eclipse of April 7, 1921, at the Paris Observatory.—H. **Douvillé**: The explanation of the appearance of certain new forms of Lamellibranchs.—A. **de Gramont**: The utility in physical astronomy of the consideration of sensibility of lines of the spectrum.—M. **de Sparre**: The maximum yield of turbines.—M. Emile Borel was elected a member of the section of geometry in succession to the late Georges Humbert.—P. **Humbert**: The polynomials of Hermite-Didon and the Laplace functions in hyperspace.—A. **Denjoy**: The characters of certain integrable functions and the corresponding operations.—C. **Nordmann**: The apparent diameter of α Orion. The apparent diameter of this star has been recently determined by Michelson, making use of an interference method the principle of which is due to Fizeau. Michelson's figure 0·046″ is compared with the figure (0·059″) obtained by the author's indirect method based on photometry.—E. **Esclangon**: Observations of the eclipse of the sun of April 8 made at the Strasbourg Observatory.—A. **Lebeuf**: The eclipse of the sun of April 7, 1921. *Résumé* of observations carried out at the Besançon Observatory.—M. **Moreux**: Observation of the eclipse of the sun of April 8, 1921. The phenomenon of the black drop was seen during this eclipse.—M. **Michkovitch**: Observations of the Reid comet (1921*a*) made at the Observatory of Marseilles with the Eichens 26-cm. equatorial. Positions are given for April 4, 5, and 6.—J. **Mascart**: The eclipse or the sun of April 7, 1921, at the Observatory of Lyons.—P. **Stroobant**: The flattening of the spheroid of Saturn. From the displacements of the line of nodes of the satellites an average figure of 0·1027 or 1/9·74 is found for the flattening. This value is probably more accurate than data based on direct determinations.—A. **Dauvillier**: The structure of the L series.—G. **Reboul** and R. **Luce**: The influence of the geometrical form of solid bodies on the chemical actions which they undergo. Further experimental confirmation of the conclusions arrived at in an earlier confirmation; the velocity of reaction is always greatest at the points where the radius of curvature is smallest.—A. A. **Guntz**: An automatic apparatus for recording the variations of a gaseous mass with time. The manometer measuring the volume changes in the gas has a fine nichrome wire stretched throughout its length; this forms an arm of a Wheatstone bridge, and thus the volume changes converted into resistances are recorded photographically. The whole of the gas is kept at constant disgregation by balancing against a compensation tube kept at a constant temperature. This balance is maintained automatically by a separate electrical arrangement.—C. **Matignon** and Mlle. G. **Marchal**: The use of enamelled bombs in calorimetry. Some of the enamels now in use for lining calorimetric bombs are attacked by dilute acids, and the amount dissolved is sufficient to interfere with the accuracy of the nitric acid correction, and also with the use of the bomb in analytical determinations (sulphur, phosphorus, etc.). The effect is most marked with new enamel.—G. **Dupont**: Contribution to the study of the acid constituents of the resinous exudation from the pine. The dextro- and lævo-pimaric acids. By the usual methods of extraction the lævo-acid is converted into its optical isomeride. The technique necessary for the isolation of either acid in a pure state is described.—J. **Rouch**: Observations of the electrical field of the atmosphere during the eclipse of the sun of April 8, 1921. The electrical field underwent a marked diminution; there was a lag of about an hour from the middle of the eclipse.—A. **Briquet**: The Low Country of Picardy north of the Somme; the line of the ancient bank.—S. **Stefanescu**: The asymmetry and the technical longitudinal sections of the crown of the molars of mastodons and elephants.—A. **Dehorne**: Heterotypy in the somatic mitosis of *Corethra plumicornis*.—P. **Wintrebert**: The aneural irritability of the ectoderm revealed by the ciliary displacement of the embryo in *Rana temporaria*.—W. **Kopaczewski**: Surface tension and antianaphylaxy. A criticism of the views and experiments of M. A. Lumière on the importance of surface tension in connection with anaphylactic shock.—M. **Kayser**: Researches on the azobacter.

Books Received.

Aspects of Plant Life, with Special Reference to the British Flora. By Robert L. Praeger. (Nature Lover's Series.) Pp. 208. (London: S.P.C.K.; New York: The Macmillan Co.) 6*s*. net.

The Yearbook of the Universities of the Empire, 1921. Edited by W. H. Dawson. Pp. xiv+571. (London: G. Bell and Sons, Ltd.) 15*s*. net.

Le Destin des Etoiles: Etudes d'Astronomie physique. By Svante Arrhenius. Traduction française by T. Seyrig. (Nouvelle Collection scientifique.) Pp. v+224. (Paris: F. Alcan.) 8 francs net.

Thermodynamics and Chemistry. By Prof. F. H. MacDougall. Pp. v+391. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 30*s*. net.

The Practice of Silviculture. By Prof. Ralph C. Hawley. Pp. xi+352. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 22*s*. net.

The Formation of Colloids. By Prof. Th. Svedberg. (Monographs on the Physics and Chemistry of Colloids.) Pp. 127. (London: J. and A. Churchill.) 7*s*. 6*d*. net.

Man and his Past. By O. G. S. Crawford. Pp. xv+227. (London: Oxford University Press.) 10*s*. 6*d*. net.

Critical Microscopy: How to Get the Best out of the Microscope. By Dr. Alfred C. Coles. Pp. viii+100+iii plates. (London: J. and A. Churchill.) 7*s*. 6*d*. net.

Drugs in Commerce: Their Source, Preparation for the Market, and Description. By John Humphrey. (Common Commodities and Industries.) Pp. xi+116. (London: Sir I. Pitman and Sons, Ltd.) 3*s*. net.

Stella Maitland; or, Love and the Stars. By Hester P. Hawkins. Pp. viii+249. (London: Simpkin, Marshall and Co., Ltd.) 6*s*. net.

Faune de France. By Prof. R. Koehler. No. 1: Echinodermes. Pp. 210. (Paris: P. Lechavelier.)

Post-Graduate Teaching in the University of Calcutta, 1919–20. Pp. 112. (Calcutta: University Press.)

Diary of Societies.

THURSDAY, MAY 5.

IRON AND STEEL INSTITUTE (Annual Meeting) (at Institution of Civil Engineers), at 10 and 2.30.—H. Brearley: The Welding of Steel in relation to the Occurrence of Pipe Blow Holes and Segregates in Ingots.—Dr. J. E. Stead: Solid Solution of Oxygen in Iron.—H. T. Ringrose: Scientific Control of Combustion.—J. E. Fletcher: Open-hearth and Other Slags—their Composition and Graphic Methods for determining their Constitution.—S. H. Fowles: Notes on the Cleaning of Blast-furnace Gas.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Dr. C. S. Myers: Psychological Studies: (1) The Localisation of Sound.

INSTITUTE OF PATHOLOGY AND RESEARCH (St. Mary's Hospital, Paddington), at 4.30.—Prof. L. Hill: Capillary Blood Pressure and Œdema.

ROYAL SOCIETY, at 4.30.—Dr. H. Head: Release of Function in the Nervous System (Croonian Lecture).

LINNEAN SOCIETY, at 5.—Prof. J. Stanley Gardiner: Reports on Collections from the Indian Ocean for Issue in the Society's Forthcoming Transactions, vol. xviii.—E. R. Speyer: Insects