

benzenes: Isidore **Bay**. The carbon bisulphide is precipitated by phenylhydrazine, the precipitate washed with pure benzene, and dried *in vacuo*.—The transformation of the α -oxyacids into aldehydes by boiling their mercuric salts in aqueous solution; application to the preparation of *l*-arabinose by means of mercuric gluconate: Marcel **Guérbet**.—Some cases of the simultaneous production of the 1:6- and 2:7-dimethylantracenes: James **Lavaux**.—Syntheses by means of ethyl and methyl adipates: L. **Bouveault** and R. **Locquin**.—The action of nascent hypiodous acid (iodine and sodium carbonate) on some acids of the general formula $R.CH:CH.CO_2H$, R being C_6H_5 more or less substituted: J. **Bougault**.—Some mineral salts which can act as peroxidases: J. **Wolff**.—A new type of polychætal annelid: Ch. **Gravier**.—The oculo-reaction in its relation to previous treatment with tuberculin: H. **Vallée**.—A bacilliform piroplasmiosis observed in cattle in the neighbourhood of Algiers: H. **Soulié** and G. **Roig**.

GÖTTINGEN.

Royal Society of Sciences.—The *Nachrichten* (physico-mathematical section), part iv. for 1907, contains the following memoirs communicated to the society:—

January 12.—Seismic waves. (1) Theory of the propagation of seismic waves; (2) seismic time-curves: E. **Wiechert** and K. **Zoopritz**.

July 6.—The uniformisation of algebraic curves: P. **Koebé**.

July 20.—Researches from the Göttingen University chemical laboratory, xviii. (1) The synthesis from nopinone of a hydrocarbon related to β -pinene; (2) the synthesis of homologous compounds of the dipentene series; (3) syntheses in the terpinene series; (4) the synthesis of anethol from anise-aldehyde, and of isosafrol from piperonal; (5) the occurrence of sabinene in Ceylon oil of cardamoms and majorana oil; (6) isomeric camphenes and a new camphene-camphor acid; (7) condensation products of cyclic ketones with aromatic aldehydes: O. **Wallach**.

August 6.—A contribution to our knowledge of the light-sense in chickens: D. **Katz** and G. **Révész**.

The official communications (part ii., 1906), just published, include a report by E. **Klein** on the progress of the issue of Gauss's works.

DIARY OF SOCIETIES.

THURSDAY, JANUARY 30.

ROYAL SOCIETY, at 4.30.—On the Observation of Sun and Stars made in some British Stone Circles. Third Note: The Aberdeenshire Circles: Sir Norman Lockyer, K.C.B., F.R.S.—On the Non-periodic or Residual Motion of Water moving in Stationary Waves: Mrs. Ayrton.—The Refractive Index and Dispersion of Light in Argon and Helium: W. Burton.—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: Rev. F. J. Jervis-Smith, F.R.S.

FRIDAY, JANUARY 31.

ROYAL INSTITUTION, at 9.—Recent Researches on Radio-activity: Prof. E. Rutherford, F.R.S.

MONDAY, FEBRUARY 3.

VICTORIA INSTITUTE, at 4.30.—The Southern Alps of New Zealand and their Glaciers: C. D. Fox.
ARISTOTELIAN SOCIETY, at 8.—The Religious Emotion; Some Results of Inductive Enquiry: Dr. A. Caldecott.

SOCIETY OF CHEMICAL INDUSTRY, at 8.—Nitro-glycerine and its Manufacture: Lieut.-Col. Sir Frederick Nathan and W. Rintoul.

TUESDAY, FEBRUARY 4.

ROYAL INSTITUTION, at 3.—Roman Britain: (6) Its Interior Civilisation: Prof. F. J. Haverfield.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Further discussion: Experimental Investigations of the Stresses in Masonry Dams subjected to Water Pressure: Sir J. W. Ottley, K.C.I.E., and Dr. A. W. Brightmore.—Stresses in Dams; an Experimental Investigation by Means of India-rubber Models: J. S. Wilson and W. Gore.—Stresses in Masonry Dams: E. P. Hill.

ZOOLOGICAL SOCIETY, at 8.30.—Cinematograph Demonstration of Results of Natural Colour Photography with Zoological Subjects: F. Martin Duncan.—The Duke of Bedford's Zoological Exploration in Eastern Asia. VII. List of Mammals from the Tsu-shima Islands: O. Thomas.—On the Presence of Gonadial Grooves in *Aurelia aurita*: T. Godvey.—The Duke of Bedford's Zoological Exploration in Eastern Asia. VIII. A Collection of Freshwater Fishes from Corea: C. Tate Regan.

WEDNESDAY, FEBRUARY 5.

GEOLOGICAL SOCIETY, at 8.—On Antigorite and the Val Antigorite, with Notes on other Serpentine containing that Mineral: Prof. T. G. Bonney, F.R.S.—The St. David's Head "Rock Series" (Pembrokeshire): J. V. Elsdon.

ENTOMOLOGICAL SOCIETY, at 8.—On Diaposematism, with Reference to

some Limitations of the Müllerian Hypothesis of Mimicry: Guy A. K. Marshall.

SOCIETY OF ARTS, at 8.—War Balloons: A. E. Gaudron.

THURSDAY, FEBRUARY 6.

ROYAL SOCIETY, at 4.30.—*Probable Papers*.—On the Weight of Precipitum obtainable in Precipitin Interactions with Small Weights of Homologous Protein: Prof. D. A. Welsh and H. G. Chapman.—Nitrication in Acid Soils: A. D. Hall, N. H. J. Miller, and C. T. Gittingham.—A Criticism of the Opsonic Theory based upon Studies carried out by Means of Melanin: S. G. Shattock and L. S. Dudgeon.—A Contribution to the Study of the Mechanism of Respiration, with Especial Reference to the Action of the Vertebral Column and Diaphragm: J. F. Halls Dally.

ROYAL INSTITUTION, at 3.—The Story of the Spanish Armada: Major Martin Hume.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Protective Devices for High Tension Transmission Circuits: J. S. Peck.

LINNEAN SOCIETY, at 8.—Fruits and Seeds from the Pre-Glacial Beds of Britain and the Netherlands: Clement Reid, F.R.S.—On a Method of Disintegrating Peat and other Deposits containing Fossil Seeds: Mrs. Reid.—On a Botanical Expedition to Fokien: S. T. Dunn.

CIVIL AND MECHANICAL ENGINEERS' SOCIETY, at 8.—Some Devices for the Absorption of Shock on Wheeled Vehicles: F. G. Woollard.

CHEMICAL SOCIETY, at 8.30.—The Metallic Picrates: O. Silberrad and H. A. Phillips.—Organic Derivatives of Silicon. Part V., Benzylethylsilicone, Dibenzylsilicone and other Benzyl- and Benzylethyl-derivatives of Silicane: R. Robison and F. S. Kipping.—Some Physico-chemical Properties of Mixtures of Pyridine and Water: H. Hartley, N. G. Thomas, and M. P. Applebey.—The Constitution of Umbellulone, Part III.: F. Tutin.—The Residual Affinity of the Coumarins and Thio-coumarins as shown by their Additive Compounds: A. Clayton.—The Influence of Foreign Substances on Certain Transition Temperatures, and the Determination of Molecular Weights: H. M. Dawson and C. G. Jackson.—The Bromination of β -Hydroxydiphenylamine: Miss A. E. Smith and K. J. P. Orton.—Colour and Constitution of *az*-Methine Compounds, Part I.: F. G. Pope.—The Decomposition of Ammonium Bichromate by Heat. Preliminary Notice: W. M. Hooton.

FRIDAY, FEBRUARY 7.

ROYAL INSTITUTION, at 9.—Napoleon and the Louvre: Humphry Ward.

SOCIETY OF ARTS, at 8.—The Hygiene of the Pottery Trade: W. Burton.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Electric Hardening and Annealing Furnaces: P. T. Steintal.

GEOLOGISTS' ASSOCIATION, at 8.—Presidential Address: The Centenary of the Geological Society: R. S. Herries.

JUNIOR INSTITUTION OF ENGINEERS, at 8.—Aerial Navigation: H. Chatley.

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