

Report of the Aeronautical Research Institute, Tôkyô Imperial University. No. 54: Application of the Inverse Wiedemann Effect to Torque Variation Recordings, Part 2. By Tatuo Kobayashi, assisted by Hiroto Okumura, Kinnmatsu Simamura and Tatuo Koyama. Pp. 4+3 plates. 0.22 yen. No. 55: On the Stability of Kármán Vortex Street in a Channel of Finite Breadth, II. By Susumu Tomotaka. Pp. 5-48. 0.47 yen. No. 56: Kuda no Tomonari ni tuite (On the Resonance of Pipes with a Movable End). By Kózô Satô. Pp. 49-92. 0.50 yen. No. 57: On the Possibility of Applying the Cathode-Ray Oscillograph to the Indicator for High-Speed Engines. By Jûichi Obata and Yukio Munetomo. Pp. 93-100+2 plates. 0.19 yen. (Tôkyô: Koseikai Publishing House.)

Columbia University. Bulletin of Information, Thirtieth Series, No. 23: Professional Courses in Optometry, 1930-1931. Pp. 30+3 plates. (New York City.)

United States Department of Agriculture. Circular No. 106: Tree Hoppers and their Control in the Orchards of the Pacific Northwest. By M. A. Yother. Pp. 15. 5 cents. Circular No. 109: Parasitism of the Mediterranean Fruit Fly in Hawaii, 1922-1924. By H. F. Willard and T. L. Bissell. Pp. 12. 5 cents. (Washington, D.C.: Government Printing Office.)

Proceedings of the United States National Museum. Vol. 76, Art. 8: A new Variety of the Hexactinellid Sponge *Rhabdoalyptus dawsoni* (Lambe) and the Species of *Rhabdoalyptus*. By H. V. Wilson and J. T. Penney. (No. 2805.) Pp. 9+2 plates. Vol. 76, Art. 21: Ordovician Trilobites of the Family Telephidae and concerned Stratigraphic Correlations. By E. O. Ulrich. (No. 2818.) Pp. 101+8 plates. (Washington, D.C.: Government Printing Office.)

Collection des travaux chimiques de Tchécoslovaquie. Redigée et publiée par E. Votoček et J. Heyrovský. Année 2, No. 3, Mars. Pp. 113-160. (Prague: Regia Societas Scientiarum Bohemica.)

Rendiconti del Seminario Matematico e Fisico di Milano. Vol. 3 (1929-VII). Pp. xv+267. (Milano.)

Journal of the Faculty of Agriculture, Hokkaido Imperial University, Sapporo, Japan. Vol. 23, Part 5. Pp. 151-187. (Tokyo: Maruzen Co., Ltd.)

Scientific Papers of the Institute of Physical and Chemical Research. Nos. 221-227: 221. Über die katalytische Reduktion des Kohlenoxyds unter gewöhnlichem Druck. 1: Versuche über die Katalysatoren mittels Erhitzungskurve, 1, von Shinjiro Kodama; 222. Über die katalytische Reduktion des Kohlenoxyds unter gewöhnlichem Druck. 2: Versuche über die Einflüsse einiger Stoffe auf die katalytische Wirkung des Kobalts mittels Erhitzungskurve, 2, von Shinjiro Kodama; 223. Über die katalytische Reduktion des Kohlenoxyds unter gewöhnlichem Druck. 3: Herstellung der flüssigen Kohlenwasserstoffe mit dem Kobalt-Kupfer-Thoriumoxydkatalysator, von Shinjiro Kodama; 224. The Separation and Determination of Gallium. 1: A New Method for the Determination of Gallium, by Sunao Ato; 225. On the Absorption Spectra of Salt Solutions. 1: The Absorption Spectra due to the Halogens and some Metallic Ions, by Sechi Kato; 226. Resistance of Impact on Water Surface, Part 1: Cone, by Shumpei Watanabe; 227. Effect of Superposing Alternating Currents on the Electrolytic Oxidation of Aluminum (abridgement), by Shoji Setoh and Akira Miyata. Pp. 193-274+plates 15-19. (Tokyo: Iwanami Shoten.) 1.25 yen.

Contents and Index of Scientific Papers of the Institute of Physical and Chemical Research. Vols. 1-11 (1922-1929). Pp. 40. (Tokyo: Iwanami Shoten.) 65 sen.

Ministerio da Agricultura, Industria e Comercio: Directoria de Meteorologia. A Previsão das Secas do Nordeste: Ensaios pelo método de correlações. Por J. de Sampaio Ferraz. Pp. 12. Memória sobre o clima do Rio Grande do Sul. Por Ladislau Coussirat de Araújo. Pp. iv+101. (Rio de Janeiro.)

Abstract-Bulletin of Lamp Development Laboratory, Incandescent Lamp Department of General Electric Company, Nela Park, Cleveland, Ohio. Vol. 2, No. 1, January. Pp. ix+163+6 plates. (Cleveland.)

University of California Publications in American Archaeology and Ethnology. Vol. 28, No. 2: Textile Periods in Ancient Peru. By Lila M. O'Neale and A. L. Krober. Pp. 23-56+48 plates. (Berkeley, Calif.: University of California Press; London: Cambridge University Press.) 60 cents.

Sudan Notes and Records. Vol. 12, 1929, Part 2. Pp. 119-272. (Khartoum.) 30 P.T.; 6s.

Publications of the Earthquake Investigation Committee in Foreign Languages. No. 25: Topographical Changes accompanying Earthquakes or Volcanic Eruptions. Pp. ii+143+39 plates. (Tokyo.)

Bulletins of the Pacific Scientific Fishery Research Station. Vol. 3, Part 6: Параразитические черви рыб залива петра великого (Parasitic Worms from the Fishes of Peter the Great Bay). By E. M. Layman. (With Summary in German.) Pp. 120. 1r. 60k. Vol. 4, Part 1: Морфометрическая характеристика западнокамчатской горобушки *Oncorhynchus gorbuscha* Walbaum (Morphometrical Characteristics of the West Kamchatka Humpback Salmon). By I. F. Pravdin. (With Summary in English.) Pp. 132. 3r. (Vladivostok.)

U.S. Department of Commerce: Bureau of Standards. Circular of the Bureau of Standards, No. 380: Architectural Acoustics. Pp. 8. (Washington, D.C.: Government Printing Office.) 5 cents.

U.S. Department of Agriculture. Circular No. 107: The Normal Breeding Season and Gestation Period of Martens. By Frank G. Ashbrook and Karl B. Hanson. Pp. 7. 5 cents. Technical Bulletin No. 173: The Bluegrass Webworm. By George G. Ainslie. Pp. 26. 10 cents. (Washington, D.C.: Government Printing Office.)

Proceedings of the American Academy of Arts and Sciences. Vol. 64, No. 5: The Minimum of Resistance at High Pressure. By P. W. Bridgeman. Pp. 75-90. 45 cents. Vol. 64, No. 6: The Reflecting Power of some Substances in the Extreme Ultra-violet. By Paul R. Gleason. Pp. 91-125. 75 cents. (Boston, Mass.)

Publikationer fra det Danske Meteorologiske Institut. Communications magnétiques, etc. No. 8: La balance de Godhavn, par D. la Cour; No. 9: Contribution à la théorie de l'intensomètre magnétique à l'induction mutuelle de D. la Cour, par Helge Petersen et D. la Cour. Pp. 28+4. (København: G. E. C. Gad.)

Proceedings of the United States National Museum. Vol. 76, Art. 17: Contribution to the Taxonomy of Asiatic Wasps of the Genus *Tiphia* (Scoliidae). By H. W. Allen and H. A. Jaynes. (No. 2814.) Pp. 105+4 plates. (Washington, D.C.: Government Printing Office.)

The Kyoto Imperial University. Publications of the Kwanson Observatory. Vol. 1, No. 1: General Descriptions of the Kwanson Observatory of the Kyoto Imperial University. By Prof. Issei Yamamoto. Pp. 16+4 plates. Vol. 1, No. 2: Shih Shen's Catalogue of Stars, the Oldest Star Catalogue in the Orient. By Joe Ueta. Pp. 17-48. (Kyoto.)

Smithsonian Institution: United States National Museum. Bulletin 104: The Foraminifera of the Atlantic Ocean. Part 7: Nonionidae, Camerinidae, Peneropidae and Alveolinellidae. By Joseph Augustine Cushman. Pp. vi+79+18 plates. 35 cents. Bulletin 149: Composition and Structure of Meteorites. By George P. Merrill. Pp. vi+62+32 plates. 40 cents. (Washington, D.C.: Government Printing Office.)

Scientific Survey of Porto Rico and the Virgin Islands. Vol. 10, Part 2: The Fishes of Porto Rico and the Virgin Islands—Branchiostomatidae to Sciaenidae. By J. T. Nichols. Pp. 159-295. 2 dollars. Vol. 10, Part 3: The Fishes of Porto Rico and the Virgin Islands—Pomacentridae to Ogcophidae. By J. T. Nichols. Pp. 297-399. 2 dollars. (New York: New York Academy of Sciences.)

Proceedings of the Academy of Natural Sciences of Philadelphia. Vol. 82. A new Nightjar from Angola: Second Preliminary Paper on the Birds collected during the Gray African Expedition, 1929. By W. Wedgwood Bowen. Pp. 2. Two new East African Birds: Third Preliminary Paper on the Birds collected during the Gray African Expedition, 1929. By W. Wedgwood Bowen. Pp. 3-7. (Philadelphia.)

U.S. Department of Commerce: Bureau of Standards. Research Paper No. 137: Effect of Small Changes in Temperature on the Properties of Bodies. By Mayo D. Hersey. Pp. 137-156. (Washington, D.C.: Government Printing Office.) 5 cents.

Annales de l'Observatoire de Paris, Section de Meudon. Publié par H. Deslandres. Tome 7, Fascicule 1: Recherches sur la polarisation de la lumière des planètes et de quelques substances terrestres. Par B. Lyot. Pp. ix+161. (Orléans: Impr. Henri Tessier.)

Travaux et mémoires du Bureau International des Poids et Mesures. Tome 18. Pp. vi+41+12+85+82+44+126+19+6. (Paris: Gauthier-Villars et Cie.)

Proceedings of the United States National Museum. Vol. 77, Art. 4: The Lysianassid Amphipod Crustaceans of Newfoundland, Nova Scotia and New Brunswick in the United States National Museum. By Clarence R. Shoemaker. (No. 2827.) Pp. 19. (Washington, D.C.: Government Printing Office.)

CATALOGUES.

The Nickel Bulletin. Vol. 3, No. 3, March. Pp. 78-104. Publication R2: The Nickel-Copper Alloys containing more than 50% Nickel. Revised edition. Pp. 24. Series B, No. 6: The Practical Application of Nickel in Cast Iron. Pp. 12. Publication R1: The Nickel-Copper Alloys containing less than 50% Nickel. Pp. 28. Publication S1: Case-Hardening and the use of Nickel Steels. Pp. 16. (London: The Mond Nickel Co., Ltd.)

Medicinal Glucose (Pure Dextrose) B.D.H. Pp. 13. (London: The British Drug Houses, Ltd.)

Caprokol (Hexyl Resorcinol B.D.H.), the Urinary Antiseptic for Oral Administration. Pp. 15.

Diary of Societies.

THURSDAY, APRIL 24.

LONDON MATHEMATICAL SOCIETY (at Royal Astronomical Society), at 5.—H. A. Hayden: Asymptotic Lines in a V_m in a V_n .—V. Naylor: The Methods of Summation.—G. N. Watson: Theorems stated by Ramanujan (XII.).

FRIDAY, APRIL 25.

FARADAY SOCIETY (at Chemical Society), at 2.15.—Annual General Meeting.

ROYAL SOCIETY OF MEDICINE (Medicine Section), at 5.—Cinematographic Demonstration by Dr. L. G. Rowntree: Ganglionectomy in Chronic Arthritis.—Prof. Dixon and Dr. G. N. Myers: The Curative Action of Digitalis in Toxemia.

INSTITUTION OF MECHANICAL ENGINEERS, at 6.—F. Carnegie: The Economical Production and Distribution of Steam in Large Factories.

ROYAL SOCIETY OF MEDICINE (Epidemiology Section), at 8.—Prof. S. L. Cummins: Some of the Clinical and Pathological Factors underlying Mortality Rates in Tuberculosis.

INSTITUTION OF ELECTRICAL ENGINEERS (West Wales (Swansea) Sub-Centre).—S. W. Melson, A. N. Arman, and W. Bibby: Surge Investigations on Overhead Line and Cable Systems.

SATURDAY, APRIL 26.

NORTH OF ENGLAND INSTITUTE OF MINING AND MECHANICAL ENGINEERS.

PUBLIC LECTURES.

THURSDAY, APRIL 24.

INSTITUTE OF PATHOLOGY AND RESEARCH, ST. MARY'S HOSPITAL, PAD-DINGTON, at 5.—Sir Almroth E. Wright: Twelve Years' Work on Immunisation of the Blood *in vitro*.

THURSDAY, MAY 1.

INSTITUTE OF PATHOLOGY AND RESEARCH, ST. MARY'S HOSPITAL, PAD-DINGTON, at 5.—Prof. J. Mellanby: Absorption from the Alimentary Canal.

CONGRESS.

APRIL 25 TO 28.

FLEMISH CONGRESS OF NATURAL SCIENCES AND MEDICINE (at Antwerp).