

pentacetyl compounds derived from glucose under the names α , β , and γ pentacetines.—On hexamethylene amine, by M. Delépine. The molecular weight, determined by the cryoscopic method, requires the formula $C_6H_{12}N_4$. This result is fully confirmed by examination of its reactions and by the character of its nitroso-derivatives.—On the seeds of *Coula* from French Congo, by MM. H. Lecomte and A. Hébert. The oil obtained from these seeds appears to consist wholly of triolein.—New facts relating to the mechanism of hyperglycæmia and hypoglycæmia; influence of the nervous system on glucose formation and histolysis, by M. M. Kaufmann. The conclusions are drawn that: (1) in hyperglycæmia, and hence in diabetes, glucose formation and histolytic resorption are active; (2) in hypoglycæmia, glucose formation and histolysis are diminished; (3) section of the medulla near the brachial enlargement modifies the action of the liver; this organ then supplies the blood with less sugar and more glycogen; nutrition is also generally modified, the storage power of the tissues is augmented and their histolytic resorption diminished.—On some points in connection with spermatogenesis in the *Syllacians*, by M. Armand Sabatier.—On the fixation of *Acéphales* by the byssus, by M. Louis Boutan.—On the attachment of Amœbæ to solid bodies, by M. Félix Le Dantec.—Histological observations on the functional adaptations of the epidermic cell in insects, by M. Joannes Chatin.—On a new practical process for the estimation of calcium carbonate in arable soils, by M. Antoine de Saporta. The estimation is based on the alteration in density of a moderately dilute solution of hydrochloric acid when chlorides are formed from soil constituents and dissolved.—On some Micrococci from the *Stéphanien*, upper coal-measures, by M. B. Renault.—On mildew: its treatment by a new process, "lysolage," by M. Louis Sipièrre.—The mulberry disease, by M. A. Prunet. The disease described appears to be due to a fungus allied to *Cladochytrium viticolom*. This fungus is named by the author *Cladochytrium*, Mori.—Researches on the conditions which have determined the principal characters of the lunar surface, by M. Stanislas Meunier.—On the rôle of our sensations in the perception of mechanical phenomena, by M. P. Clémentitch de Engelweyer.

DIARY OF SOCIETIES.

LONDON.

THURSDAY, FEBRUARY 7.

ROYAL SOCIETY, at 4.30.—On the Application of the Kinetic Theory to Dense Gases: S. H. Burbury, F.R.S.—On the Abelian System of Differential Equations, and their Rational and Integral Algebraic Integrals, with a Discussion of the Periodicity of Abelian Functions. Rev. W. R. Westrupp-Roberts.—The Oscillations of a Rotating Ellipsoidal Shell containing Fluid: S. S. Hough.
 LINNEAN SOCIETY, at 8.—The Comparative Morphology of the Galeodidæ: H. M. Bernard.—New Marine Algae from Japan: E. M. Holmes.
 SOCIETY OF ANTIQUARIES, at 8.30.
 CHEMICAL SOCIETY, at 8.—The Electromotive Force of an Iodine Cell: A. P. Laurie.—The Action of Heat on E. hyllic β -amidocrotonate: Dr. Collie.—The Acidimetry of Hydrofluoric Acid: Prof. Haga.
 LONDON INSTITUTION, at 6.—The Germination of Barley: A. Gordon Salamon.

FRIDAY, FEBRUARY 8.

ROYAL INSTITUTION, at 9.—The Anti-toxic Serum Treatment of Diphtheria: Dr. G. Sims Woodhead.
 PHYSICAL SOCIETY, at 5.—Annual General Meeting.—An Exhibition of Simple Apparatus: W. B. Croft.—On the Tin Chromic Chloride Cell: S. Skinner.
 ROYAL ASTRONOMICAL SOCIETY, at 3.—Anniversary Meeting.
 INSTITUTION OF CIVIL ENGINEERS, at 8.—The Construction and Maintenance of Roads: Chas. H. Godfrey.
 MALACOLOGICAL SOCIETY, at 8.
 CLINICAL SOCIETY, at 8.

SATURDAY, FEBRUARY 9.

ROYAL BOTANIC SOCIETY, at 3.45.
 SUNDAY, FEBRUARY 10.
 SUNDAY LECTURE SOCIETY, at 4.—Deep Sea Explorations in their Geological Bearings: Dr. R. D. Roberts.

MONDAY, FEBRUARY 11.

LONDON INSTITUTION, at 5.—Truth and Falshood as to Electric Currents in the Body: Prof. Victor Horsley, F.R.S.
 ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—North-West British Guiana: C. G. Dixon.—A Journey in German New Guinea: Captain Cayley Webster.
 SOCIETY OF ARTS, at 4.—Means for Verifying Ancient Embroideries and Laces: Alan S. Cole.
 CAMERA CLUB, at 8.15.—A Simplified and Improved Form of Photographic Lens: H. Dennis Taylor.
 ROYAL INSTITUTE OF BRITISH ARCHITECTS, at 8.
 MEDICAL SOCIETY, at 8.30.

TUESDAY, FEBRUARY 12.

ROYAL INSTITUTION, at 3.—The Internal Framework of Plants and Animals: Prof. C. Stewart.
 INSTITUTION OF CIVIL ENGINEERS, at 8.—Paper to be further discussed: The Mechanical and Electrical Regulation of Steam-Engines: John Richardson.

ANTHROPOLOGICAL INSTITUTE, at 8.30.—The Ethnographic Survey of the United Kingdom: E. W. Brabook. Prehistoric Remains in Cornwall, Part I.: A. L. Lewis.—On the Northern Settlements of the West Saxons: Dr. John Beddoe. F.R.S.
 ROYAL PHOTOGRAPHIC SOCIETY, at 8.—Annual General Meeting.
 ROYAL VICTORIA HALL, at 8.—A Visit to Russia: Smith Woodward.
 ROYAL HORTICULTURAL SOCIETY, at 3.—Annual General Meeting.
 FEDERATED INSTITUTION OF MINING ENGINEERS.—Meeting at Birmingham.
 ROYAL ASIATIC SOCIETY, at 3.
 ROYAL MEDICAL AND CHIRURGICAL SOCIETY, at 8.30.
 ROYAL COLONIAL INSTITUTE, at 8.
 WEDNESDAY, FEBRUARY 13.
 SOCIETY OF ARTS, at 8.—Light Railways: W. M. Acworth.
 SANITARY INSTITUTE, at 8.—Dry Methods of Sanitation: Dr. George Vivian Poore.
 PHARMACEUTICAL SOCIETY, at 8.30.
 THURSDAY, FEBRUARY 14.
 ROYAL SOCIETY, at 4.30.
 ROYAL INSTITUTION, at 3.—Meteorites: L. Fletcher, F.R.S.
 INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—On Reversible Regenerative Armatures, and Short Air Space Dynamos: W. B. Sayers.
 SOCIETY OF ANTIQUARIES, at 8.30.
 MATHEMATICAL SOCIETY, at 8.—Notes on the Theory of Groups of Finite Order, III. and IV.: Prof. W. Burnside, F.R.S.
 FRIDAY, FEBRUARY 15.
 ROYAL INSTITUTION, at 9.—Mountaineering: Clinton T. Dent.
 GEOLOGICAL SOCIETY, at 3.—Annual General Meeting.
 QUEKETT MICROSCOPICAL CLUB, at 8.—Annual General Meeting.
 EPIDEMIOLOGICAL SOCIETY, at 8.—Dr. Atkinson, of Hong Kong.

BOOKS, PAMPHLET, and SERIALS RECEIVED.

BOOKS.—Good Reading about many Books (Unwin)—La Pratique du Teinturier: J. Garçon, tome 1 and 2 (Paris, Gauthier-Villars).—Mussel Culture and the Bait Supply: W. L. Calderwood (Macmillan).—Lehrbuch der Algebra: Prof. H. Weber, Erster Band (Brannschweig, Vieweg).—Sea and Land: Prof. N. S. Shaler (Smith, Elder).—Steam and the Marine Steam Engine: J. Yeo (Macmillan).—N. S. W. Keport of the Minister of Public Instruction for the Year 1892 (Sydney).—Proceedings of the International Conference on Aerial Navigation held in Chicago August 1 to 4, 1893 (New York, American Engineer, &c.).—Progress of Science: J. T. Marmery (Chapman and Hall).
 PAMPHLET.—Etudes Climatologiques: A. Iancaster (Bruxelles).
 SERIALS.—Century Magazine, February (Unwin).—Contemporary Review, February (Hibster).—Asclepiad, No. 42, Vol. xi. (Longmans).—Bulletin de l'Académie Royale des Sciences de Belgique, No. 12, tome 28 (Bruxelles).—Reliquary, &c., January (Bemrose).—National Review, February (Arnold).—Zeitschrift für Physikalische Chemie, xvi. Band, 1 Hef (Leipzig, Engelmann).—Geographical Journal, February (Stanford).

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