

## PARIS.

Academy of Sciences, November 5.—M. Camille Jordan in the chair.—H. Douvillé: The lower Eocene of Aquitaine and its fauna of Nummulites.—E. L. Bouvier: The classification of the Eupotamonea, freshwater crabs of the family of Potamonidae.—G. Lemoine: Free agricultural education. An account of the institutions giving free agricultural teaching in France, most of which are due to private initiative.—W. de Tannaenberg: A functional equation and spherical unicursal curves.—E. Camichel, D. Eydoux, and M. Gariel: The strokes of an hydraulic ram: calculation of the pressures at any point in the pipe.—A. Véronnet: The absorption of water on the moon and planets. If the constitution of the moon is analogous with that of the earth, it is both possible and probable that the rocks of the moon's crust have absorbed all the water by slow diffusion.—P. Mercanton: The magnetic state of the Greenland basalts. Under certain conditions, the magnetometric examination of a specimen of lava containing magnetite, the geographical orientation of the specimen having been carefully determined, may indicate the direction of the terrestrial field at the time of cooling of the lava. But the cases in which the theoretical conditions are perfectly fulfilled are rare, and much discrimination is required. Some basalts from Disco (West Greenland), like certain diabases from Isfjord, in Spitsbergen, possess a magnetisation in the sense opposed to the magnetic field existing to-day.—P. Mahler: The amount of nitrogen in oxidised coals. Samples of Decazeville coal, from the Combes outcrop, show varying states of oxidation, the calorific values ranging between 8000 and 5200 calories. Analyses of eight specimens are given; the nitrogen content is not much altered by the oxidation.—E. Maury: The present conditions and remote origin of the Triassic lignites of the Maritime Alps.—J. Deprat: The presence of the Permian at Hongay, and the structure of the edge of the Rhætian of the Tonkin coast in the bays of Along and Fai-tsi-long.—M. Mirande: The metachromatite and the chondriome of Chara.—L. Roule: The habitat of the tunny-fish (*Orcynus thynnus*) and its coast displacements in the western French Mediterranean.—F. Mesnil and M. Caullery: A new type of evolutive dimorphism in a polychetal Annelid, *Spio martinensis*.—M. Marage: The form of intralaryngeal vibrating air.—J. Wolff and B. Geslin: The diastatic degradation of inulin in chicory root.

## BOOKS RECEIVED.

Organic Evolution. By Prof. R. S. Lull. Pp. xviii+729. (New York: The Macmillan Co.; London: Macmillan and Co., Ltd.) 3 dollars.

Volcanic Studies in Many Lands, being Reproductions of Photographs taken by the Author, Dr. Tempest Anderson, the Text by Prof. T. G. Bonney. Second series. Pp. xv+88. (London: J. Murray.) 15s. net.

On the Eves of the World. By R. Farrer. In two vols. Vol. i., pp. xii+311+illustrations and map. Vol. ii., pp. viii+328+illustrations and map. (London: E. Arnold.) 30s. net.

The Conduction of the Nervous Impulse. By Dr. K. Lucas. Revised by E. D. Adrian. Pp. xi+102. (London: Longmans and Co.) 5s. net.

Lloyd's Diagram for Calculations. By H. G. Lloyd. (London: E. and F. N. Spon, Ltd.) 2s. 6d.

The Yearbook of the Universities of the Empire, 1916 and 1917. Pp. xiii+412. (London: H. Jenkins, Ltd.) 7s. 6d. net.

Origenes y Tendencias de la Eugenia Moderna. By J. Bonilla. Pp. 96. (Liverpool: Daily Post.) 3s. 6d. net.

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Cotton and other Vegetable Fibres: Their Production and Utilisation. By Dr. E. Goulding. Pp. x+231. (London: J. Murray.) 6s. net.

The Anatomy of Woody Plants. By E. C. Jeffrey. Pp. x+478. (Chicago: University of Chicago Press; London: Cambridge University Press.) 4 dollars net.

The Cambridge University Calendar for the Year 1917-18. Pp. xxvi+1065. (Cambridge: At the University Press.) 8s. net.

Originality: A Popular Study of the Creative Mind. By T. Sharnol. Pp. xvi+304. (London: T. Werner Laurie, Ltd.) 15s. net.

## DIARY OF SOCIETIES.

THURSDAY, NOVEMBER 22.

ROYAL SOCIETY, at 4.—Special General Meeting to receive the Annual Report of the Council.—At 4.30.—Bactericidal Properties conferred on the Blood by Intravenous Injections of Diamino-acridine-sulphate: C. H. Browning and R. Sulbransen.—The Pelmatoporidae, an Essay on the Evolution of a Group of Cretaceous Polyzoa: W. D. Lang.  
INSTITUTION OF ELECTRICAL ENGINEERS, at 6.—Gas-firing Boilers: T. M. Hunter.

FRIDAY, NOVEMBER 23.

PHYSICAL SOCIETY, at 5.—Some Problems of Stability of Atoms and Molecules: Prof. J. W. Nicholson.—Uses of Certain Methods of Classification in Optics: T. H. Blakesley.

MONDAY, NOVEMBER 26.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—The Geography of the Italian Front: Dr. Filippo De Filippi.  
ROYAL SOCIETY OF ARTS, at 4.30.—Land Settlement within the Empire: Sir John McCall.

WEDNESDAY, NOVEMBER 28.

ROYAL SOCIETY OF ARTS, at 4.30.—Aerial Transport after the War: G. Holt Thomas.

FRIDAY, NOVEMBER 30.

INSTITUTION OF MECHANICAL ENGINEERS, at 6.—"Thomas Hawksley" Lecture: Heat Engines: Captain H. Riall Sankey.

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