

Official Publications Received.

BRITISH.

Air Ministry: Aeronautical Research Committee. Reports and Memoranda. No. 1163 (Ae. 327): On the Convection of Heat from the Surface of an Aerofoil in a Wind Current. By L. W. Bryant, E. Ower, A. S. Halliday and V. M. Falkner. (T. 2614.) Pp. 24+36 plates. 1s. 3d. net. No. 1166 (Ae. 330): The Force acting on a Body placed in a Curved and Converging Stream of Liquid. By Prof. G. I. Taylor. (T. 2604.) Pp. 10+1 plate. 9d. net. (London: H.M. Stationery Office.)

Transactions and Proceedings of the Botanical Society of Edinburgh. Vol. 30, Part I, Session 1927-28. Pp. viii+65+8. (Edinburgh.) 7s. 6d.

The University of Leeds: Department of Leather Industries. Report of the Advisory Committee on the Work of the Department during the Sessions 1926-27 and 1927-28. Pp. 10. (Leeds.)

University of Cambridge. Department of Agriculture: Farm Economics Branch. Report No. 11: An Economic and Financial Analysis of Five Eastern Counties Farms in 1927-28. By R. McG. Carslaw and W. H. Kirkpatrick. Pp. 13+6 tables. (Cambridge: W. Heffer and Sons, Ltd.) 1s. net.

An Investigation of the Milk Yield of Dairy Cows: being a Statistical Analysis of the Data of the Scottish Milk Records Association for the Years 1908, 1909, 1911, 1912, 1920 and 1923. By Dr. J. F. Tocher. (From *Biometrika*, Vol. 20B, Part 2, September 1928.) Pp. 105-244. (London: Biometric Laboratory, University College.)

Livingstone College. Annual Report and Statement of Accounts for the Year 1927-28. Pp. 24. (London: Leyton, E.10.)

The Quarterly Journal of the Geological Society. Vol. 84, Part 3, No. 335, October 31st. Pp. 331-584+15 plates. (London: Longmans, Green and Co., Ltd.) 7s. 6d.

University of Bristol: Department of Agriculture and Horticulture. Bulletin No. 3: The Effect of different Balanced Rations on the Yield and Composition of Milk from Dairy Cows. By A. W. Ling, C. A. MacEachern and C. Comely. Pp. 19. (Bristol.)

Treatment of Tuberculosis: Costs at Residential Institutions. (Memo. 122B/T). Pp. 21. (London: Ministry of Health.)

Memoirs of the Geological Survey of India. Vol. 50, Part 2: Descriptions of Mollusca from the Post-Eocene Tertiary Formation of North-Western India. Gastropoda (in part) and Lamellibranchiata. By the late E. Vredenburg. Pp. xiii+351-506+xxi+plates 14-33. 6.10 rupees; 10s. 9d. Vol. 51, Part 2: The Geology of Poonch State (Kashmir) and adjacent portions of the Punjab. By D. N. Wadia. Pp. 185-370+xxiv+plates 2-11. 7.6 rupees; 11s. 9d. (Calcutta: Government of India Central Publication Branch.)

The Rhodes Scholarships: Statement for the Academic Year 1927-1928. Pp. 12. (London: The Rhodes Trust.)

The Research Association of British Paint, Colour and Varnish Manufacturers. Second Annual Report, submitted to the Statutory General Meeting held at Teddington, 17th October 1928. Pp. 24+2 plates. (London.)

FOREIGN.

Smithsonian Miscellaneous Collections. Vol. 73, No. 5: Opinions rendered by the International Commission on Zoological Nomenclature. Opinions 98 to 104. (Publication 2973.) Pp. 28. Vol. 81, No. 5: The Relations between the Smithsonian Institution and the Wright Brothers. By Charles G. Abbot. (Publication 2977.) Pp. 27. (Washington, D.C.: Smithsonian Institution.)

Smithsonian Institution: Bureau of American Ethnology. Bulletin 87: Notes on the Buffalo-Head Dance of the Thunder Gods of the Fox Indians. By Truman Michelson. Pp. v+94. (Washington, D.C.: Government Printing Office.) 65 cents.

Papers of the Mount Wilson Observatory. Vol. 3: Revision of Rowland's Preliminary Table of Solar Spectrum Wave-Lengths, with an Extension to the Present Limit of the Infra-Red. (Publication No. 396.) Pp. xxi+238. (Washington, D.C.: Carnegie Institution.) 2.75 dollars.

Cathodo-Luminescence and the Luminescence of Incandescent Solids. By E. L. Nichols, H. L. Howes and D. T. Wilber. (Publication No. 384.) Pp. vii+350. (Washington, D.C.: Carnegie Institution.) 4.00 dollars.

Archaeological Investigations in Kamchatka. By Waldemar Joehelson. (Publication No. 388.) Pp. viii+88+19 plates. (Washington, D.C.: Carnegie Institution.) 2.75 dollars.

San Luis Catalogue of 15333 Stars for the Epoch 1910. Prepared at the Dudley Observatory, Albany, New York, under the direction of Lewis Boss (1908-12) and Benjamin Boss (1912-), assisted by Richard H. Tucker, Arthur J. Roy and William B. Varnum. (Publication No. 386.) Pp. lvii+307. (Washington, D.C.: Carnegie Institution.) 3.25 dollars.

The Mosquitoes of America. By Dr. Harrison G. Dyar. (Publication No. 387.) Pp. v+616 (123 plates). (Washington, D.C.: Carnegie Institution.) 5.00 dollars.

Agricultural Experiment Station: Michigan State College of Agriculture and Applied Science. Special Bulletin No. 179: Forest Insurance and its Application in Michigan. By Paul A. Herbert. Pp. 34. Special Bulletin No. 182: Strawberry Growing in Michigan. By R. E. Loree. Pp. 29. Technical Bulletin No. 93: Observations on the Pathology of Bacterium Abortus Infections. By E. T. Hallman, L. B. Sholl and A. L. Delez. Pp. 19+17 plates. Technical Bulletin No. 95: Studies in Flux Retting. By Antoinette Trevischick, B. B. Robinson and R. M. Snyder. Pp. 49. (East Lansing, Mich.)

The University of Chicago: Publications of the Yerkes Observatory. Vol. 4, Part 7: Astrometric and Photometric Statistics of certain of Hagen's Fields Photographed with the 24-inch Reflector. By Harriet McWilliams Parsons. Pp. v+32+2 plates. (Chicago: University of Chicago Press; London: Cambridge University Press.)

U.S. Department of Agriculture. Farmers' Bulletin No. 1569: Earthworms as Pests and otherwise. By W. R. Walton. Pp. ii+14. (Washington, D.C.: Government Printing Office.)

Proceedings of the United States National Museum. Vol. 74, No. 8: Five new Parasitic Flies reared from Beetles in China. By J. M. Aldrich. (No. 2753.) Pp. 7. (Washington, D.C.: Government Printing Office.)

Proceedings of the Imperial Academy. Vol. 4, No. 8, October. Pp. xxix-xxx+445-512. (Tokyo.)

Journal of the Faculty of Science, Imperial University of Tokyo. Section 2: Geology, Mineralogy, Geography, Seismology. Vol. 2, Part 6: The Intersecting Twin Earthquake of Tango Hinterland in 1927. By Dr. Bunjiro Kotô. Pp. v+265-329+plates 53-65. 2.40 yen. Vol. 2, Part 7: Pliocene Shells from Hyuga, by Matajiro Yokoyama; Neogene Shells from the Oil-Field of Higashiyama, Echigo, by Matajiro Yokoyama. Pp. 331-362+plates 66-69. 1.00 yen. (Tokyo: Maruzen Co., Ltd.)

CATALOGUES.

Catalogue de livres anciens et modernes, rares ou curieux, relatifs à l'Orient. (No. 8.) Pp. 64. (Paris: Libr. Adrien-Maisonneuve.)

Rheostats and Resistances. Pp. 26. (London: Isenthal and Co., Ltd.)

Rare and Interesting Books: 17th, 18th and 19th Centuries. (No. 22.) Pp. 82. (Newcastle-on-Tyne: William H. Robinson.)

India: its Arts and Architecture, Natural History, Religions, Sports, etc. (Catalogue 512.) Pp. 71. (London: Francis Edwards, Ltd.)

Choice Books, mostly in Contemporary or Fine Modern Bindings. (Catalogue 513.) Pp. 57+10 plates. (London: Francis Edwards, Ltd.)

Diary of Societies.

FRIDAY, DECEMBER 14.

ASSOCIATION OF ECONOMIC BIOLOGISTS (in Botany Department, Imperial College of Science), at 2.30.—Prof. P. Groom: The Antiseptic Preservation of Wood.

ROYAL SOCIETY OF ARTS (Dominions and Colonies Section), at 4.30.—Lord Olivier: The Improvement of Negro Agriculture.

ROYAL ASTRONOMICAL SOCIETY, at 5.—G. Shajn and O. Struve: On the Rotation of the Stars.—Prof. E. A. Milne: Ionisation in Stellar Atmospheres: Part II. Absolute Magnitude Effects.—H. Zanstra: The Excitation of Line and Band Spectra in Comets by Sunlight.—M. Minnaert: The Distribution of Energy near the Limb of the Sun.—C. Easton: A Photographic Chart of the Northern Milky Way.—J. Evershed: High Dispersion Prism Spectra.

BIOCHEMICAL SOCIETY (in Laboratories of J. Lyons and Co., Ltd., Hammer-smith Road), at 5.—Prof. J. C. Drummond and L. C. Baker: Further Chemical Studies of the Vitamin A Fraction of Liver Oils.—B. Russell-Wells and Dr. P. Haas: The Hydrolysis of Carrageen Mucilage.—C. R. Harrington: The Resolution of d, l-thyroxine.—M. W. Goldblatt: The Action of Insulin in Young Rabbits.—E. Clenshaw and I. Smedley Maclean: The Nature of the Unappreciable Matter from the Lipoids of Spinach and Cabbage Leaves.—L. H. Lampitt and P. Billham: The Effect of Some Constituents of Milk on its Hydrogen Ion Concentration.—D. H. F. Clayson: The Diastatic Digestion of Raw Wheat Starch.—L. H. Lampitt and J. B. Bushill: Some Observations on the Determination of Surface Tension by the Ring Method, with Special Reference to Egg Albumin.—E. B. Hughes: Some Observations on the Production of Liesegang Rings.

IMPERIAL COLLEGE CHEMICAL SOCIETY, at 5.—H. L. Riley and others: Informal Discussion on The Problem of Molecular Structure.

ROYAL SOCIETY OF MEDICINE (Ophthalmology Section) (Clinical Meeting) (at Royal Westminster Ophthalmic Hospital), at 5.

PHYSICAL SOCIETY (at Imperial College of Science), at 5.—Dr. Ezer Griffiths: A Survey of Heat Conduction Problems (Lecture).

ROYAL SOCIETY OF MEDICINE (Clinical Section), at 5.30.

MALACOLOGICAL SOCIETY OF LONDON (in Zoological Department, University College), at 6.—G. C. Robson: Remarks on the Evolution and Classification of Octopoda.—L. R. Cox: Notes on the post-Miocene Ostreidae and Pectinidae of the Red Sea Region with Remarks on the Ecological Significance of their Distribution.

INSTITUTION OF MECHANICAL ENGINEERS, at 6.—E. G. Herbert: Cutting Tools Research Committee: Report on Machinability.

INSTITUTION OF ELECTRICAL ENGINEERS (London Students' Section), at 6.15.—T. H. Lockett: The Applications of Electricity in the Printing Industry.

SOCIETY OF DYERS AND COLOURISTS (Manchester Section), at 7.—Prof. F. M. Rowe and Dr. C. P. Bean: The Effect of After-treatments on the Degree of Aggregation and Fastness Properties of Insoluble Azo Colours on the Fibre.

JUNIOR INSTITUTION OF ENGINEERS, at 7.—E. J. H. South: Locomotive Boiler Washing Plant.

WEST OF SCOTLAND IRON AND STEEL INSTITUTE (at Royal Technical College, Glasgow), at 7.—Prof. W. A. Scott: Commercial Paper.

INSTITUTION OF ELECTRICAL ENGINEERS (North-Western Centre) (at College of Technology, Manchester), at 7.—Ll. B. Atkinson: How Electricity does Things (Faraday Lecture).

SOCIETY OF DYERS AND COLOURISTS (Manchester Section) (at 36 George Street, Manchester), at 7.—Prof. F. M. Rowe and Dr. C. P. Bean: The Effect of After Treatments on the Degree of Aggregation and Fastness Properties of Insoluble Azo Colours on the Fibre.

INSTITUTE OF BRITISH FOUNDRYMEN (Lancashire Branch, Burnley Section) (at Municipal College, Burnley), at 7.15.—S. Stanworth: Comparison of English and French Moulding.

MANCHESTER ASSOCIATION OF ENGINEERS (at Engineers' Club, Manchester), at 7.15.—N. E. Box: The Dismantling, Transportation, and Erection of Heavy Machinery.

KEIGHLEY ASSOCIATION OF ENGINEERS (at Temperance Institute, Keighley), at 7.30.—J. H. Lee: Conveying.

INSTITUTE OF METALS (Sheffield Local Section) (in Non-Ferrous Section, Department of Applied Science, Sheffield University), at 7.30.—L. Wright: Chromium Plating.

OIL AND COLOUR CHEMISTS' ASSOCIATION (Manchester Section) (at Milton Hall, Manchester), at 7.30.—R. A. Bellwood: Present Day Methods of Oil Extraction.

ROYAL SOCIETY OF MEDICINE (Electro-Therapeutics Section), at 8.30.—Dr. C. A. Robinson: The Treatment of Pelvic Inflammation by Diathermy.

SOCIETY OF CHEMICAL INDUSTRY (Chemical Engineering Group)—N. Swindin: The Air and Gas Lift as a Chemical Appliance.