

of active molecules. Studying this ozonation, the authors have proved an intense activating action exercised by the ozone on the molecules of oxygen. This action markedly increases the yield of oxidations carried out with ozone.—R. Wavre: From the human scale to the terrestrial scale. The author discusses a remark of Helmholtz which the Wegener hypothesis makes of current interest. He shows that the duration of certain phenomena of hydrodynamical order increases as the square of the dimensions. For example, the large but very slow currents in the midst of the terrestrial magma have quite well been able to last for millions of years, even although this magma were very viscous. Care is necessary in passing from the laboratory scale to the terrestrial scale.—G. Tiercy: Silvering telescope mirrors. The method of E. Schaer employed at the Geneva Observatory. The author describes the composition of the baths and gives the characteristics of the Schaer method adopted for silvering the Observatory mirrors.

Official Publications Received.

BRITISH.

- Proceedings of the Malacological Society of London. Edited by R. Winckworth. Vol. 19, Part 5, July. Pp. 219-253+plates 26-29. (London: Dulau and Co., Ltd.) 10s. net.
- Department of the Interior: North West Territories and Yukon Branch. Report of the Director of the North West Territories and Yukon Branch 1929-30. (Fiscal Year ended 31st March 1930.) Pp. 28. (Ottawa: F. A. Acland.)
- Proceedings of the Society for Psychical Research. Part 121, Vol. 40, July. Pp. 59-104. (London.) 4s.
- Memoirs of the Indian Meteorological Department. Vol. 25, Part 7: An Analysis of the Base Line Values of Autographic Instruments. By Dr. Sudhansu Kumar Banerji. Pp. 247-278. (Calcutta: Government of India Central Publication Branch.) 1.4 rupees; 2s.
- India: Meteorological Department. Scientific Notes, Vol. 3, No. 25: Heights of Base of Clouds in India as determined from Pilot Balloon Ascents. By the late M. V. Narayanan and M. P. Manna. Pp. 77-82. (Calcutta: Government of India Central Publication Branch.) 5 annas; 6d.
- Proceedings of the Edinburgh Mathematical Society. Series 2, Vol. 2, Part 4, June. Edited by Prof. H. W. Turnbull and Dr. E. T. Copson. Pp. 181-283. (London: G. Bell and Sons, Ltd.)
- Harper Adams Agricultural College, Newport, Shropshire. Report of the Advisory Department, 1930-1931. (Advisory Report No. 6.) Pp. 31. The Work of the Harper Adams Pig Feeding Experimental Station during 1930. By Dr. Charles Crowther. Pp. 7. (Newport.)
- Technical College, Bradford. Diploma and Special Day Courses, Session 1931-32. Pp. 232+19 plates. (Bradford.)
- The North of Scotland College of Agriculture. Guide to Experiments and Demonstration Plots at Craibstone, 1931. Pp. 58. Bulletin No. 37: A Disease-resisting Turnip. By Wm. M. Findlay. Pp. 12. (Edinburgh.)
- Indian Journal of Physics. Vol. 6, Part 1, and Proceedings of the Indian Association for the Cultivation of Science, Vol. 20, Part 1. Conducted by Sir C. V. Raman. Pp. 80. (Calcutta.) 1.8 rupees; 2s.
- Geological Survey Department: Tanganyika Territory. Short Paper No. 8: Some Salt Lakes of the Northern Rift Zone. By Douglas Orr and Dr. D. R. Grantham. Pp. 28. (Dar es Salaam: Government Printer.) 4s.
- Air Ministry: Aeronautical Research Committee: Reports and Memoranda. No. 1382 (Ae. 507—T. 2918): Some Cases of Flow of Compressible Fluids. By Prof. G. I. Taylor. Pp. 16+5 plates. (London: H.M. Stationery Office.) 1s. net.
- Eton College Natural History Society. Annual Report 1930-31. Pp. 106+12 plates. (Windsor.) 5s.
- (University of London): County Councils of Kent and Surrey. The Journal of the South-Eastern Agricultural College, Wye, Kent. (No. 28, 1931.) Edited for the College by Dr. S. Graham Brade-Birks. Pp. 313. (Wye.) 8s. 6d.; Residents in Kent and Surrey, 4s. 6d.
- Board of Education. Educational Pamphlets, No. 85 (Industry Series, No. 10): Report by H.M. Inspectors on the Provision of Instruction in Applied Chemistry in Technical Schools and Colleges in England and Wales. Pp. 55. (London: H.M. Stationery Office.) 1s. net.
- The Scientific Proceeding of the Royal Dublin Society. Vol. 20 (N.S.), No. 8: Award of the Boyle Medal to Sir John Purser Griffith. Pp. 85-87. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.)
- Experimental and Research Station, Nursery and Market Garden Industries' Development Society, Ltd., Turner's Hill, Cheshunt, Herts. Sixteenth Annual Report, 1930. Pp. 92. (Cheshunt.)
- British Museum (Natural History). Picture Post-cards. F32: British Trees—Holly. 2 cards in colour and 2 in monochrome. F33: British Trees—Larch. 2 cards in colour and 2 in monochrome. F34: British Trees—Hornbeam. 2 cards in colour and 2 in monochrome. F36: British Trees—Common Lims. 2 cards in colour and 2 in monochrome. F38: British Trees—Juniper. 2 cards in colour and 2 in monochrome. F41: British Trees—Aspen. 2 cards in colour and 2 in monochrome. F45: British Trees—Wild Service. 2 cards in colour and 2 in monochrome. F46: British Trees—Hawthorn. 2 cards in colour and 2 in monochrome. (London: British Museum (Natural History).) 6d. each set.

- University of Bristol. The Annual Report of the Agricultural and Horticultural Research Station (The National Fruit and Cider Institute), Long Ashton, Bristol, 1930. Pp. 231. (Bristol.)
- Joint Board of Research for Mental Diseases: City and University of Birmingham. Annual Report of the Laboratory for the Year ending March 14th, 1931. Pp. 10. (Birmingham.)
- Empire Cotton Growing Corporation. Report of the Executive Committee to be submitted to the Meeting of the Administrative Council on July 23rd, 1931. Pp. 10. (London.)
- The Scientific Proceedings of the Royal Dublin Society. Vol. 20 (N.S.), No. 9: A Study of Bacteria belonging to the Sub-genus *Aerobacter*. By M. Grimes and A. J. Hennerty. Pp. 89-97. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.) 6d.
- Norman Lockyer Observatory. Director's Annual Report, April 1, 1930-March 31, 1931. Pp. 8. (Sidmouth.)

FOREIGN.

- U.S. Department of Commerce: Bureau of Standards. Bureau of Standards Journal of Research. Vol. 6, No. 6, June, R.P. Nos. 314-328. Pp. 917-1158. (Washington, D.C.: Government Printing Office.)
- Smithsonian Miscellaneous Collections. Vol. 85, No. 3: Addenda to Descriptions of Burgess Shale Fossils. By Charles D. Walcott. (Publication 8117.) Pp. 46+23 plates. (Washington, D.C.: Smithsonian Institution.)
- U.S. Department of Commerce: Bureau of Standards. Research Paper No. 325: The Waidner-Burgess Standard of Light. By H. T. Wensel, Wm. F. Roeser, L. E. Barlow and F. R. Caldwell. Pp. 1109-1117. (Washington, D.C.: Government Printing Office.) 5 cents.
- The Memoirs of the Imperial Marine Observatory, Kobe, Japan. Vol. 4, No. 2, February. Pp. 53-226. Vol. 4, No. 3, April. Pp. 227-271. (Kobe.)
- Scientific Papers of the Institute of Physical and Chemical Research. No. 305: Raman Effect for Liquid Hydrazine. By Sunao Imanishi. Pp. 7. 20 sen. Nos. 306-309: Researches on Hypoglycemia producing Substances, 2: pseudo-Thiourea, Amidine and Urea Derivatives, by Sin'iti Kawai, Tatsuo Hosono, Yoshio Shikimami and Shunyichi Yonechi; A Contribution to the Character of Triarylcarbinol Derivatives (1); by Sin'iti Kawai and Kunisaburo Tamura; On the Reaction between 2-4-6-Trichloropyrimidine and Dimethylamine, by Sin'iti Kawai and Takashi Miyoshi; β -Hydroxy-ethylguanidine and its Condensation with Acetoacetic Acid, by Sin'iti Kawai. Pp. 9-28. 40 sen. (Tokyo: Iwanami Shoten.)
- U.S. Department of Agriculture. Farmers Bulletin No. 1665: The Silverfish as a Pest of the Household. By E. A. Back. Pp. ii+6. (Washington, D.C.: Government Printing Office.) 5 cents.
- Proceedings of the Academy of Natural Sciences of Philadelphia, Vol. 83. African and Malagasy Blattidae (Orthoptera), Part 1. By James A. G. Rehn. Pp. 805-887+plates 81-85. (Philadelphia.)
- Transactions of the San Diego Society of Natural History. Vol. 6, No. 2: Notes on the Worm Snakes of the Southwest, with Descriptions of two New Subspecies. By Laurence M. Klauber. Pp. 838-852. Vol. 6, No. 24: *Crotalus tigris* and *Crotalus enyo*, two little known Rattlesnakes of the Southwest. By Laurence M. Klauber. Pp. 353-370+plate 28. (San Diego, Calif.)
- Agricultural Experiment Station, Michigan State College of Agriculture and Applied Science. Circular Bulletin No. 136: Hardy Perennials for Landscape Planting in Michigan. By C. P. Halling. Pp. 80. Circular Bulletin No. 137: Pests of Apple and Pear in Michigan. By R. H. Pettit and Ray Hutson. Pp. 63. Special Bulletin No. 211: A Comparison of Alfalfa Strains and Seed Sources for Michigan. By C. R. Megec. Pp. 8. Technical Bulletin No. 112: Residual Effects of Fruit Thinning with the Lombard Plum. By J. H. Waring. Pp. 86. Technical Bulletin No. 114: Fertilizers and Soils in relation to Concord Grapes in Southwestern Michigan. By N. L. Partridge and J. O. Veatch. Pp. 42. Technical Bulletin No. 116: The Fruiting Habit of the Peach as Influenced by Pruning Practices. By Roy E. Marshall. Pp. 58. Technical Bulletin No. 117: Experiments with the Tuber Insect Method of Controlling Virus Diseases of Potatoes. By J. E. Kotila. Pp. 26. (East Lansing, Mich.)
- Zoologica: Scientific Contributions of the New York Zoological Society. Vol. 13, Nos. 1 and 2: Bermuda Oceanographic Expeditions, 1929-1930. No. 1: Introduction and No. 2: List of Nets and Data. By William Beebe. Pp. 86. (New York City.)
- Bulletin of the Michigan College of Mining and Technology. New Series, Vol. 4, No. 4: Announcement of Courses, 1931-1932. Pp. 145. (Houghton, Mich.)

CATALOGUES.

- Zeiss Field Glasses. (List T 500 £.) Pp. 58. (London and Jena: Carl Zeiss.)
- Thermo-electric Pyrometers for Indicating and Recording Temperatures to 1400° C. (2552° F.) (List No. 194.) Pp. 24. (London: Cambridge Instrument Co., Ltd.)
- Apparatus for X-Ray Therapy. (Bulletin T.1.) Pp. 24. Diathermy. (Bulletin W.1.) Pp. 16. (London: Watson and Sons (Electro-Medical) Ltd.)
- Liver Extract B.D.H. for the Treatment of Pernicious Anæmia and Allied Conditions. Pp. 13. Elixir Valibrom B.D.H. and Elixir Valibrom Compound B.D.H. Pp. 4. (London: The British Drug Houses, Ltd.)
- McGraw-Hill Books on Business and Economics. (List 4.) Pp. 64. (London: McGraw-Hill Publishing Co., Ltd.)
- Catalogue of Important Natural History, Botanical and Horticultural Works. (No. 17.) Pp. 82. (London: John H. Knowles.)
- Respite-Prospice: Lewis's 1844-1931. An Illustrated Account of its Foundation and Development, with a Description of the Services offered to the Medical, Scientific and Teaching Professions. Pp. ii+30+5 plates. (London: H. K. Lewis and Co., Ltd.)
- A Clearance List of Books on Zoology, Mathematics, Chemistry, Geology, etc., with an Appendix of Valuable and Interesting Books (Clearance List "A"). Pp. 23. (London: Wheldon and Wesley, Ltd.)