Hallez.-The influence of high altitudes on the general nutrition: H. Guillemard and R. Moog. The observations were carried out at Paris, at the Grand Mulets (3050 metres), and the summit of Mt. Blanc (4810 metres), the changes in the urine being more specially examined. It was found that the effect of high altitudes on nutrition was to produce a diminution of the oxidation processes, diminution of diuresis, and retention of the fixed elements.

—The spleen and the biliary secretion: N. C. Paulesco. Experiments on dogs leads to the conclusion that the spleen exercises no apparent influence on the formation of bile. -Researches on the formation of hæmoglobin in the embryo: L. Hugounenq and Albert Morel. The aurora borealis of November 15 and the magnetic disturbances of November 12 and 15: Th. Moureaux. The appearance of the aurora corresponded to strong magnetic disturbances. -Observations on atmospheric electricity in Grahamsland: I. Rev.

DIARY OF SOCIETIES.

FRIDAY, DECEMBER 1.

Institution of Civil Engineers, at 8.—An Installation for the Bacterial Treatment of Sewage, at Neath: W. L. Jenkins.

GEOLOGIST, AS.OCIATION, at 8.—Gazella Daviesii—A New Antelope from the Norwich Crag of Bramerton: M. A. C. Hinton.—On Sections of the Holocene Alluvium of the Thames at Staines and Wargrave: A. S. Kennard and B. B. Woodward.

MONDAY, DECEMBER 4.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—Exploration in the Abai Basin, Abyssinia: H. Weld Blundell.

Adyssina: H. Weid Blundell.

Society of Chemical Industry. at 8.—Notes on Gutta Percha and Balata: Dr. W. A. Caspari —The Determination of Zinc in Zinc-Aluminium Alloys: Dr. R. Seligman and F. J. Willott.—Distilled Water Supply for "Works" I.aboratories: Dr. R. Seligman.—The Estimation of Naphthalene in Coal Gas: C. J. Dickinson-Gair.—Salts of the Alkaloid Cinchonamine: B. F. Howard and F. Perry.

Society of Arts, at 8.—The Measurement of High Frequency Currents and Electric Waves: Prof. J. A. Fleming, F.R.S.

TUESDAY, DECEMBER 5.

Institution of Civil Engineers, at 8.—The Steam-Turbine: Hon. C. A. Parsons, C.B., F.R.S., and G. G. Stoney.

WEDNESDAY, DECEMBER 6.

GEOLOGICAL SOCIETY, at 8.—The Physical History of the Great Pleistocene Lake of Portugal: Prof. E. Hull, F.R.S.—The Geological Structure of the Sgurr of Eigg: A. Harker, F.R.S.—The Buttermere and Ennerdale Granophyre: R. H. Rastall.

Entomological Society, at 8.—Descriptions of new Genera and Species of African Galerucidæ and Halticidæ: M. Jacoby.

Society of Arts, at 8.—The Manufacture of Sugar from British-grown Beet: Sigmund Stein.

Sect: Sigmund Stein.

Society of Public Analysts, at 8.—The Reducing Action of Hydrogen, II., The Estimation of Traces of Arsenic by the Marsh-Berzelius Method, and the "Insensitiveness" of Zinc: A. C. Chapman and H. D. Law.—Note on the Removal of Arsenic from Hydrochloric Acid for Use in the Marsh-Berzelius Method: A. R. Ling and T. Rendle.—Note on Dutch Cheese: C. H. Cribb.—Improved Arrangement of Lenses for Reading Balance Graduations: G. T. Holloway.

THURSDAY, DECEMBER 7.

ROYAL SOCIETY, at 4.30.—The Periodogram and its Optical Analogy; with an Illustration from a Discussion of Observations of Sun spots; Prof. A. Schuster, F.R.S.—(1) On a Property which holds good for all Groupings of a Normal Distribution of Frequency for two Variables, with Applications to the Study of Contingency-tables for the Inheritance of Unmeasured Qualities; (2) On the Influence of Bias and of Personal Equation in Statistics of Ill-defined Qualities; an Experimental Study; G. Udny Yule.—On the Inheritance of Coat-colour in Horses; C. C. Hurst.—A Biometrical Study of Conjugation in Paramacium; Dr., Raymond Pearl.—On Mathematical Concepts of the Material World: A. N. Whitehead, F.R.S.—The Determination of the Osmotic Pressure of Solutions by the Measurement of their Vapour Pressures; The Earl of Berkeley and E. G. Hartley.—The Vertical Temperature Gradients on the West Coast of Sociland and at Oxshort, Surrey; W. H. Dines, F.R.S.
—The Combination of Hydrogen and Oxygen in contact with Hot Surfaces; Dr. W. A. Bone, F.R.S., and R. V. Wheeler.

SOCIETY OF ARTS, at 4.30.—The Partition of Bengal: Sir James A. Bourdillon, K.C.S.I.

Gourdillon, K.C.S.I.

CHEMICAL SOCIETY, at 8.30.—The Constitution of Nitrites, Part I., Two Varieties of Silver Nitrite: P. C. Rây and A. C. Ganguli.—The Products of Heating Silver Nitrite: E. Divers.—Ethyl Piperonylacetate: W. H. Perkin, Jun., and R. Robinson.—A Contribution to the Chemistry of Saccharin: F. D. Chattaway,—The Action of Heat on a-Hydrocarboxylic Acids, Part II.: H. R. Le Sueur.—Studies on Optically Active Carbimides, Pert II., The Reactions between r-Menthylcarbimide and Alcohols: R. H. Pickard, W. O. Littlebury, and A. Neville.—The Action of Ultra-violet Light on Moist and Dried Mixtures of Carbon Monoxide and Oxygen: S. Chadwick, J. E. Ramsbottom and D. L. Chapman.

NO. 1883, VOL. 73

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—The Charing Cross Company's City of London Works: W. H. Patchell.

Civil and Mechanical Engineers' Society, at 8.—Concrete Mixers: Dr. J. S. Owens.

LINNEAN SOCIETY, at 8.—On the Ætiology of Leprosy: Dr. Jonathan Hutchinson, F.R.S:—Some Notes on the Life history of Margaritifera Paneseae: A. W. Allen.—Exhibition: Photographs of a Luxuriant Specimen of Shortia uniflora, in the Rock-garden of Mr. W. T. Hindmarsh, at Alnwick.

FRIDAY, DECEMBER 8.

ROYAL ASTRONOMICAL SOCIETY, at 5.

PHYSICAL SOCIETY, at 8.

Physical Society, at 8.

Malacological Society, at 8.—(1) A Revision of the Species of Cyclostomatidæ and Liotiidæ occurring in the Persian Gulf and North Arabian Sea; (2) Description of Two Species of Marine Shells from Ceylon; J. Cosmo Melvill.—A Pteropod Alias: (a) C. Hedley. (b) E. R. Sykes.—(1) Descriptions of Four new Species of Marine Shells from Ceylon; (2) Description of a new Species of Physa from N.W. Australia: H. B. Preston.—Notes (1) on the Dates of Publication of J. D. Wilhelm Hartmann's "Erd- und Süsswasser-Gasteropoden," 8vo, St. Gallen, 1840; (2) On Some "Feeding Tracks" of Gastropods: (3) On Cement as a Slug-killer: B. B. Woodward.

CONTENTS

CONTENTS. P	AGE
Laguerre's Mathematical Papers Philosophical Studies Our Book Shelf:—	97 98
Herbertson: "The Oxford Geographies," Vol. ii.— A. M. D	99 99
Périssé: "Le Chauffage des Habitations par Calori- fères"	100
Vorlesungspraxis"	100
Géométrie fondée sur une Théorie générale et rigoureuse des Parallèles."	100
The Bates-Müller Hypothesis of Mimicry: a Question of Historical Accuracy.—Prof. R. Meldola, F.R.S.	100
Magnetic Storms and Aurora. (With Diagrams.)-	
F.R.S. Magnetic Storms and Aurora. (With Diagrams.)— Dr. Charles Chree, F.R.S. Absorption Spectra of Ultra-violet Rays by Vapour	101
and Liquids.—Prof. E. Wiedemann The Second Law of Thermodynamics.—M. A.	101
Browne	102
British Excavations in the Near East, 1904-5 The Beauty of Minute Structure in Nature. (Illus-	102
trated.) By J. A. T. The Wastage in Armes by Disease. By Prof. R. T.	104
Hewlett	105
Notes	105
Astronomical Occurrences in December	109
Comet 19056 An Untried Method of Determining the Refraction	109
Constant	110
Spectra of Bright Southern Stars	110
A Catalogue of 4280 Stars	110
Higher Education at the Cape The Batoka Gorge of the Zambesi. (Illustrated.) By G. W. Lamplugh, F.R.S.	110
By G. W. Lamplugh, F.R.S. Indian Deep-sea Holothurians. By J. P.	III
Indian Deep-sea Holothurians. By J. P.	114
University and Educational Intelligence Societies and Academies	115
Diary of Societies	120
Supplement	
The Millais British Mammals. By R. L	iiř
The Origin of Kingship. By N. W. T.	iv
A Compendium of Natural Knowledge. By Dr. J. A.	
Harker	vi
The Principles of Science. By N. R. C	vii
Mathematics for Schools	viii
Statics in the Middle Ages. By G. B. M	ix
Spectroscopy	ix
Precious Stones. By J. W. J.	X