issued jointly by the Cambridge and Aberystwyth Sections of the Imperial Bureau of Plant Genetics (3s. 6d.).

White Pelicans of Western America

Where formerly there were more than seventy nesting colonies of white pelicans in western Canada and the United States, there are now but seven large colonies. Of these, five are in Governmentprotected areas, a fortunate circumstance, since although there still exist 20,000-25,000 of these birds in the United States, their continued existence is not so secure as the numbers might suggest. The danger which most threatens the species, according to Ben H. Thompson (Science Service, Washington, D.C.), is the draining of lakes where the nesting islands exist, but there has also to be taken into account the retaliation upon nests and eggs by fishermen who object to the pelicans' destruction of fishes, notwithstanding that in most places the birds have been found to feed mainly upon fishes not good for sport or food. A third line of control was practised for some time in Yellowstone Lake, on account of the part taken by pelicans as carriers of a trout parasite, but that policy has been given up, and the Yellowstone Park birds are now fully protected.

Museums Association

THE report of the Council for 1932-33 makes very satisfactory reading. The membership rose to 801, and is now really representative of museum interests throughout Great Britain. Income for the year, at £2,785, was a record, the subscriptions of members exceeding by £268 those of the preceding year, and the net credit balance for the year was £496. The work of the Association has followed the lines of recent years. Co-operation with the Carnegie United Kingdom Trustees in the allocation of museum grants has been continued, and now all applications for grants must be made in the first place to the Association. A successful training course for museum curators was held at Manchester, the annual conference of 1932 at Birmingham, and there is the great venture of an Empire survey of museums, which began in 1931 (Museums J., 33, 206; 1933). The same number of the Journal contains an account of the very successful conference of 1933 at Norwich.

Solar Physics Observatory, Cambridge

The annual report of the Director of the Solar Physics Observatory at Cambridge shows that a satisfactory state of progress obtains at that institution (University of Cambridge: Solar Physics Observatory. Twenty-first Annual Report of the Director of the Solar Physics Observatory to the Solar Physics Committee, 1932 August 1—1933 July 31. Pp. 3). The 3-ft. reflector is at last being put to regular use, and as a spectrograph will be obtained for it in the near future, we may look forward to a notable addition to the somewhat slender amount of stellar spectroscopy carried out in Great Britain. The Solar Physics Observatory has recently acquired additional solar apparatus in the form of a fine train

of prisms by Hilger. There is now a good collection of spectrographs at the Observatory. As in past years, a number of physicists from the Cavendish Laboratory have gone out on the Madingley Road and worked at the Observatory.

Bibliography of Cossar Ewart's Works

PROF. J. H. ASHWORTH and Dr. F. Fraser Darling have prepared a "Bibliography of the Works of James Cossar Ewart", who died on December 31 last (Supplement to "Animal Breeding Abstracts, vol. 1. Edinburgh: Oliver and Boyd. Separate, 6d. net). The list, which contains no less than 141 titles of papers and books by Cossar Ewart alone or in collaboration with others, is a story of a long and active life of scientific investigation covering a wide range of work, from minute anatomy to animal breeding. The last reference is to a letter on "The Coat of Sheep" in NATURE of March 19, 1927; it is also of interest to note that nine of Cossar Ewart's papers to the Royal Society of Edinburgh are represented by title only, so that the abstracts published in NATURE are the only records of their subject matter.

Academic Assistance Council

REFERENCE has been made in our columns from time to time to the work of the Academic Assistance Council, one of the functions of which is to assist men of science and letters who have been displaced during the political changes in Germany of the past year or so. We understand that the Council has now compiled a list of such displaced scholars, with information as to whether they have succeeded in obtaining temporary or permanent posts. The list is to be revised from time to time and sent to academic committees and appropriate institutions. The Council, the address of which is c/o Royal Society, Burlington House, London, W.1, is prepared to give further information about the movements of those on its lists in reply to responsible inquiries.

The Pasteur Institute of Southern India, Coonoor

The annual report of the Director, Major K. R. K. Iyengar, of this anti-rabic Institute for the year 1932 has recently been issued. Patients treated at the Institute numbered 566, with 4 deaths, a mortality rate of 0.7 per cent. In addition, the anti-rabic vaccine is now issued to 107 centres in the Madras Presidency and elsewhere, and at these 8,452 persons are reported to have received a complete course of treatment, among whom were 34 deaths, a mortality rate of 0.4 per cent. Semple's carbolised sheep vaccine was used throughout the year, and 144,900 doses of this vaccine were issued; in addition to the human patients, 194 animals were also treated. No record of research work appears in this report.

The Apennine Tunnel

On April 22 the King of Italy opened the new railway line joining Bologna and Florence. Known as the "Direttissima", this line is 21 miles shorter than the old line known as the "Porretana". The

total distance is 61 miles, of which 23 miles are underground. Many bridges and viaducts have had to be constructed but the outstanding feature is the Apennine Tunnel, 11 miles 882 yards in length, which is the longest tunnel in the world with a double track. The Simplon tunnel is slightly longer, but this consists of two parallel tunnels each with a single track. The Apennine tunnel is a straight line for the whole length and, half way through, a station has been built with four lines for manœuvring purposes. Electric traction is being used, the locomotives taking direct current at 3,000 volts. The total cost of the line has been about £13,000,000, while the saving of time on the journey between Bologna and Florence is about one hour and a half.

Rothamsted Experimental Station

Or the £30,000 required for the purchase of the land on which stands the Rothamsted Experimental Station, £26,700 has now been given or conditionally promised. The sum of £3,300 remains to be raised before May 12 in order that the Station may claim the generous donation of £15,000 from Mr. Robert McDougall and £5,000 from the Sir Halley Stewart Trust, which will complete the purchase fund. Farmers and all interested in agriculture in its practical, technical or educational aspects are cordially invited to visit the Rothamsted and Woburn plots at any convenient time between the beginning of May and the end of October. Mr. H. V. Garner and Capt. E. H. Gregory will be in charge of the demonstrations, and there is ample material at either of the farms to occupy a full day. All communications and requests to visit the Stations should be addressed to the Secretary, Rothamsted Experimental Station, Harpenden.

Announcements

SIR ARTHUR EVANS has been awarded the gold medal of the Society of Antiquaries for "his distinguished services to archæology". This is the first award to be made of the medal.

BRIGADIER-GENERAL SIR PERCY SYKES has been awarded the Gold Medal of the Royal Empire Society for his recently published book "A History of Exploration: from the Earliest Times to the Present Day".

Prof. C. V. Boys will deliver the nineteenth Guthrie Lecture before the Physical Society on May 4 at 5 p.m. The title of Prof. Boys's lecture will be "My Recent Progress in Gas Calorimetry".

THE third Spiers' Memorial Lecture of the Faraday Society will be delivered at the Royal Institution on May 16 at 5.30 p.m. by Sir William Bragg, who will take as his subject "Molecule Planning".

AT an ordinary meeting of the Chemical Society to be held on May 3 at 8 p.m., a discussion on "Unicellular Chemistry" will be opened by Dr. J. Vargas Eyre. Those invited to take part in the discussion include Dr. E. F. Armstrong, Dr. W. G.

Bennett, Prof. J. C. Drummond, Dr. H. B. Hutchinson and Miss M. Stephenson.

SIR CHARLES PEERS, chief inspector of ancient monuments in 1913-33, has been appointed by the Lords Commissioners of the Treasury to be a trustee of the London Museum.

Dr. R. Madwar has been appointed director of Helwan Observatory, near Cairo, in succession to Mr. P. A. Curry, who is the Deputy Director General of the Physical Department, Ministry of Public Works, Egypt.

The annual meeting of the Iron and Steel Institute will be held at the Institution of Civil Engineers, Great George Street, Westminster, S.W.1, on May 31–June 1. The autumn meeting of the Institute will be held in Belgium and Luxembourg on September 10–14.

W. Junk, 68 Sachsische Strasse, Berlin, W.15, has just issued Catalogue 85, "Periodica-Iconographiæ-Rara et Curiosa" dealing with books on science and natural history. The first section includes sets of periodicals, mainly foreign. Iconographiæ contains chiefly coloured-plate books, including several botanical rarities. The last section has books on all branches of natural science, both standard modern works and earlier works of historical interest.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:-An assistant lecturer in geography in the University of Manchester—The Registrar (April 30). An assistant master to teach mathematics in the School of Art and Technology, Chelmsford-The Clerk to the Governors, School of Art and Technology, Chelmsford (April 30). A chief technical assistant in the Department of Economics, Edinburgh and East of Scotland College of Agriculture—The Secretary, 13, George Square, Edinburgh (May 4). An assistant master to teach practical drawing in the Walton Junior Day Technical School, Liverpool—The Director of Education, 14, Sir Thomas Street, Liverpool 1 (May 4). A lecturer in bacteriology and assistant bacteriologist in the Public Health Laboratory, University of Birmingham—The Secretary (May 10). A veterinary surgeon in the Public Health Department of the Corporation of London-The Town Clerk, Public Health Department, Guildhall, E.C.2 (May 10). A principal of the Central Municipal Technical School, Liverpool—The Director of Education, 14, Sir Thomas Street, Liverpool 1 (May 14). A teacher of mechanical engineering in the Central Municipal Technical School, Liverpool -The Director of Education, 14, Sir Thomas Street, Liverpool 1 (May 14). A demonstrator in physiology in the University of Liverpool-The Professor of Physiology (May 14). A Ramsay Memorial professor of engineering at University College, London-The Academic Registrar, University of London, S.W.7 (May 23). A University professor of pharmacology at University College, London—The Academic Registrar, University of London, S.W.7 (May 25).