

thermal conductivity of lead.—**B. Bogitch**: The superficial deformations of steels tempered at moderate temperatures. A study of the corrugations produced on a surface of polished steel on cooling down suddenly from temperatures of 225° to 400° C.—**Louis Gentil**: The Middle and Upper Cretacian in western Haut Atlas, Morocco.—**D. Eginitis**: Recent earthquakes at Leucade and Ithaca.—**H. Colin**: The distribution of invertine in the tissues of the beetroot at different periods in its growth.—**F. Bordas**: The sanitation of the camps and battlefields. Residual heavy tar oil, freed from naphthalene and phenol, mixed with sodium resinate, forms a stable emulsion with water. This mixture is suggested as specially suitable for preventive treatment against flies.—**J. Bergonié**: The vibrations caused by an electromagnet worked with alternating current in non-magnetic bodies.—**Th. Guilloz**: The electric needle for the detection of projectiles in the human body.

BOOKS RECEIVED.

First Course in Chemistry. By W. McPherson and W. E. Henderson. Pp. x+416. (Boston and London: Ginn and Co.) 5s. 6d.
 Geographic Influences in Old Testament Masterpieces. By Prof. L. H. Wild. Pp. xiii+182. (Boston and London: Ginn and Co.) 4s. 6d.
 Reports from the Laboratory of the Royal College of Physicians, Edinburgh. Vol. xiii. Edited by Dr. J. J. G. Brown and Dr. J. Ritchie. (Edinburgh: Oliver and Boyd.)
 Whitby Wild Flowers. By B. Reynolds. Pp. 60. (Whitby: Horne and Sons.) 1s.
 Educative Geography. By J. L. Haddon. Pp. 76. (London: G. W. Bacon and Co., Ltd.) 1s. net.
 Memoirs of the Indian Meteorological Department. Vol. xxi. Part x. Correlation in Seasonal Variations of Weather. iv., Sunspots and Rainfall. By Dr. G. T. Walker. Pp. 17-59. (Simla: Government Central Branch Press.) 1.8 rupees.
 A Critical Revision of the Genus Eucalyptus. By J. H. Maiden. Vol. iii. Part 2. Pp. 23-44+4 plates. (Sydney: W. A. Gullick.) 2s. 6d.
 Field Book of American Trees and Shrubs. By F. S. Mathews. Pp. xvii+465. (New York and London: G. P. Putnam's Sons.) 7s. 6d. net.
 Genetic Theory of Reality. By Dr. J. M. Baldwin. Pp. xvii+335. (New York and London: G. P. Putnam's sons.) 7s. 6d. net.
 The Chemist's Year Book. Edited by F. W. Atack. 2 vols. Pp. 914. (London and Manchester: Sherratt and Hughes.) 10s. 6d. net.
 The Investigation of Mind in Animals. By E. M. Smith. Pp. xi+194. (Cambridge: At the University Press.) 3s. net.
 St. Bartholomew's Hospital in Peace and War. By Dr. N. Moore. Pp. iv+56. (Cambridge: At the University Press.) 2s. net.
 A Report on Researches on Sprue in Ceylon, 1912-14. Pp. x+155. (Cambridge: At the University Press.) 7s. 6d. net.
 A Map of the Western War Area. From the Seine to the Rhine, and from the Swiss Frontier to the Rhine Delta. With Contour Lines and Layered Colouring. Style B. Mounted in Sections, without Names. (Oxford: University Press.) 12s. 6d. net.
 Our British Snails. By Rev. Canon J. W. Horsley. Pp. 69. (London: S.P.C.K.) 1s. net.
 The Beothucks or Red Indians: the Aboriginal Inhabitants of Newfoundland. By J. P. Howley. Pp. xx+348+plates xxxvii. (Cambridge: At the University Press.) 21s. net.
 The Evolution of the Potter's Art. By T. Sheppard. Pp. xx. (London: A. Brown and Sons, Ltd.)

NO. 2382, VOL. 95]

DIARY OF SOCIETIES.

FRIDAY, JUNE 25.
 PHYSICAL SOCIETY, at 5.—A Theory of the Electrical Resistance of Metals: Sir J. J. Thomson.—An Unbroken Alternating Current for Cable Telegraphy: Lt.-Col. Squier.
MONDAY, JUNE 28.
 ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—The Map of Europe and the Near East, compiled by the Society for the General Staff: A. R. Hinks.
FRIDAY, JULY 2.
 GEOLOGISTS' ASSOCIATION, at 8.—A Provisional Hypothesis to Explain the Occurrence of the Various Types of Fossil Man: Prof. A. Keith.
SATURDAY, JULY 3.
 ARISTOTELIAN SOCIETY, BRITISH PSYCHOLOGICAL SOCIETY, and the MIND ASSOCIATION, at 6.—Joint meeting. Mr. Bertrand Russell's Theory of Judgment: Prof. G. F. Stout.
MONDAY, JULY 5.
 ARISTOTELIAN SOCIETY, BRITISH PSYCHOLOGICAL SOCIETY, and the MIND ASSOCIATION, at 4.—Joint meeting. The Import of Propositions: Miss Constance Jones, Dr. Bernard Bosanquet, and Dr. F. C. S. Schiller.

CONTENTS.

	PAGE
Chemistry of Petroleum. By J. B. C.	447
Significance of Sexual Reproduction in Plants	447
Case-Hardening. By Prof. H. C. H. Carpenter	448
Our Bookshelf	449
Letters to the Editor:—	
The Mobilisation of Science.—Sir T. K. Rose	450
The Magnetic Storm and Solar Disturbance of June 17, 1915.—Rev. A. L. Cortie, S.J.	450
Man's True Thermal Environment.—G. W. Grabham	451
A Continuous Spectrum in the Ultra-Violet.—Prof. James Barnes	451
The Names of Physical Units.—Albert Campbell	451
Training for Scientific Research.—Dr. T. S. Patterson	452
Extinguishing Fires.—C. Carus-Wilson	452
The Synthetic Production of Nitric Acid	452
The Royal Dublin Society. (Illustrated.)	454
Dr. J. W. Jenkinson	456
Notes	457
Our Astronomical Column:—	
Comet Notes	462
Orbits of Eclipsing Binaries	462
The Variation of Latitude during 1914'0-1915'0	462
The Society for Practical Astronomy	462
Aiming with the Rifle. (Illustrated.) By Edwin Edser	462
The South-Eastern Union of Scientific Societies	465
Osmotic Pressure and the Properties of Solutions. By T. M. L.	466
Electrons and Heat. By Prof. O. W. Richardson, F.R.S.	467
University and Educational Intelligence	470
Societies and Academies	471
Books Received	474
Diary of Societies	474

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.