

ferine. Luciferine can be synthesised by the action of coluciferase upon taurine.

April 15.—M. L. Guignard in the chair.—G. Humbert: The representations of an integer by certain indefinite quadratic forms.—C. Richet, P. Brodin, and Fr. Saint-Girons: The density of the blood after great hæmorrhage. With loss of blood there is a progressive lowering of the density, and the determination of the density of the blood gives a better measure of the loss through a wound than any other method available.—G. A. Boulenger: Considerations on the affinities and geographical dispersion of the Lacertidæ.—G. Julia: Rational substitutions.—R. Garnier: The irregular singularities of linear equations.—M. Valiron: The maximum of the modulus of entire functions.—M. de Pulligny: Some new remarks on the approximate quadrature of the circle.—E. Hernandez-Pacheco: The Cambrian of the Sierra de Cordoba, Spain.—L. Gentil, M. Lugeon, and L. Joleaud: The age of the pre-Riffian layers and the crushing of the South Riffian Strait, Morocco.—H. Perrotin: The nocturnal cooling of the lower layers of the atmosphere.—J. Legendre: The biology of the Madagascan perch.—M. Heitz-Boyer: An attempt at the mechanical reduction of fractures.

### BOOKS RECEIVED.

Memoirs of the Geological Survey. Special Reports on the Mineral Resources of Great Britain. Vol. iii., Gypsum and Anhydrite, by Dr. R. L. Sherlock and B. Smith; and Celestine and Strontianite, by Dr. R. L. Sherlock. Second edition. Pp. iv+64. (London: H.M.S.O.) 2s. net.

Story Lives of Great Scientists. By F. W. Rowbotham. Pp. 266. (London: Wells Gardner and Co., Ltd.) 3s. 6d.

A Flora of Epsom and its Neighbourhood. By the Rev. T. N. Hart Smith-Pearse. Pp. 107. (Epsom: L. W. Andrews and Son.) 3s. 6d. net.

The Manufacture of Intermediate Products for Dyes. By Dr. J. C. Cain. Pp. xi+263. (London: Macmillan and Co., Ltd.) 10s. net.

A Check List of North American Amphibians and Reptiles. By L. Skejneger and T. Barbour. Pp. 125. (Cambridge, Mass.: Harvard University Press.) 10s. 6d. net.

British Museum (Natural History). Report on Cetacea Stranded on the British Coasts during 1917. By Dr. S. F. Harmer. Pp. 5 to 21. (London: British Museum (Natural History).) 2s. 6d.

British Museum (Natural History). British Antarctic (*Terra Nova*) Expedition, 1910. Natural History Report. Zoology. Vol. iv., No. 2, Cephalopodiscus. By Dr. W. G. Ridewood. Pp. 11-82. (London: British Museum (Natural History).) 12s.

### DIARY OF SOCIETIES.

#### THURSDAY, MAY 2.

ROYAL SOCIETY, at 4.—Election of Fellows.—At 4.30.—Nerve-End Cells in the Dental Pulp: Dr. J. H. Mummery.—The Nature of Growths in Colloidal Silica Solutions: H. Onslow.

ROYAL SOCIETY OF ARTS, at 4.30.—The Freedom of the Seas: Gerard Finnes.

LINNEAN SOCIETY, at 5.—A New Fresh-water Shrimp (*Caridina*) from Fiji: G. M. Thomson.—(1) *Bennettites scottii*, sp. nov., a European Petrification with Foliage; (2) A Survey of the Biological Aspect of the Constitution of Coal: Dr. Marie Stopes.

#### FRIDAY, MAY 3.

ROYAL INSTITUTION, at 5.30.—The Spinning Top in Harness: Sir G. Greenhill.

INSTITUTION OF MECHANICAL ENGINEERS, at 6.—Discussion: Employment of Women in Munition Factories. Opener, Miss O. E. Monkhouse.

#### SATURDAY, MAY 4.

ROYAL INSTITUTION, at 3.—Modern Investigation of the Sun's Surface: Prof. H. F. Newall.

#### MONDAY, MAY 6.

ARISTOTELIAN SOCIETY, at 8.—Practical Dualism: Miss E. E. Constance Jones.

SOCIETY OF ENGINEERS, at 5.30.—Modern Shipbuilding and Economy in Material: J. W. Isherwood.

SOCIETY OF CHEMICAL INDUSTRY, at 7.30.—The Interaction of Aluminium and (a) the Alcohols, (b) the Higher Fatty Acids, (c) Phenol, Cresol, and Naphthol: Dr. R. Seligman and P. Williams.—The Principles and Applications of Hot-Wire Anemometry: J. S. G. Thomas.

#### TUESDAY, MAY 7.

ROYAL INSTITUTION, at 3.—Cranialogists: Prof. A. Keith.

ZOOLOGICAL SOCIETY, at 5.30.—The Arenaceous Foraminifera of the Genus *Thuramina*: E. Heron-Allen.—Comparison between the Lower Jaws of the Cynodont Reptiles *Gomphognathus* and *Cynognathus*: Dr. Branislav Petronjevic.—A New Genus of Extinct Muscardine Rodent from the Balearic Islands: Miss Dorothea M. A. Bate.

FARADAY SOCIETY, at 5.30.—Discussion: The Co-ordination of Scientific Publication. Opener, Sir Robert Hadfield, Bart.

RÖNTGEN SOCIETY, at 7.45.

#### WEDNESDAY, MAY 8.

ROYAL SOCIETY OF ARTS, at 4.30.—The Rubber Planting Industry: Prof. John B. Farmer.

BRITISH ASSOCIATION GEOPHYSICAL COMMITTEE (Royal Astronomical Society), at 5.—Discussion: The Movements of the Earth's Pole. Opener, Sir F. W. Dyson.

#### THURSDAY, MAY 9.

ROYAL SOCIETY, at 4.30.—*Froable Papers*: Contribution to the Theory of Attraction when the Force varies as any Power of the Distance: Major P. A. MacMahon and H. B. C. Darling.—Electromagnetic Integrals: Sir George Greenhill.—Intensity Relations in the Spectrum of Helium: Dr. T. R. Merton and Prof. J. W. Nicholson.—The Outline of a Theory of Magnetic Storms: Dr. S. Chapman.

ROYAL INSTITUTION, at 3.—The Folk Lore of Bells: Sir J. G. Frazer.

ROYAL SOCIETY OF ARTS, at 4.30.—The Freedom of the Sea: Sir F. T. Piggott.

INSTITUTION OF ELECTRICAL ENGINEERS, at 6.—Discussion: A British Electrical Proving House. Opener, C. Turnbull.

OPTICAL SOCIETY (Imperial College of Science and Technology), at 7.—Note on Spherical Aberration: T. Y. Baker and Major L. N. G. Filon.

#### FRIDAY, MAY 10.

ROYAL INSTITUTION, at 5.30.—Human Nutrition: Prof. F. Gowland Hopkins.

ROYAL ASTRONOMICAL SOCIETY, at 5.—The Times of Sudden Commencement of Magnetic Storms: S. Chapman.—The Entropy of a Metal: H. S. Allen.—Tracing Rays through an Optical System: T. Smith.

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