

BOOKS RECEIVED.

The Vaporizing of Paraffin for High-Speed Motors (Electric Ignition Type). By E. Butler. Pp. vi+120. (London: C. Griffin and Co., Ltd.) 3s. 6d. net.

A Text-Book of Histology. By Dr. H. E. Jordan and Dr. J. S. Ferguson. Pp. xxviii+799. (London and New York: D. Appleton and Co.) 15s. net.

Horses. By R. Pocock. With an Introduction by Prof. J. Cossar Ewart. Pp. x+252. (London: John Murray.) 5s. net.

The Land and the Empire. By C. Turnor. Pp. 144. (London: John Murray.) 3s. 6d. net.

Comptes Rendus of Observation and Reasoning. By J. Y. Buchanan. Pp. xl+452. (Cambridge: At the University Press.) 7s. 6d. net.

Explosives. By A. Marshall. Second edition. Two vols. Vol. i., pp. xv+407. (London: J. and A. Churchill.) 3l. 3s. net the two vols.

Laboratory Manual of General Chemistry, with Exercises in the Preparation of Inorganic Substances. By A. B. Lamb. Pp. vi+166. (Cambridge, Mass.: Harvard University Press; London: Oxford University Press.) 6s. net.

German and English Education: a Comparative Study. By Dr. Fr. De Hovre. Pp. 108. (London: Constable and Co., Ltd.) 2s. 6d. net.

The Permanent Values in Education. By K. Richmond. Pp. xxiii+136. (London: Constable and Co., Ltd.) 2s. 6d. net.

DIARY OF SOCIETIES.

THURSDAY, MARCH 1.

ROYAL SOCIETY, at 4.30.—A Graphical Method of Drawing Trajectories for High-Angle Fire: Prof. W. E. Dalby.—Osmotic Pressures Derived from Vapour-Pressure Measurements; Aqueous Solutions of Cane Sugar and Methyl Glucoside: The Earl of Berkeley E. G. J. Hartley, and C. V. Burton.—The Complete Photo-Electric Emission from the Alloy of Sodium and Potassium: W. Wilson.

ROYAL INSTITUTION, at 3.—Memorial Art To-day: Prof. E. S. Prior.

MATHEMATICAL SOCIETY, at 5.30.

CHEMICAL SOCIETY, at 8.—Notes on the Effect of Heat and Oxidation on Linseed Oil: J. A. N. Friend.—Acyl Derivatives of Paradiazoimino-benzene: G. T. Morgan and A. W. H. Upton.

LINNEAN SOCIETY, at 5.—Some Observations on the Feeding Habits of Fish and Birds, with Special Reference to Warning Coloration: J. C. Mottram.—The Heterangiums of the British Coal Measures: Dr. D. H. Scott.

FRIDAY, MARCH 2.

ROYAL INSTITUTION, at 5.30.—Cellulose and Chemical Industry (1866-1916): C. F. Cross.

SATURDAY, MARCH 3.

ROYAL INSTITUTION, at 3.—The Pronunciation of English at the Time of Shakespeare. (Lecture II.): Daniel Jones.

MONDAY, MARCH 5.

ROYAL GEOGRAPHICAL SOCIETY, at 5.30.—Indian Frontier Geography: Col. Sir Francis Younghusband.

ARISTOTELIAN SOCIETY, at 8.—Fact and Truth: Prof. C. Lloyd Morgan.

ROYAL SOCIETY OF ARTS, at 4.30.—Memorials and Monuments: Lawrence Weaver.

SOCIETY OF ENGINEERS, at 5.30.—High Tensile Steel *versus* Mild Steel for Reinforced Concrete: A. W. C. Shelf.

VICTORIA INSTITUTE, at 4.30.—The Conscience: Clement C. L. Webb.

TUESDAY, MARCH 6.

ROYAL INSTITUTION, at 3.—Internal Combustion Engines: Prof. W. E. Dalby.

ZOOLOGICAL SOCIETY, at 5.30.—Work of the Beavers in the Society's Gardens: R. I. Pocock.—The Scolex in the Cestode Genus *Duthiersia*, and the Species of that Genus: Dr. F. E. Beddard.—An Experimental Investigation of the Migration of Woodcock Breeding in the West of Ireland: Capt. S. R. Douglas.

RÖNTGEN SOCIETY, at 8.15.

FARADAY SOCIETY, at 8.—General Discussion: The Training and Work of the Chemical Engineer: Opener, Sir George Beilby.—The Training of the Medical Student for Work in the Factory: Prof. F. G. Donnan.—The Training of the Works Chemist in Physics: C. R. Darling.—A Plea for the Forgotten Factor in Chemical Training: W. R. Cooper.—The Work of the Imperial College in the Training of Chemical Engineers: J. W. Hinchley.

WEDNESDAY, MARCH 7.

ROYAL SOCIETY OF ARTS, at 4.30.—German Business Methods: J. H. Vickery.

ENTOMOLOGICAL SOCIETY, at 8.

SOCIETY OF PUBLIC ANALYSTS, at 8.—The Quantitative Estimation of Mercury in Organic Compounds: J. E. Marsh and O. G. Lye.—The

NO. 2470, VOL. 99]

Composition of Milk: P. S. Arup, H. C. Huish, and H. Droop Richmond.—(7) Studies in Steam Distillation: Part 4, Propionic, Butyric, Valeric, and Caproic Acids. (2) Studies in Steam Distillation: Part 5. The Analysis of Acetic Anhydride and Alkyl-Malonic Acids: H. Droop Richmond.—Note on Salvarsan and Neo-Salvarsan: J. Webster.

THURSDAY, MARCH 8.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: Some Effects of Growth-promoting Substances (Auximones) on the Growth of *Lemna minor* in Culture Solutions: W. B. Bottomley.—Some Effects of Growth-promoting Substances (Auximones) on the Soil Organisms concerned in the Nitrogen Cycle: Florence A. Mockeridge.

ROYAL INSTITUTION, at 3.—Sponges; a Study in Evolutionary Biology: Prof. A. Dendy.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Voltage Regulation of Rotary Converters: G. A. Juhlin.

FRIDAY, MARCH 9.

ROYAL INSTITUTION, at 5.30.—The Treatment of Wounds in War: Sir Almoth Wright.

MALACOLOGICAL SOCIETY, at 7.—The Genitalia of *Neanthimula aculeata*: Dr. A. E. Roycott.—(1) The Radula of the Genus *Cominella*; (2) A Colony of *Purpura lapillus*, with Operculum Malformed or Absent; (3) Note on the Adventures of the Genus named *Lucena*; (4) Note on the Da Costa Plates adapted for Rackett's Edition of Pulteney's Catalogues: B. B. Woodward.

ROYAL ASTRONOMICAL SOCIETY, at 5.

SATURDAY, MARCH 10.

ROYAL INSTITUTION, at 3.—Imperial Eugenics; Saving the Soldier: Dr. C. W. Saleeby.

CONTENTS.

PAGE

Classical Education	1
Scientific Engineering. By Dr. A. Russell	2
An Agricultural Policy	3
Our Bookshelf	4
Letters to the Editor:—	
British Optical Science.—Sir Joseph Larmor, M.P., F.R.S.	5
The Bursting of Bubbles.—Prof. S. W. J. Smith, F.R.S.	5
Thermodynamics and Gravitation: A Suggestion.—Dr. George W. Todd	5
Destructive Wild Birds. By Dr. Walter E. Collinge	6
New Antiseptics. By J. B. C.	7
The School of Oriental Studies	8
George Masee. By A. D. C.	9
The Promotion of Technical Optics	10
Notes	12
Our Astronomical Column:—	
Determination of Star Colours	16
Manchester Astronomical Society	16
Canadian Observer's Handbook	16
Educational Reform	17
Production of Iron and Steel in Canada	17
The "Sei" Whale. By Dr. F. E. Beddard, F.R.S.	17
Science for the People. By W. P. P.	18
University and Educational Intelligence	18
Societies and Academies	19
Books Received	20
Diary of Societies	20

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.