

*Naturalists' Notes*, at the end of last century, while the *Natural History Journal* was published at York from 1877 until 1898. A contemporary, the *Naturalist*, but with no connexion with the present journal of that name, appeared monthly in York in 1834, mainly for school nature students.

#### Conference of Educational Associations

THE twenty-second annual Conference of Educational Associations was held at University College, London, on January 1-8. Dr. George Dyson, of Winchester College, in his presidential address on "Education for Life", said that though there is a great and growing interest in music and the arts, it is still true that the writing of poems, the making of pictures, the modelling of statues, the playing of sonatas, the composition of songs, are regarded as frills. Our education is a system of mental education, training only a fraction of human faculty and character. He recommended a system of differentiated secondary schools, one type being frankly a workshop.

THE Great Hall was crowded on January 4 for a discussion on "The Failure of Modern Science to develop an Adequate Cultural Background to Life". Dr. W. W. Vaughan presided and the discussion was opened by Prof. Julian Huxley, who said that the defects of scientific education are over-specialisation, the failure to link science to other studies and over-emphasis on physics and chemistry, as against biology and related subjects. There is a tendency to devote too much time to practical work. He considers that science should be studied as an integral part of history and that more attention should be given to applied science, the aims of science teaching being a coherent general outlook in which scientific ideas are integrated, and the inculcation of the scientific method in human affairs. Sir Arnold Wilson's contribution to the discussion showed that he favours the teaching of science in elementary schools, in which he thinks there should be great development, and he stressed the ethical aspect of science teaching and its hope of bringing inspiration, strength and inward peace to mankind and stability to civilisation. The subsequent discussion elicited several useful suggestions, one being that young and rapidly developing branches of science might be considered from the viewpoint of their educational value. Several speakers referred to the importance of personal influences, the use of leisure, and emotional life and experience as contributing to 'cultural background'.

#### Association of British Zoologists

THE annual meeting of the Association of British Zoologists was held in the rooms of the Zoological Society in Regent's Park on January 6. On previous occasions the Association has been interested in the provision of revision classes in biology at the universities for school teachers. Dr. F. A. Dixey reported the work which the Council of the Association has done in the past year on this subject. Classes are now provided at several universities and have been well attended. In view of the expansion in the teaching of biology in schools which is now taking

place, the subject is recognised as important, and the Council was asked to continue its activities. Mrs. M. D. Brindley, opened a discussion on the possibility of providing some means by which information concerning the British fauna could be made more easily and rapidly accessible. The preservation of the fauna among the rapid and widespread changes which are bound to occur in a thickly populated country is difficult, but it is a task in which zoologists must always be interested. Changes in the fauna are often of importance to the community. At present a very large amount of information on the natural history of the fauna has been collected but much of it is scattered through many, often obscure, journals.

PROF. D. M. S. WATSON gave his views of the scope of the teaching which should be carried on in a university department of zoology. In order that the student may be able to deal later with the biological problems which will be the subject of his investigations, his teaching should be broad and should be concerned as much with the natural history and physiology of animals as with their structure. Prof. Watson gave an account of the way in which these views have been expressed in the design of the buildings which have recently been built for his department at University College. Some problems of zoological technique were also discussed. Prof. H. G. Cannon gave a lecture on the technique of making drawings for the illustration of zoological papers. It is hoped that the Council will be able to publish his lecture.

#### Ninth International Congress of Pure and Applied Chemistry

SPAIN will act as host for the ninth International Congress of Pure and Applied Chemistry, which will be held in Madrid on April 5-11, 1934, under the patronage of H.E. the President of the Spanish Republic and of the Spanish Government. The object of the Congress, which was to have been held in 1932, is to promote the progress of pure and applied chemistry, and to strengthen relations between chemists throughout the world. The president of the bureau of the Congress is Prof. Obdulio Fernández, and the general secretary is Prof. Enrique Moles; the address of the organising committee's office is San Bernardo 49 (P.O. Box 8043), Madrid (8). Membership is of three categories: honorary members, comprising the committees of honour and of patronage, and the official delegates of the Spanish Government and of the governments of other countries; supporting members, who pay the minimum amount of 300 pesetas; and active members, who pay a fee of 75 pesetas (about £1 17s. 6d.). Members' ladies pay 25 pesetas only, but they will not be entitled, as members are, to receive publications *in extenso*, the daily bulletin, summaries of communications, or the report of proceedings. Membership is open to societies, institutions, etc., connected with any branch of pure or applied chemistry, and to individuals interested therein. Applications for membership should be made to the general secretary before February 15, 1934, and should be accompanied by a remittance

made payable to the treasurer. Pamphlets containing the rules of the Congress and other information can be obtained in England from Mr. S. E. Carr, The Chemical Society, Burlington House, Piccadilly, London, W.1.

GROUPS and sections of the ninth International Congress of Pure and Applied Chemistry have been organised as follows: (1) Physical and Theoretical Chemistry, pure (electrochemistry, photochemistry), applied (colloid chemistry, rubber, tanning and leather materials, electrometallurgy); (2) Inorganic Chemistry, pure, applied (glass, ceramics, cement, mineralogy, metallurgy); (3) Organic Chemistry, pure, applied (colouring materials, explosives, sugars, starches, cellulose, paper, fats, oils, soaps, colours, paints, varnishes); (4) Biological Chemistry, pure, applied (medical and pharmaceutical chemistry, fermentation industries); (5) Analytical Chemistry, pure, applied; (6) Agricultural Chemistry; (7) History and Teaching of Chemistry, Economics and Chemical Legislation. Papers may be in the language with which the author is familiar, but the organising committee suggests the use of such languages as will avoid typographical difficulties when rendered into Latin type. Summaries must be given in English, French, German, Italian or Spanish. Scientific communications intended for the Congress should be forwarded by February 5, 1934. The Congress will comprise general lectures; lectures, followed by discussions, in the various groups; and original communications. The general lectures will deal with mineral chemistry, organic chemistry and biochemistry.

#### Metric System in China and Turkey

ON December 1 of last year, the Chinese Government issued a notice to the effect that the metric system of weights and measures would be introduced into the Customs service on February 1. According to the Shanghai correspondent of the *Times*, the metric system has been applied in the collection of the salt tax since January 1. On the same date, Turkey adopted metric weights and measures, and that system is now obligatory throughout Turkish dominions in Europe and Asia. Thus Turkey, until recently one of the most backward of the European powers, has come into line with the majority of modern States, and no doubt her commerce and industry will benefit from the consequent simplification. Several attempts have, of course, been made to introduce decimal weights, measures and coinage into Great Britain, but the most that has been achieved is the legalisation of the use of metric weights and measures, and the adoption of such terms as 'metric ton'. It would seem that the fuller use of the metric system in Great Britain, like the introduction of the 24-hour clock, is unduly delayed by the prevalent inertia of unscientific public opinion.

#### Non-Reflecting Windows

NON-REFLECTING windows are beginning to be used for shops. The reflectionless window is a British invention. It is made of a concave sheet of glass so

constructed that the light from all sources incident on it is reflected to two black boards arranged one at the top and one at the bottom of the glass. The eye of the observer looking at the glass from in front is completely unaffected by any of the reflected light, the result being that it is very difficult to believe that there is any glass between the objects displayed and the observer. The prospective buyer therefore views the goods more clearly and is not distracted by images. It is also claimed that the reflectionless window effects an appreciable saving in the cost of artificial lighting, since every lamp in use is able to give its full illuminating value and has not to compete with the disturbing effects of outside rays reflected by the window. The new window is applicable to all shops whether new or old, and for maintenance it costs no more than an ordinary plate-glass window. An illustrated description of the reflectionless window is given in the *Illuminating Engineer* of January, 1934.

#### Expedition to East Africa

AN important expedition for archaeological and geological exploration of the Northern Frontier Province of Kenya Colony left England on January 4. Its purpose is to carry out a topographical and geological survey in the neighbourhood of Lake Rudolph in the great Rift Valley of East Africa. Particular attention will be given to the search for evidence of an archaeological or palaeontological nature bearing upon the problem of the antiquity of man in the area, in the hope of extending further northward knowledge supplementing the discoveries made by Dr. L. S. B. Leakey in Kenya and Tanganyika. The personnel of the expedition will include two surveyors, Mr. R. C. Wakefield of the Sudan Survey and Mr. W. H. R. Martin of the University of Oxford. Mr. D. G. MacInnes will be responsible for mammalian palaeontology, and Mr. J. F. Millard will act as archaeologist. Dr. W. Dyson, medical officer of the expedition, will collect zoological specimens and Mr. V. E. Fuchs, who is the leader, is in charge of geology. The work of the expedition, which is supported by a number of learned societies, including the Royal Society, the Royal Geographical Society and the British Association, is planned to occupy about a year.

#### Overhead Line Distribution Outside Great Britain

AT the meeting of the Overhead-Lines Association in London on September 20, the methods used in North America and Scandinavia for distributing overhead lines were discussed. Mr. A. L. Stanton, president of the Association, said that it is difficult to make comparisons between the methods used in different countries, as the everyday conditions vary widely. In the United States, not more than five per cent of the street lighting is done by gas and not more than 25 per cent of the factory supplies comes from independent stations. The early development of many American supply systems was governed mainly by utilitarian considerations, not much attention being paid to securing continuous service, voltage regulation and avoidance of danger risks.