

of the Fair. The largest number of foreign buyers visiting the Fair will come from Holland; Germany is second on the list and Belgium, which was second last year, is third. Large contingents of buyers will also arrive from France, Denmark, Switzerland, the United States, Norway, Sweden, Poland, Czechoslovakia and Spain. From the British Empire countries, the largest number of buyers will come from the Irish Free State, with Canada next, followed by India, South Africa and Australia in that order. Altogether sixty-four countries will be represented.

#### International Protection of Birds

THE recently re-organised British National Section of the International Committee for Bird Preservation met on January 15 at the British Museum (Natural History). There were present Mr. Percy R. Lowe (chairman); Dr. F. H. A. Marshall (Royal Society); Mr. Hugh Gladstone and Mr. David Seth-Smith (Zoological Society of London); Dr. G. Carmichael Low (British Ornithologists' Union); Mrs. Frank E. Lemon and Mr. A. Holte Macpherson (Royal Society for the Protection of Birds); Mr. N. B. Kinnear and Mr. Hugh Whistler (National Trust); Mr. D. A. Bannerman and Mr. G. E. Lodge (Society for the Promotion of Nature Reserves); Mr. C. W. Hobley (Society for the Preservation of the Fauna of the Empire); and Miss Phyllis Barclay-Smith (hon. secretary). The chairman made reference to the great advance made by the International Committee for Bird Preservation during the past two years, and paid tribute to the pioneer work of its chairman, Dr. Gilbert Pearson, of the United States. Among the subjects which are engaging the activities of the British Section at the present moment are a proposed International Convention for the Preservation of Birds, to take the place of the Paris Convention of 1902, the further protection of the quail from an international point of view, and an investigation as to the actual status of wild duck in the British Isles. The question as to whether there may not be a serious decrease in the numbers of wild duck is giving rise to considerable anxiety to ornithologists and sportsmen.

#### Modern Spectroscopy

THE three Cantor lectures on the above subject, delivered by Prof. H. Dingle to the Royal Society of Arts in November and December 1934, have now been published (London: Royal Society of Arts, 1935. 2s. 6d.). They deal with the spectra of atoms, molecular and absorption spectra, and applications of spectroscopy. The first lecture outlines the main characteristics of atomic spectra, primarily from the experimental point of view. The second deals, in a rather more detailed manner, with band spectra; some indication is given of how these arise, and of their structure. The subject of absorption spectra is also touched upon. The non-physicist, to whom the lectures were primarily addressed, will find the third lecture, on the applications of spectroscopy, of particular interest and value, since it contains a good deal of matter not readily available elsewhere. The difficulties of qualitative and quantitative spectrum

analysis are clearly set forth, and the present possibilities of such methods are indicated, some interesting examples being cited. This particular application of spectroscopy is, of course, older than any other, but unexpected obstacles to its general application were encountered at an early stage, and until recently the method has been neglected to such an extent that the very meaning of the term 'spectrum analysis' is apparently unfamiliar to some of the younger physicists of the present day, with whom it connotes the analysis of spectra, for physical purposes, instead of analysis *by* spectra for chemical purposes. Concerning the section devoted to astronomical spectroscopy, it need only be said that in lucidity and interest it is quite representative of the author's well-known writings on this subject. The text is well illustrated throughout by diagrams and reproductions of spectrum photographs. The lectures will without doubt appeal to a wide circle of readers, that is to say, all those who have no special knowledge of spectroscopy but wish to obtain a general idea of what it is about and what is its contribution to the general body of scientific knowledge.

#### Rare and Standard Books on Engineering

MESSRS. HENRY SOTHERAN, LTD., have now issued part 2 of their Catalogue of Science and Technology, No. 3, an annotated and classified list of old, rare and standard works on "Exact and Applied Science". This part enumerates books on mechanical and electrical engineering, conveniently arranged in appropriate sections, and includes publications throughout the period from the beginning of the sixteenth century down to recent years. Many famous volumes are mentioned—such as Papin's "New Digester" (1681) and the quaintly bombastic "Century of the Names and Scantlings of such Inventions as at present I can call to mind to have tried and perfected" of Edward Somerset, second Marquis of Worcester, whose work, if inclined towards perpetual motion, was genuinely moving in the direction of the steam engine. Gilbert's "de Magnete" (1600) is of great interest not only as being in Lord Kelvin's view "one of the finest examples of inductive philosophy that has ever been presented to the world", but also in that it contains the rarest of all autographs of men of science, that of Gilbert himself, the father of electrical science. Napier's "Descriptio" (1614) and Newton's "Principia" (1687) are represented by first editions. As many of these books have been the possessions of outstanding men of science, their notes are of peculiar value. A copy of Silvanus Thompson's "Dynamo-Electric Machinery" (1886) is enriched "with very numerous MS. notes (often severely critical and sometimes sarcastic) by Oliver Heaviside, F.R.S."

#### Botany in the University of Sydney

VOL. 2 of Botanical Reprints from the University of Sydney shows very valuable work in progress on characteristic groups of the Australian flora. A. Burges has a first paper upon the rust fungi of the Dominion, which deals most appropriately with the genus *Uromygladium*, in which six of the

seven species are endemic to Australia and restricted to the genus *Acacia* for their host plants. Gladys Carey continues her study of the embryology of viviparous seeds, examining two of the mangrove species from tropical Queensland. Lilian Fraser has two papers upon the sooty moulds of New South Wales—those curious fungi that are found superficial upon branches and leaves, living upon the honey-dew secreted by scale insects and aphides; she also describes some of the Mycetozoa of the same State. I. V. Newman, in continuation of earlier studies of the Australian acacias, has two papers dealing with the floral organs and their development, fertilisation and embryology in *Acacia Baileyana*, whilst Joyce W. Vickery deals with the vegetative reproduction by underground tubers of two species of *Drosera* common as winter herbs in the Sydney district. The Botanical Department thus bears witness to its active interest in the flora of the Australian dominion.

#### Hydrogen Ion Determination

WE have received a copy of the fourth revised and enlarged edition of the booklet "pH Values", which may be obtained free on application to British Drug Houses, Ltd., Graham Street, City Road, London, N.1. The booklet gives an elementary account of the subject, with particular reference to indicators. It is based entirely on the idea of a concentration of hydrogen ions, and the question arises whether the time has not come to take account of activities and salt effects more adequately than is the case. Further editions of the booklet should be revised so as to bring it more into line with modern practice.

#### Popular Reading of Scientific Books

THE librarian of Middlesbrough Public Libraries has made an interesting experiment in endeavouring to guide his readers towards an intelligent use of works of general science. A pamphlet entitled "How to Understand the Sciences" (pp. 28) offers a very readable commentary upon well-known books dealing with scientific subjects in a popular way, and suggests a graduated course of reading, suitable for the plain man, in physics, chemistry, biology and general science. If Mr. Lillie's comments do not increase the intelligent reading of the scientific works in his libraries by the ordinary citizen, nothing will.

#### Association of American Geographers

THE thirty-second annual meeting of the Association of American Geographers was held on December 30–January 1 at Washington University, St. Louis, Missouri. In the three-day session, seventy-two papers were presented, including six in the field of geomorphology, ten in meteorology and climate, twenty-two in regional geography, six in the field of population, and two in cartography. The remainder represented a diversity of subjects. The morning of January 1 was devoted to a symposium of "Land Utilisation". The papers on this subject were presented by Prof. Lester E. Klimm of the University of Pennsylvania, Prof. H. M. Leppard of the University

of Chicago, Prof. Loyal Durand, jun. of the University of Wisconsin, Dr. G. Donald Hudson of the Tennessee Valley Authority and Prof. K. C. McMurray of the University of Michigan. On the evening of December 31, the retiring president, Charles C. Colby of the University of Chicago, addressed the Association and guests on the subject of "Changing Currents of Geographical Thought in America". The following officers were elected for 1936: *President*, Prof. W. H. Hobbs, University of Michigan; *Vice-President*, Dr. John K. Wright, librarian of the American Geographical Society; *Secretary*, Prof. P. E. James, University of Michigan; *Treasurer*, Prof. John E. Orchard, Columbia University; *Members of Council*, Col. Claude E. Birdseye, U.S. Geological Survey (one year), and Prof. R. J. Russell, Louisiana State University (three years).

#### British Medical Association

THE one hundred and fourth annual meeting of the British Medical Association will be held in Oxford on July 17–24. The president-elect is Sir E. Farquhar Buzzard, regius professor of medicine in the University of Oxford. The meeting will be divided into the following sections with the presidents indicated: Medicine (Dr. A. G. Gibson); Surgery (Prof. G. E. Gask); Obstetrics and Gynaecology (Prof. H. B. Whitehouse); Pathology and Bacteriology (Dr. E. W. A. Walker); Diseases of Children (Dr. R. C. Jewesbury); Neurology and Psychological Medicine (T. S. Good); Ophthalmology (Dr. P. E. H. Adams); Orthopaedics (G. R. Girdlestone); Oto-Rhino-Laryngology (L. Gollidge); Pharmacology and Therapeutics with Anaesthetics (Prof. J. A. Gunn); Physical Medicine (Dr. W. J. Turrell); Physiology and Biochemistry (Prof. R. A. Peters); Radiology (R. H. Sankey); Anatomy (Prof. W. E. Le Gros Clark); Dermatology (Dr. S. E. Dore); History of Medicine (Dr. A. Chaplin); Medical Sociology (Sir George Newman); Nutrition (Dr. A. F. Hurst); Public Medicine (Dr. W. M. Willoughby); Tuberculosis (Dr. W. Stobie). Further information can be obtained from the Secretary, B.M.A. Office, The Cottage, Keble Road, Oxford.

#### Second International Congress for Microbiology

THE second International Congress for Microbiology will be held in London on July 25–August 1 under the presidency of Prof. J. C. G. Ledingham. The headquarters of the Congress will be at University College, Gower Street, W.C.1, but additional accommodation, if required, will be available in the adjacent buildings of the London School of Hygiene and Tropical Medicine and the Wellcome Research Institution. During the Congress week, official receptions will be given by His Majesty's Government, by the Royal Society and other official bodies. Excursions have been arranged by the Ladies' Committee for the ladies and any members of Congress desiring to take part in them. Also the Sectional Committees are arranging visits to laboratories and institutes concerned with the scientific business of the sections. Extended excursions are being arranged for the