

tudes. Reply to some criticisms of M. Râteau on an earlier communication.—E. **Brylinski**: The transport of electrical energy to great distances. A mathematical discussion of the properties of a half-wave line.—S. **Posternak**: The variations of the composition of ammonium phosphomolybdate. An account of the variations in the composition of the precipitate produced by the presence of ammonium nitrate or sulphate in the liquid in which the precipitate is formed.—F. **Bourion**: The analysis of commercial chlorobenzenes by distillation. The substances present in the commercial product are benzene, monochlorobenzene, and higher chlorination products boiling at 80° C., 130° C., and 172° C. or above. A scheme for systematic fractional distillation is given, with results for synthetic mixtures. The method is a lengthy one, a single sample requiring three and a half days for analysis.—G. **Mignonac**: The ketimines. Formation by the catalytic reduction of the oximes. The reaction was carried out with nickel (reduced from its oxide at 300° C.) in absolute alcohol at ordinary atmospheric pressure at a temperature of about 16° C. The oxime of cyclohexanone gave N-cyclohexylketimine, a substance not previously isolated, and the corresponding ketimines were isolated from the reduction products of the oximes of acetophenone, propiophenone, benzophenone, and phenyl- α -naphthyl ketone.—Mlle. S. **Veil**: Alloys of oxides. Mixtures of the oxides of chromium and cerium were compressed and heated, and measurements made of the electrical conductivity and magnetisation coefficient of the products. Diagrams are given showing the results for varying proportions of the two oxides.—C. **Matignon** and J. A. **Lecanu**: The reversible oxidation of arsenious acid. From the thermochemical data it should be possible directly to oxidise arsenic trioxide to the pentoxide, and experiments were carried out at temperatures between 400° C. and 450° C., the pressures of the oxygen being 130, 127, and 138 atmospheres. The production of the pentoxide was proved, but the oxidation of the arsenic trioxide was not complete.—Ch. **Gorceix**: The formation of the first ocean.—R. **Souèges**: The embryogeny of the *Cenotheraceæ*. Development of the embryo in *Oenothera biennis*.—M. **Moilliard**: The influence of a small quantity of potassium on the physiological characters of *Sterigmatocystis nigra*. Potassium has a marked specific action on the development of this mould. Deficiency of potassium causes the glucose in the culture fluid to disappear more rapidly than the lævulose; conidia and black pigment do not appear as usual; a golden-yellow pigment appears in the fluid, and a soluble substance stained blue by iodine is formed.—G. **Bertrand**: The conditions which may modify the activity of chloropicrin towards the higher plants. The effects of chloropicrin are nearly proportional to the concentration of the vapour and the time of action. Moisture and light, except direct sunlight, are without influence.—M. **Baudouin**: An anatomical measurement permitting the diagnosis of sex in the human skull.—L. **Boutan**: Comparative yields of pelagic apparatus.—P. **Wintrebert**: The propagation of the undulating movement of the muscles of the skeleton in advanced embryos of *Scylliorhinus canicula* after section or partial resection of the spinal cord.—P. **Portier**: The rabbit deprived of its cæcal appendix regenerates this organ by differentiation of the extremity of the cæcum. When the rabbit's appendix is removed the terminal portion of the cæcum is modified, becomes infiltrated with lymphocytes, and regenerates a new appendix possessing the essential histological and physiological characters of the normal appendix. This is a proof of the important function of this organ in the rabbit.—Ch. **Porcher**: Lactéal retention.—M. **Doyon**: The anti-

coagulating and hæmolysing action of sodium nucleinate.—P. **Courmont** and A. **Rochain**: The action of the micro-organisms of sewage effluents purified by the activated-sludge method on albuminoid materials, urea, and nitrates.—E. **Aubel**: The sterilising power of acids.

Books Received.

School Dynamics. By W. G. Borchardt. Part i. (with Answers.) Pp. vii+286+xix. (London: Rivingtons.) 3s. 6d.

Space and Time in Contemporary Physics. By Prof. M. Schlick. Rendered into English by H. L. Brose. Pp. xi+89. (Oxford: At the Clarendon Press.) 6s. 6d. net.

Zoology: A Text-book for Colleges and Universities. By Prof. T. D. A. Cockerell. Pp. xi+558. (Yonkers-on-Hudson, New York: World Book Co.) 3 dollars.

An Introduction to Palæontology. By Dr. A. M. Davies. Pp. xi+414. (London: T. Murby and Co.) 12s. 6d. net.

Practical Plant Biochemistry. By M. W. Onslow. Pp. vii+178. (Cambridge: At the University Press.) 15s. net.

Wild Fruits and How to Know Them. By Dr. S. C. Johnson. Pp. xi+132. (London: Holden and Hardingham, Ltd.) 1s. net.

Aluminium: Its Manufacture, Manipulation, and Marketing. By G. Mortimer. (London: Sir Isaac Pitman and Sons, Ltd.) 2s. 6d. net.

Cotton Spinning. By W. Scott Taggart. Vol. iii. Fifth edition. Pp. xxviii+490. (London: Macmillan and Co., Ltd.) 10s. net.

Diary of Societies.

THURSDAY, MAY 13.

- ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—A. P. Graves: Welsh and Irish Folk Song.
- ROYAL SOCIETY, at 4.—Election of Fellows.—4.30.—Dr. A. D. Waller: Demonstration of the Apparent "Growth" of Plants (and of Inanimate Materials) and of their Apparent "Contractility."—W. N. F. Woodland: The "Renal Portal" System (Renal Venous Meshwork) and Kidney Excretion in Vertebrata.
- LONDON MATHEMATICAL SOCIETY, at 5.—H. W. Richmond: (1) Historical Note on some Canonical Forms quoted by Mr. Wakeford. (2) Historical Note on Cayley's Theorems on the Intersections of Algebraic Curves.—T. Stuart: The Lowest Parametric Solutions of a Dimorph Sextan Equation in the Rational, Irrational, and Complex Fields.—A. E. Jolliffe: The Pascal Lines of a Hexagon.
- INSTITUTION OF ELECTRICAL ENGINEERS (at Institution of Civil Engineers) at 6.—S. Evershed: Permanent Magnets in Theory and Practice.
- INSTITUTE OF INVENTORS (at Royal Society of Arts), at 7.30.—D. Lschman and Others: Discussion on The Relations of the Inventor to the State.
- OPTICAL SOCIETY, at 7.30.
- INSTITUTION OF AUTOMOBILE ENGINEERS (Graduates' Section) (at 28 Victoria Street), at 8.—W. E. Benbow: The Chemical and Physical Properties of Iron and Steel.
- ROYAL SOCIETY OF MEDICINE (Neurology Section), at 8.30.—Annual General Meeting.—Dr. S. A. K. Wilson: Decerebrate Rigidity in Man, and the Occurrence of Tonic Fits.

FRIDAY, MAY 14.

- DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH. Conference of Research Organisations (at Institution of Civil Engineers), at 3.—Marquess of Crewe: Introductory Address.—Dr. A. W. Crossley: The Relation of Research Associations to Existing Institutions for Research.—J. W. Williamson: The Staffing of Research Associations: Salaries and Superannuation.
- ROYAL ASTRONOMICAL SOCIETY, at 5.
- PHYSICAL SOCIETY OF LONDON, at 5.—Dr. F. Lloyd Hopwood: Demonstration of Experiments on the Thermionic Properties of Hot Filaments.—G. D. West: A Modified Theory of the Crookes Radiometer.—A. Campbell: The Magnetic Properties of Silicon-Iron (Stalloy) in Alternating Fields of Low Value.—T. Smith: Tracing Rays through an Optical System.