially for children making use of the Museum's service to schools. In addition, seventeen temporary exhibits were arranged as well as a series of winter lectures and conducted summer walks.

Proceedings of the Glasgow Mathematical Association

DURING the past fifty years the numbers of those engaged in research in pure mathematics has increased many times; but there has been no corresponding increase in the number of British journals available for the publication of their work. We therefore heartily welcome the appearance of a new journal, entitled *Proceedings of the Glasgow Mathematical Association*, but actually containing papers not only from Glasgow but also from England, Canada and South Africa. Manuscripts from all parts of the world are invited, primarily, but not exclusively, on pure mathematics, and should be sent to the Editor, Glasgow Mathematical Association, Department of Mathematics, University, Glasgow, W.2. The *Proceedings* will be published each January and July, the first part having appeared in January 1952. Four parts will make up a volume of about two hundred pages. The prepaid subscription for each volume is £2 (or 6 dollars) post free, and single parts may be obtained for 10*s*. 6*d*., from the publishers (Edinburgh and London: Oliver and Boyd, Ltd.) or from any bookseller.

Plant Breeding Institute, Cambridge

THE Plant Breeding Institute at Cambridge, for many years part of the School of Agriculture, University of Cambridge, which was responsible for its administration with the aid of grants from the Ministry of Agriculture and Fisheries, has now been constituted as an independent research institute. It will continue to be financed by grant-aid from the Ministry and to come under the scientific supervision of the Agricultural Research Council. The Institute now takes the form of a company limited by guarantee, and without share capital. The membership of the governing body is as follows: Sir Frank Engledow (chairman); Prof. G. E. Briggs; Prof. W. Brown; Mr. E. Cave; Prof. S. C. Harland; Prof. H. Ian Moore; Prof. J. W. Munro; Prof. T. G. B. Osborn; Mr. R. W. Ward.