

## Official Publications Received.

Department of the Interior: United States Geological Survey. Water-Supply Paper 541: Surface Water Supply of the United States, 1922. Part 1: North Atlantic Slope Drainage Basins. Pp. vi+258+2 plates. (Washington: Government Printing Office.) 25 cents.

Proceedings of the Academy of Natural Sciences of Philadelphia. Vol. 76, 1924. Pp. iii+444+21 plates. (Philadelphia.) 6.25 dollars.

Smithsonian Miscellaneous Collections. Vol. 77, No. 2: Explorations and Field-Work of the Smithsonian Institution in 1924. (Publication 2794.) Pp. iii+136. (Washington: Smithsonian Institution.)

Department of Commerce: U.S. Coast and Geodetic Survey. Serial No. 293: Results of Observations made at the United States Coast and Geodetic Survey Magnetic Observatory near Tucson, Ariz., 1921 and 1922. By Daniel L. Hazard. Pp. 99+5 plates. Serial No. 292: Results of Observations made at the United States Coast and Geodetic Survey Magnetic Observatory at Vieques, P.R., in 1921 and 1922. By Daniel L. Hazard. Pp. 98+4 plates. (Washington: Government Printing Office.) 15 cents each.

Experimental Vegetation: (The Relation of Climaxes to Climates. By Frederic E. Clements and John E. Weaver. (Publication No. 355.) Pp. vii+172+15 plates. (Washington: Carnegie Institution.)

The Phytometer Method in Ecology: the Plant and Community as Instruments. By Frederic E. Clements and Glenn W. Goldsmith. (Publication No. 356.) Pp. vi+106+11 plates. (Washington: Carnegie Institution.)

Papers from the Department of Marine Biology of the Carnegie Institution of Washington. Vol. 19: A Memorial to Alfred Goldsborough Mayor. Some Posthumous Papers of A. G. Mayor, relating to his Work at Tutuila Island and adjacent Regions; together with Reports of R. A. Daly, R. T. Chamberlin and C. B. Lipman on their Work in the same Connection. (Publication No. 340.) Pp. viii+217+56 plates. (Washington: Carnegie Institution.)

Cenozoic Gravigrade Edentates of Western North America, with Special Reference to the Pleistocene Megalonychinae and Mylodontidae of Rancho La Brea. By Chester Stock. (Publication No. 331.) Pp. xiii+206+48 plates. (Washington: Carnegie Institution.)

Contributions to Embryology. Vol. 16, Nos. 78-84. (Publication No. 361.) Pp. 276+32 plates. (Washington: Carnegie Institution.)

City of Norwich. The Report of the Castle Museum Committee to the Council, 1924. Pp. 25. (Norwich.)

Transactions of the Astronomical Observatory of Yale University. Vol. 3, Part 3: Theory of the Trojan Group of Asteroids. Conclusion of Chapter I, and Chapters II to VI: Development of the Theory and Applications. By Prof. Ernest W. Brown. Pp. 81-133. (New Haven.)

United States Department of Agriculture. Department Bulletin No. 1324: The Oviposition Response of Insects. By Charles H. Ricketson. Pp. 18. (Washington: Government Printing Office.) 5 cents.

Forest Bulletin No. 60: Note on *Aimee*, *Artocarpus hirsuta*, Lamk. By C. Claude Wilson. Pp. ii+7+4 plates. (Calcutta: Government of India Central Publication Branch.) 7 annas; 9d.

Union of South Africa. Department of Mines and Industries: Geological Survey. Memoir No. 19: The Coal Resources of Union of South Africa. Vol. 2: The Inland Coalfields of Natal. By W. J. Wybergh. Pp. 180+6 plates. (Pretoria: Government Printing and Stationery Office.) 10s.

The Indian Forest Records. Silviculture Series, Vol. 11, Part 2: Contributions towards a Knowledge of Twisted Fibre in Trees. By H. G. Champion. Pp. v+70+13 plates. 2.8 rupees; 4s. 6d. Entomology Series, Vol. 11, Part 4: On some Indian Brentiidae (Coleoptera). Part 1: Neue Brentiiden aus Britisch Indien und den anliegenden Gebieten, von Richard Kleine; Part 2: Notes on the Biology of the Brentiidae, by Dr. C. F. C. Beeson; Part 3: Descriptions of the Larvæ of *Cerolates tristriatus* and *C. sexsulcatus*, and of the Pupa of *Cyphagogus corporalis*, by J. C. M. Gardner. Pp. ii+48+18+6+4 plates. 1.5 rupees; 2s. 8d. Chemistry Series, Vol. 11, Part 6: The Constituents of some Indian Essential Oils. Part 17. By Madyar Gopal Rau and John Lionel Simonsen. Pp. 8. 2 annas; 3d. (Calcutta: Government of India Central Publication Branch.)

The Royal Society for the Protection of Birds. Thirty-fourth Annual Report, January 1st to December 31st, 1924; with Proceedings of Annual Meeting, 1925. Pp. 94. (London: 82 Victoria Street, S.W.1.) 1s.

Proceedings of the South London Entomological and Natural History Society, 1924-25. Pp. xix+142+8 plates. (London: Hibernia Chambers, London Bridge, S.E.1.) 12s. 6d.

Field Museum of Natural History. Zoological Series, Vol. 12, No. 8: Two new Birds from Peru. Reports on Results of the Captain Marshall Field Expeditions. By John T. Zimmer. (Publication 228.) Pp. 101-109. (Chicago.)

The Journal of the Royal Agricultural Society of England. Vol. 85, 1924. Pp. 12+447+clviii+x+20. (London: John Murray.) 15s.

Report of the Astronomer Royal to the Board of Visitors of the Royal Observatory, Greenwich. Read at the Annual Visitation of the Royal Observatory, 1925, June 6. Pp. 21. (Greenwich.)

Koninklijk Nederlandsch Meteorologisch Instituut. No. 108: Seismische Registreringen in De Bilt, 10, 1922. Pp. xvi+47. (Utrecht: Kemink en Zoon.) 0.80 f.

Report of the Marlborough College Natural History Society for the Year ending Christmas, 1924. (No. 73.) Pp. 146. (Marlborough.) 3s. 6d.

Aeronautical Research Committee: Reports and Memoranda. No. 933 (Ae. 151): Forces and Moments (including those due to Controls) on a Model Fairey "N4" Flying Boat *Atalanta* at various Angles of Yaw. By H. B. Irving and A. S. Batson. (A.2.a. Stability Calculations and Model Experiments, 87-T, 1924.) Pp. 14+12 plates. 1s. net. No. 941 (M.N. 8): Measurement of Vertical Currents in the Lowest Layers of the Atmosphere during Sea-Breezes. By J. Durward. (A.5. Meteorology, 103-T, 1887.) Pp. 5+3 plates. 6d. net. No. 952 (Ae. 171): Further Experiments on Honeycomb Radiators. By Dr. R. G. Harris and L. E. Caygill. (A.3.k. Miscellaneous 49-T, 1927.) Pp. 20+12 plates. 1s. 3d. net. No. 958 (Ae. 177): Lift and Drag of two Aerofoils measured over 360° Range of Incidence. By C. N. H. Lock and H. C. H. Townsend. Pp. 5+4 plates. 6d. net. (London: H.M. Stationery Office.)

Department of Commerce: Bureau of Standards. Scientific Papers of the Bureau of Standards, No. 505: Critical Potentials associated with Excitation of Alkali Spark Spectra. By F. L. Mohler. Pp. 165-191. (Washington: Government Printing Office.) 10 cents.

Koninklijk Magnetisch en Meteorologisch Observatorium te Batavia. Jaarverslag 1924. Pp. 22. (Wetvreden: Landsdrukkerij.)

Southern Rhodesia. Report of the Director, Geological Survey, for the Year 1924. Pp. 11. (Salisbury, Southern Rhodesia.)

British Empire Exhibition, 1925. Official Guide. Edited by G. C. Lawrence. Pp. 128. (London: Fleetway Press, Ltd.) 1s.

Egyptian Government Almanac for the Year 1925. Pp. viii+800. (Cairo: Government Publications Office.) 5 P.T.

Verhandlungen der Schweizerischen Naturforschenden Gesellschaft. 105 Jahresversammlung vom 1 bis 4 Oktober 1924 in Luzern. 1 Teil. (Actes de la Société Helvétique des Sciences naturelles. 105<sup>e</sup> session annuelle du 1<sup>er</sup> au 4 octobre 1924 à Lucerne. 1<sup>re</sup> partie.) Pp. 252+60. (Aarau: H. R. Sauerländer et Cie.)

## Diary of Societies.

SATURDAY, JUNE 20.

ASSOCIATION OF WOMEN SCIENCE TEACHERS (Summer Meeting) (at Birmingham University), at 10.45.—Business Meeting.—At 11.30.—Dr. Shakespear: Colour (Lecture).

ROYAL SOCIETY OF MEDICINE (Study of Disease in Children Section) (in Bio-chemical Laboratory, Cambridge), at 2.30.—Dr. Kay and Dr. Vines: Bone Formation and Experimental Rickets.—At 4.45.—Dr. J. F. Gaskell: The Relationship of Experimental Pneumonia in Rabbits to the Pneumonias of Childhood.

MONDAY, JUNE 22.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS (Summer Meeting) (at Queen's Hotel, Birmingham), at 9.30 A.M. (Also on June 23 and 24.)

ROYAL IRISH ACADEMY, at 4.15.

ROYAL ASTRONOMICAL SOCIETY (Geophysical Discussion), at 5.—Prof. J. C. McLennan, Lord Rayleigh: The Aurora and its Spectrum. Chairman: Sir Ernest Rutherford.

ROYAL INSTITUTE OF BRITISH ARCHITECTS, at 8.30.—Presentation of the Royal Gold Medal.

TUESDAY, JUNE 23.

ROYAL SOCIETY OF MEDICINE, at 5.30.—General Meeting.

ROYAL ANTHROPOLOGICAL INSTITUTE, at 8.15.—Lt.-Col. J. Cunningham: Some Factors in Racial Immunity and Susceptibility to Disease.

WEDNESDAY, JUNE 24.

ROYAL SOCIETY OF ARTS, at 4.—Annual General Meeting.

GEOLOGICAL SOCIETY OF LONDON, at 5.30.—Prof. W. J. Sollas: On a Sagittal Section of the Skull of *Australorhynchus africanus*.—D. Parkinson: The Faunal Succession in the Carboniferous Limestone and Bowland Shales at Clitheroe and Pendle Hill.—Janet M. M. Dingwall: On *Cyathoclisia*, a New Genus of Carboniferous Corals.

BRITISH PSYCHOLOGICAL SOCIETY (Medical Section) (at Royal Society of Medicine), at 8.30.—Dr. I. D. Suttie: An Irrelevant Accretion to the Freudian Theory.

THURSDAY, JUNE 25.

ROYAL SOCIETY, at 4.30.—D. H. Black:  $\beta$ -Ray Spectra of Thorium Disintegration Products.—Miss C. F. Blam: Tensile Tests of Crystals of an Aluminium Zinc Alloy.—Dr. G. Shearer: On the Distribution of Intensity in the X-Ray Spectra of Certain Long-Chain Organic Compounds.—C. F. Jenkin: High Frequency Fatigue Tests.—L. W. Bryant and D. H. Williams: An Investigation of the Flow of Air around an Aerofoil of Infinite Span. With an Appendix by Prof. G. I. Taylor, Note on the Connexion between the Lift of an Aerofoil in a Wind and the Circulation round it.—To be read in title only.—Prof. T. H. Havelock: Wave Resistance: the Effect of Varying Draught.—Prof. C. V. Raman and L. A. Ramdas: The Scattering of Light by Liquid Boundaries and its Relation to Surface Tension, Part III.—W. H. George: An Electrical Method for the Study of Impact applied to the Struck String.—F. H. Constable: The Mechanism of Catalytic Decomposition.—S. A. Emeson and Dr. L. C. Martin: The Photometric Matching Field, II.—G. S. Adair: Partial Osmotic Pressures and Membrane Equilibria.—Miss Mary W. Porter: A Contribution to the Study of the Optical Properties of Mixed Crystals.—H. Gregory and C. T. Archer: Experimental Determination of the Thermal Conductivities of Gases.—D. B. Deodhar: On the Atmospheric Radio-activity and Indian Weather.—Prof. J. R. Partington and A. B. Howe: The Ratio of the Specific Heats of Hydrogen.—A. Cary and Dr. E. K. Rideal: The Behaviour of Crystals and Lenses of Fats on the Surface of Water. Part I.—G. H. Henderson: The Capture and Loss of Electrons by  $\alpha$ -Particles.—Dr. A. S. Parkes: The Effects on Fertility and the Sex-ratio of Sub-Sterility Exposures to X-rays.—R. N. Chrystal: The Genus *Dreyfusia* (Order Hymenoptera, Family Chermesidae) in Britain and its Relation to the Silver Fir.—T. Moran: The Effect of Low Temperatures on Hens' Eggs.—And other papers.

FRIDAY, JUNE 26.

PHYSICAL SOCIETY OF LONDON (at Imperial College of Science), at 5.—Dr. A. Russell: The Electrostatic Capacity of Two Spheres when Touching One Another.—Miss S. Marshall and J. O. C. Vick: An Investigation of the Control Conditions under which Newton's Law is valid for the Emission of Heat from Electrically Heated Wires.—I. Jones: Condensation of Nuclei Produced by the Illumination of Air-halogen Mixtures.

ROYAL SOCIETY OF MEDICINE (Anaesthetics Section) (at Manchester University).—Dr. H. P. Fairlie and others: Discussion on Chloroform.—S. R. Wilson and Dr. S. McSwiney: Animal Demonstration showing Effects of Adrenalin Injections during Ether and Chloroform Anaesthesia.