with glucose and methylene blue, placed in an evacuated bulb, and exposed to sunlight, oxidises the glucose and reduces the methylene blue simultaneously.-J. Orcel: The prochlorites of corundum rocks. These minerals, ten analyses of which are given, are divided into two sub-groups, ripidolites defined by the ratio MgO/FeO = 3 and grochauite, with a ratio MgO/FeO=10.—Pierre Viennot: The Labourd stratum, French Basque region.—Léon Moret: The facies of the Senonian sponges of the Beausset basin and their conditions of deposit.— C. Kilian: The Immidir, branch of the "Enceinte Tassilienne,'' Central Sahara.—René Jeannel : Sketch of the stocking of Europe by the species of the genus Choleva.—R. Anthony and F. Villemin: The lobation of the fœtal kidney in the primates.-Radu Vladesco: Diffraction of light by the eyelashes. The diffraction bands seen under certain conditions are due to the scales forming the outer envelope of the hair.-J. Lopez-Lomba and Mme. Randoin: Contribution to the study of B avitaminosis in the pigeon.-L. M. Bétances: Cytohemato-genesis in the Metazoa. -A. Weber: The inhibiting action of the internal medium of batrachians on the fecundation and the parthenogenetic activation of their eggs. In Rana fusca the internal medium, lymph or blood, behaves towards the activated egg as a toxic substance, to which the egg becomes permeable after puncture, while previously it was immunised against this toxic property.-Maurice Aubertot: The dissemination and transport of nematodes of the genus Rhabditis by Diptera.-R. Courrier: Remarks on the fecundation membrane of the egg of the sea-urchin (Paracentrotus lividus).—Edouard Chatton and Mme. M. Chatton: The influence of bacterial factors upon nutrition: the multiplication and sexuality of the infusoria.-Robert Ph. Dollfus: The cestode of the fine pearls of the Meleagrina of Nossi-Bé.

# Official Publications Received.

Journal and Proceedings of the Royal Society of Western Australia.

Vol. 8, 1921–1922. Pp. x+52. (Perth.) 5s.

Health for School Children: Report of Advisory Committee on Health Education of the National Child Health Council, Washington, D.C. (School Health Studies, No. 1: Department of the Interior, Bureau of Education.) Pp. 75. (Washington: Government Printing Office.)

10 cents.

Department of the Interior: Bureau of Education. Bulletin, 1922, No. 36: Report of a Survey of the University of Arizona. Pp. viii+89. Bulletin, 1922, No. 50: Educational Directory, 1922-1023. Pp. iii+179. 15 cents. (Washington: Government Printing Office.)

Experimental and Research Station, Nursery and Market Garden Industries' Development Society, Ltd., Turner's Hill, Cheshunt, Herts. Eighth Annual Report, 1922. Pp. 66. (Cheshunt.)

U.S. Department of Agriculture: Weather Bureau. Monthly Weather Review. Supplement No. 19: Thermal Belts and Fruit Growing in North Carolina. By Henry J. Cox. Appendix: Thermal Belts from the Horticultural Viewpoint. By W. N. Hutt. Pp. v+106. (Washington: Government Printing Office.) 50 cents.

Annual Report of the Council of the Yorkshire Philosophical Society for the Year 1922, presented to the Annual Meeting, February 12th, 1923. Pp. 63. (York.)

# Diary of Societies.

SATURDAY, MAY 26.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.-J. B. McEwen: Musical Education.

MONDAY, May 28.

FARADAY SOCIETY (at Institution of Electrical Engineers), at 3.—General Discussion on the Physical Chemistry of the Photographic Process.—Prof. W. D. Bancroft: Introductory Address—The Theory of Photography.—Section I. The Physical Chemistry of the Vehicle and of the Emulsion.—Dr. T. Slater Price: Introductory Address.—Prof. R. Luther: Effect of Treatment of Gelatin on the Sensitivity of the Emulsion.—E. P. Sheppard, F. A. Elliott, and S. S. Sweet: Notes on the Photographic Chemistry of Gelatin.—E. P. Wightman, A. P. H. Trivelli, and S. E. Sheppard: Structure of the Photographic Emulsion.—Dr. C. Winther: The Solubility of Silver Bromide in Ammonium Bromide and Gelatin.—At 5.—Section II. Reactions of the Plate during Exposure (including Latent Image).—Dr. F. C. Toy: Introductory Address—The Mechanism of the Latent Image Formation.—S. E. Sheppard, A. P. H. Trivelli, and E. P. Wightman: Exposure Theories.—Prof. R. Luther: The Relation between the Size of Silver Bromide Grains and Sensitivity.—W. C. Clark: Sensitivity of Silver Halide Grains in a Photographic Emulsion.—Dr. J. Errera: The Influence of MONDAY, MAY 28.

the Dispersion of Asphalte Solutions on their Light Sensitiveness.—
Section III. Development and Characteristics of the Developed Plate (including Optical Properties, Sensitometry).—O. Bloch: Introductory Address.—Plate Sensitometry.—Prof. R. Luther: The Characteristic Curve.—Prof. R. Luther: Proportional Reducting Methods.—Prof. E. Goldberg: The Use of the Neutral Grey Wedge in Sensitometry.—T. Thorne-Baker: The Effect of Radiations of very small Wave-lengths on Optical Opacity and Gamma.—S. E. Sheppard and F. A. Elliott: The Theory of Development.—L. A. Jones: Recent Progress in the Sensitometry of Photographic Materials.—L. A. Jones: Some New Instruments for use in Photographic Sensitometry.—F. E. Ross: Optical Properties of the Photographic Emulsion.—At 8.—Section IV. Adsorption Reaction in Photographic Films.—Dr. Luppo-Cramer: Introductory Address. — Dr. Luppo-Cramer: Nucleus Isolation and Desensitisation.—A. L. Lumiere and A. Seyewetz: The Chemistry of the Red Toning of Sulphide-toned Prints.—Prof. R. Luther: Adsorption of Cupric Ion by Silver Bromide: Estimation of Traces of Copper by a New Catalytic Method.—Prof. R. Luther: Copper as Catalyst in Photographic Processes: Catalytic Effects in the Carbon Process.—E. R. Bullock: Theory of Photographic Due Mordanting.—Dr. J. Plotnikov: Future Problems in Photography.
ROYAL INSTITUTION OFIGRART BRITAIN, at 3.—Sir Walford Davies: Speech Rhythm in Vocal Music (2).
ROYAL GEOGRAPHICAL SOCIETY (Anniversary Meeting) (at Ecolian Hall), at 5.30. — Presidential Address.—Presentation of Medals and other awards, etc.

at 5.30. — Presidential Address, — Presentation of Medias and Conditional Address, etc.

ROYAL INSTITUTE OF BRITISH Architecture, at 8.—G. Scott: Tradition and Originality in Italian Renaissance Architecture.

Aristotellan Society (at University of London Club, 21 Gower) Street), at 8.—C. D. Burns: The Contact of Minds.

ROYAL Society of Medicine (Odontology Section) (Annual General Meeting), at 8.—Dr. S. Wallace: Observations on the Progress of Preventive Dentistry.

\*\*TUESDAY\*\*, May 29.\*\*

TUESDAY, MAY 29. ROYAL INSTITUTION OF GREAT BRITAIN, at 3 .- Prof. W. M. Flinders Petrie: Discoveries in Egypt (2).
ROYAL SOCIETY OF MEDICINE (Medicine Section), at 5.30.—Annual General

Meeting.
ZOOLOGICAL SOCIETY OF LONDON, at 5.30.—C. Tate Regan: The Skeleton of Lepidosteus, with Remarks on the Origin and Evolution of the Lower Neopterygian Fishes.—Dr. C. F. Sonntag: The Comparative Anatomy of the Tongues of the Mammalia. IX. Edentat, Dermoptera, and Insectivora.—S. Maulik: New Cryptosome Beetles.

#### WEDNESDAY, MAY 30,

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ROYAL SOCIETY OF ABI'S, at 4.30.— A. J. Sewell: The History and Development of the Perambulator and Invalid Carriage.

ROYAL MICHOSCOPICAL SOCIETY (Industrial Applications of the Microscope Section), at 7.—M. T. Denne: An Improved Apparatus for the Production of Photomicrographs.—C. A. Newton: A New Form of Microscope Lamp for Easy Exchange of Paralleliser and Polariser.—M. P. Swift: A Hutchinson Universal Goniometer.—At 8.—J. M. Coon: The Microscopical Examination of China Clay.—H. B. Milner: The Microscopical Investigation of Sands for various Industrial Purposes.

#### THURSDAY, MAY 31.

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ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Sir William M. Bayliss: The Nature of Enzyme Action (1).

ROYAL SOCIETY, at 4.30.—Dr. E. Griffiths and Dr. G. W. C. Kaye: The Measurement of Thermal Conductivity, No. 1.—Dr. G. W. C. Kaye: The Measurement of Thermal Conductivity, No. 1.—Dr. G. W. C. Kaye: The Magnetic Field and Return Current round a Submarine Cable carrying Alternating Current.—Prof. S. Russ: The Effect of X-rays of different Wave-lengths upon some Animal Tissues.—Dr. E. F. Armstrong and Dr. T. P. Hilditch: A Study of Catalytic Actions at Solid Surfaces. Part XI. The Action of Alumina and certain other Oxides in promoting the Activity of Nickel Catalysts.—N. K. Adam: The Structure of Thin Films. Part IV. Benzene Derivatives. A Condition of Stability in Monomolecular Films.—N. K. Adam: The Structure of Thin Films. Part V.—W. B. Rimmer: The Spectrum of Ammonia.

INSTITUTION OF ELECTRICAL ENGINEERS, at 6 (Annual General Meeting)—Presentation to the Institution of (a) An oil painting of the late Dr. Silvanus Thompson; (b) Dr. Thompson's Library; (c) A bronze bust of Dr. Thompson, by Mr. Gilbert Bayes.

of Dr. Thompson, by Mr. Gilbert Bayes.

FRIDAY, JUNE 1. ROYAL SOCIETY OF ARTS (Indian Section), at 4.30.—A. Kendall: The Participation of India and Burma in the British Empire Exhibition, 1924. ROYAL ASTRONOMICAL SOCIETY (Geophysical Discussion), at 5.—The Variation of Latitude in relation to the Physical Properties of the Earth's Interior. Chairman, Lord Rayleigh. Speakers, R. Stoneley, Dr. H. Jeffreys, and others.

PHILOLOGICAL SOCIETY (at University College), at 5.30.—Dr. H. Bradley:

Dictionary Evening.
ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Prof. H. A. Lorentz: The Radiation of Light.

SATURDAY, JUNE 2.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Dr. A. W. Hill: The Vegetation of the Andes.
BRITISH PASCHOLOGICAL SOCIETY (at University College), at 3.—Sir Charles Walston: Some Aspects of the Philosophy of Harmonism and Future Experiments.

### PUBLIC LECTURES.

THURSDAY, MAY 31.

Sr. Mary's Hospital (Institute of Pathology and Research), at 4.30.— Prof. L. Hill: New Ideas concerning the Biological Action of Light. UNIVERSITY COLLEGE, at 5.30.—Prof. A. Cippico: Ludovico Ariosto (in Italian).

FRIDAY, JUNE 1.

UNIVERSITY COLLEGE, at 5.30. — Dr. P. Lang: Contemporary Swiss Literature. (Succeeding Lectures on June 8 and 15.)