

## FOREIGN.

Publications of the Manila Observatory. Vol. 1, No. 9: Meteorites in the Philippines. By the Rev. Miguel Selga. Pp. 52+2 plates. (Manila: Bureau of Printing.)

Memoirs of the College of Science, Kyoto Imperial University. Series A, Vol. 13, No. 4, July. Pp. 281-322+4 plates. (Tokyo and Sendai: Maruzen Co., Ltd.) 1.00 yen.

Five Years of Research in Industry, 1926-1930: a Reading List of Selected Articles from the Technical Press. Compiled by Clarence J. West. Pp. 91. (New York: National Research Council.) 50 cents.

Ministry of Agriculture, Egypt: Cotton Research Board. Seventh Report, 1928. Pp. v+57+50 plates. (Cairo: Government Press.) 15 P.T.

U.S. Department of Agriculture. Technical Bulletin No. 195: Control of the Mountain Pine Beetle in Lodgepole Pine by the use of Solar Heat. By J. E. Patterson. Pp. 20. (Washington, D.C.: Government Printing Office.) 5 cents.

## CATALOGUES.

The "Clarostat" Book. Fifth edition. Pp. 48. (Liverpool and London: Claude Lyons, Ltd.)

A Large Selection of Books on most branches of Literature, including Notable Works from well-known Libraries and other Sources, recently Purchased. (Catalogue No. 529.) Pp. 108. (London: Francis Edwards, Ltd.)

Wild-Barfield High-Temperature Electric Furnaces for the Heat Treatment of High Speed Steel and General Purposes requiring temperatures up to 1400° C. (Section K.) Pp. 12. (London: Wild-Barfield Electric Furnaces, Ltd.)

Pituitary (Posterior Lobe) Extract B.D.H. Pp. 16. (London: The British Drug Houses, Ltd.)

Surveying and Drawing Instruments and Appliances. (Catalogue No. 564.) Pp. 266. (London: Casella and Co., Ltd.)

## Diary of Societies.

## WEDNESDAY, OCTOBER 1.

SOCIETY OF PUBLIC ANALYSTS (at the Chemical Society), at 8.—G. W. Baker: Scientific Evidence relating to Firearms, with Special Reference to a Recent Murder Trial. (As the author cannot be present, Mr. G. H. Perry has kindly consented to read the paper and to demonstrate the evidence.)—J. W. Croxford: The Composition of Rye Oil.—G. E. Lester Smith: The Determination of Unsaponified Oil in Soap or Fatty Acids.

## THURSDAY, OCTOBER 2.

SOCIETY OF CHEMICAL INDUSTRY (Bristol Section) (in the Chemical Department, The University, Bristol), at 7.30.—Prof. J. W. Hinchley: Air and Water.

## FRIDAY, OCTOBER 3.

JUNIOR INSTITUTION OF ENGINEERS, at 7.30.—S. J. Crispin: The Development of the Bridge.

## SATURDAY, OCTOBER 4.

ROYAL SANITARY INSTITUTE (in the Assembly Room, Town Hall, Hereford), at 10.—Councillor Mrs. Luard: The Place of Women in Local Government.—G. H. Jack: The Preservation of the Countryside.—Councillor J. R. Barker: The Health Authority and the Milk Supply. INSTITUTE OF BRITISH FOUNDRYMEN (Lancashire Branch) (at the College of Technology, Manchester), at 4.—R. W. Stubbs: Presidential Address.

## MONDAY, OCTOBER 6.

SOCIETY OF ENGINEERS (at Burlington House, Piccadilly), at 6.—Lieut. Col. H. C. Hawkins: Some Impressions of America.

IRON AND STEEL INSTITUTE (Joint Meeting with the Cleveland Institute of Engineers) (at the Cleveland Technical Institution, Middlesbrough), at 7.30.—H. C. Wood: Open-hearth Furnace Steelworks: a Comparison of British and Continental Installations and Practice.—J. Šarek: What Reasons compelled the Prague Ironworks to Introduce Thin-walled Blast-furnaces.—A. Kříž: The Heterogeneity of an Ingot made by the Harmet Process.—L. W. Schuster: The Effect of Contamination by Nitrogen on the Structure of Electric Welds.—O. Quadrat: A Contribution on the Problem of the Analysis of Basic Slags and the Representation of their Composition in a Triangular Diagram.

## TUESDAY, OCTOBER 7.

INSTITUTE OF METALS (Birmingham Local Section) (in Chamber of Commerce, Birmingham), at 7.—P. G. Bamford: Chairman's Address.

IRON AND STEEL INSTITUTE (Joint Meeting with the Lincolnshire Iron and Steel Institute) (at the Secondary Schools, Doncaster Road, Scunthorpe), at 7.—F. Bainbridge: Developments in Fuel Economy at Skinningrove.—J. A. Jones: Chromium-Copper Structural Steels.

IRON AND STEEL INSTITUTE (Joint Meeting with the Sheffield Metallurgical Association) (at 198 West Street, Sheffield), at 7.30.—D. F. Campbell: High-Frequency Steel Furnaces.—W. H. Hatfield: Permanence of Dimensions under Stress at Elevated Temperatures.—A. Kříž: The Heterogeneity of an Ingot made by the Harmet Process.—H. C. Wood: Open-hearth Furnace Steelworks: a Comparison of British and Continental Installations and Practice.

## WEDNESDAY, OCTOBER 8.

ILLUMINATING ENGINEERING SOCIETY (at 15 Savoy Street, W.C.2), at 6.30.—Report on Progress in Illuminating Engineering, and Display of Exhibits Illustrating Recent Developments in Illumination.

No. 3178, Vol. 126]

INSTITUTION OF CHEMICAL ENGINEERS (in the Chemical Society's Rooms), at 8.—Dr. Saral J. Kohli: The Effect of Surface Conditions on Heat Transmission.

## THURSDAY, OCTOBER 9.

ROYAL AERONAUTICAL SOCIETY (in the Lecture Hall of the Royal Society of Arts), at 6.30.—C. R. Fairey: The Growth of Aviation.

INSTITUTE OF METALS (London Local Section) (at Society of Motor Manufacturers and Traders, Ltd., 83 Pall Mall), at 7.30.—W. T. Griffiths: Chairman's Address.

INSTITUTION OF WELDING ENGINEERS (at the Engineers' Club, Albert Square, Manchester), at 7.45.—J. Ryder: The Training of Operators in the Welding and Cutting Industries.

## FRIDAY, OCTOBER 10.

ROYAL SANITARY INSTITUTE (in the Guildhall, Nottingham), at 4.30.—Alderman A. R. Atkey: River Pollution.—Dr. L. P. Lockhart: Industrial Medicine in Relation to Public Health.

IRON AND STEEL INSTITUTE (Joint Meeting with the Local Branch of the South Wales Institute of Engineers) (at the Royal Metal Exchange, Swansea), at 7.—A. Kříž: The Heterogeneity of an Ingot made by the Harmet Process.—H. C. Wood: Open-hearth Furnace Steelworks: a Comparison of British and Continental Installations and Practice.—O. Quadrat: A Contribution on the Problem of the Analysis of Basic Slags and the Representation of their Composition in a Triangular Diagram.

JUNIOR INSTITUTION OF ENGINEERS, at 7.30.—S. Dunlop: The Refining of Cane Sugar.

INSTITUTE OF METALS (Sheffield Local Section) (in Non-Ferrous Section, Applied Science Department, University, Sheffield), at 7.30.—Conjoint Meeting for the Sixth "Sorby" Lecture.

## SATURDAY, OCTOBER 11.

INSTITUTE OF BRITISH FOUNDRYMEN (Lancashire Branch, Burnley Section) (at the Technical College, Burnley).—F. Griffiths: Belgian Moulding Sands in the Iron Foundry.

## PUBLIC LECTURES.

## MONDAY, OCTOBER 6.

ROYAL INSTITUTE OF PUBLIC HEALTH, at 4.—Prof. W. H. Park: Pneumonia: The Types of Pneumococci in Adults and Children and their Significance (Harben Lecture 1).

## TUESDAY, OCTOBER 7.

ROYAL INSTITUTE OF PUBLIC HEALTH, at 4.—Prof. W. H. Park: Pneumonia: The Epidemiology; and the Refining of Antipneumococcus Serum (Harben Lecture 2).

KING'S COLLEGE, LONDON, at 5.—Dr. J. W. Pickering: Blood Plasma and Platelets. (Succeeding Lectures on Oct. 14, 21, and 28.)

## WEDNESDAY, OCTOBER 8.

ROYAL INSTITUTE OF PUBLIC HEALTH, at 4.—Prof. W. H. Park: Pneumonia: The Therapeutic Use of Vaccines and Antibacterial Sera (Harben Lecture 3).

## THURSDAY, OCTOBER 9.

KING'S COLLEGE, LONDON, at 5.15.—Rev. Dr. N. Sykes: The Age of Reaction and Reconstruction (1815-65).

UNIVERSITY COLLEGE, LONDON, at 5.30.—Prof. H. Spemann: Introduction to the Theory and Practice of Experimental Embryology (in English). (Succeeding Lecture on Oct. 10.)

## CONGRESS.

## SEPTEMBER 29 TO OCTOBER 1.

FARADAY SOCIETY (in Laboratory of Physical Chemistry, Cambridge).—Discussion on Colloid Science applied to Biology.

Monday, Sept. 29, 2 to 4 and 4.30 to 7.—Equilibrium in Protein Systems. In Chair—Sir William Hardy, who will introduce the Discussion.

Prof. A. V. Hill: Membrane-Phenomena in Living Matter—Equilibrium or Steady State.

Dr. R. A. Gortner: The State of Water in Colloidal and Living Systems.

Prof. E. J. Bigwood: Distribution of Diffusible Ions in Gels.

Prof. W. Pauli: The Behaviour of Proteins towards other Colloids and towards Electrolytes.

Prof. F. F. Nord: The Biological Significance of the Physical Influence of Gases on Colloids.

Tuesday, Sept. 30, 10 A.M. to 11.15 A.M., 11.30 A.M. to 1 P.M., 2.30 to 4, and 4.30 to 7; and

Wednesday, Oct. 1, 10 A.M. to 1 P.M.—In Chair—Sir F. Gowland Hopkins, who will introduce the Discussion.

Dr. Honor B. Fell and Dr. Wilmer, followed by Kinematograph Studies of Living Cells by Dr. Canti: The Structure, Behaviour and Physiological Characteristics of Vertebrate Cells cultivated *in vitro*.

Prof. E. Faure-Fremiet: The Kinetics of Living Matter.

Prof. R. A. Peters: Surface Structure in the Integration of Cell Activity.

Prof. O. Warburg: Surface Reactions in Living Cells.

Prof. H. Pfeiffer: Isoelectric Point of Cells and Tissues.

Dr. A. von Muralt and Dr. J. Edsall: Double Refraction in Protein Systems.

Dr. J. H. Quastel: The Mechanism of Bacterial Action.

Other speakers will be: Prof. E. F. Burton, Prof. J. Duclaux, Prof. H. Euler, Prof. H. Freundlich, Prof. H. R. Kruyt, Prof. H. Lundegardh, Dr. P. Lecomte du Nouy, Prof. W. J. V. Osterhout, Prof. W. Ostwald, Prof. and Mme. Jean Roche, Dr. Straub, and Prof. T. Svedberg.