

of nitrite was without objection.—On the floating spiked Decapods collected by the American expeditions of the *Hassler* and the *Blake*: E. L. **Bouvier**.—On the congruences of skew cubics: M. **Stuyvaert**.—On the development of a uniform analytical function in an infinite product: M. **Zoretti**.—On the complementary geodesic triangulations of the upper regions of the French Alps (third expedition): P. **Helbronner**.—On a dynamometric brake designed for measuring the power of motors, and which allows of the utilisation, in an electrical form, of the greater part of the work developed: A. **Krebs**. This electrical brake has been successfully applied to measuring the horse-power of motor-car engines of from 1 horse-power to 200 horse-power. It has several advantages over the friction dynamometer, as it can be used as long as may be required without any danger of over-heating, and is not liable to the errors introduced by the variations in the coefficient of friction.—On the electrical phenomenon created in liquid chains, symmetrical as regards concentration, by the formation of a fresh surface of contact: H. **Chanoz**.—On the liquefaction of air by compression with external work: Georges **Claude**. A continuation of an earlier paper on the same subject, and giving an account of the modifications which it has been necessary to make in the arrangements of the apparatus to secure an increased yield of liquid air.—On the molecular conductivity of the phosphoric esters: P. **Carré**. Measurements are given for the monoalkylphosphoric esters derived from ethyl and isobutyl alcohols, glycerol, erythritol, and mannide, and it was found that the ionisation of the acid phosphoric esters is considerably greater than with phosphoric acid itself.—A general method for the synthesis of $\alpha\beta$ -glycidic esters and of ketones: Georges **Darzens**. In a previous paper the author has shown that by the condensation of monochloroacetic acid with ketones, trisubstituted glycidic esters are formed by the saponification of which unstable acids are produced, the latter readily splitting up into carbon dioxide and a ketone. This reaction has now been extended to α -chloropropionic acid, giving ketones of the type $RR_1CH-CO-CH_3$. The reaction appears to be quite general; eight new glycidic esters and five new ketones are described.—On the constitution of crystallised bodies: Fréd. **Wallerant**.—Observations relating to the morphology of aerial bulbs: Marcel **Dubard**. *Coleus Dazo* shows a tendency to accumulate its reserves in its aerial organs when the conditions of growth are unfavourable to the formation of subterranean stems. These reserves, of a starchy nature, are deposited in the axillary buds originally intended to form flowers.—The changes in the amount of fragrant oil present in the plant during the accomplishment of the functions of the flower: Eug. **Charabot** and Alex. **Hébert**.—Comparison of the cycles of evolution of the Orthonectidæ and Dicyemidæ: F. **Mesnil** and M. **Caulleury**.—The formation of the vitellus in the sparrow: M. **Dubuisson**.—The embryogeny of the Hexactinidæ: L. **Faurot**.—The reason why certain deaf mutes can hear low notes better than high ones: M. **Marage**. From experiments on animals unprovided with any organ of hearing, the author concludes that the perception of low musical notes by deaf mutes is not hearing in the proper sense of the word, but a special sense for low notes which is also met with in the lower animals.—The increase in the activity of the pancreatic secretion by calcium salts: C. **Delezenne**. The experiments described show the importance of calcium salts in developing the activity of pancreatic juice. A complete explanation of the effects produced is not, as yet, forthcoming.—On the tectonic at the S.W. of Chott and Hodna: J. **Savornin**.—On the use of hydrostatic pressure in tapping thermal springs: L. **De Launay**.—The exploration of the free atmosphere above the Atlantic Ocean, north of the tropical regions, on board the yacht of the Prince of Monaco, in 1905: H. **Hergesell**.

DIARY OF SOCIETIES.

THURSDAY, NOVEMBER 23.

ROYAL SOCIETY, at 4.30.—On the Nature of the Galvanotropic Irritability of Roots: Dr. A. J. Ewart and Miss Bayliss.—Some Observations on *Wolwitschia mirabilis*, Hooker-f.: Prof. H. H. W. Pearson.—On the Effects of Alkalies and Acids, and of Alkaline and Acid Salts, upon Growth and Cell Division in the Fertilised Eggs of *Echinus esculentus*;

a Study in Relationship to the Causation of Malignant Disease: Prof. B. Moore, Dr. H. E. Roaf, and E. Whitley.—A Note on the Effect of Acid, Alkali, and Certain Indicators in Arresting or Otherwise Influencing the Development of the Eggs of *Pleuronectes platessa* and *Echinus esculentus*: E. Whitley.—On Certain Physical and Chemical Properties of Solutions of Chloroform and other Anesthetics. A Contribution to the Chemistry of Anæsthesia. (Second Communication): Prof. B. Moore and Dr. H. E. Roaf.—(1) On the Possibility of Determining the Presence or Absence of Tubercular Infection by the Examination of a Patient's Blood or Tissue Fluids: (2) On Spontaneous Phagocytosis and on the Phagocytosis which is obtained with the Heated Serum of Patients who have responded to Tubercular Infection, or as the Case may be to the Inoculation of a Tubercle Vaccine: Dr. A. E. Wright and Staff-Surgeon S. T. Reid, R.N.—On the Occurrence of the Heterotypical Mitosis in Cancer: Dr. E. F. Bashford and T. A. Murray.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—The Applications of Electricity in the Royal Gun Factory, Woolwich Arsenal: Colonel H. C. L. Holden, R.A., F.R.S.

FRIDAY, NOVEMBER 24.

PHYSICAL SOCIETY, at 5.—The Dielectric Strength of Air: A. Russell.—On the Electrical Conductivity of Flames containing Salt Vapours for Rapidly Alternating Currents: Dr. H. A. Wilson.—On the Lateral Vibration of Loaded and Unloaded Bars: J. Morrow.

SATURDAY, NOVEMBER 25.

THE ESSEX FIELD CLUB (at Essex Museum of Natural History, Stratford), at 6.30.—Report of Club's Delegate at Meeting of Corresponding Societies' Committee, British Association, 1905: F. W. Rudler, I.S.O.—Romance of Plant Life: F. Martin-Duncan.

MONDAY, NOVEMBER 27.

SOCIETY OF ARTS, at 8.—The Measurement of High Frequency Currents and Electric Waves; Prof. J. A. Fleming, F.R.S.

INSTITUTE OF ACTUARIES, at 5.—Valuation by Select Tables: Separate Papers by Messrs. T. G. Ackland, O. F. Diver and G. King.

TUESDAY, NOVEMBER 28.

ZOOLOGICAL SOCIETY, at 8.30.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Discussion: On Waterways in Great Britain: J. A. Saner.—Also, time permitting: The Steam-Turbine: The Hon. C. A. Parsons, C.B., F.R.S., and G. G. Stoney.

WEDNESDAY, NOVEMBER 29.

SOCIETY OF ARTS, at 8.—The British Association in South Africa: Sir William H. Preece, K.C.B., F.R.S.

FRIDAY, DECEMBER 1.

INSTITUTION OF CIVIL ENGINEERS, at 8.—An Installation for the Bacterial Treatment of Sewage, at Neath: W. L. Jenkins.

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