

ten to fifteen minutes, and during that time can be carried by currents of air about the room.—An infection of the gondi (*Ctenodactylus gondi*) with the Leishman or a similar organism: C. Nicolle and L. Manceaux.—The preponderating rôle of geometry in topographical examinations: M. Contremoulins. A discussion of the application of geometrical principles to practical radiography. The author arrives at the following conclusions:—the distance of the radiating focus from the photographic plate should be constant for all radiographic examinations, the normal incidence ought to be inscribed automatically in the course of the examination on the plate, the attitude in which the subject has been radiographed ought to be mentioned on the proof, and, whenever possible, two radiographs should be taken forming two planes of projection at an angle of 90°.

GÖTTINGEN.

Royal Society of Sciences.—The *Nachrichten* (physico-mathematical section), part iii. for 1908, contains the following memoirs communicated to the society:—

May 16.—The formal relations of quadrilaterals composed of circular arcs: W. Inlenburg.—New developments in linear differential equations: E. Hilb.—A new method of solution of certain boundary-value problems: W. Ritz.—The application of integral equations to the problem of Riemann: E. E. Levi (Pisa).

June 27.—The influence of a naturally active body on light reflected from it: K. Försterling.—The decomposition of an empirically given periodic function into series of sines: C. Runge.—The reduced differential equations of a heavy unsymmetrical top: P. Stäckel (Karlsruhe).

July 11.—Researches from the University chemical laboratory of Göttingen, xx. (1) Transformation of nopinone (C<sub>9</sub>N<sub>11</sub>O) into β-pinene (C<sub>10</sub>H<sub>16</sub>), camphene, and camphor (C<sub>10</sub>H<sub>16</sub>O); (2) the alcohols of the terpinene series; (3) the modifications of terpinene: O. Wallach.

July 25.—Formulæ for the reflection of light at a thin metallic film: W. Voigt.

DIARY OF SOCIETIES.

THURSDAY, NOVEMBER 5.

ROYAL SOCIETY, at 4.30.—(1) Note on Tidal Bores; (2) Vortices in Oscillating Liquid: The Lord Rayleigh, O.M., Pres. R.S.—Note on Two recently-compiled Calendars of Papers of the Period 1606–1806 in the Archives of the Royal Society: Prof. A. H. Church, F.R.S.—On the Generation of a Luminous Glow in an Exhausted Receiver moving near an Electrostatic Field, and the Action of a Magnetic Field on the Glow so produced, the Residual Gases being Oxygen, Hydrogen, Neon and Air: Rev. F. J. Jervis-Smith, F.R.S.—The Rate of Production of Helium from Radium: Sir James Dewar, F.R.S.—The Spectrum of Radium Emanation: A. T. Cameron and Sir William Ramsay, K.C.B., F.R.S.—On the Osmotic Pressures of Aqueous Solutions of Calcium Ferrocyanide. Part I. Concentrated Solutions: The Earl of Berkeley, F.R.S., E. G. J. Hartley, and C. V. Burton.—The Effect of Pressure upon Arc Spectra. No. 2, Copper: W. G. Duffield.—On a Method of Comparing Mutual Inductance and Resistance by the Help of Two-phase Alternating Currents: A Campbell.

CHEMICAL SOCIETY, at 8.30.—The Direct Union of Carbon and Hydrogen: W. A. Bone and H. F. Coward.—The Relation between Absorption Spectra and Chemical Constitution. Part XI, Some Aromatic Hydrocarbons: E. C. C. Baly and W. B. Tuck.—Organic Derivatives of Silicon. Part VII, Synthesis of *di*-Sulphobenzylethylsilylsilicyl Oxide: B. D. W. Luff and F. S. Kipping.—(1) Chlorine Derivatives of Pyridine. Part IX, Preparation and Orientation of the Dichloropyridine, m. p. 66–70°; (2) Chlorine Derivatives of Pyridine. Part X, Orientation of the Trichloropyridine, m. p. 49–50°; (3) Chlorination of Methyl Derivatives of Pyridine. 2-Methyl pyridine. Part II: W. J. Sell.—(1) The Triazo-group. Part V, Resolution of *α*-Triazopropionic acid; (2) The Triazo-group. Part VI, Triazethyl Alcohol and Triazoacetaldehyde: M. O. Forster and H. E. Fierz.

LINNEAN SOCIETY, at 8.—Notes on some Parasitic Copepoda, with a Description of a New Species of *Chondracanthus*: May E. Bainbridge.—On some Nemertean from the Eastern Indian Ocean: R. C. Punnett and C. Forster Cooper.—Report on the Echinoderms other than Holothurians collected by Mr. Stanley Gardiner in the Western Parts of the Indian Ocean: Prof. F. Jeffrey Bell.

AMSTERDAM SOCIETY, at 8.15.—Presidential Address, The Amsterdam Congress.

FRIDAY, NOVEMBER 6.

GEOLOGISTS' ASSOCIATION, at 8.—On some Norwegian Lakes and Rock-Basins: H. W. Monckton

TUESDAY, NOVEMBER 10.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Glasgow Central Station Extension: D. A. Matheson.

THURSDAY, NOVEMBER 12.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: The Charges on Ions in Gases, and the Effect of Water Vapour on the Motion of Negative Ions: Prof. J. S. Townsend, F.R.S.—The Charges on Ions produced by Radium: C. E. Haselfoot.—The Occlusion of the Residual Gas and the

Fluorescence of the Glass Walls of Crookes's Tubes: A. A. Campbell Swinton.—An Investigation of the Anatomical Structure and Relationships of the Labyrinth in the Reptile, the Bird and the Mammal: Dr. A. A. Gray.—The Natural Mechanism for Evoking the Chemical Secretion of the Stomach (Preliminary Communication): Dr. J. S. Edkins and Miss M. Tweedy.—Further Observations on *Welwitschia*: Prof. H. H. W. Pearson.—On the Presence of Hæmoagglutinins, Hæmo-opsinins and Hæmo-lysin in the Blood obtained from Infectious and Non-Infectious Diseases in Man (Preliminary Communication): L. S. Dudgeon.—Preliminary Note on the Occurrence of a New Variety of Trypanosomiasis in the Island of Zanzibar: A. Edington.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Inaugural address by the President, Mr. W. M. Morley.

MATHEMATICAL SOCIETY, at 5.30 (*Annual General Meeting*).—On the Theory of Groups of Finite Order (Presidential Address): Prof. W. Burnside.—On the Dirichlet Series and Asymptotic Expansion of Integral Functions of Zero Order: J. E. Littlewood.—The Norm Curves on a Given Base: Prof. F. Morley.—Satellite Curves on a Plane Cubic: J. O'Sullivan.—On the Arithmetical Nature of the Coefficients in a Group of Linear Substitutions (Third Paper): Prof. W. Burnside.—On the Second Mean Value Theorem of Integral Calculus: Dr. E. W. Hobson.—On the Representation of a Function by Means of a Series of Legendre's Functions: Dr. E. W. Hobson.—The Conformal Transformations of a Space of Four Dimensions and their Applications to Geometrical Optics: H. Bateman.—Periodic Properties of Partitions: D. M. Y. Sommerville.—The Solution of Integral Equations: Prof. A. C. Dixon.—The Eliminant of Three Quantics in Two Independent Variables: A. L. Dixon.—A Note on the Continuity or Discontinuity of a Function defined by an Infinite Product: G. H. Hardy.—The Energy and Momentum of an Ellipsoidal Electron: F. B. Piddock.—On *q*-Integration: Rev. F. H. Jackson.—On *q*-Transformations of Power Series: Rev. F. H. Jackson.—The Complete Solution in Integers of the Eulerian Equation X<sup>4</sup> + Y<sup>4</sup> = U<sup>4</sup> + V<sup>4</sup>: Dr. T. Stuart.

FRIDAY, NOVEMBER 13.

PHYSICAL SOCIETY, at 8.

MALACOLOGICAL SOCIETY, at 8.—Note on *Diplommatina strubelli*, Smith: E. A. Smith.—The Radulæ of British Helicids, Part ii: Rev. E. W. Bowell.—New Marine Mollusca from New Caledonia, &c.: G. B. Sowerby.—New Species of Macrochlamys and Monocondylæa from Siam: H. B. Preston.—A New Species of Oliva: F. G. Bridgman.

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