Official Publications Received.

BRITISH.

The University of Manchester: The Manchester Museum. Museum Publication 101: Report of the Museum Committee for the Year 1930-31. Pp. 22. (Manchester.) 6d. net.
London School of Hygiene and Tropical Medicine (University of London). Seventh Annual Report to the Court of Governors 1930-31. Pp. 17. Report by the Dean on the Work of the School for the Year ended July 31, 1931. Pp. 54. (London.)

Air Ministry: Aeronautical Research Committee: Reports and Memoranda. (Ae. 522-T. 3132): Motion of H.M.A. R. 101 under certain assumed Conditions. By D. H. Williams and A. R. Collar. Pp. 17+28 plates. (London: H.M. Stationery Office.) 1s. 3d. net.

Amgueddia Genedlaethol Cymru: National Museum of Wales. Twenty-fourth Annual Report, 1930-31, presented by the Council to the Court of Governors on the 28rd October 1931. Pp. 42. (Cardiff.)
Hastings and St. Leonards Natural History Society. Report and Balance Sheet for the Session 1930-31. Pp. 15. (St. Leonards.)
Commonwealth of Australia: Council for Scientific and Industrial Research. Bulletin No. 51: A Soil Survey of the Swamps of the Lower Murray River. By J. K. Taylor and H. G. Poole. Pp. 42+6 maps. Bulletin No. 52: The Soils of Australia in relation to Vegetation and Climate. By Prof. J. A. Prescott. Pp. 71+12 plates. (Melbourne: H. J. Green.)

Catalogue of Indian Insects. Part 20: Alucitidae (Pterophoridae). By T. Bainbridge Fletcher. Pp. iv+61. (Calcutta: Government of India Central Publication Branch.) 1.6 rupees: 2s. 3d.

Tide Tables for the Atlantic Coast of Canada for the Year 1932: including the River and Gulf of St. Lawrence, the Atlantic Coast, the Bay of Fundy, Northumberland and Cabot Straits, and Information on Currents; in addition, Tide Tables for New York and Boston, U.S.A. (Thirty-sixth Year of Issue.) Pp. 92. (Ottawa: F. A. Acland.)

Forest Bulletin No. 73: The Herbarium of the Forest Bulletin No. 74: Summary of Results of Treated Experiment al Sleepers laid in the various Railway Systems of India, thought up to date. By F. J. Popham. Pp. ii+21+50

Annexure to Transactions of the Geological Society of South Africa, Vol. 34, 1931, containing Contributions to a Discussion on the Origin of the Gold in the Witwatersrand System, which took place before the Society during 1930-1931. Pp. ii+92+4 plates. (Johannesburg.) Southern Rhodesia. Meteorological Report for the Year ended 30th June 1930, by the Department of Agriculture. Pp. 94. (Salisbury.) University College and University College Hospital Medical School, London. The Third Rickman Godlee Lecture: The Call and Claims of Natural Beauty, delivered by Prof. G. M. Trevelyan, in the Great Hall of the College, 26th October 1931. Pp. 31. (London: University College.) 1s. College.) 1s.

Transactions and Proceedings of the Botanical Society of Edinburgh.
ol. 30, Part 4, Session 1930-31. Pp. xxv-xxxi+257-366. (Edinburgh.)

Vol. 30, Part 4, Session 1930-31. Pp. xxv-xxxi+257-366. (Edinburgh.) 7s. 6d.
Report of the Department of Industries, Madras, for the Year ending 31st March 1931. Pp. vi+109. (Madras: Government Press.) 12 annas. Royal College of Science, London. Register of Old Students, compiled by the Royal College of Science Association, 1931. Fourth issue. Pp. ii+149. (London.) 3s.

Empire Marketing Board. Australian and New Zealand Fruit Shipments. Report of an Investigation by the Economic Section of the Empire Marketing Board into the Deterioration in Transit of Imported Australian and New Zealand Fruit, 1927-30. (E.M.B. 46). Pp. 64+5 plates. (London: H.M. Stationery Office.) 1s. net.

The Journal of the Board of Greenkeeping Research. Vol. 2, No. 5, November. Pp. 89-160+13 plates. (Bingley: St. Ives Research Station.) 2s. 60

2s. 6o
County Council of the West Riding of Yorkshire: Education Committee. Report on the Examination for County Minor Scholarships, 1931. Pp. 37. (Wakefield.)
Proceedings of the Royal Irish Academy. Vol. 40, Section A, No. 3:
A Pair of Circular Cubics generated by two Rigid Quadrangles. Ry T.
McHugh. Pp. 60-75. 6d. Vol. 40, Section A, No. 4: The Mobilities of Atmospheric Large Ions. By R. K. Boylan. Pp. 76-85. 6d. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.)
Transactions of the Rochdale Literary and Scientific Society. Vol. 17, 1929-31. Pp. 96+xxii+4 plates. (Rochdale.)
Records of the Geological Survey of India. Vol. 65, Part 2. Pp. 135-443+plates 3-15. 2.12 rupees; 5s. Vol. 65, Part 3. Pp. 315-443+plates 16-18. 2.12 rupees; 5s. (Calcutta: Government of India Central Publication Branch.)

FOREIGN.

Proceedings of the Imperial Academy. Vol. 7, No. 8, October. Pp. xxi-xxiii+291-330. (Tokyo.)

Abridged Scientific Publications from the Kodak Research Laboratories. Vol. 14, 1930. Pp. 295+viii. (Rochester, N.Y.: Eastman Kodak Co.)

Publications of the Observatory of the University of Michigan. Vol. 10, No. 4: Some New Methods in Astronomical Photography, with Application to Moving Pictures of Celestial Objects. By Francis C. McMath, Henry S. Hulbert and Robert R. McMath. Pp. 53-73+11 plates. (Ann Arbor, Mich.)

Mich.)
Astronomische Abhandlungen: Ergänzungshefte zu den Astronomischen Nachrichten. Band 8, Nr. 4: Spezieller Kanon der Sonnenfinsternisse für Vorderasien und Ägypten für die Zeit von 900 v. Chr. bis 4200 v. Chr. Unter Mitwirkung von R. Hiller, Bearbeitet von P. V. Neugebauer. Pp. 132+17 Tafeln. (Kiel: Druck von C. Schaidt.) 6 gold marks. Bulletin, Geotechnical Committee, Government Railways of Japan. No. 1, June. Pp. 338. (Tokyo.)

No. 3245, Vol. 1297

Scientific Papers of the Institute of Physical and Chemical Research. No. 330: The Determination of Phosphoric Acid and Molybdenum as Anmonium Phosphomolybdate. By Sansei Kitajima. Pp. 285-330. 60 sen. Nos. 331-332: Hyperfine Structure of Mercury, 2, by Kiyoshi Murakawa; Systematics and Statistics of Nuclei, by Kiyoshi Murakawa. Pp. 9. 15-sen. Nos. 333-338: Über die katalytische Reduktion des Kohlenoxyds unter gewöhnlichem Druck, 9: Versuche mit dem Co-Cu-MgO-Katalysator, von Kenji Frijimura: Über die katalytische Reduktion des Kohlenoxyds unter gewöhnlichem Druck, 10: Versuche über die Einflüsse einiger Stoffe auf die katalytische Wirkung des Co-Cu-MgO-Katalysators, von Kenji Fujimura; Untersuchungen über Lignite, von Ryohei Oda; Über die pyrogenetische Zersetzung von Paraffinöl und einigen anderen Kohlenwasserstoffen bei Gegenwart von verscheidenen Katalysatoren sowie unter Wasserstoffhochdruck, von Ryohei Oda; Distribution of Chemical and Thermal Effects in Spark Gap, by Hikotarō Takō; Studies on the Coagulation of von Weimarn's Au_F Sols, 3, by Eileh'i Iwase. Pp. 11-87. 90 sen.

(Tökyő: Iwanami Shoten.)

Proceedings of the United States National Museum. Vol. 79, Art. 25: Report on a Collection of Insects of the Order Trichoptera from Siam and China. By A. B. Martinov. (No. 2891.) Pp. 20+4 plates. (Washington, D.C.: Government Printing Office.)

China. By A. B. Martinov. (No. 2891.) Pp. 20+4 plates. (Washington, D.C.: Government Printing Office.)
Contributions from the Department of Geology of Stanford University. Vol. 1, No. 2: Ecoeue Foraminifera from Martinez, California. By Joseph A. Cushman and Julian D. Barksdale. Pp. 53-73+plates 11-12. 50 cents. Contributions from the Dudley Herbarium of Stanford University. Vol. 2: The Trees and Shrubs of Western Oregon. By Gilbert Thereon Benson. Pp. 170. 3 dollars. Stanford University Publications: University Series. Biological Sciences, Vol. 6, No. 3: The Primary Groups of Oviparous Cyprinodont Fishes. By George Sprague Myers. Pp. 241-254. 50 cents. Biological Sciences, Vol. 7, No. 1: The Arachnid Order Chelonethidae. By Dr. Joseph Conrad Chamberlin. Pp. 284. 2 dollars. Mathematics and Astronomy, Vol. 2, No. 1: Terrestrial Electricity. By Prof. Fernando Sanford. Pp. 298. 2.50 dollars. (Stanford University Press; London: Oxford University Press; Field Museum of Natural History. Anthropology Memoirs, Vol. 3: Roentgenologic Studies of Egyptian and Peruvian Mummies. By Roy L. Moodie. Pp. 66+76 plates. (Chicago.)
U.S. Department of Commerce: Coast and Geodetic Survey. Annual Report of the Director of the Coast and Geodetic Survey to the Secretary of Commerce for the Fiscal Year ended June 30, 1931. Pp. ii+45+9 plates. (Washington, D.C.: Government Printing Office.) 60 cents.

Agricultural Experiment Station of the Rhode Island State College. Bulletin 232: Utilization of Citric Acid and of Sodium Citrate by Sadmonella Pullorum. By John C. Weldin and Alice R. Miller. Pp. 16. (Kingston, R. I.)

Proceedings of the United States National Museum. Vol. 79, Art. 24:

Proceedings of the United States National Museum. Vol. 79, Art. 24; Three New Parasitic Nematode Worms. By Mary Scott Skinner. (No. 2890.) Pp. 9. Vol. 86, Art. 4: The North American Beetles of the Genus Coccinella. By Th. Dobzhansky. (No. 2904.) Pp. 32. Vol. 80, Art. 10; Notes on Francis Walker's Typos of North American Flies of the Family Tachinidae. By J. M. Aldrich. (No. 2910.) Pp. 16. (Washington, D.C.: Government Printing Office.)
U.S. Department of the Interior: Office of Education. Bulletin, 1931, No. 20: Biennial Survey of Education in the United States, 1928-1930. Chapter 5: Commercial Education. By J. O. Malott. Pp. 48. 10 cents. Pamphlet No. 22: Speech Defects and their Correction; for Teachers-Parents and Pupils. By Dr. James Frederick Rogers. Pp. ii+28. 5 cents. (Washington, D.C.: Government Printing Office.)
U.S. Department of Commerce: Bureau of Standards. Bureau of Standards Journal of Research. Vol. 7, No. 5, November, Research Papers Nos. \$72-386. Pp. 765-1016. (Washington, D.C.: Government Printing Office.)

(Peiping.)
Smithsonian Miscellaneous Collections. Vol. 85, No. 9: The Determination of Ozone by Spectrobolometric Measurements. By Oliver R. Wulf. (Publication 3127.) Pp. 12+3 plates. (Washington, D.C.: Smithsonian Institution.)

Institution.)

Spisy Lékařské Fakulty, Masarykovy University (Publications de la Faculté de Médecine). Svazek 10, Spis 99-108. Pp. iii+6+71+10+77+14+65+13+10+32+36. (Brno: A. Píša.)

Proceedings of the United States National Museum. Vol. 80, Art. 2: Three New Species of Polychaetous Annelids in the Collections of the United States National Museum. By Aaron L. Treadwell. (No. 2902.)

Pp. 5. (Washington, D.C.: Government Printing Office.)

CATALOGUES.

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Spectrograph of Great Intensity. (Lispec 31.) Pp. 4. (Delft: P. J. Kipp and Zonen.)
Improved Quick Weighing Balance with Air. or Oil-Damping. (Rem 31.) Pp. 2. (Delft: Julian H. Becker.)
Outhits for Absorption Spectrophotometry: a Guide to the Choice of Suitable Spectrophotometric Apparatus for (a) the Ultra-Violet Region, (b) the Visible Region. Pp. 38. (London: Adam Hilger, Ltd.)
Surgical Diathermy. Pp. 28. (London: Watson and Sons (Electro-Medical), Ltd.)
General Literature, Books on Various Subjects, First Editions and Autograph Letters, etc. (Catalogue No. 544.) Pp. 80. (London: Francis Edwards, Ltd.)
Geophysical Prospecting by Electrical Methods. (List No. 62.) Pp. 12. (London: H. Tinsley and Co.)
Synthetic Organic Chemicals, Vol. 5, No. 2, December. Pp. 4. (Rochester, N.Y.: Eastman Kodak Co.)
Calendar for 1932. (Newcastle-on-Tyne: C. A. Parsons and Co. Ltd.)
The Chemist and Druggist Diary, 1932. Pp. 446+Diary. (London: The Chemist and Druggist.)