

puscles in the Gammaridæ: L. Bruntz.—A new antelope from Central Africa, *Cephalophus leopoldi*: Maurice de Rothschild and Henri Neuville.—The influence of a small quantity of the radium emanation on the development and metamorphosis of batrachians: P. Wintrebert.—A comparison of sleep during the day and night: N. Vaschide. Sleep during the daytime is in all cases less profound, less restful, and less refreshing than sleep during the night.—The treatment of malignant pustule by iodine: A. F. Lobet.—The *charrige* of the northern slopes of the Pyrenées between the valley of Ariège and Roussillon: Léon Bertrand.—Some early experiments of M. Daubrée and of M. de Chancourtois relative to the artificial imitation of mountain chains: Stanislas Meunier.

## DIARY OF SOCIETIES.

### THURSDAY, JANUARY 10.

MATHEMATICAL SOCIETY, at 5.30.—Exhibition of Four-dimensional Models: Mrs. A. Stott.—On the Uniform Convergence of Fourier's Series: Dr. E. W. Hobson.—Asymptotic Approximation to Integral Functions of Zero Order: J. E. Littlewood.—Partial Differential Equations of the Second Order having Integral Systems free from Partial Quadratures: Prof. A. R. Forsyth.—On the Singular Points of Some Classes of Power Series in Several Variables: G. H. Hardy.—The Construction of the Line drawn through a Given Point to meet Two Given Lines: Prof. W. Burnside.—On the Reducibility of Covariants of Binary Quantics of Infinite Order, Part iii.: P. W. Wood.—On Hypereven Numbers, and on Fermat's Numbers: Lieut.-Col. A. Cunningham.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—New Incandescent Lamps: J. Swinburne.

### FRIDAY, JANUARY 11.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Balancing of Internal-combustion Motors applied to Marine Propulsion: A. T. Weston.

ROYAL ASTRONOMICAL SOCIETY, at 5.—Observation of the Occultation of Saturn by the Moon, 1906, October 27: John Tebbutt.—The Places of Zodiacal Stars for the Epoch 1900: A. M. W. Downing.—The Perturbations of Halley's Comet: P. H. Cowell and A. C. D. Crommelin.—Micrometrical Measures of Double Stars: Rev. T. E. Espin.—New Double Stars: Rev. T. E. Espin.—Observations of Occultations of Stars by the Moon made in the Year 1906: Royal Observatory, Greenwich.—*Probable Paper*: Mean Areas and Heliographic Latitudes of Sun-spots in the Year 1905, Deduced from Photographs taken at the Royal Observatory, Greenwich, at Dehra Dûn, at Kodaikânal Observatory, India, and in Mauritius (communicated by the Astronomer Royal).—*Probable Discussion*: Prof. Fowler's Papers on the Enhanced Lines of Iron in the Region F to C, and on Silicon in the Chromosphere.

MALACOLOGICAL SOCIETY, at 8.—Descriptions of New Species of Achatina from the Congo Free State: S. I. Da Costa.—Further Contributions to the Genus Chloritis, with Descriptions of Eleven New Species: G. K. Gude.—Description of a New Species of Pupina, and Illustrations of some hitherto unfigured Helicoid Land-shells: G. K. Gude.—Descriptions of new Non-marine Shells from New Zealand: Henry Suter.

### SATURDAY, JANUARY 12.

ROYAL GEOGRAPHICAL SOCIETY (at The Queen's Hall, Langham Place), at 8.45.—The Duke of the Abruzzi's Expedition to Mount Ruwenzori.

PUBLIC SCHOOL SCIENCE MASTERS' ASSOCIATION (University of London), at 2.30.—The Place of Science and of Literature in a General Education: Rev. and Hon. E. Lyttelton.—The Internal Economy of School Science: Mr. Thwaites.—The Best Method of Introducing the Atomic Theory in Science: F. R. L. Wilson.

### MONDAY, JANUARY 14.

LONDON INSTITUTION, at 5.—The Wonder Workers of the Soil: Prof. W. B. Bottomley.

### TUESDAY, JANUARY 15.

ROYAL INSTITUTION, at 3.—The Sculpture of Aegina in Relation to Recent Discovery: Prof. Percy Gardner.

ZOOLOGICAL SOCIETY, at 8.30.—On a Collection of Mammals made by Dr. Vassal in Annam: J. Lewis Bonhote.—On the "Bleating" or "Drumming" of the Snipe (*Gallinago coelestis*): P. H. Bahr.—Some New and Insufficiently-known Species of Marmoset Monkeys from the Amazonian Region: Dr. E. A. Goeldi.—Contributions to the Knowledge of the Systematic Arrangement and Anatomy of Certain Genera and Species of Squamata: F. E. Beppard, F.R.S.

ROYAL STATISTICAL SOCIETY, at 5.

SOCIETY OF ARTS, at 4.30.—The Progress of the Uganda Protectorate: George Wilson, C.B.

FARADAY SOCIETY, at 8.—The Application of the Electron Theory to Electrolysis: E. E. Fournier d'Albe.

### WEDNESDAY, JANUARY 16.

SOCIETY OF ARTS, at 8.—Adjourned Discussion on Mr. J. W. Gordon's Paper, Patent Law Reform.

ROYAL MICROSCOPICAL SOCIETY, at 8.—President's Annual Address, The Flowering Plants of the Mesozoic Age in the Light of Recent Discoveries.—Exhibition of Mounted Specimens of Freshwater Polyzoa: Mr. Rousselet.

METEOROLOGICAL SOCIETY, at 7.45.—Annual General Meeting.—Presidential Address, Weather in War Time: Richard Bentley.

### THURSDAY, JANUARY 17.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: Regeneration of Bone, Part ii.: Sir William Macewen, K.C.B., F.R.S.—Further Observations on the Effects Produced in Rats by the Trypanosomata of Gambia Fever and of Sleeping Sickness: H. G. Plimmer.—The Natural and Induced Resistance of Mice to the Growth of Cancer: Dr. E. F. Bashford, J. A. Murray, and Dr. W. Cramer.—On the Pathology of the Dropsy produced by Obstruction of the Superior and Inferior Venæ Cavæ and the Portal Vein; Preliminary Communication: Dr. C. Bolton.—Experiments on the Dark Space in Vacuum Tubes: Sir William Crookes, F.R.S.—On the Discharge of Negative Electricity from Hot Calcium: Dr. F. Horton.

CHEMICAL SOCIETY, at 8.30.—The Relation between Absorption Spectra and Optical Rotatory Power, Part i., The Effect of Unsaturation and Stereo-isomerism: A. W. Stewart.—Organic Derivatives of Silicon, Part ii., The Synthesis of Di-ethyl, Propyl Benzyl Silicol, its Sulphonation, and the Resolution of the Sulphonic Derivatives into Optically Active Compounds: F. S. Kipping.—The Association of Phenols in the Liquid Condition: J. T. Hewitt and T. F. Winmill.—A New Mercuric Oxochloride: J. T. Hewitt.—Aromatic Selenonium Bases: S. Smiles and T. P. Hilditch.—The Relation of Colour and Fluorescence to Constitution: A. G. Green.—The Constitution of Silver Nitrite, a Correction: E. Divers.—Preparation of Chromyl Chloride: F. D. Law and F. M. Perkin.—Tetraketopiperazine: A. T. de Moulpied and A. Rule.

ROYAL INSTITUTION, at 3.—Recent Advances in the Exploration of the Atmosphere: Dr. W. N. Shaw, F.R.S.

LINNEAN SOCIETY, at 8.—*Platanthera chlorantha*, *Custor*, var. *tricarvata*: W. Botting Hemsley, F.R.S.—*Acanthaceae* of Insular Malaya: the late Mr. C. B. Clarke, F.R.S.—A Freshwater Isopod from Calcutta: Rev. T. R. R. Stebbing, F.R.S.

### FRIDAY, JANUARY 18.

ROYAL INSTITUTION, at 9.—Fifty Years of Explosives: Sir Andrew Noble, Bart., K.C.B., F.R.S.

INSTITUTION OF MECHANICAL ENGINEERS, at 8.—Adjourned Discussion on Lighting of Railway Premises, Indoor and Outdoor: H. Fowler.—Eighth Report to the Alloys Research Committee: On the Properties of the Alloys of Aluminium and Copper: Prof. H. C. H. Carpenter and C. A. Edwards.

## CONTENTS.

	PAGE
Indian Climatology. By Prof. J. Hann . . . . .	241
A New Treatise on Evolution. By F. A. D. . . . .	244
Our Coal Resources . . . . .	244
The Religion of the Malays . . . . .	245
Our Book Shelf:—	
Millington: "John Dalton" . . . . .	246
"Verhandlungen der deutschen zoologischen Gesellschaft, 1906" . . . . .	246
"Photograms of the Year 1906" . . . . .	246
Stuyvaert: "Les Nombres positifs. Exposé des Théories modernes de l'Arithmétique élémentaire" . . . . .	246
Letters to the Editor:—	
The Treatment of Cancer.—Dr. J. Beard; The Writer of the Article . . . . .	247
The American Gooseberry-mildew.—E. S. Salmon. Filter Presses.—The "Cooper Research Laboratory" . . . . .	248
Archæological Discoveries in Turkestan . . . . .	248
At the Back of the Black Man's Mind. ( <i>Illustrated.</i> ) . . . . .	248
Jujutsu. ( <i>Illustrated.</i> ) By Lady Lockyer . . . . .	250
Scientific Work in Egypt. By W. E. P. . . . .	250
International Fishery Investigations . . . . .	251
Notes . . . . .	253
Our Astronomical Column:—	
Ephemeris for Comet 1906g (Thiele) . . . . .	257
The Observation of Total Solar Eclipses . . . . .	257
Observations of Mars . . . . .	257
Transit-circle Observations . . . . .	257
The "Companion to the Observatory" . . . . .	257
"The Heavens at a Glance, 1907" . . . . .	257
The Geology of Mining Areas. ( <i>Illustrated.</i> ) By G. A. J. C. . . . .	258
Men of Science in America . . . . .	259
Wave Action in Relation to Engineering Structures . . . . .	260
Science in Examinations for the Higher Civil Service . . . . .	260
University and Educational Intelligence . . . . .	261
Societies and Academies . . . . .	262
Diary of Societies . . . . .	264