

prove conclusively that the idea of an exceptional resistance of cells cultivated *in vitro* is unfounded.—**Léon Velluz and Jean Loisleur**: The properties of proteo-cellulosic membranes.—**R. Vladesco, D. Simci, and M. Popesco**: A new function of the stomach. The rôle of this organ in the metabolism of urea.—**C. Levaditi, P. Ravaut, P. Lépine, and Mlle. R. Schœn**: The presence of a virus pathogenic for the ape in certain venereal buboes of man.

Official Publications Received.

BRITISH.

Journal of the Indian Institute of Science. Vol. 13A, Part 12: i. The Spike-Disease of *Dodonaea viscosa*, by B. N. Sastri and N. Narayana; ii. Studies in the Proteins of Indian Foodstuffs, Part 3: The Globulins of Bengal Gram (*Cicer aristinum*, Linn.) and Horse Gram (*Dolichos biflorus*), by Nuggihalli Narayana. Pp. 147-158. (Bangalore.) 12 annas.
Records of the Geological Survey of India. Vol. 63, Part 4. Pp. 379-450+11+plates 10-19. (Calcutta: Government of India Central Publication Branch.) 2.12 rupees; 5s.
International Geological Congress. Comptes rendus of the XV Session, South Africa, 1929. Vol. 1. Pp. xiv+314+42 plates. Vol. 2: Scientific Communications. Pp. x+688+97 plates. (Pretoria: Wallachs, Ltd.) 40s.
Board of Education. Report of the Consultative Committee on the Primary School. Pp. xxix+290. (London: H.M. Stationery Office.) 2s. 6d. net.
The Carnegie Trust for the Universities of Scotland. Twenty-ninth Annual Report (for the Year 1929-30) submitted by the Executive Committee to the Trustees on 11th February 1931. Pp. iv+94. (Edinburgh.)
Royal Society of Arts. Report on the Competition of Industrial Designs, 1930. Pp. 52. (London.)
Ollscoil Na h-Eireann (The National University of Ireland). Calendar for the Year 1930. Pp. viii+298+511+222. (Dublin.)
The First Annual of the Pure Rivers Society, 1930. Pp. 60. (London.) 1s.
An Index to Acts of Parliament and Statutory Rules and Orders affecting the Chemical Industry. Published for the Association of British Chemical Manufacturers. Pp. 24. (Cambridge: W. Heffer and Sons, Ltd.) 2s. net.

FOREIGN.

United States Department of the Interior: Geological Survey. Professional Paper 100: The Coal Fields of the United States. General Introduction, by Marius R. Campbell; Ohio, by J. A. Bownocker. Pp. iv+101+9 plates. Professional Paper 160: Geologic History of the Yosemite Valley. By François E. Matthes. Pp. vi+137+52 plates. 1.10 dollars. (Washington, D.C.: Government Printing Office.)
United States Department of the Interior: Geological Survey. Water-Supply Paper 623: Surface Water Supply of the United States, 1926. Part 3: Ohio River Basin. Pp. vii+333. 50 cents. Water-Supply Paper 628: Surface Water Supply of the United States, 1926. Part 8: Western Gulf of Mexico Basins. Pp. v+207. 35 cents. Water-Supply Paper 646: Surface Water Supply of the United States, 1927. Part 6: Missouri River Basin. Pp. vi+216. 20 cents. Water-Supply Paper 647: Surface Water Supply of the United States, 1927. Part 7: Lower Mississippi River Basin. Pp. iv+98. 20 cents. Water-Supply Paper 648: Surface Water Supply of the United States, 1927. Part 8: Western Gulf of Mexico Basins. Pp. v+117. 20 cents. Water-Supply Paper 655: Surface Water Supply of Hawaii, July 1, 1926, to June 30, 1927. Pp. v+151. 25 cents. (Washington, D.C.: Government Printing Office.)
United States Department of the Interior. Fifty-first Annual Report of the Director of the Geological Survey to the Secretary of the Interior, 1930. Pp. ii+91+1 plate. (Washington, D.C.: Government Printing Office.) 15 cents.
Smithsonian Institution: United States National Museum. Report on the Progress and Condition of the United States National Museum for the Year ended June 30, 1930. Pp. ix+219. (Washington, D.C.: Government Printing Office.) 35 cents.
Institut de France: Académie des Sciences. Annuaire pour 1931. Pp. 390. (Paris: Gauthier-Villars et Cie.)
Calendario del Santuario e delle Opere di Beneficenza Cristiana di Pompei, 1931. Pp. 272. (Pompei.)

CATALOGUE.

Catalogue of Rare Books. (No. 32.) Pp. 71. (London: William H. Robinson, Ltd.)

Diary of Societies.

FRIDAY, MARCH 20.

ASSOCIATION OF ECONOMIC BIOLOGISTS (in Btany Lecture Room, Imperial College of Science and Technology), at 2.30.—Dr. A. C. Thaysen: Retrospects and Prospects of the Economic Application of Microbiology.—H. J. Bunker: A General Review of the Microbiology of Cellulose and its Associated Compounds.
ROYAL SOCIETY OF MEDICINE (Balneology and Climatology Section), at 5.—Dr. W. Edgecombe and others: Discussion on Osteoarthritis.
LONDON SOCIETY (at Royal Society of Arts), at 5.—Lord Moynihan: Ancient Methods of Surgery.

PHYSICAL SOCIETY (at Imperial College of Science) (Annual General Meeting), at 5.—Presentation of Duddell Medal, 1930, to Sir J. Ambrose Fleming.
ROYAL SANITARY INSTITUTE (at Technical College, Lincoln), at 5.—L. O. Need and others: Discussion on Houseboats on Inland Waterways.—S. C. Baggott and others: Discussion on Refuse Collection and Disposal.
ROYAL COLLEGE OF SURGEONS OF ENGLAND, at 5.—Sir Arthur Keith: Demonstration of the Anatomy and Nerve Supply of the Diaphragm.
INSTITUTION OF MECHANICAL ENGINEERS, at 6.—R. S. Allen and W. E. W. Millington: Modern Methods of raising Water from Underground Sources.
NORTH-EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS (at Mining Institute, Newcastle-upon-Tyne), at 6.—T. Millican: Corrosion with Reference to Boilers.
INSTITUTION OF ELECTRICAL ENGINEERS (Meter and Instrument Section) (Informal Meeting), at 6.30.—W. Lawson and others: Discussion on Should the Bottom Bearings of Meters be Oiled?—W. Holmes and others: Discussion on Are Cobalt Steel Magnets Desirable for Use as Permanent Magnets for Instruments?—Lt.-Col. K. Edgumbe and F. Hope-Jones: Discussion on Are Synchronous Motors or Clocks More Suitable for Time Service?—J. W. Record and W. Phillips: Discussion on Are Long Scales Preferable to Short in Indicating Instruments?
SOCIETY OF DYERS AND COLOURISTS (London Section) (at Dyers' Hall, E.C.), at 6.45.—Capt. Whiteman: Spray Dyeing.
INSTITUTE OF CHEMISTRY (Manchester Section) (Annual General Meeting) (at "Manchester Ltd.", Manchester), at 7.—Prof. R. M. Caven: Lecture.
INSTITUTION OF MECHANICAL ENGINEERS (jointly with Institution of Automobile Engineers) (at Merchant Venturers' Technical College, Bristol), at 7.—Dr. J. S. Davies: An Experimental Investigation into Induction Conditions, Distribution and Turbulence in Petrol Engines.
SOCIETY OF CHEMICAL INDUSTRY (Newcastle Section) (at Armstrong College, Newcastle-upon-Tyne), at 7.30.—H. W. Howes: Pyrex Glasses, their Properties and Uses.
JUNIOR INSTITUTION OF ENGINEERS, at 7.30.—W. S. Roberts: Some Token Systems of Railway Signalling.
ROYAL SOCIETY OF MEDICINE (Electro-Therapeutics Section), at 8.30.—Dr. Chalmers Watson: Radiation in Relation to Human and Animal Life.
ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Prof. E. N. da C. Andrade: Sound, Sand, and Smoke: New Light on Old Problems.
GEOLOGISTS' ASSOCIATION (North-East Lancashire Group) (at Technical College, Blackburn).—J. Ranson: The Structure of the Alps (Lecture).

SATURDAY, MARCH 21.

BRITISH MYCOLOGICAL SOCIETY (in Botanical Department, University College), at 11 A.M.—Miss D. Ashworth: Development of Spores in Choanophoraceae.—Miss M. Brett: Reversible Saltation in *Stemphylium*.—P. H. Gregory: The *Fusarium* Bulb-root of *Narcissus*.—W. M. Ware: Mushroom Growing: its Scientific and Practical Aspects.
INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS (Yorkshire and North-Western Districts) (at College of Technology, Manchester), at 2.30.—Dorman, Long and Co., Ltd.: The Building of the New Tyne Bridge, The Building of Imperial Chemical House, and The Sydney Harbour Bridge.
MATHEMATICAL ASSOCIATION (at Bedford College), at 3.—S. Inman: Contracted Methods in Arithmetic.
ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Lord Rutherford: Recent Researches on the Alpha-Rays (3).
RURAL RECONSTRUCTION ASSOCIATION (at 20 Bedford Square), at 3.—R. Borlase Matthews: The Importance of Electrical Development to the Countryside.—M. Fordham: Marketing and Employment.

MONDAY, MARCH 23.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, at 5.—R. T. Payne: Demonstration on Pathological Specimens Relating to Diseases of the Gall-Bladder and Extra-hepatic Biliary Passages.
INSTITUTION OF MECHANICAL ENGINEERS (Annual Meeting), at 6.45.—Short Papers.
INSTITUTION OF ELECTRICAL ENGINEERS (North-Eastern Centre) (at Armstrong College, Newcastle-upon-Tyne), at 7.
INSTITUTION OF ELECTRICAL ENGINEERS (South Midland Centre) (at Birmingham University), at 7.—J. W. Rissik and H. Rissik: Heavy-Duty Rectifiers and their Application to Traction Substations.
INSTITUTE OF FUEL (at Institution of Civil Engineers), at 7.30.—R. A. Burrows: Self-help in the Coal Industry.
BRITISH KINEMATOGRAPH SOCIETY (at Film House, Wardour Street), at 7.45.—L. Rowson: Some Aspects of Camera Work in Hollywood.
ROYAL SOCIETY OF ARTS, at 8.—Capt. A. G. D. West: The Recording and Reproducing of Sound (Cantor Lectures) (3).
ROYAL SOCIETY OF MEDICINE (Odontology Section), at 8.—Clinical Meeting.
ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—Dr. C. Christy: Liberia in 1930.
SOCIETY OF CHEMICAL INDUSTRY (Yorkshire Section) (Annual General Meeting) (at Leeds).—H. J. Pooley and others: Discussion on the Activities of the Society.

TUESDAY, MARCH 24.

ROYAL SOCIETY OF ARTS, at 4.30.—Dominions and Colonies Meeting.
ROYAL SOCIETY OF MEDICINE (Medicine Section), at 5.—Dr. Janet Vaughan, Dr. S. C. Dyke, Dr. J. F. Wilkinson, and others: Discussion on The Value of Liver in Treatment.
ROYAL COLLEGE OF PHYSICIANS OF LONDON, at 5.—Sir William Willcox: Toxic Jaundice (Lumleian Lectures) (2).
ROYAL INSTITUTION OF GREAT BRITAIN, at 5.15.—Dr. C. D. Darlington: The Cytological Theory of Heredity and Variation (3).
EUGENICS SOCIETY (at Linnean Society), at 5.30.—W. Palin Elderton: Heredity and Insurance.
INSTITUTION OF CIVIL ENGINEERS, at 6.—G. C. Minnitt: The Washaway and Reconstruction of the Nerbudda Bridge on the Great Indian Peninsula Railway.—The late P. Allan: The George's River Bridge, New South Wales.