

Bericht über die Tätigkeit des Königlich Preussischen Meteorologischen Instituts im Jahre 1912. Pp. 53+172+3 plates. (Berlin: Behrend and Co.) 6 marks.

Bibliotheca Geographica. Band xvii. Jahrgang 1908. Pp. xvi+533. (Berlin: W. H. Kühl.)

Iowa Geological Survey. Vol. xxi. Annual Reports, 1910 and 1911, with Accompanying Papers Prepared in Cooperation with the U.S. Geological Survey. Pp. xvi+1214+xviii plates. (Des Moines: Iowa Geological Survey.)

Traité Complet d'Analyse chimique appliquée aux Essais Industriels. By Profs. J. Post and B. Neumann. Deux. Edition Française, Entièrement Refondue. By G. Chenu and M. Pellet. Tome Troisième. Second Fasc. Pp. 465-902+v. (Paris: A. Hermann et Fils.) 15 francs.

Traité de Chimie Minérale. By H. Erdmann. Translated by Prof. A. Corvisy. Tome Premier. Pp. iv+559. (Paris: A. Hermann et Fils.) 12 francs.

A New Philosophy: Henri Bergson. By E. Le Roy. Translated by V. Benson. Pp. x+235. (London: Williams and Norgate.) 5s. net.

Myths of the Modocs. By J. Curtin. Pp. xii+389. (London: Sampson Low and Co., Ltd.) 12s. 6d. net.

In the Lap of the Lammermoors. By W. M'Conachie. Pp. xii+315. (Edinburgh and London: W. Blackwood and Sons.) 5s. net.

The Belief in Immortality and the Worship of the Dead. By Prof. J. G. Frazer. Vol. i. Pp. xxi+495. (London: Macmillan and Co., Ltd.) 10s. net.

Das Miocän von Eggenburg. By Dr. F. X. Schaffer. (Abhandlungen der K.K. Geologischen Reichsanstalt. Band xxii. Heft 2.) Pp. 129-193+12 plates. (Vienna: k.k. Geologischen Reichsanstalt.) 16 kronen.

The Deciding Voice of the Monuments in Biblical Criticism. By Dr. M. G. Kyle. Pp. xviii+320. (London: S.P.C.K.) 4s. net.

Aus Süd-Brasilien. By Dr. W. Breitenbach. Pp. xvi+251. (Brackwede i.W.: Dr. W. Breitenbach.) 3 marks.

The Chemistry of Dyeing. By Dr. J. K. Wood. Pp. vii+80. (London: Gurney and Jackson.) 1s. 6d. net.

Volume and Surface Integrals Used in Physics. By J. G. Leathem. Second edition. Pp. iv+73. (Cambridge University Press.) 2s. 6d. net.

Machine Construction and Drawing. By A. E. Ingham. Pp. xii+143. (London: G. Routledge and Sons, Ltd.) 1s. 6d. net.

Vorträge über Deszendenztheorie gehalten an der Universität zu Freiburg im Breisgau. By Prof. A. Weissmann. Dritte Auflage. Erster Band und Zweiter Band. Pp. xiv+342+vii+354+3 plates. (Jena: G. Fischer.) 13 marks.

Die Paläobotanische Literatur. Edited by W. J. Longmans. Dritter Band. Die Erscheinungen der Jahre 1910 und 1911 und Nachträge für 1909. Pp. 569. (Jena: G. Fischer.) 26 marks.

DIARY OF SOCIETIES.

THURSDAY, MARCH 27.

CONCRETE INSTITUTE, at 7.30.—Props and Beams in Mines: Prof. S. M. Dixon.

MONDAY, MARCH 31.

INSTITUTE OF ACTUARIES, at 5.—The Estimated Age Distribution of the Indian Population, as Recorded at the Census of 1911, and the Estimated Rates of Mortality, Deduced from a Comparison of the Census Returns for 1901 and 1911: T. G. Ackland.

TUESDAY, APRIL 1.

ROYAL INSTITUTION, at 3.—Recent Discoveries of Early Man: Dr. A. S. Woodward.

RÖNTGEN SOCIETY, at 8.15.—The Physiological Principles of Internal Radium Therapy: Prof. Saubermann, Berlin.—The Radiographic Epi-

scope, a New Instrument for the Utilisation of the Single X-Ray Print: Dr. Cotton.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Yield of Various Catchment-Areas in Scotland: W. C. Reid.—Measurement of the Flow of the River Derwent, Derbyshire: E. Sandeman.

WEDNESDAY, APRIL 2.

ENTOMOLOGICAL SOCIETY, at 8.

SOCIETY OF PUBLIC ANALYSTS, at 8.—The Moisture in some English, Colonial and Foreign Butters during 1910-1912, with a Note on the Mitchell-Walker Moisture Test: L. Gowing-Scopes.—Egyptian Butter and Semna: S. H. Trimen.—A Simple Test for Differentiating between Cocoa-Butter and "Green" Butters: C. Revis and E. Richards Bolton.—The Correct Way to Use Glycerine-Jelly in Mounting Microscopical Objects: L. W. Stansell.—A New Apparatus for Maintaining Constant Temperatures: F. H. Dupré and P. V. Dupré.

BRITISH ASTRONOMICAL ASSOCIATION, at 5.

THURSDAY, APRIL 3.

ROYAL INSTITUTION, at 3.—The Bridge into Life: Dr. E. Frankland Armstrong.

LINNEAN SOCIETY, at 8.—Some Forms of *Alchemilla vulgaris*: C. E. Salmon.—Report on *H.M.S. Sealark*, Calcare: Prof. A. Dendy.—*Embia major*, sp. nov., from the Himalayas: Prof. A. D. Imms.—A Free-swimming Nauplioid Stage in *Palinurus*: Dr. J. D. F. Galchrist.—The Classification of the Order Symphyla: R. S. Bagnall.

INSTITUTION OF MECHANICAL ENGINEERS, at 8.—Further Discussion: Some Effects of Superheating and Feed-water Heating on Locomotive Working: F. H. Trevithick and P. J. Cowan.

FRIDAY, APRIL 4.

ROYAL INSTITUTION, at 9.—The Spectroscope in Organic Chemistry: Dr. J. J. Dobbie.

GEOLOGISTS' ASSOCIATION, at 8.—The Geology of the Nottingham District: B. Smith.

CONTENTS.

	PAGE
Forest Physiography. By J. W. Mackay	79
The Highway of Animal Evolution	79
Zoology and Natural History. By R. I. P.	80
Metallurgical Industries	82
Our Bookshelf	83
Letters to the Editor:—	
The Falling Birth-rate.—J. Anderson; Prof. Karl Pearson, F.R.S.	84
The Radio-Elements and the Periodic Law.—Norman R. Campbell	85
The Occurrence of the Archannelid, <i>Protodrilus</i> , on the South Coast of England.—J. H. Orton	85
On the Gain of Definition obtained by Moving a Telescope.—M. E. J. Gheury	86
Four-horned Sheep.—H. J. Elwes, F.R.S.	86
The Experimental Study of Fluid Motion. (<i>Illustrated</i> .) By C. G. E.	86
Livingstone as a Man of Science. By Sir H. H. Johnston, G.C.M.G., K.C.B.	89
Plant Diseases and Insect Pests	90
Notes	90
Our Astronomical Column:—	
Spectrum of the Pleiades Nebula	94
Chromospheric (Solar) Lines in the Spectrum of ϕ Persei	94
What Becomes of the Light of the Stars?	95
Publications of the Strassburg University Observatory	95
Tide Tables	95
Stars with Variable Radial Velocities	95
The Teaching of Mathematics. By David Beveridge Mair	95
The Rusting of Iron	97
Southern Hemisphere Seasonal Correlations	98
Some Methods of Magnifying Feeble Signalling Currents. (<i>With Diagrams</i> .) By S. G. Brown	98
University and Educational Intelligence	100
Societies and Academies	101
Books Received	103
Diary of Societies	104

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.