

eclipse of the moon of August 14, observed at the Ksara Observatory (Libau). Details of results obtained with the 20 cm. equatorial and with an 11 cm. telescope.—Edouard Imbeaux: The great artesian basins of the United States.—Johs Schmidt: The immigration of the larvæ of the eel, in the Mediterranean, by the Straits of Gibraltar (*v. NATURE*, January 13, 1923, p. 51, and January 5, 1924, p. 12).—Jules Drach: The movement of a heavy solid with one point fixed. Determination of the group of rationality of the differential equation of the problem.—René Garnier: The uniform functions defined by the inversion of total algebraical differentials.—G. Vairon: Complements to the Picard-Borel theorems.—Serge Bernstein: The quasi-analytical functions of Carleman.—Bertrand Gambier: A generalisation of the polygons of Poncelet.—J. Grialou: Plane vertical movement of liquids possessing viscosity, the state being permanent.—Benjamin Jekhowsky: The elements of the planet Algiers N (1924 QL).—J. Guillaume and Mlle. Bloch: Observations made at the Lyons Observatory during the eclipse of the moon, August 14, 1924.—W. Abbott: The breaking-up of the southern polar cap of Mars.—J. Guillaume: Observations of the sun made at the Lyons Observatory during the first quarter of 1924.—R. Jouaust: The amplification of the current of photoelectric cells and its application to precision astronomy. It is possible with simple arrangements to determine on a photographic recorder the time of transit of a bright star if the telescope is of sufficient size. If very sensitive photographic galvanometers are used, such as a string galvanometer, smaller telescopes may be used for observations on less bright stars.—Nicolas Perrakis and Pierre Bedos: A law connecting the ionisation potential of an element with its boiling point. A formula is given for the relation between the ionisation potential and boiling point and the values calculated for fifteen elements. The calculated and experimental values are in fair agreement, with the exception of the two elements oxygen and nitrogen.—A. Dufour: The wave-length of maximum energy of the sound spectrum of an explosion. Analysis of the records of the sound wave of the Courtine explosion gives results in agreement with the theory of M. Villard, that the wave-length of maximum energy in the sound spectrum of an explosion varies with the mass of explosive employed.—Mlle. Irène Curie and Nobuo Yamada: The distribution of the length of the α -rays of polonium in oxygen and in nitrogen. From the results described, it follows that the difference of form between the Bragg curves in oxygen and in nitrogen must be attributed to the law of variation of ionisation along an α -ray.—Georges Chaudron and Hubert Forestier: The allotropy of the oxides of iron, chromium, and aluminium.—C. G. Bedreag: Physical system of the elements.—A. Duboin: The silicate compounds of cadmium. The compounds $K_2O \cdot CdO \cdot 4SiO_2$, $2CdO \cdot SiO_2$, and $3CdO \cdot SiO_2$ have been isolated.—M. Risco: Spectrum analysis of the meteorite of June 19, 1924. The meteorite was shown to contain magnesium, aluminium, silicon, potassium, calcium, titanium, vanadium, chromium, manganese, iron, cobalt, nickel, strontium, and possibly barium.—David Rotman-Roman: Some volcanic rocks of the Yémen. Analyses and descriptions of comendite and plagitrachyte.—Gustave Rivière and Georges Pichard: Contribution to the study of the immediate principles contained in apple leaves and the epidermis of apples. The *malol* extracted by Sands from the skin of apples is an acid-alcohol, and is re-named by the authors maloloic acid.—F. Picard: Contribution to the study of the physiological rôle of the tannins. Their importance in the ripening of the shoots of the vine.—Marc

Bridel: The fermentation hydrolysis of gentiacauline. Preparation of a xylo-glucose, primeverose. Two ferments have been prepared capable of hydrolysing gentiacauline, one prepared from the seeds of *Rhamnus utilis*, the other from *Monotropa Hypopitys*. Both give the same products, gentiacauleine and a new xylo-glucose probably identical with the primeverose of Goris, Mascré, and Vischniac.—H. Lagatu and L. Maume: A remarkably regular evolution of certain physiological ratios (lime, magnesia, potash) in the leaves of a well-manured vine.—L. Léger: An organism of the parasitic Ichthyophone type in the digestive tube of *Lota vulgaris*.—G. Guittonneau: The utilisation of mineral nitrogen by the Microsiphoneæ of the soil.—Auguste Lumière: Contribution to the study of normal sera.

Official Publications Received.

- Koninklijk Magnetisch en Meteorologisch Observatorium te Batavia. Verhandelingen No. 8: Het Klimaat van Nederlandsch-Indië (The Climate of the Netherlands Indies). Door Dr. C. Braak. Deel 1 (Vol. 1), Algemeene Hoofdstukken (General Chapters), Afllevering 6 (Part 6). (With English Summaries.) Pp. iv+348-415+159-198. (Batavia: Javasche Boekhandel & Drukkerij.)
- Journal of the Chemical Society: containing Papers communicated to the Society. 1924, Vol. 125, October. Pp. iv+1971-2197+xii. (London: Gurney and Jackson.)
- Monographs of the Rockefeller Institute for Medical Research. No. 20: Experimental Studies of Yellow Fever in Northern Brazil. By Dr. Hideyo Noguchi, Dr. Henry R. Muller, Dr. Octavio Torres, Dr. Flaviano Silva, Dr. Horacio Martins, Dr. Alvaro Ribeiro dos Santos, Dr. Godofredo Vianna, and Dr. Mario Bião. Pp. 36+5 plates. (New York City.)
- Bulletin of the Experiment Station of the Hawaiian Sugar Planters' Association. Entomological Series, Bulletin No. 16: The Introduction into Hawaii of Insects that attack Louisiana. By R. C. L. Perkins and O. H. Swezey. Pp. iii+83. (Honolulu, Hawaii.)
- Contributions from the Jefferson Physical Laboratory and from the Craft High-Tension Electrical Laboratory of Harvard University, for the Years 1922 and 1923. Vol. 16. 47 papers, unpagged. (Cambridge, Mass.: Harvard University.)
- Memoirs of the Department of Agriculture in India. Chemical Series, Vol. 7, No. 4: Some Digestibility Trials on Indian Feeding Stuffs. By Dr. P. E. Lander and Pandit Lal Chand Dharmani. Pp. 77-100. (Calcutta: Thacker, Spink and Co.; London: W. Thacker and Co, 12 annas; 1s.)
- The Parliament of the Commonwealth of Australia. Meteorological Service: Report to the Right Honorable the Minister for Home and Territories in the Meteorological Service of the Commonwealth for the Year 1922-1923. Pp. 18. (Melbourne: H. J. Green.) 9d.
- Memoirs of the Asiatic Society of Bengal. Vol. 6: Zoological Results of a Tour in the Far East. Edited by Dr. N. Annandale. Part 9: Fish of the Talé Sap, Peninsular Siam (Part 1), by Dr. Sunder Lal Hora; Fish of the Tai-Hu, Kiangsu Province, China, by Henry W. Fowler; Revision of the Japanese Species of the Genus *Corbicula*, by Dr. B. Pashad. Pp. 461-530. (Calcutta.) 3.6 rupees.
- Battersea Polytechnic. Report of the Principal for the Session 1923-24. Pp. 86. (London: Battersea, S.W.11.)
- Ministry of Agriculture, Egypt: Technical and Scientific Service. Bulletin No. 46: Four new Species of Coccidæ from Egypt. By W. J. Hall. Pp. ii+8+6 plates. (Cairo: Government Publications Office.) 5 P.T.
- Proceedings of the Royal Irish Academy. Vol. 36, Section B, No. 12: The Glacial Geology of the North-West of Ireland. By Prof. J. Kaye Charlesworth. Pp. 174-314+plates 8-9. 8s. 6d. Vol. 36, Section B, Nos. 13, 14, 15, 16: Dichromone and Dibenzylidichromone, by Dr. Joseph Aigar, Francis Fogarty and Dr. Hugh Ryan; The Condensation of Aldehydes with Butylacetoacetic Ester, by Dr. Hugh Ryan and Mary J. Shannon; The Condensation of Aldehydes with Methylthylketone, by Dr. Hugh Ryan and Patrick J. Cahill. Pp. 315-339. 1s. 6d. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.)
- Methods and Problems of Medical Education. (First Series.) Pp. 151. (New York City: The Rockefeller Foundation.)

Diary of Societies.

SATURDAY, NOVEMBER 15.

- BRITISH MYCOLOGICAL SOCIETY (in Botany Department, University College), at 11.—Dr. W. Robinson: Conditions controlling Growth and Reproduction in Sporodinia.—A. W. Exell: Hymenial Structure in Three Species of Stereum.—W. J. Dowson: A Die-back of Rambler Roses caused by *Gnomonia Rubi* Rehm.—Miss Clara A. Pratt: The Staling of Fungal Cultures.—J. Ramsbottom: Fragmenta Mycologica.
- PHYSIOLOGICAL SOCIETY (at London Hospital Medical School), at 4.—I. Sands: Self Oxidation in the Blood of the Earthworm.—Dr. J. M. H. Campbell, G. O. Mitchell, Dr. M. S. Pembrey, and A. T. W. Powell: The Effect of Muscular Work upon Digestion.—Dr. M. S. Pembrey: The Weight of the Heart in Different Conditions.—Dr. W. Cramer: Self Control and Inhibition in the Adrenal.—Dr. A. V. Anrep and Prof. E. H. Starling: Central and Reflex Regulation of the Circulation.—Prof. H. E. Roaf and W. A. M. Smart: Some Equations based on the Application of the Mass Law to Oxyhaemoglobin Dissociation Curves.—J. R. Marrock: Comparison of Chloride and Iodide Excretion in