

Official Publications Received.

Journal of the College of Science, Imperial University of Tokyo. Vol. 42, Art. 3: Ökologische Untersuchungen der Schwimminseln in Japan. Von Harufusa Nakano. Pp. 57. 1.50 yen. Vol. 44, Art. 1: Fossils from the Upper Musashino of Kazusa and Shimosa. By Matajiro Yokoyama. Pp. 200 + viii + 17 plates. 9.20 yen. Vol. 44, Art. 2: On some Japanese Freshwater Triclad; with a Note on the Parallelism in their Distribution in Europe and Japan. By Tokio Kaburaki. Pp. 71 + 1 plate. 2.30 yen. (Tokio: Imperial University; Maruzen Co., Ltd.)

Philosophical Transactions of the Royal Society of London. Series B, Vol. 211: The Breeding Places of the Eel. By Dr. Johs. Schmidt. Pp. 179-208. (London: Harrison and Sons, Ltd.)

Actes de la Société Helvétique des Sciences Naturelles. 101^e Session annuelle du 29 août au 1^{er} septembre 1920 à Neuchâtel. 1^{re} Partie. Pp. 266 + 55. (Aarau: H. R. Sauerländer et Cie.)

Bulletin of the American Museum of Natural History, Vol. 46, Art. 10: The Locomotor Apparatus of certain Primitive and Mammal-like Reptiles. By Alfred Sherwood Romer. Pp. 517-606 + plates 27-46. (New York: American Museum of Natural History.)

Contributions from the Jefferson Physical Laboratory, from the Cruft High-Tension Electrical Laboratory, and from Colleagues and Former Students, dedicated to Professor Edwin Herbert Hall, for the Year 1921. Vol. 15 (unpaged). (Cambridge, Mass.: Harvard University Press.)

The Institution of Civil Engineers. Engineering Abstracts prepared from the Current Periodical Literature of Engineering and Applied Science, published outside the United Kingdom. New Series, No. 13, October. Edited by W. F. Spear. Pp. 176. (London: Institution of Civil Engineers.)

República Argentina. Ministerio de Agricultura de la Nación: Oficina Meteorológica Nacional. La Máxima de la radiación solar en Enero y Febrero de 1920, y el estado del tiempo mundial. Por H. H. Clayton y Guillermo Hoxmark. Pp. 18. (Buenos Aires.)

Rapport annuel sur l'état de l'Observatoire de Paris pour l'année 1921. Par M. B. Baillaud. Pp. 35. (Paris: Impr. Nationale.)

Canada. Department of Mines: Mines Branch. No. 549: Report on Structural Materials along the St. Lawrence River, between Prescott, Ont., and Lachine, Que. By Joseph Keele and L. Heber Cole. Pp. 119 + 30 plates + 3 maps. (Ottawa.)

Nedbøriakttagelser i Norge utgitt av det Norske Meteorologiske Institutt. Årgang 27, 1921. Pp. xiii + 79 + 47 + 2 maps. (Kristiania: H. Aschehoug and Co.) 6.00 kr.

Jahrbuch des Norwegischen Meteorologischen Instituts für 1921. Pp. xi + 174. (Kristiania: Grøndahl and Søn.)

Field Museum of Natural History. Publication 210, Zoological Series, Vol. 12, No. 3: Game Birds from North-western Venezuela. By W. H. Osgood and B. Conover. Pp. 17-48. (Chicago.)

Annual Conference of the Universities of Great Britain and Ireland, 1922. Abridged Report of Proceedings. Pp. 32. (London: Universities Bureau of the British Empire.) 1s.

Nedbøriagttagelser i Norge utgitt av det Norske Meteorologiske Institutt. Middelverdier, Maksima og Minima. Pp. xvi + xi + 83 + 12 plates + 2 maps. (Kristiania: H. Aschehoug and Co.) 6.00 kr.

State of Illinois. Department of Registration and Education: Division of the Natural History Survey. Bulletin, Vol. 13, Art. 14: Forest Insects in Illinois. I: The Subfamily Ochthiphilinae (Diptera, Family Agromyzidae). By J. R. Malloch. Pp. 345-362. Bulletin, Vol. 13, Art. 15: The Small Bottom and Shore Fauna of the Middle and Lower Illinois River and its Connecting Lakes, Chillicothe to Grafton: its Valuation; its Sources of Food Supply; and its Relation to the Fishery. By R. E. Richardson. Pp. 363-522. Bulletin, Vol. 13, Art. 16: An Ecological Survey of the Prairie Vegetation of Illinois. By H. C. Sampson. Pp. 523-578 + plates 48-77. Bulletin, Vol. 14, Art. 1: The Orchard Birds of an Illinois Summer. By S. A. Forbes and A. O. Gross. Pp. 8 + 6 plates. Bulletin, Vol. 14, Art. 2: Distribution of the Fresh-water Sponges of North America. By F. Smith. Pp. 9-22. (Urbana, Ill.)

República Argentina. Ministerio de Agricultura de la Nación: Oficina Meteorológica Nacional. Las Condiciones físicas del Atlántico Sur entre el Río de La Plata y las Islas Orcadas del Sur durante el verano. Por R. C. Mossman. Pp. 26. (Buenos Aires.)

University of London: University College. Calendar, Session 1922-1923. Pp. lxxviii + 410 + lxxx-clxxxviii. (London: Taylor and Francis.)

Annuaire de l'Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique. 1922, 88^e année. Pp. 124 + 209 + plates. (Bruxelles: M. Lamertin; M. Hayez.)

Ministry of Agriculture, Egypt. Cotton Research Board. Second Annual Report, 1921. Pp. xvi + 203. (Cairo: Government Publications Office.) 15 P.T.

Bulletin of the American Museum of Natural History. Vol. 45, III: The Predaceous Enemies of Ants. By J. Bequaert. Pp. 271-331. Vol. 45, IV: Ants in their Diverse Relations to the Plant World. By J. Bequaert. Pp. 333-583. Vol. 45, V: The Anatomy of certain Plants from the Belgian Congo, with Special Reference to Myrmecophytism. By I. W. Bailey. Pp. 585-621. Vol. 45, VI: Notes on a Collection of West African Myrmecophiles. By W. M. Mann. Pp. 628-630. Vol. 45, VII: Keys to the Genera and Subgenera of Ants. By W. M. Wheeler. Pp. 631-710. Vol. 45, VIII: A Synonymic List of the Ants of the Ethiopian Region. By W. M. Wheeler. IX: A Synonymic List of the Ants of the Malagasy Region. By W. M. Wheeler. Pp. 711-1055. (New York.)

Jamaica. Annual Report of the Department of Agriculture for the Year ended 31st December 1921. Pp. 43. (Kingston, Jamaica.)

Studies on the Cyclostomatous Bryozoa. By F. Canu and R. S. Bassler. (No. 2443: From the Proceedings of the United States National Museum, Vol. 61, Art. 22.) Pp. 160 + 28 plates. (Washington: Government Printing Office.)

Diary of Societies.

MONDAY, NOVEMBER 13.

ROYAL SOCIETY OF ARTS, at 8.—J. Slater: The Strand and the Adelphi in Ancient Times.

ENTOMOLOGICAL SOCIETY OF LONDON, at 8. SURVEYORS' INSTITUTION, at 8.—J. M. Clark: Presidential Opening Address.

ROYAL GEOGRAPHICAL SOCIETY (at Æolian Hall), at 8.30.—Commander F. Wild: The Work of "The Quest."

TUESDAY, NOVEMBER 14.

ROYAL HORTICULTURAL SOCIETY, at 3.—Dr. H. Wager: The Colours of Flowers and Fruits (Masters Memorial Lecture).

INSTITUTION OF PETROLEUM TECHNOLOGISTS (at Royal Society of Arts), at 5.

INSTITUTE OF MARINE ENGINEERS, INC., at 6.30.—J. Steinheil: The Evolution of the Nobel Diesel Engine (Part I).

QUEKETT MICROSCOPICAL CLUB, at 7.30.—Dr. R. J. Ludford: The Cytology of Growth.

ILLUMINATING ENGINEERING SOCIETY (at Royal Society of Arts), at 8.—Reports on Progress during the Vacation and Developments in Lamps and Lighting Appliances.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN, at 7.—J. C. Kingdon: Experiments on the Tensile Strength of Gelatine and Gelatine-jelly; Discussion of the Results as bearing on the Structure of Gelatine; with a Note on the Evolution of Heat by Gelatine when expanding in Water.—K. C. D. Hickman: Rapid Sulphiding of Bromide Prints. Toning with Gases instead of Liquids; together with a Demonstration of the Methods employed.—D. Northall-Laurie: Photomicrographs in Colour mounted to exhibit changing Tints.

WEDNESDAY, NOVEMBER 15.

ROYAL MICROSCOPICAL SOCIETY, at 8.—C. Beck: Glare and Flooding in Microscope Illumination.—Dr. C. Singer: The First Mechanical Microtome.—Prof. G. S. Thapar: The Occurrence and Significance of a Third Contractile Vacuole in *Paramecium caudatum*.—Prof. B. L. Bhatia: The Significance of Extra Contractile Vacuoles in *Paramecium caudatum*.

ROYAL SOCIETY OF ARTS, at 8.—Dr. S. Smith: The Action of the Beater in Paper Making, with Special Reference to the Theory of the Fibre Board and its Application to Old and New Problems of Beater Design.

THURSDAY, NOVEMBER 16.

ROYAL SOCIETY, at 4.30.—*Probable Papers*.—Prof. A. S. Eddington, The Propagation of Gravitational Waves.—Dr. J. H. Jeans: The Theory of the Scattering of α and β Rays.—Prof. A. P. Chattock and L. F. Bates: The Richardson Gyro-magnetic Effect.—P. M. S. Blackett: The Analysis of a Ray Photographs.—J. H. Jones: The Kinetic Energy of Electrons emitted from a hot Tungsten Filament.—Dr. W. Wilson: The Quantum Theory and Electromagnetic Phenomena.—S. Marsh and A. E. Evans: Measurements of Electrode Potential Drop with Direct Current and Alternating Current Electrolysis.

LINNEAN SOCIETY, at 5.

ROYAL AERONAUTICAL SOCIETY (at Royal Society of Arts), at 5.30.—R. McKinnon Wood: The Co-relation of Model and Full-Scale Work.

CHILD-STUDY SOCIETY (at Royal Sanitary Institute), at 6.—A. D'Arcy Chapman: The Measurement of the Intelligence of School Children in Massachusetts, U.S.A.

INSTITUTION OF ELECTRICAL ENGINEERS, at 6.—The late Dr. G. Kapp: The Improvement of Power Factor (read by Prof. M. Walker).

CHEMICAL SOCIETY, at 8 (and Informal Meeting).

CAMERA CLUB, at 8.15.—T. H. B. Scott: Lourdes.

FRIDAY, NOVEMBER 17.

ROYAL SOCIETY OF ARTS (Indian Section), at 4.30.—J. W. Meares: The Development of Water Power in India.

INSTITUTION OF MECHANICAL ENGINEERS, at 6.—Adjourned discussion on paper by Sir Vincent L. Raven: Electric Locomotives.

JUNIOR INSTITUTION OF ENGINEERS, at 7.30.—Annual General Meeting. ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN, at 8.—N. E. Luboshez: Definition and Diffusion of Image.

PUBLIC LECTURES.

SATURDAY, NOVEMBER 11.

HORNIMAN MUSEUM (Forest Hill), at 3.30.—Dr. W. A. Cunningham: The Natural History of Crabs.

MONDAY, NOVEMBER 13.

CITY OF LONDON Y.M.C.A. (186 Aldersgate Street), at 6.—Sir Bruce Bruce-Porter: How to Keep Well.

TUESDAY, NOVEMBER 14.

SCHOOL OF ORIENTAL STUDIES, at 5.—Dr. T. G. Bailey: The Sansis, or Thieves of India: Their Language, History, and Customs.

ROYAL SANITARY INSTITUTE, at 5.15.—Miss A. D. Muncaster: Some Hygienic Aspects of Food and Food Preparation. (1) The Hygiene of Raw Food (Chadwick Lecture).

GRESHAM COLLEGE, at 6.—W. H. Wagstaff: Geometry. Succeding Lectures on November 15, 16, and 17.

THURSDAY, NOVEMBER 16.

UNIVERSITY COLLEGE, at 2.30.—Miss Margaret A. Murray: Recent Excavations in Malta.

KING'S COLLEGE, at 5.30.—M. Beza: The Story of Cupid and Psyche in Rumanian Folklore.

FRIDAY, NOVEMBER 17.

BEDFORD COLLEGE FOR WOMEN, at 5.30.—Miss K. M. Westaway: Plutarch: His Life and Writings.

SATURDAY, NOVEMBER 18.

HORNIMAN MUSEUM (Forest Hill), at 3.30.—A. D. Howell Smith: Textiles and their History.