

State of Illinois. Department of Registration and Education: Division of the Natural History Survey. Classified List of Publications available for Exchange and Distribution, including the Publications of the State Entomologist's Office and the State Laboratory of Natural History. Pp. 80. Bulletin, Vol. 18, Art. 8: Epidemic Diseases of Fruit Trees in Illinois, 1922-1928. By L. R. Tehon and Gilbert L. Stout. Pp. 411-502. Bulletin, Vol. 19, Art. 1: The Fishes of Champaign County: a Study of the Distribution and Abundance of Fishes in Small Streams. By David H. Thompson and Francis D. Hunt. Pp. 101. Bulletin, Vol. 19, Article 2: Records of Spring Migration of Birds at Urbana, Illinois, 1903-1922. By Frank Smith. Pp. 103-117. (Urbana, Ill.: State Natural History Survey.)

Cornell University Agricultural Experiment Station. Bulletin 507: Motor Trucks on New York Farms. By C. W. Gilbert. Pp. 55. Memoir 132: Biochemistry and Biophysics of the Developing Hen's Egg. 1: Influence of Humidity. By Alexis L. Romanoff. Pp. 27. (Ithaca, N.Y.): Proceedings of the United States National Museum. Vol. 77, Art. 19: Notes on the Rhinotragine Beetles of the Family Cerambycidae, with Descriptions of New Species. By W. S. Fisher. (No. 2842.) Pp. 20. Vol. 77, Art. 20: The Taxonomy and Host Relationships of the Biting Lice of the Genera *Dennyus* and *Eureum*, including the Descriptions of a New Genus, Subgenus and four New Species. By H. E. Ewing. (No. 2843.) Pp. 16. (Washington, D.C.: Government Printing Office.)

Publikationer fra det Danske Meteorologiske Institut. Communicationes magnétiques, etc. No. 11: Le variomètre de Copenhague, par D. la Cour et Viggo Laursen; No. 12: On the Scale Value and the Base Value of the H-Variometer, by V. H. Ryd. Pp. 11+11. (København: G. E. C. Gad.)

Publications de l'Observatoire Astronomique de l'Université de Belgrade. Tome 3: Annuaire pour l'an 1931. Rédigé par V. V. Michkovitch. Pp. 146+3 planches. (Belgrade.)

Scientific Papers of the Institute of Physical and Chemical Research. Nos. 271-273: A Study on the Decomposition of Potassium Ferrocyanide and of Potassium Ferricyanide by the Autoclave Treatment, by Tomonuke Katsural and Tokunosuke Watanabe; Researches on the Cutting Force, 2: Cutting Action of Planing Tool, by Makoto Okoshi; Grain-Growth of Marble (Abridgement), by Masawo Kuroda. Pp. 189-227. (Tokyo: Iwanami Shoten.) 75 sen.

Mount Wilson Catalogue of Photographic Magnitudes in Selected Areas 1-139. By F. H. Seares, J. C. Kapteyn and P. J. van Rhijn, assisted by Mary C. Joyner and Myrtle L. Richmond. (Papers of the Mount Wilson Observatory, Vol. 4.) (Publication No. 402.) Pp. 1+276. (Washington, D.C.: Carnegie Institution.) 8.00 dollars.

Contributions to Palaeontology from Carnegie Institution of Washington. 1: A Neocene Erosion Surface in Central Oregon, by John P. Buwalda; 2: The Dalles and Hood River Formations, and the Columbus River Gorge, by John P. Buwalda and Bernard N. Moore; 3: Orodonts from the Sespe Deposits of South Mountain, Ventura County, California, by Chester Stock; 4: Carnivora New to the Mascall Miocene Fauna of Eastern Oregon, by Chester Stock; 5: Capromeryx minor Taylor from the McKittrick Pleistocene, California, by Eustace L. Furlong; 6: A Tertiary Vertebrate Fauna from the Upper Cuyama Drainage Basin, California, by C. Lewis Gazin; 7: A Tertiary Mammalian Fauna from the Mint Canyon Formation of Southern California, by John H. Maxson. (Publication No. 404.) Pp. iii+112+8 plates. (Washington, D.C.: Carnegie Institution.) 2.25 dollars.

Contributions to Embryology. Vol. 21, Nos. 118 to 125. 118: A Human Embryo with Seventeen Pairs of Somites, by Wayne J. Atwell; 119: Description of a Human Embryo with Eight Somites, by Cecil M. West; 120: Medullated Tracts in the Brain Stem of a Seventh-month Human Fetus, by O. R. Langworthy; 121: Ossification of the Otic Capsule in Human Fetuses, by T. H. Bast; 122: On an Unusual Placental Form in the Hyracoidae, its Bearing on the Theory of the Phylogeny of the Placenta, by George B. Wislocki; 123: Gross and Microscopic Structure of Thyroid Gland in Man, by W. F. Reinhoff, Jr.; 124: The Age Factor in Grafts, by Vera Danckhoff and V. E. Danckhoff; 125: The Early Embryology of the Rabbit, by P. W. Gregory. (Publication No. 407.) Pp. iii+168+29 plates. (Washington, D.C.: Carnegie Institution.) 3.75 dollars.

Thermodynamic Relations in Multi-Component Systems. By Roy W. Goranson. (Publication No. 408.) Pp. xvii+329. (Washington, D.C.: Carnegie Institution.) 6.00 dollars.

Leonardo da Vinci, the Anatomist (1452-1519). By Prof. J. Playfair McMurrich. (Published for the Carnegie Institution.) (Publication No. 411.) Pp. xx+265+72 plates. (Baltimore, Md.: Williams and Wilkins Co.) 6.00 dollars.

Report of the Aeronautical Research Institute, Tôkyô Imperial University. No. 63: The Attempted Take-off of the "City of Tacoma" for the Trans-Pacific Flight at Kasumigaura, Japan. By Taitiro Ogawa. Pp. 249-259+2 plates. (Tokyo: Koseikai Publishing House.) 0.16 yen.

Proceedings of the United States National Museum. Vol. 77, Art. 12: Birds from the Small Islands off the Northeast Coast of Dutch Borneo. By J. H. Riley. (No. 2335.) Pp. 23+1 plate. (Washington, D.C.: Government Printing Office.)

U.S. Department of Agriculture. Circular No. 139: Method and Procedure of Soil Analysis used in the Division of Soil Chemistry and Physics. By W. O. Robinson. Pp. 20. (Washington, D.C.: Government Printing Office.) 5 cents.

U.S. Department of Commerce: Coast and Geodetic Survey. Serial No. 492: Results of Magnetic Observations made by the United States Coast and Geodetic Survey in 1929. By Daniel L. Hazard. Pp. 33. (Washington, D.C.: Government Printing Office.) 10 cents.

Proceedings of the American Philosophical Society. Vol. 69, No. 7. Pp. 397-528. (Philadelphia.)

Ministère de l'Instruction publique et des Beaux-Arts. Enquêtes et documents relatifs à l'enseignement supérieur. 124: Rapports sur les Observatoires astronomiques de province et les Observatoires et Instituts de Physique du Globe, année 1928. Pp. 115. (Paris: Imprimerie Nationale.)

Mémoires du Musée Royal d'Histoire Naturelle de Belgique. Mémoire No. 45: Hydromedusae collected in the South-Western Part of the North Sea and in the Eastern Part of the Channel in 1903-1914. By P. L. Kramp. Pp. 55. (Bruxelles.)

An Album of the Groups in the Verney-Fauntleroy Hall of South Asiatic Mammals of the American Museum of Natural History. Pp. 28+24 plates. (New York City.)

U.S. Department of Commerce: Bureau of Standards. Bureau of Standards Journal of Research. Vol. 5, No. 4, October. Pp. 781-972. (Washington, D.C.: Government Printing Office.)

Reprint and Circular Series of the National Research Council. No. 94: Eighth Report of the Committee on Contact Catalysis. By J. C. W. Frazer. Pp. 51. 50 cents. No. 95: Doctorates conferred in the Sciences by American Universities, 1929-1930. Compiled by Callie Hull and Clarence J. West. Pp. 49. 50 cents. No. 96: Second Report of the Committee on Photochemistry. By Hugh S. Taylor. Pp. 45. 50 cents. (Washington, D.C.: National Academy of Sciences.)

State of California: Division of Fish and Game. Fish Bulletin No. 23: Success of the Purse Seine Boat in the Sardine Fishery at Monterey, California (1929-1930 Fishing Season). By J. B. Phillips. Pp. 30. Free. Fish Bulletin No. 24: An Analysis of the Catch Statistics of the Striped Bass (*Roccus lineatus*) Fishery of California. By J. A. Craig. Pp. 48. Free. Fish Bulletin No. 25: Fishing areas along the California Coast for the Sardine (*Sardinia caerulea*). By the California State Fisheries Laboratory. Pp. 46. Free. Fish Bulletin No. 26: Seasonal Changes in the Daily Average Length of the California Sardine (*Sardinia caerulea*). By Frances N. Clark. Pp. 22. Free. (Terminal Island, Calif.: California State Fisheries Laboratory.)

Annual Report of the Board of Regents of the Smithsonian Institution showing the Operations, Expenditures and Condition of the Institution for the Year ending June 30, 1929. (Publication 3034.) Pp. xiii+622+91 plates. (Washington, D.C.: Government Printing Office.) 1.75 dollars.

## Diary of Societies.

### FRIDAY, DECEMBER 19.

LONDON SOCIETY (at Royal Society of Arts), at 5.—Prof. S. D. Adsehead: South Essex: Its Docks, Industries, and Houses.

NORTH-EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS (Informal Meeting) (in Mining Institute, Newcastle-upon-Tyne), at 7.15.—E. L. Chappness and others: Are we justified in using Steel and other Materials of Foreign Manufacture in the British Engineering Industries?

JUNIOR INSTITUTION OF ENGINEERS (Informal Meeting), at 7.30.—W. Cullen: Well Drill Blasting.

BRITISH ELECTRICAL DEVELOPMENT ASSOCIATION (at Royal Society of Arts), at 7.30.—R. C. Hawkins: Sales Aspects of Hotel Lighting.

JUNIOR INSTITUTION OF ENGINEERS (at Metallurgical Club, Sheffield), at 7.30.—P. S. Devereux: Chairman's Address.

INSTITUTE OF CHEMISTRY (London Section), at 8.—Dr. A. E. Dunstan: Gluckstein Memorial Lecture.

ROYAL SOCIETY OF MEDICINE (Electro-Therapeutics and Comparative Medicine Sections), at 8.30.—Major A. A. Fryer, Dr. R. W. A. Salmond, Lieut.-Col. E. Middleton Perry, Dr. J. E. King, and others: Discussion on A Comparison of Radiological Problems in Man and Animals. SOCIETY OF DYERS AND COLOURISTS (London Section).—Dr. Callan: Emulsifying Agents, Textile Assistants, and Finishing Materials: their Examination and Valuation.

### MONDAY, DECEMBER 22.

INSTITUTION OF AUTOMOBILE ENGINEERS (Glasgow Centre) (at 39 Elmbank Crescent, Glasgow), at 7.30.—Dr. H. E. Merritt: Trends in the Transmission.

### PUBLIC LECTURE.

### FRIDAY, DECEMBER 19.

SOCIETY OF CHEMICAL INDUSTRY (South Wales Section) (at Technical College, Cardiff), at 7.30.—J. Pryde: Human Engines.

### CONFERENCE.

### DECEMBER 19 AND 20.

SOCIETY FOR EXPERIMENTAL BIOLOGY (at Bedford College).

Friday, Dec. 19, 10 a.m. to 1.—Dr. M. C. Rayner: Observations on *Armillaria mellea* in Pure Culture with Certain Conifers.

J. G. Boswell: The Biochemistry of Dry Rot in Wood.

G. E. Blackman: The Effect of Nitrogen Compounds on the Botanical Composition of Grass.

Dr. W. H. Pearsall: Changes in the Constitution of *Beta* Leaves during Growth.

Dr. E. B. Adrian: The Activity of Isolated Nerves and Nerve Cells.

H. O. Bull: Conditioned Responses and Salmon Smolts.

2.15 to 4.—Dr. C. M. Yonge: The Relationship between Corals and *Zooxanthellae*.

Dr. T. A. Stephenson: The Growth of Corals.

H. Hindle: Thermophilous Organisms.

W. H. Thorpe: Experiments on the Biology of the Petroleum Fly, *Psiloa petrolii*.

5.30 to 6.30.—E. Charles: Metabolic Changes associated with Pituitary Activity.

E. A. Spaul: Internal Secretions and Metamorphosis.

Saturday, Dec. 20, 10 a.m. to 1.—Symposium on the Permeability of Protoplasmic Membranes.

Prof. L. T. Hogben: Electrical Conductivity and the Permeability of Animal and Plant Tissues.

Prof. A. V. Hill: The Steady State across Biological Membranes.

A. D. Hobson: Changes in the Sea-Urchin Egg following Fertilisation.

R. J. Pumphrey: Electrical Potentials across the Membranes of the Trout Egg.

C. F. A. Pantin: Surface Permeability and the Evolution of the Blood Serum.