

DIARY OF SOCIETIES.

THURSDAY, NOVEMBER 11.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Accumulator Traction on Rails and Ordinary Roads : L. Epstein.
 MATHEMATICAL SOCIETY, at 8.—On the Poncelet Polygons of a Limaçon : Prof. F. Morley.—On an Extension of the Exponential Theorem : J. E. Campbell.—The Integral $\int P_n dx$ and Allied Forms in Legendre's Functions, between Arbitrary Limits : R. Ha greaves.—The Character of the General Integral of Partial Differential Equations : Prof. Forsyth, F.R.S.—The Calculus of Equivalent Statements (No. 7) : H. MacColl.

FRIDAY, NOVEMBER 12.

ROYAL ASTRONOMICAL SOCIETY, at 8.—On the Nature of the Orbit of γ Lupi : T. J. J. See.—List No. 4 of Nebulæ discovered at the Lowe Observatory : Lewis Swift.—Equatorial comparisons of Uranus with 41 Libræ, and a probable Occultation of the Star by the Planet : John Tebbutt.—On the Effect of Chromatic Dispersion of the Atmosphere on the Parallaxes of a Centauri and β Orionis ; and on a Method of Determining its Effect on the Value of the Solar Parallax derived from Heliometer Observations of the Minor Planets : David Gill.—The Great Equatorial Current of Jupiter : A. Stanley Williams.—Approximate Ephemeris of the Leonids from 1897 December 24 to 1898 April 8 : G. Johnstone Stoney.—On the Effect upon the Moon's Motion of a Hypothetical Change in the Law of Gravitation : Robert Bryant.—A Spectroscopic Method for Determining the Second and Third Contacts during a Total Eclipse of the Sun : Wm. Shackleton.—Note on a Result used by Prof. Wadsworth in several recently published Papers : H. F. Newall.
 MALACOLOGICAL SOCIETY (in the apartments of the Linnean Society), at 8.—Malacological Notes made during a Journey through Russia ; with some Account of Dredgings in the Black Sea : G. F. Harris.—Description of a New Species of *Mülleria* from India : Edgar A. Smith.—Note on a Variety of *Rhaphanus Lorraini*, with a List of the known Species : Edgar A. Smith.—On *Streptaxis gracilis*, a New Species from Ceylon : Oliver Collett.—Revision of the New Zealand Rissoiædæ : H. Suter.
 PHYSICAL SOCIETY (in the rooms of the Chemical Society), at 4.—Council Meeting.—At 5.—On the Isothermals of Ether : J. Rose-Innes.—On the Variation with Temperature of the Electromotive Force of the H-Form of Clark Cells : F. S. Spiers and F. Twyman.

TUESDAY, NOVEMBER 16.

ZOOLOGICAL SOCIETY, at 8.30.—On British Medusæ : E. T. Browne.—On Three Consignments of Butterflies collected in Natal in 1896 and 1897 by Guy A. K. Marshall : Dr. A. G. Butler.—On the Sydney Busu-Rat (*Mus arboricola*) : Edgar B. Waite.
 MINERALOGICAL SOCIETY, at 8.—Anniversary Meeting.—Election of Officers and Council.—On Angelite from Bolivia : L. J. Spencer.
 INSTITUTION OF CIVIL ENGINEERS, at 8.—The Manchester Ship Canal : Sir E. Leader Williams.—The Eastham Division : Whately Elliot. The Runcorn Division : Sir E. Leader Williams. The Irlam Division : W. O. E. Meade-King.
 ROYAL STATISTICAL SOCIETY, at 5.30.—Notes on the Subjects discussed at the Meeting of the International Statistical Institute at St. Petersburg, 1897 : Major P. G. Craigie.
 ROYAL PHOTOGRAPHIC SOCIETY, 12 Hanover Square, W., at 8.—A Review of Triple Printing Methods : E. Sanger Shepherd.

WEDNESDAY, NOVEMBER 17.

SOCIETY OF ARTS, at 8.—The Colonies : their Arts, Manufactures, and Commerce : Sir Owen Tudor Burne.
 GEOLOGICAL SOCIETY, at 8.—The Geology of Rotuma : J. S. Gardiner.—A Geological Survey of the Witwatersrand and other Districts in the Southern Transvaal : Dr. F. H. Hatch.—Observations on the Genus *Aclioina* de Koninck, with Descriptions of British Species and some other Carboniferous Gasteropoda : Jane Donald.
 ENTOMOLOGICAL SOCIETY, at 8.—Some Results obtained from the Hybridisation of Allied Species : J. W. Tutt.
 ROYAL METEOROLOGICAL SOCIETY (at the Institution of Civil Engineers), at 7.30.—Results of a Comparison between the Sunshine Records obtained simultaneously from a Campbell-Stokes Burning Recorder and from a Jordan Photographic Recorder : Richard H. Curt.s.
 ROYAL MICROSCOPICAL SOCIETY, at 8.
 SANITARY INSTITUTE, at 8.—A Discussion on the Pollution of Water Supplies by Encampments of Hop-Pickers, Casual Workers, Tramps, &c. : to be opened by Prof. W. H. Corfield, in reference to the Dangers of Pollution of Municipal Water Supplies ; and by Miss M. A. Chreiman, in reference to the Sanitary Control of Hop-Pickers, &c.

THURSDAY, NOVEMBER 18.

ROYAL SOCIETY, at 4.30.—Account of a Comparison of Magnetic Instruments at Kew Observatory : C. Chree, F.R.S.—Note on the Influence of very Low Temperatures on the Germinative Power of Seeds : H. T. Brown, F.R.S., and F. Escombe.—On the Structure and Affinities of Fossil Plants from the Palæozoic Rocks. II. On *Spencerites*, a New Genus of Lycopodiaceous Cones from the Coal Measures, founded on the *Lepidodendron Spenceri* of Williamson : D. H. Scott, F.R.S.—The Histology of the Cell-wall, with special reference to the Mode of Connection of Cells : W. Gardiner, F.R.S.—Mathematical Contributions to the Theory of Evolution. IV. On the Probable Errors of Frequency Constants, and on the Influence of Random Selection on Variation and Correlation : Prof. K. Pearson, F.R.S., and L. N. G. Filon.—On the Geometrical Treatment of the "Normal Curve" of Statistics, with special reference to Correlation, and to the Theory of Error : W. F. Sheppard.
 LINNEAN SOCIETY, at 8.—On *Pontobolbos manauarensis* : Prof. A. Dendy.—On Haddonia, a New Genus of Foraminifera : F. Chapman.
 CHEMICAL SOCIETY, at 8.—On the Decomposition of Camphoric Acid by Fusion with Potash or Soda : Dr. A. W. Crossley and W. H. Perkin, jun., F.R.S.—Experiments on the Synthesis of Camphoric Acid : W. H. Bentley and W. H. Perkin, jun., F.R.S.—The Action of Magnesium on Cupric Sulphate Solution : Dr. Frank Clowes and R. M. Caven.—Properties and Relationships of Di-hydroxytartaric Acid : H. J. Horstman Fenton.

BOOKS, PAMPHLETS, and SERIALS RECEIVED

BOOKS.—Memorials Journal and Botanical Correspondence of C. C. Babington, F.R.S. (Cambridge, Macmillan and Bowes).—North America. Vol. 1. Canada and Newfoundland : S. E. Dawson (Stanford).—Resultate der Wissenschaftlichen Reforschung des Balatonsees, Zweiter Band, Erster Theil (Wien. Hölzel).—Ba-u und Leben unserer Waldbäume : Dr. M. Büsigen (Jena, Fischer).—The Practice of Massage : A. S. Eccles, 2nd edition (Baillière).—Air, Food, and Exercises : Dr. A. Rabagliati (Baillière).—Gases : their Constitution and Functions : S. J. Corrigan, Part 3 (St. Paul, Minn.).—Die Zigeuner : Prof. G. Cora (Turin).—The Meteorology of Edinburgh : R. C. Mossman, 2 parts (Edinburgh, Grant).—A System of Medicine : edited by Dr. Clifford Allbutt, Vol. iv. (Macmillan).—Les Constantes Physico-Chimiques : D. Sidersky (Paris, Gauthier-Villars).—Bibliography of X-Ray Literature and Research (1896-97) : edited by C. E. S. Phillips (Electrician Company).—William Harvey : D'Arcy Power (Unwin).—A History of Fowling : Rev. H. A. Macpherson (Edinburgh, Douglas).—Botanisches Bilderbuch für Jung und Alt : F. Bley (Berlin, Schmidt).—University College, Nottingham, Calendar, 1897-98 (Nottingham, Sands).
 PAMPHLETS.—Random Shots at Birds and Men : "Jim Crow" (Roxburgh Press).—Notions Générales sur L'Ecorce Terrestre : Prof. A. de Lapparent (Paris, Masson).
 SERIALS.—Century Magazine, November (Macmillan).—Journal of the Sanitary Institute, October (Stanford).—Reale Istituto Lombardo di Scienze e Lettere, Rendiconti, serie II, Vol. xxx, Fasc. xvi. (Milano).—American Naturalist, October (Philadelphia).—Astrophysical Journal, October (Chicago).—The Atoll of Funafuti, Part 4 (Sydney).—Zeitschrift für Physikalische Chemie, xxiv, Band, 2 Heft (Leipzig).—Anales del Museo Nacional de Buenos Aires, Tome v. (Buenos Aires).—Geological Magazine, November (Dulau).—Scribner's Magazine, November (Low).—Journal of Botany, November (West).—History of Mankind : F. Ratzel, translated, Part 21 (Macmillan).—Fortnightly Review, November (Chapman).—Knowledge, November (Hobborn).—Gazzetta Chimica Italiana, 1897, Parte II, Fasc. iv. (Roma).—Geographical Journal, November (Stanford).—Transactions of the Rochdale Literary and Scientific Society, 1896-97 (Rochdale).—North America Fauna, No. 73 (Washington).—Strand Magazine, November (Newnes).—Nansen's Farthest North, Part 1 (Newnes).—Mémoires de la Société de Physique et d'Histoire Naturelle de Genève, Tome xxxII, seconde Partie (Genève).—American Journal of Science, November (New Haven).

CONTENTS.

	PAGE
Mimicry in Butterflies and Moths. II. By E. B. P.	25
The Action of Medicines	26
Organic Chemical Manipulation. By N.	28
Our Book Shelf:—	
Cornish : "Nights with an Old Gunner, and other Studies of Wild Life."—L. C. M.	29
Fischer : "Untersuchungen über den Bau der Cyanophyceen und Bakterien"	29
Sanderson : "Electricity and Magnetism for Beginners."—A. P. C.	29
Noyes : "Organic Chemistry for the Laboratory."—Dr. A. Harden	29
"The Reliquary and Illustrated Archaeologist."	29
Fletcher : "The Commercial Uses of Coal Gas"	29
Letters to the Editor:—	
The Law of Divisibility.—Henry T. Burgess	30
A Link in the Evolution of a Certain Form of Induction Coil.—Rev. F. J. Jervis-Smith, F.R.S.	30
The Leonid Meteors.—W. F. Denning	30
Insects and Colour.—Rev. Alfred Thornley	30
High-Pressure Electricity. (Illustrated.) By W. E. A.	31
The Rev. P. B. Brodie, M.A., F.G.S. By H. B. W.	31
Notes	32
Our Astronomical Column:—	
The Coming Total Eclipse of the Sun	35
The Binary β 395 = 82 Ceti	36
Telescopic Seeing	36
The November Meteors	36
The Connection between the Characters of Isomorphous Salts and the Atomic Weight of the Metals Contained. (Illustrated.) By A. E. Tutton	36
The Jackson-Harmsworth Arctic Expedition	40
Report on Technological Examinations	40
Experimental Morphology. By Prof. G. F. Atkinson	41
University and Educational Intelligence	46
Scientific Serials	46
Societies and Academies	47
Diary of Societies	48
Books, Pamphlets, and Serials Received	48