

had been recently doing great damage to flour in a warehouse in the East of London.—Mr. A. G. Butler contributed a paper "On the species of the Lepidopterous genus *Euchromia*; with descriptions of new species in the collection of the British Museum."—Lord Walsingham communicated a note substituting the generic name *Homonymus* for the generic name *Anistrothorus*—which was preoccupied—used in his "Revision of the genera *Acrolophus* and *Anaphora*," recently published by the Society.

PARIS.

Academy of Sciences, November 14.—M. Janssen in the chair.—Note on certain definitions in mechanics, and on the unities in current use, by M. de Freycinet. In supplement to the remarks already made in his treatise on mechanics, the author here deals more fully with the notions involved in such terms as *force*, *weight*, *mass*, *bulk*, and shows that considerable advantage might be gained by slightly modifying the generally accepted unities. Fresh definitions are suggested of the unities of length, volume, weight, force, velocity, &c.—On the state of the potassa present in plants and the soil, and on its quantitative analysis, by MM. Berthelot and André. In continuation of a previous communication on this subject, the authors here study the condition and process of analysis of the potassa in living plants, and in the humus produced by their disintegration.—On waterspouts, by M. D. Colladon. In reply to M. Faye's strictures, the author illustrates his views by means of an instantaneous photograph, showing that under certain conditions two waterspouts may be generated, one ascending, the other descending, and crossing each other.—On MM. Houzeau and Lancaster's "Bibliographie Générale de l'Astronomie," by M. Faye. A well-merited eulogium is passed on the authors of this great work, who have earned the lasting gratitude of astronomers for accomplishing their vast undertaking in such a thoroughly satisfactory manner. The Bibliography constitutes a systematized catalogue of all astronomical publications that have appeared from the remotest times down to the present day. Although not absolutely exhaustive, the omissions do not appear on examination to be very numerous; but unfortunately only 300 copies have been issued of a work which should find a place in every Observatory and in every scientific library in the world. M. Houzeau has enriched the first volume with a valuable philosophical history of astronomy, which will be found extremely interesting, especially to those students who have been unable to follow the recent discoveries of specialists on the state of astronomical science amongst the Egyptians, Assyrians, and other ancient peoples.—New nebulae discovered at the Observatory of Paris, by M. G. Bigourdan. These discoveries have been made during the years 1884-87 with the equatorial of the West Tower. Most of the nebulae are very weak, and some, indicated as more or less stellar, might, strictly speaking, be regarded as simple stars, it being often quite impossible to distinguish between a small nebula and a star of small magnitude. The positions are approximately given for the mean equinox of 1860, in order to facilitate comparison with J. Herschel's "General Catalogue of Nebulae and Clusters of Stars," and its supplement by Dreyer.—On the theory of magnetism, by M. P. Duhem. From a comparative study of magnetic and diamagnetic bodies the theorem is deduced that all magnetic bodies are attracted from great distances by permanent magnets, but that nothing can be affirmed regarding diamagnetic bodies. A theorem is also established which sets forth the difference between magnetic and diamagnetic bodies, and some remarks are appended regarding the magnetizing of crystals.—Measurement of the heights and movements of clouds in Spitzbergen and Upsala, by M. Nils Ekholm. These comparative studies are based on fifty meteorological observations taken during the Swedish expedition of 1882-83 to Spitzbergen, conducted by the author.—On a new method of formation of safranines, by MM. Ph. Barbier and Léo Vignon. Having in a previous communication explained a special method of forming substituted safranines, the authors here describe a new process for producing phenosafranin and its homologues.—On a new artificial serum intended to dilute the blood for the purpose of counting its globules, by M. Mayet. For the serum here described it is claimed that it is free from the disadvantages of others in general use. It consists of distilled water, 100 gr.; neutral phosphate of anhydrous and pure sodium, 2 gr.; with cane sugar to raise the density of the liquid to 1.085.—On antipyrine as a remedy against sea-sickness, by M. Eugène Dupuy. The author declares that for some time back

he has successfully employed this substance as a prophylactic against sea-sickness. He recommends a dose of 3 gr. to be taken daily for three days before sailing, to be continued if necessary during the voyage. Without claiming to have discovered an absolute specific, he considers that the success hitherto attending the use of antipyrine justifies the hope that in this substance we possess a more or less efficacious remedy against one of the chief terrors of travelling by sea.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

A Dictionary of Place-Names: C. Blackie, 3rd edition (Murray).—Report of the Commissioner of Agriculture, 1885 (Washington).—The Cremation of the Dead: Dr. H. Erichsen (Haynes, Detroit).—Down the Great River: Capt. W. Glazier (Hubbard, Philadelphia).—The Creator, and what we may know of the Method of Creation: Dr. W. H. Dallinger (Woolmer).—Primo Saggio sui Ragni Birmani: Prof. T. Thorell (Genova).—Le Pétrole: W. de Fonvielle (Hachette).—Ants, Bees, Dragon-Flies, Earwigs, Crickets, and Flies: W. H. Bath (Sonnenschein).—Through Central Asia: Dr. H. Lansdell (Low).—The Volcanic Origin of Epidemics: Are Epidemics Contagious? Dr. J. Parkin (Low).—Bulletin of the U.S. Fish Commission, vol. vi., 1886 (Washington).—Mineralogy: F. Rutley (Murby).—A Vertebrate Fauna of Sutherland, Caithness, and West Cromarty: Harvie-Brown and Buckley (Douglas).—Bulletin of the U.S. National Museum, No. 32, Catalogue of Batrachians and Reptiles of Central America and Mexico: E. D. Cope (Washington).—Archiv für Pathologische Anatomie und Physiologie, und für klinische Medicin, Hund. Bandes, Zweites Heft (Reimer, Berlin).—Botanische Jahrbücher für Systematik, Pflanzengeschichte, und Pflanzengeographie, Neunter Band, ii. Heft (Engelmann, Leipzig).—Transactions of the County of Middlesex Natural History and Science Society, 1886-87 (Mitchell and Hughes).—Records of the Geological Survey of India, vol. xx. part 3.—Bulletin of the California Academy of Sciences, vol. ii. No. 7.—Annalen der Physik und Chemie, 1887, No. 11 (Leipzig).—Beiblätter zu den Physik und Chemie, 1887, No. 10 (Leipzig).—Transactions of the Asiatic Society of Japan, vol. xv. part 1.

CONTENTS.

PAGE

Charles Darwin. By Prof. T. G. Bonney, F.R.S. . . .	73
Our Book Shelf:—	
Roberts: "A Treatise on the Integral Calculus" . . .	75
Todhunter: "Solutions to Problems contained in a Treatise on Plane Co-ordinate Geometry"	75
De Bary: "Lectures on Bacteria"	75
Desmaux: "Mattie's Secret"	76
Letters to the Editor:—	
Politics and the Presidency of the Royal Society.—Prof. Balfour Stewart, F.R.S.; Prof. Alex. W. Williamson, F.R.S.	76
"The Conspiracy of Silence."—Prof. T. G. Bonney, F.R.S.	77
Instability of Freshly-Magnetized Needles.—Prof. Francis E. Nipher; Prof. Arthur W. Rücker, F.R.S.	77
Greek Geometry.—R. T.	78
The Chromosphere.—John Evershed, Jun.	79
Perception of Colour.—C. E. Stromeyer	79
Swifts.—C. B. Witchell	79
Note on a Madras Micrococcus.—Edgar Thurston	79
Catharina undulata.—J. Reynolds Vaizey	79
Researches on Meteorites. II. (Illustrated.) By J. Norman Lockyer, F.R.S.	80
Sir Julius von Haast, F.R.S.	87
Notes	87
Our Astronomical Column:—	
American Observatories	89
U Ophiuchi	90
The New Algol Variables	90
Astronomical Phenomena for the Week 1887 November 27—December 3	90
Geographical Notes	90
Meteorological Notes	91
The British Association and Local Societies	91
The Meteorology of Oxford	94
University and Educational Intelligence	95
Societies and Academies	95
Books, Pamphlets, and Serials Received	96