

PARIS.

Academy of Sciences, December 13.—M. Ed. Perrier in the chair.—G. Bigourdan: The forgotten astronomer, Jean de Lignières, and the renaissance of astronomy in Europe. Riccioli ("Astronomia Reformata," 1665), giving the latitudes and longitudes of various stars, reproduced a small catalogue, the author of which was unknown to him, and since called by the name of *Astronomus incognitus*. Reasons are now given showing that this unknown astronomer was Jean de Lignières, a master of the University of Paris. The positions given in this catalogue are for the year 1364.—G. Humbert: The approximation of real irrational numbers.—H. Douvillé: The Orbitoids of the Danian and of the Tertiary.—J. Guillaume: Observations of the sun made at the Observatory of Lyons during the second quarter of 1915. The observations made on seventy-two days are tabulated, showing the number of spots, their distribution in latitude, and the distribution of the faculæ in latitude.—M. Mesnager: The elastic equilibrium of an indefinite plate of uniform thickness, compressed by two equal and opposite forces uniformly distributed along two parallel right lines situated in a plane normal to the bases.—Pierre Breteau: The preparation of phosphorescent calcium sulphide. Modifications of Verneuil's method are suggested. The sulphide is first prepared from a mixture of calcium carbonate and sulphur by ignition at a red heat, and this is then impregnated with 1/10,000 of its weight of bismuth. This is again raised to a red heat and allowed to cool slowly.—Mlle. Yvonne Dehorne: An Actinostromid of the Cenomanian.—J. Repelin: The discovery of deposits of large Pythonomorphs in the Upper Cretaceous in the neighbourhood of Jerusalem.—Ph. Flajolet: Perturbation of the magnetic meridian at Lyons (Saint-Genis-Laval) during the second quarter of 1915.—A. F. Legendre: General considerations on the structural forms of south-western China and the Tibetan borders.—C. Sauvageau: The commencements of the development of *Saccorhiza bulbosa*.—Arthur Compton: The influence of some meteorological factors on the appearance of cases of cerebrospinal meningitis. The degree of humidity of the atmosphere would appear to be a meteorological factor of great importance in determining the appearance of this disease when the organism is already present in the country.—M. Weinberg and P. F. Seguin: Researches on gas gangrene. This communication gives the results of the study of a hundred cases of this infection, together with suggestions for a serum treatment.—E. Vastisar: The terminations of the acoustic nerve.

BOOKS RECEIVED.

Illustrations of the New Zealand Flora. Edited by T. F. Cheeseman, with the assistance of W. B. Hemsley; the plates drawn by Miss M. Smith. Vol. i. Pp. 8+121 plates and descriptions. Vol. ii. Plates 122-250 and descriptions+pp. xxxiv. (Wellington, N.Z.: J. Mackay.)

Transactions of the English Ceramic Society. Vol. xiv. Session 1914-15. (Stoke-on-Trent: The Society.) Department of Marine and Fisheries. Report of the Meteorological Service of Canada, Central Office, Toronto, for the Year ended December 31, 1912. Vol. i., Introduction and Parts i.-iii. Pp. xvi+367. Vol. ii., parts iv.-vi. Pp. 368-568. (Ottawa: J. de L. Taché.)

An Introduction to the Principles of Physical Chemistry from the Standpoint of Modern Atomistics and Thermodynamics. By Prof. E. W. Washburn. Pp. xxv+445. (New York: McGraw-Hill Book Company, Inc.; London: Hill Publishing Co., Ltd.) 15s. net.

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Hancock's Applied Mechanics for Beginners. Revised and rewritten. By Prof. H. C. Riggs. Pp. xiii+441. (New York: The Macmillan Co.; London: Macmillan and Co., Ltd.) 10s. 6d. net.

The Wheat Industry. By N. A. Bengtson and D. Griffith. Pp. xiii+341. New York: The Macmillan Company; London: Macmillan and Co., Ltd.) 3s. net.

Catalysis and its Industrial Applications. By E. Jobling. Pp. viii+120. (London: J. and A. Churchill.) 2s. 6d. net.

DIARY OF SOCIETIES.

MONDAY, JANUARY 3.

ARISTOTELIAN SOCIETY, at 8.—Time, Space, and Relativity: Prof. A. N. Whitehead
SOCIETY OF CHEMICAL INDUSTRY, at 8.

TUESDAY, JANUARY 4.

RÖNTGEN SOCIETY, at 8.15.—Some Observations upon the Occurrence of Uranium: J. H. Gardiner.

WEDNESDAY, JANUARY 5.

GEOLOGICAL SOCIETY, at 5.30.—The Islay Anticline (Inner Hebrides): E. B. Bailey.

THURSDAY, JANUARY 6.

OPTICAL SOCIETY, at 8.—The Use of a Graticule in Binoculars and Telescopes: S. D. Chalmers.

FRIDAY, JANUARY 7.

GEOLOGISTS' ASSOCIATION, at 7.30.—The Discovery and Excavation of a Large Specimen of *Elephas antiquus* near Chatham: Dr. C. W. Andrews.

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