

Official Publications Received.

BRITISH.

Paleontologische Navorsing van die Nasionale Museum, Bloemfontein. Deel 1, Eerste Stuk : Die Krytfauna van Soeloeland. 1: Trigonitidae. Deur Dr. Ir. E. C. N. Van Hoepen. Pp. 38+7 plates. (Bloemfontein.)

Ministry of Agriculture and Fisheries. Miscellaneous Publications. No. 70: Report on the Occurrence of Fungus, Bacterial and Allied Diseases of Crops in England and Wales for the Years 1925, 1926 and 1927. Pp. 75+2 plates. (London: H.M. Stationery Office.) 3s. 6d. net.

The University of Manchester: The Manchester Museum. Museum Publication 97: Report for the Year 1928-29. Pp. 26+2 plates. (Manchester.) 6d. net.

Air Ministry: Aeronautical Research Committee. Reports and Memoranda. No. 1250: Reports and Memoranda of the Aeronautical Research Committee published between 1st August 1928 and 31st August 1929. Pp. 7. 6d. net. No. 1222 (M. 62): High Frequency Fatigue. By G. F. Jenkin and G. D. Lehmann. (E.F. 219.) Pp. 34. 1s. 6d. net. (London: H.M. Stationery Office.)

Leeds University. Report to the Worshipful Company of Clothworkers of the City of London of the Advisory Committee on the Departments of Textile Industries and Colour Chemistry and Dyeing, during the Session 1928-29. Pp. 14. (Leeds.)

University of Leeds: Clothworkers' Departments. Report of the Work done under the Research Scheme established in 1923 with the aid of a Special Grant from the Worshipful Company of Clothworkers, Session 1928-29. Pp. 16. (Leeds.)

The Dioptric Review: the Transactions of the British Optical Association. Edited by John H. Sutcliffe. Vol. 82, No. 2, February. Pp. 36-83. (London.)

Report on the Second Imperial Mycological Conference, 1929. Pp. 42. (London: H.M. Stationery Office.) 1s. 6d. net.

University College of Wales, Aberystwyth: Welsh Plant Breeding Station. Experiments to test the Yield and other Properties of various Species and Strains of Herbage Plants under Different Methods of Management. By R. G. Stapledon and William Davies. (Series H, No. 10, Seasons 1928-28.) Pp. 42. (Aberystwyth.) 3s. 6d.

Air Ministry: Aeronautical Research Committee. Reports and Memoranda. No. 1251: Some Early Model Experiments on Devices for Improving Lateral Control near the Stall. By H. B. Irving and A. S. Batson. Pp. 5+7 plates. (London: H.M. Stationery Office.) 1s. net.

The National Institute of Agricultural Botany. Tenth Report and Accounts, 1928-29. Pp. 22. (Cambridge.)

The Journal of the Royal Horticultural Society. Edited by F. J. Chittenden. Vol. 55, Part 1, January. Pp. 167+lxv+43 plates. (London.) 7s. 6d.

FOREIGN.

Publications of the Kapteyn Astronomical Laboratory at Groningen. No. 43: Distribution of Stars according to Apparent Magnitude, Galactic Latitude and Galactic Longitude. By Prof. Dr. P. J. Van Rhijn. Pp. ii+104. No. 44: Photovisual Magnitudes for the Selected Areas at $\delta = +75^\circ$, derived from Plates taken at the Leander McCormick Observatory by H. L. Alden and P. van de Kamp. Discussed by Prof. Dr. P. J. Van Rhijn and B. J. Bok. Pp. ii+19. (Groningen: Hoitsema Bros.)

Ministero dell' Aeronautico, Aviazione civile e Traffico aereo. Annali dell' Ufficio presagi. Vol. 2. Pp. 202+4 tavole. (Roma.)

Collection des travaux chimiques de Tchecoslovaquie. Redigée et publiée par E. Votček et J. Heyrovský. Année 2, No. 1, Janvier. Pp. 61. (Prague: Regia Societas Scientiarum Bohemica.)

Statens Skogsforsöksanstalt. Meddelanden, Häfte 25. Pp. iii+317. 7.00 kr. Exkursionsledare, 13a: Führer der Exkursionen des Internationalen Kongresses Forstlicher Versuchsanstalten, Stockholm, 1929. Pp. 97+59. Flygblad, No. 39: Skogsträdens Fruktställning år 1928. Av L. Tirén. Pp. 19. (Stockholm: Centraltryckeriet.)

Agricultural Experiment Station of the Rhode Island State College. Bulletin 222: The Production of Gas by *Salmonella pullorum*, II. By John C. Weldin and Helen J. Weaver. Pp. 25. (Kingston, R.I.)

U.S. Department of Agriculture. Farmers' Bulletin No. 1612: Propagation of Aquatic Game Birds. By W. L. McAtee. Pp. ii+41. 10 cents. Farmers' Bulletin No. 1613: Propagation of Upland Game Birds. By W. L. McAtee. Pp. ii+61. 10 cents. (Washington, D.C.: Government Printing Office.)

The Science Reports of the Tôhoku Imperial University, Sendai, Japan. First Series (Mathematics, Physics, Chemistry), Vol. 18, No. 4. Pp. 419-579. (Tokyo and Sendai: Maruzen Co., Ltd.)

CATALOGUES.

Catalogue of Second-hand Books, including the Libraries of the late H. V. Macnaghten and R. D. Hicks; with Books from other Libraries recently Purchased. (No. 341.) Pp. 90. (Cambridge: W. Heffer and Sons, Ltd.)

Scarce and Interesting Old Books: First Editions, Americana, Old Novels, Early Law Books. (No. 28.) Pp. 90. (Newcastle-on-Tyne: William H. Robinson.)

Catalogue de livres anciens et modernes, rares ou curieux, relatifs à l'Orient. (No. 12.) Pp. 277-362. (Paris: Libr. Adrien-Maisonneuve.)

Diary of Societies.

FRIDAY, MARCH 7.

ROYAL SOCIETY OF MEDICINE (Oology Section), at 10.30 A.M.—G. J. Jenkins, Dr. J. S. Fraser, and E. B. Barnes: Discussion on Malignant Disease of the Ear.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, at 2.45.—T. B. Layton: Demonstration of The Rhinological Anatomy of the Naso-frontal Duct and the Hiatus Semilunaris.

ANDERSONIAN CHEMICAL SOCIETY (at Royal Technical College, Glasgow), at 3.15.—Dr. Cumming: Lignin.

ROYAL SOCIETY OF ARTS (Indian Meeting), at 4.30.

ROYAL ASTRONOMICAL SOCIETY (Geophysical Discussion), at 4.30.—The History of Mountains. Opener: Dr. Harold Jeffreys.

ROYAL SOCIETY OF MEDICINE (Laryngology Section), at 5.

INSTITUTION OF MECHANICAL ENGINEERS, at 6.—L. W. Schuster: The Strength and Design of Fusion Welds for Unfired Pressure Vessels.

SOCIETY OF CHEMICAL INDUSTRY (Manchester Section) (at Engineers' Club, Manchester), at 7.—Dr. F. L. Pyman: Fine Chemicals.

INSTITUTION OF ELECTRICAL ENGINEERS (Meter and Instrument Section), at 7.—A. E. Moore and W. T. Slater: An Investigation of the Frequency Variations in Induction Watt-hour Meters.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN (Pictorial Group—Annual General Meeting), at 7.

NORTH-EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS (Informal Meeting) (at Bolbec Hall, Newcastle-upon-Tyne), at 7.15.—W. D. Horsley and others: Discussion on The Effect of the Use of Electricity in Workshops on Efficiency and Costs.

JUNIOR INSTITUTION OF ENGINEERS, at 7.30.—Lt.-Col. G. J. Hartley: Chile and Engineering in Chile.

INSTITUTE OF METALS (London Local Section) (at 83 Pall Mall), at 7.30.—A. Coad Pryor: The Manufacture of Glass and some of its more Interesting Properties.

GEOLOGISTS' ASSOCIATION (at University College), at 7.30.—Dr. A. E. Trueman: The Lower Lias (Bucklandi Zone) of Nash Point, Glamorgan.—A. A. Fitch: The Geology of Etchingham and Robertsbridge, Sussex.—G. S. Sweeting: The Geological Structure of the Ashburnham, Battle and Crowhurst Districts, Sussex, with Notes on the Wealden Iron Ore.

ROYAL SOCIETY OF MEDICINE (Anesthetics Section), at 8.30.—Dr. C. Donald: Spinal Analgesia with Spinocain.—Dr. H. Jones: Percain 'Ciba', a New Regional and Spinal Analgesic, with Special Reference to High Thoracic Nerve-root (Splanchnic) Block.

ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Dr. C. Tate Regan: Angler Fishes.

SOCIETY OF CHEMICAL INDUSTRY (Chemical Engineering Group) (jointly with Glasgow Section) (at Institution of Engineers and Shipbuilders, Glasgow).—J. S. F. Gard and R. F. Robinson: The Insulation of Heated and Cooled Surfaces.

OXFORD UNIVERSITY JUNIOR SCIENTIFIC CLUB.—Prof. C. E. Ingles: The Construction of a Great Suspension Bridge.

SATURDAY, MARCH 8.

INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS (Annual District Meeting) (at Lecture Hall, Taunton) at 11 A.M.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Sir Ernest Rutherford: Atomic Nuclei and their Structure (1).

BRITISH PSYCHOLOGICAL SOCIETY (General Meeting) (at Bedford College), at 3.30.—Dr. V. Hazlitt: Children's Thought.—Miss A. M. Jenkin: Imagery and Learning.

BRITISH ASSOCIATION OF MANAGERS OF TEXTILE WORKS (at Manchester Athenaeum), at 6.30.—F. Nasmith: The Increasing Use of Cotton Fabrics for Industrial Purposes.

MONDAY, MARCH 10.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, at 5.—C. E. Shattock: Demonstration of Affections of Joints.

KING'S COLLEGE ENGINEERING SOCIETY, at 5.15.—A. H. S. Oddy: Pulverised Fuel.

ROYAL AERONAUTICAL SOCIETY (jointly with Institute of Transport) (at Royal Society of Arts), at 6.30.—Herr Wronsky: Air Transport.

INSTITUTION OF AUTOMOBILE ENGINEERS (Birmingham Centre) (at Queen's Hotel, Birmingham), at 7.—W. H. Goddard: The Mercedes-Benz Diesel Engine.

INSTITUTION OF ELECTRICAL ENGINEERS (North-Eastern Centre) (at Armstrong College, Newcastle-upon-Tyne), at 7.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS (Associate Members' and Graduates' Section) (at Borough Polytechnic), at 7.—L. J. Fowler: Some District Heating Systems.

INSTITUTE OF METALS (Scottish Local Section) (at 39 Elmbank Crescent, Glasgow), at 7.30.—Annual General Meeting.

MEDICAL SOCIETY OF LONDON, at 8.—Dr. J. W. McNee and others: Discussion on Cardiac Infarction.

SURVEYORS' INSTITUTION, at 8.—Sir Harry Haward: Recent Developments in Electricity Supply in Great Britain, with Special Reference to Rural Electrification.

ROYAL GEOGRAPHICAL SOCIETY (at Æolian Hall), at 8.30.—F. Kingdon Ward: The Eastern Gate to India.

INSTITUTION OF ELECTRICAL ENGINEERS (Western Centre) (at Bristol).

TUESDAY, MARCH 11.

ROYAL INSTITUTION OF GREAT BRITAIN, at 5.15.—Dr. C. Singer: The Passage from Medieval to Modern Science (1): Science in the Middle Ages.

INSTITUTION OF CIVIL ENGINEERS, at 6.—H. D. Smith: Reconstruction of Liskeard Viaduct, and Scheme for Reconstruction of the Approach Spans of the Royal Albert Bridge, Saltash.—F. Gibbons: Reconstruction of Approach Spans, Royal Albert Bridge, Saltash.—J. Alexander: Reconstruction of Kent and Leven Viaducts, Furness Section of the London, Midland and Scottish Railway.

INSTITUTE OF MARINE ENGINEERS, at 6.30.—A. T. Wall: The Advantages to the Shipowner of Closer Co-operation between the Naval Architect and the Marine Engineer.

INSTITUTION OF ELECTRICAL ENGINEERS (Scottish Centre) (at North British Station Hotel, Edinburgh), at 7.—Capt. P. P. Eckersley: Broadcasting by Electric Waves (Faraday Lecture).

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN, at 7.—Annual General Meeting.

INSTITUTE OF BRITISH FOUNDRYMEN (Lancashire Branch—Burnley Section) (at Municipal College, Burnley), at 7.15.—A. Sutcliffe: Jobbing Castings.

INSTITUTION OF AUTOMOBILE ENGINEERS (Coventry Centre) (at King's Head Hotel, Coventry), at 7.30.—Capt. J. S. Irving: Problems Encountered in the Design of the *Golden Arrow*.