

devices in which the electron plays an essential part, and to show the important part these developments play in modern daily life. The exhibits will range from Thomson's original apparatus to the most modern developments, such as the electron microscope. A handbook has been specially written by Mr. D. H. Follett, of the Science Museum (at the Museum, or from the Institute of Physics, 1s. 2d. post paid); the first part is a guide to the exhibition and the second is a general account of the subjects dealt with in the various sections of the exhibition.

Hydrocyanic Acid and Poliomyelitis

POLIOMYELITIS (infantile paralysis) in human beings is ordinarily regarded as an infectious disease caused by a virus. While it is true that a virus has been isolated and can be transmitted to monkeys, there are many features in the incidence of the disease which are difficult to reconcile with the virus hypothesis. The epidemiological features of the disease strongly suggest that food is concerned in its spread, but repeated attempts to demonstrate an infective agent in the food have failed. The occurrence of local outbreaks under certain seasonal and climatic conditions and the apparent absence of direct case-to-case transmission are suggestive of some form of food poisoning. R. R. Scobey (*Archiv. Pediatrics*, New York, **63**, 322; 1946) puts forward the theory that the disease is primarily due to hydrocyanic acid poisoning; either the hydrocyanic acid directly poisons the nerve cells, or else it makes them susceptible to a virus which is normally about the body. Hydrocyanic acid, in the free state or in the form of mustard oil or cyanophore glucosides, is now known to be present in many of the vegetables and fruits which are ordinarily consumed during the time of year when poliomyelitis is prevalent. The plants concerned belong to the Cruciferae (mustard, horse-radish, cauliflower, cabbage) and Rosaceae (most of the ordinary stone-fruits and berries). The symptoms and pathological changes which occur in experimental hydrocyanic acid poisoning in animals and in many of the recorded cases of poisoning in man bear a striking resemblance to those of poliomyelitis. The hydrocyanic acid content of plants shows a marked seasonal variation. The geographical distribution, seasonal incidence and climatic conditions observed during epidemics of poliomyelitis can be correlated with a high hydrocyanic acid content of the local flora and with the feeding habits of the community. Scobey brings together much circumstantial evidence in support of his theory, which will deserve serious attention, for this is a disastrous disease for which no rational therapy is at present available.

Immigration into Britain of Continental Butterflies

AUGUST 1947 was marked by the large-scale immigration of certain Continental butterflies which are infrequent visitors in the British Isles. Most striking was the extensive arrival of the clouded yellow (*Colias croceus* Fourcroy), which ranged from southern England to Scotland, and included specimens of the pale greenish-white female variety *helice*, and a few of the scarcer pale clouded yellow (*Colias hyales* Linn.). Even more interesting was the appearance in the north of England of the Camberwell beauty (*Nymphalis antiopa*, Linn.) after an absence of many years. At a meeting of the Merseyside Naturalists' Association on August 24, A. J. Cobham reported the appearance of this insect at Maghull, Lancashire, the previous week, and afterwards a

specimen was caught at Birkenhead, Cheshire. This insect migrates across the North Sea from its haunts in northern Europe, from Scandinavia to Germany and Holland, whereas the clouded yellow's migration route is from North Africa across France. 1941 was the last notable 'clouded yellow' year, the greatest immigration since 1877, while 1917 was remarkable for Camberwell beauties: the Camberwell beauty was first recorded in Cool Arbour Lane, Camberwell, London, in August 1748. There has also been a marked invasion of death's head hawk moths (*Acherontia atropos* Linn.) in the north of England, and numerous larvæ of these Continental moths were found in potato fields during August.

Stanislaw Kalinowski and the Swider Geophysical Observatory

No. 10 of the *Travaux de l'Observatoire Géophysique a Swider*, Poland, is the first publication of the Observatory for seven years; geophysicists will welcome this reappearance of the journal, more especially in view of the great sufferings of Poland during the War, and the continuing difficulties there. But they will mourn the loss, reported in this issue of the *Travaux*, of the founder and director of the Observatory, Stanislaw Kalinowski, whose death occurred early last year, at the age of seventy. Many who were present at the Edinburgh assembly of the International Union for Geodesy and Geophysics, which he attended with his daughter, will cherish recollections of his ardent interest in the science of geomagnetism, which he served so long and so well, particularly through the founding of the Swider Observatory in 1921, and through the magnetic survey of Poland which he conducted from that base. This issue of the *Travaux*, prepared by his hand, besides giving hourly values of the magnetic elements at Swider for the year 1936, summarizes the results obtained for the daily variation of the magnetic elements over the period 1921-35; it also contains a vivid account of the fortunes of the Observatory during the Second World War. An introduction to the publication, written by another hand, gives a moving account of his own heroic struggles, amidst afflictions that would have crushed many a younger man, to defend his Observatory from Nazi avidity and to maintain its work. He never lost faith in the overthrow of the conquerors of Poland, and made plans for the end of the War and the future of the Observatory. It is good to know that State provision has now been made for the Observatory, and that it has been newly named after its distinguished founder.

A Fully Automatic Low-Temperature Cabinet

J. and E. HALL, LTD., of Dartford, Kent, have recently produced, for research purposes, a fully automatic low-temperature cabinet which can run at a temperature of -95° C. The manufacturers believe this to be the only plant available of this type, developed and manufactured entirely in Great Britain. The unit has been produced almost exclusively from normal standard equipment. Refrigeration is accomplished by the use of two small 'Hallmark' refrigerating compressors of conventional standard design which are arranged to run in cascade, suitable refrigerants being chosen for the high and low stages. The cooled cabinet consists of a cylindrical metal vessel, $19\frac{1}{2}$ in. internal diameter by 36 in. high. The whole equipment is arranged on a chassis which can be easily moved from one laboratory

to another, the only services required being electricity and water. Safety precautions are such that whether the plant is switched off, the current interrupted involuntarily, or the water supply interrupted, it is not possible for dangerously high pressures to develop in any part of the system.

International Conference on Soil Mechanics and Foundation Engineering

THE Second International Conference on Soil Mechanics and Foundation Engineering is to be held in Rotterdam during June 21–30, 1948, on the invitation of the Netherlands Government and the Municipality of Rotterdam. The following subjects have been selected for discussion: (A) *Technical and Scientific Topics*: theories, hypotheses, considerations of general character; investigations in the laboratory and in the field; stability and deformation of earth and earth constructions; stability and movements of soil-retaining constructions; stress distributions under foundations and settlements of structures; pile foundations, pile loading tests; problems in highway and runway constructions (superstructure); methods for improving the mechanical quality of soils; ground-water movements. (B) *Topics of a General Character*: survey of the existing institutions and individuals working in the sphere of soil mechanics; suggestions for international co-operation. Anyone interested in the Conference, whether from the point of view of practical application, research or teaching, is welcome to attend the meetings and to contribute reports or discussions. The president of the Conference is Prof. K. Terzaghi and the secretary Prof. A. Casagrande. An organising committee has been appointed under the chairmanship of Ir. J. P. van Bruggen, with Ir. T. K. Huizinga as secretary and Ir. W. C. van Mierlo as treasurer. The Institution of Civil Engineers has convened a British National Committee under the chairmanship of Mr. W. K. Wallace, and full particulars of the Conference can be obtained from the Secretary, Institution of Civil Engineers, Great George Street, London, S.W.1.

American Philosophical Society Publications

THE American Philosophical Society has issued reports of two symposia held last year at Philadelphia (*Proc. Amer. Phil. Soc.*, 90, No. 4; 1946), both of very general and vital interest, one of them on "Present Day Social and Economic Aspects of National Health" and the other on "U.N.E.S.C.O. and American Participation in its Activities". As to the first of these symposia, it is obviously profitable to compare notes with the United States on the health of the people, on the role of Government agencies in a national health programme, and on the place of the physician in modern society. The other symposium is of great value as giving a comprehensive view of the United Nations Educational, Scientific and Cultural Organisation written by well-informed Americans.

Durban Museum and Art Gallery

THE annual report of the Durban Museum and Art Gallery for the year 1945–46 again stresses the need of these expanding institutions for extra space. "The congested conditions," it is stated, "become more acute each year." Though the City Council has allocated several extra rooms in the municipal building for museum purposes, it is pointed out that this will only relieve the position as regards workroom,

storage and library accommodation, the urgent need for further exhibition space remaining a matter which requires serious consideration. The total number of visitors to the Museum and the Art Gallery during the year was 166,922 and 154,397 respectively.

Announcements

THE Ernst Julius Cohen Memorial Lecture of the Chemical Society will be given by Prof. F. G. Donnan at the rooms of the Chemical Society, Burlington House, London, W.1, on October 2 at 7.30 p.m.

DR. J. A. B. SMITH, lecturer in applied biochemistry with special reference to nutrition at the University of Glasgow, has been appointed deputy director of the Hannah Dairy Research Institute.

THE Melchett Medal for 1947 of the Institute of Fuel has been awarded to Major Kenneth Gordon, who will deliver his Melchett Lecture on "Hydrogenation in the Fuel and Chemical Industries" at 2.30 p.m. on October 16 at Gas Industry House, 1 Grosvenor Place, London, S.W.1.

THE selection committee of the Harrison Memorial Fund, consisting of the presidents of the Chemical Society, the Royal Institute of Chemistry, the Society of Chemical Industry and the Pharmaceutical Society, will make an award of the Harrison Memorial Prize in December 1947. The Prize, not exceeding £150, will be awarded to a chemist of either sex, who is a natural-born British subject and not at the time more than thirty years of age, for original investigations published during the past five years. Communications relating to the award must be received by the President, Chemical Society, Burlington House, Piccadilly, London, W.1, not later than December 1.

THE Meldola Medal is the gift of the Society of Maccabæans and is normally awarded annually. The next award will be made early in 1948 to the chemist who, being a British subject and less than thirty years of age at December 31, 1947, shows the most promise, as indicated by published chemical work brought to the notice of the Council of the Royal Institute of Chemistry before that date. Communications, either by persons who desire to recommend a candidate or by a candidate himself, should be sent to the President, Royal Institute of Chemistry, 30 Russell Square, London, W.C.1, the envelope being marked "Meldola Medal".

THE Library of the joint institutions, the Botanical Garden and Institute, and the Cryptogamical Laboratory, Pavia (founded in 1871, the world's oldest laboratory devoted to the study of plant diseases), a centre for studies on fungicides, for human and comparative mycopathology (botanical section), and for mushroom culture, wishes to exchange biological and general scientific periodicals and reprints with English institutions. Almost complete series of *Atti* (43 volumes, from 1888 on) and *Archivio Botanico* (22 volumes, from 1925 on) are still available, as well as reprints of the same periodicals, and of *Mycopathologia* and *Il Farmaco*. The Library is also a consulting library of the University of Pavia. Communications should be addressed to the Director, P.O. Box 165, Pavia, Italy.

ERRATUM.—In *Nature*, September 6, p. 326, col. 2, the name of the new assistant superintendent of the Zoological Gardens, London, should be Mr. George S. Cansdale.