

Pp. xii+107. (London: Longmans and Co.) 3s. 6d. net.

A Study of Metabolism in Severe Diabetes. By F. G. Benedict and E. P. Joslin. Pp. vi+135. (Washington: Carnegie Institution.)

Pierre du Ryer, Dramatist. By Prof. H. C. Lancaster. Pp. v+182. (Washington: Carnegie Institution.)

Guide to the Materials for American History to 1783, in the Public Record Office of Great Britain. Vol. i., The State Papers. By Prof. C. M. Andrews. Pp. xi+346. (Washington: Carnegie Institution.)

The Classics of International Law. Edited by J. B. Scott. De Jure et Officiis Bellicis et Disciplina Militari Libri III. Vol. i., Reproduction of the First Edition. With introduction by Dr. J. Westlake. Pp. xxvii+227. Vol. ii., Translation. By Dr. J. P. Bate. Pp. xii+250. (Washington: Carnegie Institution.)

Scientific Papers. By J. Y. Buchanan. Vol. i. Pp. xii+15 papers. (Cambridge: University Press.) 10s. 6d. net.

Klimatographie von Salzburg. By Dr. A. Fessler. Pp. 87+map. (Vienna: Gerold and Co.)

Report of the Conference on the Education of the Domiciled Community in India, Simla, July, 1912. Pp. iv+202. (Calcutta: Superintendent Government Printing, India.) 1s. 6d.

DIARY OF SOCIETIES.

THURSDAY, FEBRUARY 13.

ROYAL SOCIETY, at 4.30.—A Cassegrain Reflector with Corrected Field: Prof. R. A. Sampson.—Studies of the Processes Operative in Solutions. XXV. The Influence of Non-electrolytes on Solubility. The Nature of the Processes of Dissolution and Precipitation: Prof. H. E. Armstrong and Dr. J. V. Eyre.—Studies of the Processes Operative in Solutions. XXVI. The Disturbance of the Equilibrium in Solutions of Fructose by Salts and by Non-electrolytes: E. E. Walker.—The Excitation of γ Rays by the α Rays of Ionium and Radiothorium: J. Chadwick and A. S. Russell.—Load Extension Diagrams taken with the Optical Load Extension Indicator: Prof. W. E. Dalby.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Some Factors in Parallel Operation: A. R. Everest.

CONCRETE INSTITUTE, at 7.30.—Three Steel-frame Structures in London: S. Bylander.

ROYAL SOCIETY OF ARTS, at 4.30.—Kathiawar: Sir W. Lee-Warner.—MATHEMATICAL SOCIETY, at 8.—Figures in n -Dimensional Space analogous to Orthocentric Tetrahedra: T. C. Lewis.—A Property of the ζ -Function: J. E. Littlewood.—The Summability of a Fourier's Series: G. H. Hardy.—Trigonometrical Series which Converge Nowhere or almost Nowhere: G. H. Hardy and J. E. Littlewood.—A Theorem Concerning Power Series: H. Bohr.—The Theorem of Quadratic Reciprocity: P. J. Heawood.—The Irreducibility of Legendre's Polynomials: J. B. Holt.

FRIDAY, FEBRUARY 14.

ROYAL INSTITUTION, at 9.—New Gyroscopes and their Applications: Prof. Andrew Gray.

PHYSICAL SOCIETY, at 8.—Annual General Meeting.—The Dynamics of Pianoforte Touch: Prof. G. H. Bryan.

INSTITUTION OF MECHANICAL ENGINEERS, at 8.—Annual General Meeting.—Modern Condensing Systems: A. E. Leigh Scanes.

ROYAL ASTRONOMICAL SOCIETY, at 5.—Anniversary Meeting.

MALACOLOGICAL SOCIETY, at 8.—Annual Meeting

SATURDAY, FEBRUARY 15.

ROYAL INSTITUTION, at 3.—The Properties and Constitution of the Atom: Sir J. J. Thomson, O.M.

MONDAY, FEBRUARY 17.

ROYAL SOCIETY OF ARTS, at 8.—The Art of Miniature Painting: C. Davenport.

ARISTOTELIAN SOCIETY, at 8.—The Analysis of Volition, treated as a Study of Psychological Methods and Principles: Prof. R. F. A. Hoernle.

VICTORIA INSTITUTE, at 4.30.—The Antecedent Probability of a Revelation: Ven. Archdeacon Sinclair.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Further Discussion: Durban Harbour, South Africa: C. W. Methven.—Natal Harbour Works: C. J. Crofts.

ZOOLOGICAL SOCIETY, at 8.30.—Diagnoses of New Species and Varieties of Agnathous Mollusca from Equatorial Africa: H. B. Preston.—The Dwarf Buffalo of Southern Nigeria, with a Revision of the Dwarf Buffaloes of Western Africa: R. Lydekker.—Notes on the Habits of Certain Reptiles in the Lagos District: W. A. Lamborn.—Two British Entomozoa belonging to the Orders Copepoda and Ostracoda: Dr. G.

Stewardson Brady.—The Gorgonopsia, a Suborder of the Mammal-like Reptiles: Dr. R. Broom.

WEDNESDAY, FEBRUARY 19.

ROYAL SOCIETY OF ARTS, at 8.—The Adulteration of Jam: E. Marriage.

ROYAL MICROSCOPICAL SOCIETY, at 8.—Report upon the Lenses of the late Joseph Jackson Lister: E. J. Spitta.—Demonstration on the Use of the Centrifuge in Pond-life Work: D. J. Scourfield.—Slides showing the Development of the Fairy Shrimp (*Chirocephalus diaphannus*): C. Lees Cortius.

ROYAL METEOROLOGICAL SOCIETY, at 7.30.—Periodical Variations of the Velocity of the Wind at Oxford: W. H. Robinson.—Rate of Ascent of Pilot Balloons: J. S. Dines.—Meteorological Conditions in a Field Crop: W. L. Balls.

THURSDAY, FEBRUARY 20.

ROYAL SOCIETY, at 4.30.—Probable Papers: Studies on Enzyme Action. XIX. Urease, a Selective Enzyme. II. Observations on Accelerative and Inhibitive Agents: Prof. H. E. Armstrong, M. S. Benjamin, and E. Horton.—Nervous Rhythm arising from Rivalry of Antagonistic Reflexes; Reflex Stepping as Outcome of Double Reciprocal Innervation: Prof. C. S. Sherrington.—The Liberation of Ions and the Oxygen Tension of Tissues during Activity: Dr. H. E. Roaf.—Contributions to the Bio-chemistry of Growth. The Glycogen Content of the Liver of Rats Bearing Malignant Growths: W. Cramer and J. Lochhead.—Changes in the Glomeruli and Tubules of the Kidney accompanying Activity: Prof. T. G. Brodie and J. J. Mackenzie.

INSTITUTION OF MINING AND METALLURGY, at 8.

FRIDAY, FEBRUARY 21.

ROYAL INSTITUTION, at 9.—Horticultural Investigations at the Woburn Experimental Fruit Farm: Spencer U. Pickering.

SATURDAY, FEBRUARY 22.

ROYAL INSTITUTION, at 3.—The Properties and Constitution of the Atom: Sir J. J. Thomson, O.M.

CONTENTS.

PAGE

The Nernst Festschrift. By Prof. F. G. Donnan, F.R.S.	641
Function Theory. By G. B. M.	642
A Yearbook of Science	643
Geographical Works	643
Our Bookshelf	644
Letters to the Editor:—	
On the Appearance of Helium and Neon in Vacuum Tubes.—Sir J. J. Thomson, O.M., F.R.S.	645
The Water surface "Halo."—Prof. A. M. Worthington, C.B., F.R.S.	647
An X-Ray Fringe System.—Prof. C. G. Barkla, F.R.S.; G. H. Martyn	647
Atmospheric Potential.—Evan M'Lennan	647
The Upper Trade and Antitrade Winds.—Dr. Wilhelm Krebs	648
Nomenclature at the Zoological Congress.—Prof. T. D. A. Cockerell	648
The Discovery of a Human Tooth in the Cave Earth in Kent's Cavern.—Arthur R. Hunt	649
The British Antarctic Expedition	649
Eyesight and Typography	651
Investigation of Atmospheric Pollution	651
Lord Crawford, F.R.S.	652
Origins of Helium and Neon	653
Notes	655
Our Astronomical Column:—	
Latitude Distribution of Absorption Markings on Ha Spectroheliograms	658
The Spectrum of the Corona	658
The Temperatures of Stars	658
One Hundred New Double Stars	659
Contributions to American Economic Geology. By J. W. G.	659
Recent Work on Invertebrates. By R. L.	660
Migrations between Australia and America	660
University and Educational Intelligence	661
Societies and Academies	662
Books Received	665
Diary of Societies	666

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.