

copper exerts a catalytic action on hypophosphites, hydrogen being given off; one gram-molecule of copper was found to produce 30 gram-molecules of hydrogen in this way.—An exception to the general method of preparation of aldehydes by means of the glycidic acids: René **Pointet**. The general method indicated by Darzens does not give the expected diphenylacetic aldehyde, the glycidic ester splitting up into diphenylacetic acid and carbon monoxide instead of into carbon dioxide and the corresponding aldehyde.—Some halogen derivatives of γ -oxycrotonic acid: MM. **Lespieau** and **Viguiet**.—Theory of the colour reactions of dioxyacetone in sulphuric acid solution: G. **Deniges**. Methylglyoxal, in sulphuric acid solution, gives the same colour reactions with alkaloids as dioxyacetone, and it is probable that the latter is converted into methylglyoxal in these reactions by the acid.—The oxidation of alcohols by the simultaneous action of tannate of iron and solution of hydrogen peroxide: E. **de Stocklin**. Methyl, ethyl, normal propyl, and normal butyl alcohols are oxidised to aldehydes by hydrogen peroxide in presence of tannate of iron, as also are the alcohols glycol, glycerol, and sorbitol. Capryl, isopropyl, and isobutyl alcohols resist this oxidation.—Castration in *Zea mays*, var. *tunicata*, produced by *Ustilago maydis*: M. **Chiffot**.—Variations in grafted vines: F. **Baco**.—The influence of grafting on some annual plants, and plants living by their rhizomes: Lucien **Daniel**. Details of experiments, spreading over thirteen years, on the grafting of the potato on the tomato, and of Helianthus provided with rhizomes (*H. tuberosus*, *lactiflorus*, and *multiflorus*) on an annual (*H. annuus*).—The phytogeographical divisions of Algeria: G. **Lapil**.—The anatomical distinction of the genera Lithothamnion and Lithophyllum: Mme. Paul **Lemoine**.—A case of abnormal multiple cephalisation in Syllidians in stolonisation: Aug. **Michel**.—A special method of electrodiagnosis: M. **Guyenot**. An application of the instantaneous discharge of a condenser through an induction coil without an iron core to the quantitative study of the electrical stimulation of nerves. It has proved of practical service in the detection of cases of feigned paralysis.—Prehistoric rock engraving discovered at Ile-d'Yeu (Vendée): Marcel **Baudouin**.—Seismic movements of February 9, 1909: Alfred **Angot**.—The solution of ferruginous dust of cosmic origin in the sea: M. **Thoulet**.

DIARY OF SOCIETIES.

THURSDAY, FEBRUARY 25.

ROYAL SOCIETY, at 4.30.—The Statistical Form of the Curve of Oscillation for the Radiation emitted by a Black Body: Prof. H. A. Wilson, F.R.S.—The Flight of a Rifled Projectile in Air: Prof. J. B. Henderson.—On the Cross-breeding of Two Races of the Moth *Acidalia virgularia*: L. B. Prout and A. Bacot.

ROYAL INSTITUTION, at 3.—Problems of Geographical Distribution in Mexico: Dr. Hans Gadow, F.R.S.

ROYAL SOCIETY OF ARTS, at 4.30.—The Bhuddist and Hindu Architecture of India: Prof. A. A. Macdonell.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Further discussion: The Use of Large Gas Engines for Generating Power: L. Andrews and R. Porter.

FRIDAY, FEBRUARY 26.

ROYAL INSTITUTION, at 9.—Osmotic Phenomena, and their Modern Physical Interpretation: Prof. H. L. Callendar, F.R.S.

PHYSICAL SOCIETY (at Finsbury Technical College, Leonard Street, City Road, E.C.), at 5.—A Laboratory Machine for applying Bending and Twisting Moments simultaneously: Prof. Coker.—On the Self-demagnetising Factor of Bar Magnets: Prof. Silvanus P. Thompson, F.R.S., and E. W. Moss.—Exhibition of Optical Properties of Combinations of Mica and Selenite Films (after Reusch and others) in Convergent Polarised Light: Prof. Silvanus P. Thompson, F.R.S.—Exhibition of Apparatus: C. R. Darling.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Standardisation in Engineering Practice: Dr. W. C. Unwin, F.R.S.

SATURDAY, FEBRUARY 27.

ROYAL INSTITUTION, at 3.—Properties of Matter: Sir J. J. Thomson, F.R.S.

MONDAY, MARCH 1.

SOCIETY OF CHEMICAL INDUSTRY, at 8.—On some Requirements of a Colour Standard: J. W. Lovibond.—Sulphur as a Cause of Corrosion in Steel: G. N. Huntly.

ROYAL SOCIETY OF ARTS, at 8.—Modern Methods of Artificial Illumination: Leon Gaster.

TUESDAY, MARCH 2.

ROYAL INSTITUTION, at 3.—The Evolution of the Brain as an Organ of the Mind: Prof. F. W. Mott, F.R.S.

ZOOLOGICAL SOCIETY, at 8.30.—The Development of the Sub-divisions of the Pleuro-peritoneal Cavity in Birds, illustrated by Lantern-slides: Miss Margaret Poole.—The Growth of the Shell of *Patella vulgata*, L.: E. S. Russell.—The Life-history of the Agrionid Dragon-fly: F. Balfour-Browne.—Growth-stages in the British Species of the Cral Genus *Parasmilia*: W. D. Lang.

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INSTITUTION OF CIVIL ENGINEERS, at 8.—Some recent Grain-handling and Storing Appliances at the Millwall Docks: M. Mowat.

FARADAY SOCIETY, at 8.—On the Rate of Evolution of Gases from Homogeneous Liquids: V. H. Veley, F.R.S., and Dr. J. C. Cain.—The Electro-analysis of Mercury Compounds with a Gold-Kathode: Dr. F. Mollwo Perkin.—The Relation between Composition and Conductivity in Solutions of *meta*- and *ortho*-Phosphoric Acids: Dr. E. B. R. Prideaux.

WEDNESDAY, MARCH 3.

SOCIETY OF PUBLIC ANALYSTS, at 8.—The Composition of Cider: B. T. P. Barker and E. Russell.—The Composition and Analysis of Chocolate: N. P. Booth, C. H. Cribb, and P. A. Ellis Richards.—Note on the Determination of Petroleum in Turpentine: J. H. Coste.

ENTOMOLOGICAL SOCIETY, at 8.—Birds as a Factor in the Production of Mimicry among Butterflies: Guy A. K. Marshall.

THURSDAY, MARCH 4.

ROYAL SOCIETY, at 4.30.—Probable Papers: On the Presence of Hæmagglutinins, Hæmopsonins, and Hæmolysins in the Blood obtained from Infectious and Non-infectious Diseases in Man (Second Report): L. S. Dudgeon.—The Action on Glucoside by Bacteria of the Acid-fast Group, with a New Method of isolating Human Tubercle Bacilli directly from Tuberculous Material contaminated with other Micro-organisms (Preliminary Note): F. W. Twort.—The Effect of Heat upon the Electrical State of Living Tissues: Dr. A. D. Waller, F.R.S.

ROYAL INSTITUTION, at 3.—Problems of Geographical Distribution in Mexico: Dr. Hans Gadow, F.R.S.

RÖNTGEN SOCIETY, at 8.15.—Some Vacuum Tube Phenomena: A. A. Campbell Swinton.

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