

DIARY OF SOCIETIES.

THURSDAY, NOVEMBER 10.

MATHEMATICAL SOCIETY, at 8.—Some Secondary Needs and Opportunities of English Mathematicians: Presidential Address.—The Structure of certain Linear Groups with Quadratic Invariants: Dr. L. E. Dickson.—Multiform Solutions of certain Differential Equations of Physical Mathematics and their Applications: H. S. Carslaw.—A Discovery in the Theory of Compound Partitions: Major Macmahon, R.A., F.R.S.—On Groups of Order p^2q^2 : Prof. Burnside, F.R.S.—On the Null Spaces of a One System and its Associated Complexes: W. H. Young.—On the Functions Y and Z which satisfy the Identity

$$4(x^p - 1)/(x - 1) = Y^2 \pm Z^2$$

Prof. L. J. Rogers.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Rotatory Converters: Prof. Silvanus P. Thompson, F.R.S.

FRIDAY, NOVEMBER 11.

ROYAL ASTRONOMICAL SOCIETY, at 8.—The Development of $\left[\frac{r}{a}\right]^n \sin \cos m\omega$: R. T. A. Innes.—Remarks on Dr. Gill's Paper in the *Monthly Notices* for June 1898: A. A. Rambaut.—Note on Mr. Pogson's Manuscripts relating to his proposed Atlas of Variable Stars: Rev. J. G. Hagen.—(1) On the South Temperate Current of Jupiter; (2) Nomenclature of the Chief Surface Currents of Jupiter: A. Stanley Williams.—(1) On a New Instrument for Measuring Astrophotographic Plates; (2) On a Method of obtaining Perfectly Circular Dots unaffected by Phase, and their Employment for Determining the Pivot Errors of the Cape Transit Circle: David Gill.—On some Photographs of the Moon, Comets, Meteors, and the Milky Way, and on the Exterior Nebulosity of the Pleiades: E. E. Barnard.—(1) Mean Areas and Heliographic Latitudes of Sun-spots in the Year 1897, deduced from Photographs taken at Greenwich, at Dehra Dün (India), and in Mauritius; (2) Observations of Planet 433 (1898 DQ) with the 30-inch Reflector of the Thompson Equatorial: Royal Observatory, Greenwich.—*Papers promised*: Brief Account of the New Photographic Telescope at Cambridge Observatory: Sir R. S. Ball.—(1) Approximate Ephemeris of the Leonids; (2) Forecast of the Time of the Leonid Shower of 1898; (3) On the Presence of Helium in the Earth's Atmosphere: G. Johnstone Stoney.

PHYSICAL SOCIETY, at 5.—Discussion on Mr. A. Campbell's Paper on the Magnetic Fluxes in Meters and other Electrical Instruments, to be opened by Prof. W. E. Ayrton, F.R.S.—On the Propagation of Damped Electrical Oscillations along Parallel Wires: Prof. W. B. Morton.—On the Properties of Liquid Mixtures: R. A. Lehfeldt.

MALACOLOGICAL SOCIETY, at 8.—A Revision of the Pliocene Non-Marine Mollusca of England: A. S. Kennard and B. B. Woodward.—Description of Two New Species of *Trochidae* from the Commander Islands: Edgar A. Smith.—Description of a New Species of *Tridacna*: G. B. Sowerby.—On some Supposed New Species of Land Mollusca from the Moluccas: H. Fulton.

MONDAY, NOVEMBER 14.

IMPERIAL INSTITUTE, at 8.30.—Trinidad, with Special Reference to the Recent Hurricane: H. Caracciolo.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—A British Antarctic Expedition: Addresses by the President and others.

TUESDAY, NOVEMBER 15.

ZOOLOGICAL SOCIETY, at 8.30.—A Revision of the Moths of the Subfamily *Pyraustinae* and Family *Pyralidae*, Part I.: Sir George Hampson, Bart.—List of Mammals obtained by Mr. R. McD. Hawker during a Recent Expedition to Somaliland: W. E. de Winton.—On Mammals collected by Mr. J. D. La Touche at Kuantun, N.W. Fokien: Oldfield Thomas.—Revision of the Genera and Species of Fishes of the Family *Mormyridae*: Mr. Boulenger.

MINERALOGICAL SOCIETY, at 8.—Anniversary Meeting.—Election of Officers and Council.—Plagiometrie, Heteromorphite, and Semsyite as Members of a Natural Group of Minerals: L. J. Spencer, with Chemical Analyses by G. T. Prior.—Petrographical Notes on Rock Specimens collected during the Ross Antarctic Expedition of 1899-43: G. T. Prior.—Mineralogical Notes from the Oxford University Laboratory (Communicated): Prof. Miers, F.R.S.—Note on the Occurrence of Riebeckite in Trachytic Rocks from Abyssinia: G. T. Prior.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Electrical Transmission of Power in Mining: William Beedie Esson.

ROYAL PHOTOGRAPHIC SOCIETY, at 8.—On Rapid Dry Plates for Process Work: Combined Screen and Colour Negatives for Three-Colour Printing: A. A. K. Tallent.—On the Melting and Setting Points of Gelatine Solutions, and their Modification: R. Child Bayley.

WEDNESDAY, NOVEMBER 16.

SOCIETY OF ARTS, at 8.—Opening Address by Sir J. Wolfe Barry, K.C.B., F.R.S., on the Internal Traffic of London.

ROYAL METEOROLOGICAL SOCIETY, at 7.30.—Report on Experiments upon the Exposure of Anemometers at Different Elevations: The Wind Force Committee.—Comparison of Estimated Wind Force, with that given by Anemometers: Captain D. Wilson-Barker.—The Tornado at Camberwell, October 29, 1898: William Marriott.

ROYAL MICROSCOPICAL SOCIETY, at 7.30.—Exhibition of Thum's Slides of Diatoms in High Refractive Media.

ENTOMOLOGICAL SOCIETY, at 8.

THURSDAY, NOVEMBER 17.

ROYAL SOCIETY, at 4.30.

LINNEAN SOCIETY, at 8.—On some Spiders from Chili and Peru: F. O. Pickard Cambridge.—The Botanical Results of a Journey into the Interior of Western Australia: Spencer Moore.

CHEMICAL SOCIETY, at 8.—Preparation of Hyponitrite from Nitrite through Oxaymidosulphonate: Dr. E. Divers, F.R.S., and T. Haga.—(1) Absorption of Nitric Oxide in Gas Analysis; (2) Interaction of Nitric Oxide with Silver Nitrate; (3) Preparation of Pure Alkali Nitrites; (4) The Reduction of an Alkali Nitrite by an Alkali Metal; (5) Hypo-nitrites: their Preparation by Sodium or Potassium and Properties: Dr. E. Divers, F.R.S.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

Books.—The Story of the Cotton Plant: F. Wilkinson (Newnes).—Primer of Geometry: J. Sutherland (Longmans).—Chemistry in Daily Life: Dr. Lassar-Cohn, translated by M. M. F. Muir, 2nd edition (Grevell).—Das Leitvermögen der Elektrolyte: Dr. F. Kohlrausch and Dr. L. Holborn (Leipzig, Teubner).—Comparative Photographic Spectra of Stars to the 3^d Magnitude: F. McClean (Dulau).—Spectra of Southern Stars: F. McClean (Stanford).—Monographia Roccellorum: O. V. Darbishire (Stuttgart, Nägeli).—Observations and Researches made at the Hongkong Observatory in the Year 1897: W. Doberck (Hongkong).—Railway "Block" Signalling: J. Pigg (Biggs).—Chemistry for Schools: C. H. Gill, 20th edition, revised and enlarged by Dr. D. H. Jackson (Stanford).—First Lessons in Modern Geology: A. H. Green (Oxford, Clarendon Press).—A Middle Algebra: W. Briggs and Prof. Bryan (Clive).—Elemente der Mineralogie: Naumann and Zirkel, ii. Hälfte, Specielle Theil (Leipzig, Engelmann).—Electrical Engineering: W. Slingo and A. Brooker, new edition (Longmans).—Conspectus Florei Romaniae: Dr. D. Grecescu (Berlin, Friedländer).—Four-footed Americans and their Kin: M. O. Wright (Macmillan).—An Introductory Logic: Prof. J. E. Creighton (Macmillan).—Differential and Integral Calculus: P. A. Lambert (Macmillan).—Der Ursprung der Kultur: L. Frobenius. Erster Band: Der Ursprung der Afrikanischen Kulturen (Berlin, Borntraeger).

PAMPHLETS.—A Plan and Plea for National Medicine; E. L. Garbett (Reeves).—The Transition of North Carolina from Colony to Commonwealth: Prof. E. W. Sikes (Baltimore).—Petrographical and Geological Investigations of certain Transvaal Norites, Gabbros, and Pyroxenites, and other South African Rocks: J. A. L. Henderson (Dulau).—Mines and Quarries: Reports of Le Neve Foster for the North Wales, &c., District (No. 6) for the Year 1897 (Darling).

SERIALS.—Fortnightly Review, November (Chapman).—National Review, November (Arnold).—Madras Government Museum, Bulletin, Vol. 2, No. 2, Anthropology (Madras)—Natural Science, November (Dent).—Middlesex Hospital Journal, October (London).—Zeitschrift für Physikalische Chemie, xxvii. Band, 2 Heft (Leipzig, Engelmann).—Geographical Journal, November (Stanford)—Knowledge, November (Witherby).—Journal of the Sanitary Institute, October (Stanford).—Science Progress, October (Scientific Press).—Terrestrial Magnetism, September (Cincinnati).—Journal of Botany, November (West).—Botanische Jahrbücher, Sechszwanzigster Band, 2 Heft (Leipzig).—Zeitschrift für Wissenschaftliche Zoologie, lxiv. Band, 4 Heft (Leipzig).

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