

fishes, *Coris julis*. A small piece of coloured paper was suspended on a line above a baited hook. The fish learnt to associate the hook with the paper, as after being twice caught on successive days, it refused the bait when the paper was attached, but took it when the paper was removed.—F. Kerforne: The tectonic of the region south of Rennes.

BOOKS RECEIVED.

Calcul et Construction des Alternateurs Mono- et Polyphasés. By Prof. H. Birven. Translated by P. Dufour. Pp. 179. (Paris: Gauthier-Villars.) 6 francs.

Théorie de la Couche Capillaire Plane des Corps Purs. By Dr. G. Bakker. Pp. 95. (Paris: Gauthier-Villars.) 2 francs.

Organisation et Direction des Usines. D'après de livre allemand intitulé "Der Fabrikbetrieb" de A. Ballewski. By A. Mayer. Pp. vi+220. (Paris: Gauthier-Villars.) 7.50 francs.

Kant's Gesammelte Schriften. Herausgegeben von der Königlich Preussischen Akademie der Wissenschaften. Band xiv. Dritte Abtheilung: Handschriftlicher Nachlass. Band i.: Mathematik-Physik und Chemie-Physische Geographie. Pp. lxii+637. (Berlin: G. Reimer.) 19 marks.

Ruins of Desert Cathay. Personal Narrative of Explorations in Central Asia and Westernmost China. By M. Aurel Stein. Vol. i. Pp. xxxviii+546+plates and map. Vol. ii. Pp. xxi+517+plates and maps. (London: Macmillan and Co., Ltd.) 2 vols. 42s. net.

Diesel Engines for Land and Marine Work. By A. P. Chalkley. With an introductory chapter by Dr. R. Diesel. Pp. xi+226. (London: Constable and Co., Ltd.) 8s. 6d. net.

Mineralogy. By F. Rutley. Eighteenth edition. Pp. viii+267. (London: T. Murby and Co.) 2s. net.

Vanished Arizona. Recollections of the Army Life of a New England Woman. By M. Summerhayes. Second edition. Pp. 319 (Salem, Mass.: The Salem Press Company.) 1.60 dollars.

Practical Chemistry for Engineering Students. By A. J. Hale. Pp. xvi+192. (London: Longmans and Co.) 3s. net.

An Experimental Course of Physical Chemistry. By Dr. J. F. Spencer. Part II. Dynamical Experiments. Pp. xvi+256. (London: G. Bell and Sons, Ltd.) 3s. 6d.

Solutions of the Exercises in Godfrey and Siddons's Solid Geometry. By C. L. Beaven. Pp. 164. (Cambridge: University Press.) 5s. net.

Examples in Arithmetic, Part I. Taken from A School Arithmetic. By H. S. Hall and F. H. Stevens. With Answers. Pp. vii+115+xxii. (London: Macmillan and Co., Ltd.) 1s. 6d.

A.B.C. of Hydrodynamics. By Lieut.-Colonel R. de Villamil. Pp. xi+135. (London: E. and F. N. Spon, Ltd.) 6s. net.

The Gardener and the Cook. By L. H. Yates. Pp. x+260. (London: Constable and Co., Ltd.) 3s. 6d.

DIARY OF SOCIETIES.

THURSDAY, FEBRUARY 22.

ROYAL SOCIETY, at 4.30.—Bakerian Lecture: The Variation of the Specific Heat of Water investigated by the Continuous Mixture Method: Prof. H. L. Callendar, F.R.S.—Index to Reports of Physical Observations—Electric, Magnetic, Meteorological, Seismological—made at Kew Observatory: Dr. C. Chree, F.R.S.—On the Velocities of Ions in Dried Gases: R. T. Lattey and H. T. Tizard.—The Observation by means of a String Electrometer of Fluctuations in the Ionisation produced by γ Rays: Prof. T. H. Laby and P. W. Burbidge.—The Wave Problem of Cauchy and Poisson for Liquid of Finite Depth and for Slightly Compressible Liquid: F. B. Piddock.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—The Supply and Transmission of Power in Self-contained Road Vehicles and Locomotives: J. C. Macfarlane and H. Burge.

FRIDAY, FEBRUARY 23.

ROYAL INSTITUTION, at 9.—The Gyrostatic Compass and Practical Applications of Gyrostats: George K. B. Elphinstone.

PHYSICAL SOCIETY, at 5.—A Method of Accurate Comparison of Quantities of Radium: Prof. E. Rutherford, F.R.S., and Mr. Chadwick.—The Absorption of the γ -rays by Gases: Mr. Chadwick.—On Wave-form Sifters for Alternating Currents: A. Campbell.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Works for the Prevention of Coast-erosion: W. T. Douglass.

SATURDAY, FEBRUARY 24.

ROYAL INSTITUTION, at 3.—Molecular Physics: Sir J. J. Thomson, F.R.S. ESSEX FIELD CLUB, at 6 (at Essex Museum, Stratford).—Report on the Lichens of Epping Forest. II: R. Paulson and P. G. Thompson.

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MONDAY, FEBRUARY 26.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—The Economic Geography of the Type: A. J. Sargent.

ROYAL SOCIETY OF ARTS, at 8.—The Loom and Spindle: Past, Present and Future; Primitive Weaving Appliances: Prehistoric, Ancient, and Modern: L. Hooper.

INSTITUTE OF ACTUARIES, at 5.—On the Principle Provisions of the Law of Bankruptcy in England, with References to some Decisions of Interest to Life Insurance Companies: N. J. Carter.

TUESDAY, FEBRUARY 27.

ROYAL INSTITUTION, at 3.—Optical Determination of Stress, and some Applications to Engineering Problems: Prof. E. G. Coker.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Further Discussion: Some Features of the West African Government Railways: F. Shelford.—Probable Papers: (1) Roller and Ball Bearings; (2) The Testing of Antifriction Bearing Metals: Prof. J. Goodman.

WEDNESDAY, FEBRUARY 28.

GEOLOGICAL SOCIETY, at 8.—Late Glacial and Post-glacial Changes in the Lower Dee Valley: L. J. Wills.—The Glen Orchy Anticline (Argyllshire): E. B. Bailey and M. Macgregor.

ROYAL SOCIETY OF ARTS, at 8.—Education in Science as a Preparation for Industrial Work: H. A. Roberts.

BRITISH ASTRONOMICAL ASSOCIATION, at 5.

THURSDAY, FEBRUARY 29.

ROYAL SOCIETY, at 4.30.—Probable Papers: The Bacterial Production of Acetyl methylcarbinol and 2.3. Butylene Glycol. II: Dr. A. Harden, F.R.S., and Dorothy Norris.—An Instrument for Measuring the Distance between the Centres of Rotation of the Two Eyes: H. S. Ryland and B. T. Lang.—The Locomotor Function of the Lantern in *Echinus*, with remarks on other Allied Lantern Activities: Dr. J. F. Gemmill.—The Relation of Wild Animals to Trypanosomiasis: Capt. A. D. Fraser, R.A.M.C., and Dr. H. L. Duke.—The Transmission of *Trypanosoma nanum* (Laveran): Dr. H. L. Duke.—The Development of a Leucocytozoon of Guinea-pigs: E. H. Ross.

FRIDAY, MARCH 1.

ROYAL INSTITUTION, at 9.—The Total Solar Eclipse in the South Pacific, April, 1911: Dr. W. J. S. Lockyer.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Design and Construction of Masonry Dams: H. J. F. Gourley.

SATURDAY, MARCH 2.

ROYAL INSTITUTION, at 3.—Molecular Physics: Sir J. J. Thomson, F.R.S.

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