

rocks encountered in the perforations of Ripi (Latium).—R. Fabiani: Remains of mammals in the Tertiary and Quaternary of Ragusa (Sicily).—Giambattista Dal Piaz: Outliers of the Dent Blanche in the post-Triassic formations of Grivola.—G. Montalenti: Rearing of termites without the protozoa of the caecal pouch.—M. Fedele: The organisation and the functional characteristics of the nervous activity of the Tunicata (3). The visceral nervous system.—P. Pasquini: The lentogenic capacity of the optical vesicle in the embryos of amphibia and the 'organiser' of the crystalline lens.—R. Savelli: A case of incomplete dominance in the achene of maize.—V. Bambacioni: The development of the female gametophyte and the increase of the chromosomes in the chalazal region in *Fritillaria persica* L.

Official Publications Received.

BRITISH.

The Journal of the Royal Anthropological Institute of Great Britain and Ireland. Vol. 57, July to December 1927. Pp. viii+249-468+18+47. (London.) 15s. net.

Biological Reviews and Biological Proceedings of the Cambridge Philosophical Society. Edited by H. Munro Fox. Vol. 3, No. 2, March. Pp. 93-173. (Cambridge: At the University Press.) 12s. 6d. net.

Descriptive Account and Catalogue of the Home Office Industrial Museum and Exhibits, with Explanatory Notes. Pp. vi+178+14 plates. (London: H.M. Stationery Office.) 3s. 6d. net.

Leeds Public Libraries. What to Read on Psychology. By Prof. William McDougall. Pp. 20. 2d. What to Read on Citizenship. By H. A. L. Fisher. Pp. 23. 2d. What to Read on English Economic History. By G. D. H. Cole. Pp. 40. 2d. What to Read on Evolution. By Prof. J. Arthur Thomson. Pp. 31. 2d. (Leeds.)

Seale-Hayne Agricultural College, Newton Abbot, Devon. Report of the Advisory Departments, 1927. (Pamphlet No. 27.) Pp. 51. 6d. Department of Plant Pathology: Fourth Annual Report for the Year ending September 30th, 1927. (Pamphlet No. 25.) Pp. 29. 6d. (Newton Abbot.)

Annals of the (Mededelingen van het) Transvaal Museum. Vol. 12, Part 3: The Sphagnum of South Africa, Parts ix and x, by Dr. George Arnold; Stone Age Cultures on the Zululand Highfield and in Northern Natal, by Dr. V. Lebzelter and F. K. O. Bayer. Pp. 191-288+plates 8-17. (Cambridge: Printed at the University Press.)

Proceedings of the Edinburgh Mathematical Society. Edited by Prof. T. M. MacRobert and Prof. H. W. Turnbull. Series 2, Vol. 1, Part 2, March. Pp. 71-138. (London: G. Bell and Sons, Ltd.)

Journal of the Royal Microscopical Society. Series 3, Vol. 48, Part 1, March. Pp. xv+127. (London.) 10s. net.

Philosophical Transactions of the Royal Society of London. Series A, Vol. 227, A649: The Mechanical Equivalent of Heat. By Prof. T. H. Laby and E. O. Hercus. Pp. 63-92. (London: Harrison and Sons, Ltd.)

Memoirs of the Punjab Irrigation Research Laboratory. Vol. 1, No. 1: A Statistical Examination of the Sensitivity of a Water Table to Rainfall and Irrigation. By Bernard Howell Wilsdon, with R. Partha Sarathy. Pp. ii+52. (Lahore: Government Printing Office.) 1.12 rupees; 2s. 4d.

Seale-Hayne Agricultural College, Newton Abbot, Devon. Four Years' Variety Trials with Potatoes. By A. Nobie. (Pamphlet No. 24.) Pp. 15. 6d. Grassland Management: a Report on Intensive Stocking and Nitrogenous Manuring, 1927. By T. J. Shaw. (Pamphlet No. 26.) Pp. 20. 6d. (Newton Abbot.)

Commonwealth of Australia: Council for Scientific and Industrial Research. Pamphlet No. 6: Standard Methods of Drying Sultana Grapes in Australia. By A. V. Lyon. Pp. 16. (Melbourne: H. J. Green.)

FOREIGN.

U.S. Department of Agriculture. Farmers' Bulletin No. 1543: Insects Injurious to the Rice Crop. By J. W. Ingram. Pp. ii+17. (Washington, D.C.: Government Printing Office.) 5 cents.

Occasional Papers of the California Academy of Sciences. No. 14: The Rudistids of Southern Mexico. By Robert H. Palmer. Pp. 137 (18 plates). (San Francisco.) 1.75 dollars.

Proceedings of the United States National Museum. Vol. 72, Art. 25: Synopsis of Pentatomid Bugs of the Subfamilies Megaridinae and Canopinae. By W. L. McAtee and J. R. Malloch. (No. 2721.) Pp. 21+2 plates. (Washington, D.C.: Government Printing Office.)

Merentutkimuslaitoksen Julkaisu Havstorskningsinstitutets Skrift. No. 45: Regelmässige Beobachtungen von Temperatur und Salzgehalt des Meeres im Jahre 1925. Herausgegeben von Gunnar Granquist. Pp. 47. 20 Fmk. No. 46: Die thalassologische Terminfahrt im Jahre 1926. Von Risto Jurwa und Erik Palmén. Pp. 20. 20 Fmk. No. 47: Die Tätigkeit des Instituts für Meeresforschung im Jahre 1926. Von Rolf Witting. Pp. 17. 20 Fmk. No. 48: Beobachtungen von Strom und Wind an den Leuchtschiffen in den Jahren 1924 und 1925. Von Erik Palmén. Pp. 23. 20 Fmk. (Helsinki.)

Report of the Aeronautical Research Institute, Tōkyō Imperial University. No. 81: Some Experiments on Periodic Columnar Forms of Vortices caused by Convection. By Torahiko Terada, and Second Year Students of Physics. Pp. 47+5 plates. (Tōkyō: Kōseikai Publishing House.) 1.00 yen.

Smithsonian Institution: United States National Museum. Bulletin 141: Collection of Heating and Lighting Utensils in the United States National Museum. By Walter Hough. Pp. viii+114+99 plates. (Washington, D.C.: Government Printing Office.) 70 cents.

Crystallographic Tables for the Determination of Minerals. By Victor Goldschmidt and Samuel G. Gordon. (Special Publication No. 2.) Pp. 70. (Philadelphia: Academy of Natural Sciences.) 1.50 dollars.

New York Academy of Sciences. Scientific Survey of Porto Rico and the Virgin Islands. Vol. 11, Part 1: Insects of Porto Rico and the Virgin Islands. Diptera or Two-winged Flies. By C. H. Curran. Pp. 118. (New York City.)

Columbia University Bulletin of Information. Professional Courses in Optometry: Announcement 1928-1929. Pp. 35+3 plates. (New York.)

Veröffentlichungen aus dem Kaiser-Wilhelm-Institut für Silikatforschung in Berlin-Dahlem. Herausgegeben von Prof. Dr. Wilhelm Eitel. Erster Band. Pp. v+269. (Berlin: Gebrüder Borntraeger.) 28 gold marks.

Agricultural Experiment Station: Michigan State College of Agriculture and Applied Science. Technical Bulletin No. 87: Paper Wrappers and their Effect upon Physical and Chemical Properties of Horticultural Products. By H. D. Brown. Pp. 29. Technical Bulletin No. 91: Taxes on Michigan's Rented Farms, 1919-1925. By R. Wayne Newton. Pp. 34. Special Bulletin No. 162: Pruning the Red Raspberry. By Stanley Johnston and R. E. Loree. Pp. 23. Special Bulletin No. 167: Chicory Growing in Michigan. By C. E. Cormany. Pp. 11. Special Bulletin No. 168: The Management of Michigan Muck Soils for the Production of Onions. By Paul M. Harmer. Pp. 48. Special Bulletin No. 174: Spraying Calendar. By W. C. Dutton, R. H. Pettit and C. W. Bennett. Pp. 31. (East Lansing, Mich.)

CATALOGUE.

Medizinische Fachkataloge: Biologie, Physiologie, Pathologie. Pp. 144. (Berlin: Julius Springer.)

Diary of Societies.

TUESDAY, APRIL 10.

INSTITUTE OF MARINE ENGINEERS, at 6.30.—G. J. Wells: The Report of the Heat Engine and Boiler Trials Committee.
QUEKETT MICROSCOPICAL CLUB, at 7.30.—C. H. Oakden: The Invention of the Micropolariscope.—Prof. W. T. Gordon: Rocks of Organic Origin.

THURSDAY, APRIL 12.

ROYAL AERONAUTICAL SOCIETY (at Royal Society of Arts), at 6.30.—Dr. Hele-Shaw and T. E. Beacham: The Variable Pitch Airscrew.
INSTITUTE OF METALS (London Local Section) (Annual General Meeting) (at 83 Pall Mall, S.W.1), at 7.30.—R. B. Pilcher: Alchemists in Art and Literature.
OIL AND COLOUR CHEMISTS' ASSOCIATION.

FRIDAY, APRIL 13.

ROYAL SOCIETY OF MEDICINE (War Section), at 4.—Annual General Meeting.

ROYAL SOCIETY OF MEDICINE (War and Otolaryngology Sections), at 4.30.—Special Discussion on Effects of Middle-ear Disease on Efficiency in Civil and Military Life.—Speakers:—For Section of War: Wing-Comm. D. Ranken, Major Hare, and Surg.-Comm. Maxwell. For Section of Otolaryngology: S. Scott, Dr. T. J. Faulder, and T. R. Rodger.

ROYAL ASTRONOMICAL SOCIETY, at 5.—J. J. M. Reesink: Note on the Theory of the Outer Layers of a Pulsating Star.—Prof. E. A. Milne: The Effect of Collisions on Monochromatic Radiative Equilibrium.—R. Invrea: Occultations of Stars by the Moon, observed at the Royal Observatory, Pino Torinese, 1926-1927.—B. M. Peck: Occultations observed at Herne in 1927.

ROYAL SANITARY INSTITUTE (at Sessions House, Maidstone), at 5.—Dr. A. Greenwood and others: Discussion on The Health of Hop Pickers and the Sanitation of Hop Pickers' Encampments.

MALACOLOGICAL SOCIETY OF LONDON (at Linnean Society), at 6.
INSTITUTION OF ELECTRICAL ENGINEERS (London Students' Section), at 6.15.—A. Page: Address.

SOCIETY OF CHEMICAL INDUSTRY (Manchester Section) (Annual General Meeting) (at Engineers' Club, Manchester), at 7.—Dr. R. H. Pickard: Fundamental Researches in the Leather Industry.

OIL AND COLOUR CHEMISTS' ASSOCIATION (Manchester Section) (at Milton Hall, Manchester), at 7.30.—Annual General Meeting.

JUNIOR INSTITUTION OF ENGINEERS, at 7.30.—A. P. Morris: Calculating Apparatus and Diagrams for Engineers.

PHILOLOGICAL SOCIETY (at University College), at 8.—N. W. Thomas: African Words in New English Dictionary.

SOCIETY OF CHEMICAL INDUSTRY (Birmingham and Midland Section) (jointly with Chemical Engineering Group) (at Engineers' Club, Birmingham).—Dr. C. M. Walter: Paper.

CONFERENCE.

APRIL 13-16.

GEOGRAPHICAL ASSOCIATION (at Oxford).
April 14.—Sir Halford Mackinder: The British Empire in Relation to the Geography of the World (Lecture).
April 16.—Col. C. H. D. Ryder: Surveys from Air Photographs (Lecture).—Dr. L. Dudley Stamp and others: Discussion on Practical Steps in Regional Survey Work and Local Studies.