

of the period of electric oscillations by the rotating mirror, by M. L. Décombe. A discussion of the precision to be obtained by means of the rotating mirror method and a criticism of results previously published on the same subject by M. Tissot.—On the band spectrum of nitrogen in the oscillating spark, by M. G. A. Hemsalech. It is shown that the band spectrum obtained with the oscillating spark with certain metals is identical with the band spectrum of nitrogen at the negative pole.—The rapid measurement of surface tensions, by MM. Ph. A. Guye and L. Perrot. A study of the conditions under which the method of falling drops gives accurate results for the surface tension of liquids.—On the variation of composition of mineral waters and of spring waters as brought out with the aid of the electric conductivity, by M. P. Th. Muller. The composition of a water having been once determined chemically any variation of its composition from time to time can be most easily detected by determining its electrical conductivity.—On myrcenol and its composition, by M. Ph. Barbier. By studying the oxidation products of this substance it would appear to have the same constitution as that attributed to licareol by Tiemann, but as the physical and chemical properties of myrcenol are altogether distinct from those of licareol it is necessary to reconsider the formula attributed to the latter substance.—On ethyl nitroacetate, by M. A. Wahl. Since the substance obtained by the action of ammonia upon ethyl nitro-dimethylacrylate gave an ethyl nitroacetate which was not identical with the specimen obtained by M. de Forcrand, an attempt was made to prepare this compound by an independent method. The decomposition of ethyl nitromalonate by boiling with potash was finally found to give the compound sought for, which agreed in its properties with the ester previously prepared by the author, but differs from the nitroacetate of de Forcrand.—The preparation of the isomeric ortho-, meta- and para-nitrobenzoyl cyanacetic esters and of orthonitrobenzoyl chloride, by M. Mavrojanis.—A new reaction of saccharin, by M. Alex. Leys.—On the migration of nitrogenous and ternary matters in annual plants, by M. G. André.—On the *Voandzou*, by M. Balland. An analysis of the seeds of this plant showed that the proportions of fat, nitrogenous material, starch and ash are exactly those required for human food. It is the first example of a natural product presenting the chemical characteristics of a perfect food.—Contribution to the microchemical examination of alkaloids, by M. M. E. Pozzi-Escot.—On the phenomena of histolysis and histogenesis accompanying the development of the endoparasitic Trematods of terrestrial mollusca, by MM. Vaney and A. Conte.—On the evolution of the blastodermic leaflets in the Nematods, by M. A. Conte.—On a new subfamily of marine Hemiptera, the *Hermatobatinae*, by MM. H. Coutière and J. Martin.—Researches on the physical constants which influence the electrical stimulation of the nerve, by M. Georges Weiss.—The direct measurement of the wave-length in a nerve following short electrical stimulations, by M. Aug. Charpentier.—Some remarks on the otoliths of the frog, by M. Marage.—The influence of the sterilisation of the medium, the air respired and the food absorbed upon the animal organism, by MM. Charrin and Guillemonat. The comparative experiments upon guinea-pigs would tend to show that the absence of bacteria in the air and food is distinctly prejudicial to the animal, which loses its vitality and resisting power to disease.

## DIARY OF SOCIETIES.

### THURSDAY, MAY 9.

ROYAL SOCIETY, at 4.30.—Discussion of Special Report.  
MATHEMATICAL SOCIETY, at 5.30.—(1) A Case of Algebraic Partitionment; (2) On the Series whose Terms are the Cubes and Higher Powers of the Binomial Coefficients; Major MacMahon, R.A., F.R.S.—A Property of Recurring Series; G. B. Mathews, F.R.S.—The Product of Two Spherical Surface Harmonic Functions; J. B. Dale.  
INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Storage Batteries in Electric Power Stations, controlled by Reversible Boosters; J. S. Highfield.  
IRON AND STEEL INSTITUTE, at 10.30.—Annual Meeting.

### FRIDAY, MAY 10.

ROYAL INSTITUTION, at 9.—The Response of Inorganic Matter to Mechanical and Electrical Stimulus; Prof. J. C. Bose.  
PHYSICAL SOCIETY, at 5.—Applications of Elastic Solids to Metrology; Dr. C. Chree, F.R.S.—The Thermal Properties of Isopentane compared with those of Normal Pentane; Prof. S. Young, F.R.S., and J. Rose-Innes.  
SOCIETY OF ARTS, at 8.—Polyphase Electric Working; Alfred C. Eborall.  
MALACOLOGICAL SOCIETY, at 8.—Description of a New Species of *Voluta* from Natal, with a List of the Known Forms of *Volutidae* from South

Africa; E. A. Smith.—Description of a New Species of *Voluta*, *Cymbiola mangeri*; H. B. Preston.—On Three New Operculates (*Cyctotus*) from Columbia; S. I. Da Costa.  
ROYAL ASTRONOMICAL SOCIETY, at 5.—Results of Double Star Measures made at Windsor, New South Wales, in the Years 1899 and 1900; John Tebbutt.—The Visual Spectrum of Nova Persei; Rev. A. L. Cortie.—The Spectrum of Nova Persei, Note 4; Rev. W. Sidgreaves.—*Probable Papers*: Additional Note on the Position of Nova Persei, and a Comparison of Photographic Magnitudes of Neighbouring Stars with those of Father Hagen's Chart and Catalogue; F. A. Bellamy.—The Cambridge Machine for Measuring Celestial Photographs; A. R. Hinks.—Further Observations of the 'New Star' in Perseus; Radcliffe Observatory, Oxford.

### SATURDAY, MAY 11.

ROYAL INSTITUTION, at 3.—The Rise of Civilisation in Egypt; Prof. W. M. Flinders Petrie.

### MONDAY, MAY 13.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—A Survey in Baffinland; Dr. Robert Bell, F.R.S.—Explorations in the Great Bear Lake Region; J. Mackintosh Bell.  
SOCIETY OF ARTS, at 8.—Alloys; Sir W. C. Roberts-Austen, K.C.B., F.R.S.

### TUESDAY, MAY 14.

ROYAL INSTITUTION, at 3.—Cellular Physiology; Dr. A. Macfadyen.

### WEDNESDAY, MAY 15.

ROYAL METEOROLOGICAL SOCIETY, at 4.30.—The Periodicity of Cyclonic Winds; Rupert T. Smith.—An Account of the Bequest by the late G. J. Symons, F.R.S., to the Royal Meteorological Society; William Marriott.

ROYAL MICROSCOPICAL SOCIETY, at 8.—Exhibition of Aquatic Life.  
SOCIETY OF ARTS, at 8.—Synthetic Wireless Telegraphy; Guglielmo Marconi.

### THURSDAY, MAY 16.

CHEMICAL SOCIETY, at 8.—The Nutrition of Yeast, Part III.; Dr. A. L. Stern.—Derivatives of Methylfurfural; H. J. H. Fenton and Miss Mildred Gostling.—The Preparation and Optical Inversion of Optically Active Nitrogen Compounds, dextro- and Levo- $\alpha$ -benzylphenyl-allyl-methylammonium Salts; W. J. Pope and A. W. Harvey.

### FRIDAY, MAY 17.

ROYAL INSTITUTION, at 9.—Turkish Kurdistan; Earl Percy.  
SOCIETY OF ARTS, at 8.—Polyphase Electric Working; A. C. Eborall.

### SATURDAY, MAY 18.

ROYAL INSTITUTION, at 3.—Rise of Civilisation in Egypt; Prof. W. M. Flinders Petrie.

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