

BOOKS RECEIVED.

Les Anaglyphes Géométriques. By H. Vuibert. Pp. 32. (Paris : Vuibert.)

Die Zustandsgleichung. By Prof. H. K. Onnes and W. H. Keesom. Pp. 615-945. (Leipzig : B. G. Teubner.)

Animal Secrets Told. By H. C. Brearley. Pp. xvi + 274. (London : Headley Bros.) 5s. net.

Tabellen der Luftgewichte γ' , der Druckäquivalente β' und der Gravitation g . By Dr. S. Riefler. Pp. iv + 102. (Berlin : J. Springer.) 6 marks.

A School Economic Atlas. By Dr. J. G. Bartholomew. With Introduction by Prof. L. W. Lyde. Revised edition. Pp. xii + 64. (Oxford : Clarendon Press.) 2s. 6d. net.

Map Projections. By A. R. Hinks. Pp. xii + 126. (Cambridge University Press.) 5s. net.

The A.B.C. Guide to Astronomy. By Mrs. H. P. Hawkins. Second edition. Pp. iv + 120. (London : Simpkin and Co., Ltd.) 1s. 6d. net.

The Tribes of Northern and Central Kordofán. By H. A. MacMichael. Pp. xv + 259. (Cambridge University Press.) 10s. 6d. net.

Statics, including Hydrostatics and the Elements of the Theory of Elasticity. By Prof. H. Lamb. Pp. xii + 341. (Cambridge University Press.) 10s. 6d. net.

The Annual of the British School at Athens. No. XVII. Session 1910-11. Pp. liv + 335 + xxi plates. (London : Macmillan and Co., Ltd.) 25s. net.

An Introduction to Algebraical Geometry. By Dr. A. Clement-Jones. Pp. 548. (Oxford : Clarendon Press.) 12s.

Geschlechtszellen und Körperzellen im Tierreich. By Dr. von Berenberg-Gossler. Pp. 22. (Jena : Gustav Fischer.) 60 pfennigs.

The Montessori System. By Dr. T. L. Smith. Pp. x + 78. (New York and London : Harper and Brothers.) 2s. 6d. net.

Die Gattung Hedera. By F. Tobler. Pp. v + 151. (Jena : G. Fischer.) 6.50 marks.

Picturesque Nepal. By P. Brown. Pp. xvi + 205. (London : A. and C. Black.) 7s. 6d. net.

The Naturalist in Siluria. By Capt. Mayne Reid. Cheap edition. Pp. 240. (London : The Year Book Press.) 2s. net.

The Calculus. By Prof. E. W. Davis, assisted by Prof. W. C. Brenke. Edited by E. R. Hedrick. Pp. xx + 63. (New York : The Macmillan Co.; London : Macmillan and Co., Ltd.) 8s. 6d. net.

A Laboratory Manual in Chemistry. By Profs. W. C. Morgan and J. A. Lyman. Pp. xiii + 142. (New York : The Macmillan Co.; London : Macmillan and Co., Ltd.) 1s. 8d. net.

The Beginner in Poultry. By C. S. Valentine. Pp. x + 450. (New York : The Macmillan Co.; London : Macmillan and Co., Ltd.) 6s. 6d. net.

A College Text-book on Quantitative Analysis. By Dr. H. R. Moody. Pp. vi + 165. (New York : The Macmillan Co.; London : Macmillan and Co., Ltd.) 5s. 6d. net.

Lecture Notes on Elementary Statics and Dynamics for Intermediate Students. By Prof. J. Sen. Pp. 95. (Calcutta : Hilton and Co.) 1s.

Über die krankhaften Erbanlagen des Mannes. By F. Lenz. Pp. 170. (Jena : G. Fischer.) 4.50 marks.

NO. 2243, VOL. 90]

DIARY OF SOCIETIES.

FRIDAY, OCTOBER 25.

INSTITUTION OF MECHANICAL ENGINEERS, at 8.—Characteristic Dynamical Diagrams for the Motion of a Train during the Accelerating and Retarding Periods: Prof. W. E. Dalby

PHYSICAL SOCIETY, at 5.—The Constitution of Mercury Lines examined by an Echelon Grating and a Lummer Gehrcke Plate: Prof. H. Nagao and T. Takamine.—Note on the Mutual Inductance of Two coaxial Circular Currents: Prof. H. Nagao.—The Absorption of Gas Vacuum Tubes: S. E. Hill.

SATURDAY, OCTOBER 26.

ESSEX FIELD CLUB (at the Essex Museum, Stratford, Essex), at 6.—Some Recent Observations of the Physiography of the Stort Valley, with special reference to the Rubble-Drift Deposits: Rev. Dr. Irving and Percy A. Irving.—Report of Club's Delegates at the Dundee Meeting of the British Association: W. Whitaker and Joseph Wilson.

TUESDAY, OCTOBER 29.

ZOOLOGICAL SOCIETY, at 8.30.—(1) "Gazella hayyi" = *Gazella fuscifrons*; (2) The Bornean Bantin: R. Lydekker.—Notes on the Breeding of the "Millions" Fish (*Girardinus paucilobus*): E. G. Boulenger.—The Crustacea Isopoda of the Porcupine Expedition: Rev. T. R. R. Stebbing.—Contributions to the Anatomy and Systematic Arrangement of the Cestoidea.—VII. On Six Species of Tapeworms from Reptiles belonging to the Genus *Ichthyotænia* (s.l.): Dr. F. E. Beddoe.—Descriptions of New Butterflies of the Genus *Thecla* from S.E. Brazil: E. Dukinfield Jones.

CONTENTS.

	PAGE
The Dawn of Land Vertebrates. By A. S. W.	215
Science of the Soil. By T. B. W.	215
Philosophy and Psychology. By J. A. H.	216
New Books on Chemistry. By T. M. L.	217
Our Bookshelf	218
Letters to the Editor: —	
X-rays and Crystals.—Prof. W. H. Bragg, F.R.S.	219
Glaciation and Striation.—Sir E. Ray Lankester, K.C.B., F.R.S.	219
Nautilus Pearls.—Prof. Sydney J. Hickson, F.R.S.	220
Sailing Flight of Birds.—F. W. Headley	220
The Zodiacal Light.—E. G. Fenton	220
Colours of Plasmodia of Some Mycetozoa.—Kumagusu Minakata	220
The "Michael Sars" in the Atlantic. (Illustrated.)	
By Dr. E. J. Allen	221
The Swiss Society of Natural Sciences	223
The University of Bristol—Installation of Lord Haldane as Chancellor	224
William Bottomley. By J. A. E.	226
Prof. Lewis Boss	226
Notes	227
Our Astronomical Column: —	
The Discovery of a Comet, 1912b	231
Comet 1912a (Gale)	232
Measuring the Angular Diameters of Stars	232
The Perseids of August 12, 1912	232
The Physical Cause of the z-Term in Latitude Variation	232
The Becquerel Memorial Lecture of the Chemical Society:	
The Relations between Various Solar Phenomena	233
The Significance of Life to the Omaha. By Dr. A. C. Haddon, F.R.S.	234
The Royal Microscopical Society	235
The British Association at Dundee: —	
Section M.—Agriculture.—From the Opening Address by T. H. Middleton, M.A., President of the Section	235
University and Educational Intelligence	243
Societies and Academies	243
Books Received	244
Diary of Societies	244

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.