

essential oil in a living plant: Eug. **Charabot** and G. **Laloue**. An examination of the plant *Artemisia absinthium*.—The pharmacodynamical action of a new alkaloid contained in the root of fresh valerian: J. **Ohevalier**.—The formation of the skeleton in some of the hexacorals: Armand **Krempf**.—The part belonging to the anastomotic branch of the spinal in the physiological properties of the pneumo-gastric or pneumo-spinal nerve: F. X. **Lesbre** and F. **Maignon**.—Some new experiments concerning the pathology of pulmonary anthracosis: G. **Kuss** and E. **Lobstein**. Further experiments bearing on the criticisms of MM. Calmette, Grysez, and Vansteenbergh. The conclusions drawn from this work are that ordinary pulmonary anthracosis, as arising in ordinary life, is produced by inhalation and not by deglutition.—The evolution of the Cerithiada in the Middle and Upper Eocene of the Paris basin: Jean **Boussac**.

GÖTTINGEN.

Royal Society of Sciences.—The *Nachrichten* (physico-mathematical section), parts iii. and iv. for 1906, contains the following memoirs communicated to the society:—

May 12.—The motion of an electron under the influence of a longitudinally directed force: Paul **Hertz**.

March 31.—Physics without apparatus; attraction and repulsion of unelectricified bodies. Electrical experiments with a polished table surface: W. **Holtz**.

May 5.—The imaginary zeros of the hypergeometric function: A. **Hurwitz**.

June 16.—Calorimetric studies, i., specific heats of pure alcohol, and of mixtures of alcohol and water: E. **Bose**.

July 28.—Calorimetric studies, ii., thermal anomalies in alcoholic mixtures; iii., relations between the foregoing results (i. and ii.): E. **Bose**.—Seismic records in Göttingen during 1905: G. **Angenheister**.

May 19.—A characteristic property of the *Klassenkörper* (Abelian functions): Ph. **Furtwängler**.

October 27.—Statistical review of the local and remote earth tremors recorded at the Samoa Observatory during 1905: F. **Linke**.

July 28.—Principles of a general theory of linear integral equations: D. **Hilbert**.

DIARY OF SOCIETIES.

THURSDAY, JANUARY 31.

ROYAL SOCIETY, at 4.30.—On the Two Spectra of the Elements as Evidence of the Composite Nature of the Atoms: Prof. W. N. Hartley, F.R.S.—On the Explosion of Pure Electrolytic Gas: Prof. H. B. Dixon, F.R.S., and L. Bradshaw.—The Fixing of Gaseous Mixtures by Compression: L. Bradshaw.—A Recording Calorimeter for Explosions: Prof. B. Hopkinson.—On the Discharge of Negative Electricity from Hot Calcium: Dr. F. Horton.

ROYAL INSTITUTION, at 2.—Standards of Weights and Measures: Major Percy A. Macmahon, F.R.S.

FRIDAY, FEBRUARY 1.

ROYAL INSTITUTION, at 9.—The Methods of Combating the Bacteria of Disease in the Interior of the Organism: Sir Almroth E. Wright, F.R.S.

SCIENTISTS' ASSOCIATION, at 7.30.—President's Address: On the Constitution and Management of Scientific Societies.

MONDAY, FEBRUARY 4.

LONDON INSTITUTION, at 5.—Through Savage Europe: Harry de Windt.

SOCIETY OF ARTS, at 8.—Gold Mining and Gold Production: Lode Mining: Prof. J. W. Gregory, F.R.S.

SOCIETY OF CHEMICAL INDUSTRY, at 8.—(1) The Chemical Composition of some Motor Tyre Rubbers; (2) On the Composition of some New Crude Rubbers: Dr. P. Schidrowitz and F. Kaye.

VICTORIA INSTITUTE, at 4.30.—The Bible Pedigree of the Nations: M. L. Rouse.

TUESDAY, FEBRUARY 5.

ROYAL INSTITUTION, at 3.—Survivals from the Past in the Plant World: Prof. A. C. Seward, F.R.S.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Modern Motor Vehicles: Col. R. E. B. Crompton, C.B.

ZOOLOGICAL SOCIETY, at 8.30.—On the Fœtus of the Giraffe: Prof. E. Ray Lankester, F.R.S.—On New or Rare Cumacea from the Collection of the Copenhagen Museum. Part i.: Dr. W. T. Calman.—Description of a New Amazonian Tree-Frog with Peculiar Breeding Habits: Dr. E. A. Goeldi.

WEDNESDAY, FEBRUARY 6.

SOCIETY OF PUBLIC ANALYSTS, at 8.15.—Annual General Meeting. Presidential Address.—(1) Mineral Acids in Vinegar; (2) The Composition of English Fermentation Vinegar: F. D. Ratcliff.—The Detection of Cane Sugar in Milk: W. H. Anderson.

SOCIETY OF ARTS, at 8.—The Principles and Practice of Insurance, and their Modern Developments: T. E. Young.

GEOLOGICAL SOCIETY, at 8.—Note on the Cervical Vertebra of a Zeuglodon from the Barton Clay of Barton Cliff (Hampshire): Dr. C. W. Andrews,

F.R.S.—On the Origin and Age of the Plateaus around Torquay (South Devon): A. J. Jukes-Browne.

ENTOMOLOGICAL SOCIETY, at 8.—Notes on the Indo-Australian Papilionidæ: Percy I. Lathy.

THURSDAY, FEBRUARY 7.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: The Influence of Increased Barometric Pressure on Man, No. 3. The Possibility of Oxygen Bubbles being set free in the Body: Leonard Hill, F.R.S., and M. Greenwood, jun.—On the Combining Properties of the Opsonin of an Immune Serum: Prof. R. Muir and W. B. M. Martin.—Experiments made to determine the Condition under which "Specific" Bacteria derived from Sewage may be present in the Air of Ventilating Pipes, Drains, Inspection Chambers, and Sewers: Major W. H. Horrocks, R.A.M.C.—Observations on the Life-History of Leucocytes, Part ii., On the Origin of the Granules: C. E. Walker.

ROYAL INSTITUTION, at 3.—Standards of Weights and Measures: Major P. A. Macmahon, F.R.S.

LINNEAN SOCIETY, at 8.—*Papers*: New Plants from Malaya: Dr. Otto Stapf.—Tertiary Foraminifera of Victoria: the Balcombian Deposits of Port Phillip: F. Chapman.—*Exhibitions*: Specimens of *Chara ornithopoda*: H. and J. Groves.—Some Observations of Climbing Plants (with lantern-slides): Rev. John Gerard.—Herbarium formed by A. Ruperti, 1698-1700: W. Rose Smith.

CHEMICAL SOCIETY, at 8.30.—On the Rapid Electroanalytical Deposition and Separation of Metals, Part i., The Metals of the Silver and Copper Groups and Zinc: H. J. Sand.—The Alkaloids of Ergot: G. Barger and F. H. Carr.—Influence of Substitution on the Formation of Diazo-amines and Amino-azo-compounds, Part vi., the Partially Methylated 4:6-Diamino-*m*-xylenes: G. T. Morgan and F. M. G. Micklethwait.—(1) The Reaction of Hydroxylaminodihydroumbellulone Oxime; (2) The Constitution of Umbellulone, Part ii., the Reduction of Umbellulonic Acid: F. Tutin.—Studies on Optically Active Carbinols, Part v., The Aryl Esters and the Amides of γ -Menthylcarbamic Acid: R. H. Pickard and W. Oswald.—Some Constituents of Natural Indigo, Part i.: A. G. Perkin and W. P. Bloxam.—The Occurrence of Isatin in some Samples of Java Indigo: A. G. Perkin.—(1) On the Absorption Spectra of Benzoic Acid, the Benzoates and Benzamide; (2) The Absorption Spectra of Phthalic, *iso*-Phthalic and Terephthalic Acids; Phthalic Anhydride and Phthalimide: W. N. Hartley and E. P. Hedley.—*acy*-Trimethyl- and *acy*-Tetramethyl-tricarballic Acids and $\alpha\alpha$ -Dimethylbutane $\alpha\beta$ -Tricarboxylic Acid: H. Henstock and C. H. G. Sprankling.—A Reaction of Certain Colouring Matters of the Oxazine Series: J. F. Thorpe.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Investigations on Light Standards and the Present Condition of the High-Voltage Glow Lamp: C. C. Paterson (Conclusion of Discussion).—Comparative Life Tests on Carbon, Nernst, and Tantalum Incandescent Lamps using Alternating Currents: H. F. Haworth, T. H. Matthewman, and D. H. Ogley.

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