

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

OF 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. Vargass 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).