

Proceedings of the Geologists' Association. Edited by A. K. Wells. Vol. 35, Part 4, December. Pp. 265-430. (London: Edward Stanford, Ltd.) 5s.

Union of South Africa: Department of Agriculture. (Division of Chemistry Series No. 31) Science Bulletin No. 30: An Investigation into some Physical and Chemical Changes occurring in Grapes during Ripening. By P. R. v. d. R. Copeman. Pp. 38. (Division of Chemistry Series No. 33) Science Bulletin No. 32: The Composition of ripe Wine Grapes from the Government Viticultural Station, Faarl. By G. Frater. Pp. 30. (Division of Chemistry Series No. 34): Some Methods of detecting Irregularities in the Composition of South African Wines. By F. Fevrier. Pp. 17. (Pretoria: Government Printing and Stationery Office.) 3d. each.

Department of the Interior: United States Geological Survey. Water-Supply Paper 514: Surface Water Supply of the United States, 1919-1920. Part 12: North Pacific Slope Drainage Basins. C: Lower Columbia River Basin and Pacific Slope Drainage Basins in Oregon. Pp. v+204+2 plates. 25 cents. Bulletin 756: Oil and Gas Fields of the Lost Soldier-Ferris District, Wyoming. By A. E. Fath and G. F. Moulton. Pp. iv+57+8 plates. 20 cents. Bulletin 750-C: Observations on the rich Silver Ores of Aspen, Colorado. By Edson S. Bastin. Pp. ii+41-62. n.p. Professional Paper 92: The Middle and Upper Eocene Floras of South-eastern North America. By Edward Wilber Berry. Pp. v+206+65 plates. 1 dollar. (Washington: Government Printing Office.)

Department of Scientific and Industrial Research. Report of the Food Investigation Board for the Year 1923. Pp. iv+77+4 plates+14 charts. (London: H.M. Stationery Office.) 3s. net.

Proceedings of the Yorkshire Geological Society. New Series, Vol. 20, Part 1, December. Edited by H. C. Versey and Herbert E. Wroot. Pp. 154+v+12 plates. (Leeds.)

Committee of the Privy Council for Medical Research. Report of the Medical Research Council for the Year 1923-1924. Pp. 142. (London: H.M. Stationery Office.) 3s. 6d. net.

## Diary of Societies.

### SATURDAY, JANUARY 10.

BRITISH ECOLOGICAL SOCIETY (Annual Meeting) (at University College), at 10 A.M.—Prof. F. E. Weiss: Plant Structure and Environment (Presidential Address).—Prof. Oliver: Blakeney "Far Point."—Prof. Fritch: The Algae of Swiftly Flowing Streams.—Prof. Yapp: Deposition of Frost on Leaves.

INSTITUTE OF METALS (London Section) (at Institute of Marine Engineers), at 7.30.—Dr. R. H. Greaves: Extensometers.

### MONDAY, JANUARY 12

ROYAL IRISH ACADEMY, at 4.15.

ROYAL SOCIETY OF EDINBURGH, at 4.30.—E. L. Gill: The Permian Fish *Dorypterus*.—E. A. Baker: The Blackening of the Photographic Plate at Low Densities.—Dr. E. L. Ince: The Modes of Vibration of a Stretched Membrane with a particular Law of Density.

INSTITUTE OF TRANSPORT (Yorkshire Local Section) (at Town Hall, Leeds), at 5.30.—J. B. Hamilton: Inaugural Address.

INSTITUTE OF ELECTRICAL ENGINEERS (Western Centre) (at Merchant Venturers' Technical College), at 6.—W. B. Woodhouse: Presidential Address.

INSTITUTE OF AUTOMOBILE ENGINEERS (at Chamber of Commerce, Birmingham), at 7.—Dr. S. S. Pickles: The General Manufacture of Rubber (Lecture).

INSTITUTE OF ELECTRICAL ENGINEERS (Informal Meeting), at 7.—W. Day and others: Discussion on Telephonic Development in Great Britain and in the United States.

INSTITUTE OF ELECTRICAL ENGINEERS (North-Eastern Centre) (at Armstrong College, Newcastle-on-Tyne), at 7.15.

INSTITUTE OF METALS (Scottish Section) (at 39 Elmbank Crescent, Glasgow), at 7.30.—Open Discussion.

NAVY SURVEYORS' INSTITUTION, at 8.

ROYAL GEOGRAPHICAL SOCIETY (at Æolian Hall), at 8.30.—Major R. W. G. Hingston: Animal Life at High Altitudes.

INSTITUTE OF BREWING (at Engineers' Club).—J. Stewart: The Season's Barleys.

### TUESDAY, JANUARY 13.

ROYAL INSTITUTION OF GREAT BRITAIN, at 5.15.—Prof. A. Fowler: The Analysis of Spectra (I).

INSTITUTE OF MECHANICAL ENGINEERS (South Wales Branch) (at Swansea), at 6.—A. A. Fordham: Steel Construction as applied to Steel Works and Mill Buildings.

INSTITUTE OF CIVIL ENGINEERS, at 6.—Prof. A. H. Gibson: The Investigation of the Surge-Tank Problem by Model Experiments.—F. Heywood: The Flow of Water in Pipes and Channels.

INSTITUTE OF AUTOMOBILE ENGINEERS (at Royal Society of Arts), at 7.—Dr. S. S. Pickles: The General Manufacture of Rubber (Lecture).

INSTITUTE OF ELECTRICAL ENGINEERS (North Midland Centre) (at Hotel Metropole, Leeds), at 7.—W. B. Woodhouse: Presidential Address.

MANCHESTER METALLURGICAL SOCIETY (at College of Technology, Manchester), at 7.—F. C. H. Lantsberry: Tool Steels.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN, at 7.—A. S. Watson: Portraiture of Men.

INSTITUTE OF AUTOMOBILE ENGINEERS (Coventry Graduates Meeting) (at Broadgate Café, Coventry), at 7.15.—A. E. Barrett: Piston Rings.

SOCIETY OF CHEMICAL INDUSTRY (Birmingham Section) (at University), at 7.15.—H. L. Heathcote: The Testing of Resistance to Tearing.—D. F. Twiss and F. Thomas: A Comparative Study of some Vulcanisation Accelerators.

INSTITUTE OF ENGINEERS AND SHIPBUILDERS IN SCOTLAND (at 39 Elmbank Crescent, Glasgow), at 7.30.

INSTITUTE OF METALS (North-East Coast Section) (at Armstrong College, Newcastle-on-Tyne), at 7.30.—A. R. Page: Blazing.

QUERRETT MICROSCOPICAL CLUB, at 7.30.—S. R. Wycherley: The Mounting of Chemicals for the Polaroscope.

ROYAL SOCIETY OF MEDICINE (Psychiatry, Neurology, Disease in Children, and Epidemiology Sections), at 8.30.—Dr. P. C. P. Cloake and Dr. F. C. Shruball (Psychiatry), Prof. E. Bramwell (Neurology), Prof. A. Hall (Disease in Children), Dr. McNalty and Dr. Parsons (Epidemiology), and others: Discussion on The Mental Sequelae of Encephalitis Lethargica.

INSTITUTION OF ELECTRICAL ENGINEERS (Scottish Section).

### WEDNESDAY, JANUARY 14.

ROYAL SOCIETY OF ARTS, at 3.—Lt.-Col. G. M. Richardson: Dogs in Peace (Dr. Mann Juvenile Lectures).

ROYAL SOCIETY OF MEDICINE (Bathology and Climatology Section), at 5.30.—Dr. V. Coates: Clinical Types of so-called Infective Arthritis.

RADIO SOCIETY OF GREAT BRITAIN (Informal Meeting) (at Institution of Electrical Engineers), at 6.—S. Ward: Some Notes on Short Wave Reception.

INSTITUTION OF CIVIL ENGINEERS (Informal Meeting), at 7.—H. J. Deane and others: Discussion on The Use and Abuse of Reinforced Concrete.

INSTITUTION OF ELECTRICAL ENGINEERS (South Midland Centre) (at Birmingham University), at 7.—H. W. Taylor: Three-Wire Direct-Current Distribution Networks: Some Comparisons in Cost and Operation.

NORTH-EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS (Graduate Section) (at Bolbec Hall, Newcastle-on-Tyne), at 7.—J. Calderwood: Propeller Design.

ENTOMOLOGICAL SOCIETY OF LONDON, at 8.—Annual Meeting.

### THURSDAY, JANUARY 15.

ROYAL SOCIETY, at 4.30.—Sir Charles Sherrington and E. G. T. Liddell: Further Observations on Myotatic Reflexes.—Prof. A. V. Hill, C. N. H. Long, and H. Lupton: Muscular Exercise, Lactic Acid, and the Supply and Utilisation of Oxygen. Parts I, II, and III.—Prof. A. P. Chattock: The Physics of Incubation.—H. M. Carleton: Growth, Phagocytosis, and other Phenomena in Tissue Cultures of Foetal and Adult Lung.—J. F. Fulton: (a) The Influence of Tension upon the Electrical Responses of Muscle to Repetitive Stimuli; (b) Some Observations upon the Electrical Responses and Shape of the Isometric Twitch of Skeletal Muscle; (c) The Relation between the Durations of the Isometric Twitch and of the After-action of Tetanus.

ROYAL INSTITUTION OF GREAT BRITAIN, at 5.15.—J. S. Huxley: The Courtship of Animals and its Biological Bearings (I).

INSTITUTION OF MINING AND METALLURGY (at Geological Society of London), at 5.30.

INSTITUTION OF AUTOMOBILE ENGINEERS (London Graduates Meeting) (at Watergate House, Adelphi), at 7.30.—A. E. L. Collins: Steam Vehicles for Road Transport.

OPTICAL SOCIETY (at Imperial College of Science and Technology), at 7.30.—A. Stevenson: A Peep into Sir William Herschel's Workshop.

CHEMICAL SOCIETY, at 8.—E. E. Turner and A. B. Sheppard: 6-Chlorophenoxarsine.—G. A. R. Kon and R. P. Linstead: The Chemistry of the Three-Carbon System. Part III.  $\alpha$ - $\beta$  Change in Unsaturated Acids; Part IV. A Case of Retarded Mobility.

ROYAL SOCIETY OF TROPICAL MEDICINE AND HYGIENE (at 11 Chandos Street, W.), at 8.15.—Lt.-Col. A. T. Gage and Lt.-Col. Clayton Lane: The Alkaloids of Cinchona and Malaria.

INSTITUTION OF RUBBER INDUSTRY (at 16 St. Mary's Parsonage, Manchester).—J. Adamson: History of the Rubber Industry in Manchester.

### FRIDAY, JANUARY 16.

ROYAL SANITARY INSTITUTE (at Town Hall, Newcastle-on-Tyne), at 4.—Dr. A. F. G. Spinks, H. H. Evers, and others: Discussion on Maternity and Child Welfare Practice.

ROYAL DUBLIN SOCIETY, at 4.30.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN (Pictorial Group), at 7.

INSTITUTE OF METALS (Swansea Section) (at Swansea University College), at 7.15.—Prof. C. A. Edwards: Alloys and their Properties.

JUNIOR INSTITUTION OF ENGINEERS, at 7.30.—Major A. M. Taylor: The Hexaphase System and the Compensated 3-Phase System for 150,000 Volts Transmission with Records of Test.

SOCIETY OF CHEMICAL INDUSTRY (South Wales Section) (at Technical College, Cathays Park, Cardiff), at 7.30.—T. Lewis: Chemical Constituents of Ductless Glands.

SOCIETY OF CHEMICAL INDUSTRY (Chemical Engineering Group jointly with the London Section) (at Royal Society of Arts), at 8.—T. W. Stainer Hutchins, Dr. C. H. Lander, and others: Discussion on The Low Temperature Treatment of Bituminous Materials.

SOCIETY OF CHEMICAL INDUSTRY (Liverpool Section) (at Liverpool University), at 8.—Sir Max Muspratt, Bart.: Chemistry and Civilisation (Hurter Memorial Lecture).

ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Sir William Bragg: The Investigation of the Properties of Thin Films by means of X-Rays.

## PUBLIC LECTURES.

### WEDNESDAY, JANUARY 14.

LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE, at 5.—B. J. Fletcher: The Principles of Design (Introductory Lecture).

St. BARTHOLOMEW'S HOSPITAL MEDICAL COLLEGE (Physiology Department, 6 Giltspur Street, E.C.1), at 5.—Prof. C. Lovatt Evans: The Physiology of Plain Muscle. (Succeeding Lectures on January 21, 28, February 4.)

KING'S COLLEGE, at 5.30.—Prof. A. P. Newton: The World of the Middle Ages.

### THURSDAY, JANUARY 15.

UNIVERSITY COLLEGE, at 2.30.—Miss Margaret A. Murray: Egyptian History (Introductory Lecture).