

of leaves would give 200 kilograms of pure charcoal, 30 kilograms of tar, 1 kilogram of crude acetic acid, and 600 grams of acetone.—C. Galaine and C. Houbert: The carbonisation and distillation of peat, sawdust, house refuse, and other light organic products. A continuous process of distillation is described with rotary retorts, securing uniformity of carbonisation, with recovery of gas and by-products.—H. Colin and Mlle. Y. Trouard Riolle: The graft of the sunflower on the Jerusalem artichoke.—F. Morvillez: The leaf-trace of the *Chrysobalanæ*.—A. Guilliermond: Mitochondria and vacuolar system.

MELBOURNE.

Royal Society of Victoria, April 11.—Mr. J. A. Kershaw, president, in the chair.—Miss A. Osborne: An abnormality of the frog, *Hyla aurea*. Although abnormalities in the arrangement of the anterior veins are fairly common in this genus, a departure from type is more rare in the case of the posterior vessels. In the specimen described there were two right renal portal veins, one connecting with the iliac in the ordinary way, the other—apparently due to longitudinal splitting of the original single vessel—draining the posterior pelvic region, from which there was a rather more developed venous system than is usual.

BOOKS RECEIVED.

Stoichiometry. By Prof. S. Young. Second edition. Pp. xiv+363. (London: Longmans and Co.) 12s. 6d. net.

Cookery under Rations. By M. M. Mitchell. Pp. 65. (London: Longmans and Co.) 2s. net.

A Medical Dictionary. By W. B. Drummond. Pp. ix+625. (London: J. M. Dent and Sons, Ltd.) 10s. 6d. net.

British Museum (Natural History). British Antarctic (*Terra Nova*) Expedition, 1910. Natural History Report. Zoology. Vol. v., No. 1. Coelenterata. Part i., Actiniaria. By T. A. Stephenson. Pp. 1-68. (London: British Museum (Natural History).) 10s.

Essentials of Practical Geography. By B. C. Wallis. Pp. xv+213. (London: Macmillan and Co., Ltd.) 4s. 6d.

Field Book of Insects. By Prof. F. E. Lutz. Pp. ix+509. (New York and London: G. P. Putnam's Sons.) 12s. 6d.

The Dispensatory of the United States of America. by Prof. J. P. Remington and others. 20th edition. Pp. cxxii+2010. (Philadelphia and London: J. B. Lippincott Co.) 2l. 1s. net

Studies in Electro-Physiology (Animal and Vegetable). By A. E. Baines. Pp. xxix+291. (London: G. Routledge and Sons, Ltd.) 12s. 6d. net.

DIARY OF SOCIETIES.

THURSDAY, JUNE 13.

ROYAL SOCIETY, at 4.30.—Experiments on the Effect of the Vibration of a Stretched Wire forming part of a Closed Electric Circuit: Admiral Sir Henry Jackson.—The Effect of Wind Pressure on the Pitch of Organ Pipes: A. Mallock.—The Diamagnetism of Hydrogen and the Value of the Magnetron: Dr. A. E. Oxley.

OPTICAL SOCIETY, at 7.—The Prevention of Filing in Enclosed Optical Instruments: H. S. Ryland.—A Chart for Finding the Number of Lenses in, and Size of, a Block: Horace Lee.—Charts for Assisting in the Selection of Suitable Glasses for Cemented Doublets: T. Smith.

MATHEMATICAL SOCIETY at 5.—Helling's Integrals: Prof. E. W. Hobson.—An Assumption in the Theory of Singular Solutions of Ordinary Differential Equations of the First Order: Prof. M. J. M. Hill.—Quartic and Cubic Residuacity Tables: Col. A. J. Cunningham and Th. Gosset.—Lucas's Process applied to Composite Mersenne Numbers: Col. A. J. Cunningham.—The Gaussian Period Numbers and the Conditions that 2 should be a Residue of a 16th or a 32nd Power: Dr. A. E. Western.—The Aberrations of a Symmetrical Optical System: T. W. Chaundy.—The Rotation-groups of the Regular Figures in Four or more Dimensions: T. Lindsay Ince.

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FRIDAY, JUNE 14.

ROYAL ASTRONOMICAL SOCIETY, at 5.—Literal Development of the Motion of the Lunar Perigee: R. Moritz.—William Herschel's Observations of Variable Stars and Stars suspected of Variability.—The Measurement of Time to the Thousandth of a Second: R. A. Sampson.—The Motion in Longitude of the Red Spot on Jupiter: Rev. T. E. R. Phillips.—The Stellar Magnitude Scales of the Astrogaphic Catalogue. 12th Note; Hyderabad, Perth, Edinburgh, and Cape Magnitudes: H. H. Turner.—An Example of the Determination of a Minute Periodic Variation as Illustrative of the Law of Errors: S. Chapman.—The Pulsation Theory of Cepheid Variables: F. A. Lindemann.—*Probable Papers*: The Proper Motions of the B Stars: Sir F. W. Dyson.—Observations of a New Star in Aquila.—W. H. Steavenson.—The Origin and Energy of Magnetic Storms: Dr. S. Chapman.

PHYSICAL SOCIETY, at 5.—*Discussion*: The Teaching of Physics in Schools: Opener, Sir Oliver J. Lodge.

MALACOLOGICAL SOCIETY, at 7.—Notes on Magilus and Allied Genera: G. B. Sowerby.—Note on an Unpublished Reprint of a Paper by J. W. Brazier, published in the *Sydney Mail* of December 2, 1871: H. O. N. Shaw.—On a Supposed New Genus of Pelecypoda from the Older Tertiaries of Southern Nigeria: R. Bullen Nelson.

MONDAY, JUNE 17.

VICTORIA INSTITUTE, at 4.30.—Annual Address. The Future of Education: Prof. D. S. Margoliouth.

TUESDAY, JUNE 18.

ROYAL STATISTICAL SOCIETY, at 5.15.—Annual General Meeting.—Recent Economic Developments in Japan in their Relation to her Trade with the United Kingdom: K. Yamasaki.

MINERALOGICAL SOCIETY, at 5.30.—The Origin of Septaria: W. A. Richardson.—The Composition of the Nickeliferous Iron of the Meteorites of Lodran, Powder Mill Creek, and Holbrook: Dr. G. T. Prior.

WEDNESDAY, JUNE 19.

GEOLOGICAL SOCIETY, at 5.30.

ROYAL METEOROLOGICAL SOCIETY, at 5.—The Lunar Atmospheric Tide at Greenwich, 1854-1917: S. Chapman.—The Audibility of the Gunfire on the Continent at Chignal St. James, near Chelmsford, during 1917: Miller Christy.—Seasonal Variation in the Audibility of Distant Gunfire: F. J. W. Whipple.

ROYAL MICROSCOPICAL SOCIETY, at 8.—Photo-synthetic Processes: Prof. Benjamin Moore.—A New Type of Infusorian, *Achnidiopsis paradoxa*: E. Penard.—Diatom Ooze from Deep Antarctic Waters: E. Heron-Allen and A. Earland.—Gnats and Gnat Larvæ: J. M. Offord.

THURSDAY, JUNE 20.

ROYAL SOCIETY, at 4.30.—Croonian Lecture: The Physiological Basis of Thirst: Major W. E. Cannon.

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