

—C. Houlbert and C. Galaine: The causes of inclusion of foreign material (*chambrage*) in oysters. This phenomenon is caused by a deficiency of organic nutriment, and means are suggested for dealing with oyster-beds to prevent its occurrence.

### BOOKS RECEIVED.

The Carnegie United Kingdom Trust. Second Annual Report. Pp. 73. (Edinburgh: T. and A. Constable.)

Year Book of the Royal Society, 1916. Pp. 238. (London: Harrison and Sons.) 5s.

Carnegie Institution of Washington. Year Book, No. 14, 1915. Pp. xii+429. (Washington: Carnegie Institution.)

Psychological Effects of Alcohol. By R. Dodge and F. G. Benedict. Pp. 281. (Washington: Carnegie Institution.)

Ptolemy's Catalogue of Stars: A Revision of the Almagest. By Dr. C. H. F. Peters and E. B. Knobel. Pp. iii+207. (Washington: Carnegie Institution.)

Rural Arithmetic. By A. G. Ruston. Pp. xi+431. (London: University Tutorial Press, Ltd.) 3s. 6d.

The Year-Book of the Scientific and Learned Societies of Great Britain and Ireland, 1915. Pp. vi+351. (London: C. Griffin and Co., Ltd.) 7s. 6d. net.

A Text Book of Geology. Part i. Physical Geology. By Prof. L. V. Pirsson. Pp. vii+444. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 10s. net.

Analytic Geometry. By Dr. H. B. Phillips. Pp. vii+197. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 6s. 6d. net.

Mathematical Monographs. No. 16. Diophantine Analysis. By R. D. Carmichael. Pp. vi+118. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd.) 5s. 6d. net.

### DIARY OF SOCIETIES.

#### THURSDAY MARCH 9.

ROYAL SOCIETY, at 4.30.—The Distribution of Intensity in Broadened Spectrum Lines: Prof. J. W. Nicholson and T. R. Merton.—Prof. Joly's Method of avoiding Collision at Sea: Prof. H. C. Plummer.—Apparatus for the Determination of Gravity at Sea: Prof. W. G. Duffield.

ROYAL INSTITUTION, at 3.—Recent Excavations in Mesopotamia—The Southern Capital, Babylon: Prof. L. W. King.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Continuous-current Railway Motor: E. V. Partridge.

OPTICAL SOCIETY, at 8.—A Simple Focimeter for the Determination of Short Focal Lengths both Negative and Positive: T. F. Connolly.—The Manufacture and Testing of Prismatic and other Compasses: F. E. Smith.

MATHEMATICAL SOCIETY, at 5.30.—Some Applications of General Theorems of Combinatory Analysis: Major P. A. Macmahon.—Mr. Grace's Theorem on Six Lines with a Common Transversal: Prof. H. F. Baker.—The Integrals of a certain Riccati Equation connected with Halphen's Transformation: H. E. J. Cron.—A Certain Plane Sextic: Miss Hilda P. Hudson.—The Construction of Co-apolar Triads on a Cubic Curve: Dr. W. P. Milne.—The Dynamical Equations of the Tides: J. Bondman.

#### FRIDAY, MARCH 10.

ROYAL INSTITUTION, at 5.30.—Illusions of the Upper Air: Sir Napier Shaw.

ROYAL ASTRONOMICAL SOCIETY, at 5.—General Solution of Hill's Equation: E. Lindsay Ince.—Distribution of Star Clusters: O. R. Walkey.—Mean Areas and Heliographic Latitudes of Sun-spots in 1914: Royal Observatory, Greenwich.—Remarks on the Formation of Sun-spots: F. Henricus.—Calculation of Longitude from Moon and Moon-culminating Stars: F. J. Broadbent.—Observations of Jupiter: F. Sargeant.—Statistics of Minor Planets: H. C. Plummer.—Faint Stars with large Proper Motions (ninth note): F. J. Poole.—Longitudes of Jupiter's Satellites: W. de Sitter.—*Probable Papers*: The Nature of the Coronium Atom: J. W. Nicholson.—The Eclipsing Binary *T Aurigæ*: C. Martin and H. C. Plummer.—Note on Bright Meteors: H. C. Plummer.—Barnard's Observations of Variable Stars, *T Herculis*: H. H. Turner and M. A. Blagg.

PHYSICAL SOCIETY, at 5.—Experiments Illustrating the Flow of Heat in Conducting Sheets: S. Skirrow.—The Absorption of Gas by a Quartz Vacuum Tube: Dr. R. S. Willows and H. F. George.

#### SATURDAY, MARCH 11.

ROYAL INSTITUTION, at 3.—Radiations from Atoms and Electrons: Sir J. J. Thomson.

#### TUESDAY, MARCH 14.

ROYAL INSTITUTION, at 3.—Sea Power as a Factor in the Evolution of Modern Races: Prof. A. Keith.

#### WEDNESDAY, MARCH 15.

ROYAL METEOROLOGICAL SOCIETY, at 7.30.—The Meteorology of the Globe in 1914: Sir Napier Shaw.

ROYAL SOCIETY OF ARTS at 4.30.—Forestry and the War: E. P. Stebbing. FARADAY SOCIETY, at 8.—Discussion on Methods and Appliances for the Attainment of High Temperatures in the Laboratory. Opener: Dr. J. A. Harker.

ROYAL MICROSCOPICAL SOCIETY, at 8.—Original Factors in Evolution: Prof. J. Arthur Thomson.—The Supposed Exhibition of Purpose and Intelligence by the Foraminifera: Sir E. Ray Lankester. ENTOMOLOGICAL SOCIETY, at 8.

#### THURSDAY, MARCH 16.

ROYAL INSTITUTION, at 3.—Organic Products used as Propulsive and Explosive Agents: Prof. H. E. Armstrong.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—The Possibilities in the Design of Continuous-current Traction Motors: N. W. Storer.—The Use of Direct Current for Terminal and Trunk Line Electrification: N. W. Storer.

LINNEAN SOCIETY, at 5.—Resemblance between African Butterflies of the genus *Charaxes*; a New Form of Mimicry: Prof. E. B. Poulton.—Notes on Plants collected in Sikkim, including the Kalpong district: C. C. Lacaita.—Exhibition of Species of Ribes and their Garden Derivation: E. Bonyard.—Early Botanical Exploration of North America: B. Daydon Jackson.

CHILD STUDY SOCIETY, at 6.—The Unconscious Mental Life of the Child: Dr. E. Jones.

#### FRIDAY, MARCH 17.

ROYAL INSTITUTION, at 5.30.—The Search for New Coal Fields in England: Dr. A. Strahan.

INSTITUTION OF MECHANICAL ENGINEERS, at 6.—The Composition of the Exhaust from Liquid-fuel Engines: R. W. Fenning.

#### SATURDAY, MARCH 18.

ROYAL INSTITUTION, at 3.—Radiation from Atoms and Electrons: Sir J. J. Thomson.

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#### Editorial and Publishing Offices:

MACMILLAN & CO., LTD.,  
ST. MARTIN'S STREET, LONDON, W.C.

Advertisements and business letters to be addressed to the Publishers

Editorial Communications to the Editor.

Telegraphic Address: PHUSIS, LONDON.  
Telephone Number: GERRARD 8830.