

furnished by the author's new formula are compared with the observations made on the solar spectrum.—**Pagnini**: The hypotheses on which the undulatory theory is based.—**Giorgi**: Reference is made to Miller's recent experiments, and also to those of Wataghin, who has subjected the ballistic theory of light to further test.—**Zanon**: The biology of *Thrips tabaci*. The last generation of this insect was found in the gall caused by *Schizomya pimpinellæ* on wild fennel in the Roman Campagna.

Official Publications Received.

Scientific Papers of the Institute of Physical and Chemical Research. No. 48: On the Absorption Spectra produced by the Explosion of various Elements (Hg, Cu, Fe, etc.). By Takeo Hori. Pp. 59-78+5 plates. 79 sen. Nos. 50-51: La Konsisto de Magnezioksiklorida Cemento, de Tutomu Maeda kaj Sigeru Yamane; Viskozeosanoĝo dum la Reakcio inter Magnezioksido kaj Magnezioksiklorida Akvosolvajo, kaj Nova Konsidero rilate al Hardiĝo de Cementoj, de Tutomu Maeda. Pp. 85-128. 50 sen. No. 52: Some Experiments on Spark Discharge in Heterogeneous Media—a Hint on the Mechanism of Lightning Discharge. By Toraiiko Terada, Ukutirō Nakaya and Kiyoshiko Yumoto. Pp. 129-160+plates 7-14. 70 sen. No. 53: Influence of Vitamin A on the Absorption of a Foreign Fat. By Waro Nakahara. Pp. 161-166. 20 sen. No. 54: The Change of the Wave-length of the Cadmium Red-line (A6438.7 Å). By Mitsuharu Fukuda. Pp. 167-170+plate 15. 20 sen. No. 55: On the New Lines (LS-2p₁, s), of Zinc, Cadmium and Mercury. By Mitsuharu Fukuda. Pp. 171-176+plate 16. 30 sen. No. 56: The Spectra of Metals under Heavy Current Excitation. By Mitsuharu Fukuda, Tamio Kuyama and Yasushi Uchida. Pp. 177-188+plate 17. 40 sen. (Tokyo: Institute of Physical and Chemical Research, Komagome, Hongo.)

Aeronautical Research Committee. Reports and Memoranda, No. 987 (Ae. 199): The Full Scale Determination of the Lateral Resistance Derivatives of a Bristol Fighter Aeroplane. By H. M. Garner and S. B. Gates. (A.2.b. Stability, Full Scale Experiments 34-T. 2107.) (S. and C. 119.) Pp. 16+8 plates. 1s. net. Reports and Memoranda, No. 990 (Ae. 201): Full Scale and Model Measurements of Lift and Drag of Bristol Fighter with R.A.F. 31 Wings. By B. D. Clark, Dr. R. G. Harris and L. E. Caygill. (A.3.a. Aerofils General, 153, A.4.b. Full Scale Work 28-T. 2123.) Pp. 6+7 plates. 6d. net. (London: H.M. Stationery Office.)

Department of the Interior: U.S. Geological Survey, Water-Supply Paper 562: Surface Water Supply of the United States, 1923. Part 2: South Atlantic Slope and Eastern Gulf of Mexico Basins. Pp. iv+86+3 plates. 15 cents. Bulletin 783-A: Mineral Industry of Alaska in 1924 and Administrative Report. By Philip S. Smith. Pp. ii+39+xvii. (Washington, D.C.: Government Printing Office.)

Publications of the Kapteyn Astronomical Laboratory at Groningen. Edited by Prof. Dr. P. J. Van Rhijn. No. 40: The Stars of High Velocity. By J. H. Oort. Pp. viii+75. (Groningen: Hoitsema Bros.)

Diary of Societies.

SATURDAY, JUNE 12.

BIOCHEMICAL SOCIETY (in Wellcome Physiological Research Laboratories, Langley Court, Beckenham), at 11.45 and 2.30.—C. G. Pope: (a) A Direct Reading H-ion Meter; (b) The Surface Concentration of Phenol in Aqueous Solutions.—J. W. Trevan, H. Bainbridge, and J. H. Gaddum: Micro Volumetric Methods.—J. W. Trevan: A New Micro-Balance.—A. F. Watson and E. D. F. Langstaff: Stages in the Purification of Culture Filtrates of *B. Diphtheriae*.—C. Dorée and E. C. Barton-Wright: A Note on the Stone-Cells of the Pear.—R. L. M. Wallis: The Corpus Luteum and Cholesterol Metabolism.—D. T. Davies, F. Dickens, and E. C. Dodds: Observations on the Properties and Preparation of the Para-thyroid Hormone (Collip).—H. R. Whitehead: Phosphates and the Growth of Streptococci.—A. T. Glenn, C. G. Pope, H. Waddington, and U. Wallace: Variations in Immunity Response to Different Preparations of Diphtheria Toxin.—A. F. Watson and E. D. F. Langstaff: The Preparation and Some Properties of Purified Diphtheria Antigen.—J. W. Trevan and E. M. Boock: Some Physical Properties of Local Anaesthetics.—O. Rosenheim and T. A. Webster: (a) The Anti-rachitic Properties of Irradiated Sterols; (b) Note on Alleged Specific Colour Reactions for Vitamin D.

MINING INSTITUTE OF SCOTLAND (at Dunfermline).

MONDAY, JUNE 14.

FARADAY SOCIETY (at Institution of Mechanical Engineers) (Discussion on Explosive Reactions in Gaseous Media), at 2.30 and 5.—Part I. Explosive Reactions Considered Generally.—Dr. W. E. Garner: Introductory Survey.—Prof. H. B. Dixon, J. Harwood, and W. F. Higgins: On the Ignition Point of Gases.—Prof. W. T. David: Radiation in Gaseous Explosions.—Dr. S. W. Saunders and Dr. W. E. Garner: Ionisation in Gas Explosions.—Dr. S. C. Lind: Ionisation and Gas Explosions.—Prof. R. V. Wheeler and Dr. W. Payman: The Uniform Movement of Flame.—Prof. W. A. Bone: Explosions at High Pressure.—Dr. Colin Campbell and Prof. H. B. Dixon: Explosion Wave in Cyanogen Mixtures.—At 7.45.—Part II. Explosive Reactions Considered in Reference to Internal Combustion Engines.—Sir Dugald Clerk: Introductory Survey.—Prof. W. T. David: Combustion in Gas Engines.—H. T. Tizard: Explosions in Petrol Engines.

ROYAL IRISH ACADEMY, at 4.15.

VICTORIA INSTITUTE (at Central Buildings, Westminster), at 4.30.—Prof. H. A. Kelly: The Silence of God—How is it explained?

BRITISH PSYCHOLOGICAL SOCIETY (Education Section) (at London Day Training College), at 8.—Capt. H. S. G. Sutherland: The Correlation between Size of Family and Intelligence of the Children.

ROYAL GEOGRAPHICAL SOCIETY (at Æolian Hall), at 8.30.

TUESDAY, JUNE 15.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, at 5.—Sir Thomas Lewis: Observations upon Blood Vessels of the Human Skin (Croonian Lectures) (3).

ROYAL STATISTICAL SOCIETY (at Royal Society of Arts), at 5.15.—Dr. E. C. Snow: Some Observations on Trade Forecasting and Prices.

MINERALOGICAL SOCIETY (at Geological Society of London), at 5.30.—Dr. F. L. Stillwell: On the Nature of Berthierite.—S. I. Tomkoff: On some Chloritic Minerals Associated with the Basaltic Carboniferous Rocks of Derbyshire.—H. E. Buckley: The Anomalous Optical Properties of Several New Series of Isomorphous Double Tartrates.—Dr. G. T. Prior: On the South African Meteorites, Vaalbuut, Witklip, and Queen's Mercy.

ZOOLOGICAL SOCIETY OF LONDON, at 5.30.—Dr. H. H. Scott: A Mycotic Disease of Batrachians.—H. G. Jackson: The Morphology of the Isopod Head.—F. W. Edwards: On the Marine Chironomidae (Diptera); with Descriptions of a New Genus and Four New Species from Samoa.—P. A. Buxton: The Colonisation of the Sea by the Chironomidae (Diptera); with an Account of the Habits of a New Genus and Species in Samoa.—O. A. Merritt Hawkes: On the Massing of the Ladybird, *Hippodamia convergens* (Coleoptera), in the Yosemite Valley.—Dr. Marie V. Lebour: On some Larval Euphausiids (Crustacea) from the Mediterranean in the Neighbourhood of Alexandria, Egypt, collected by Mr. F. S. Russell.—D. Bhatia: On Three New Species of the Genus *Anadenus* (Mollusca).—Prof. J. P. Hill and Prof. J. B. Gatenby: The Corpus Luteum of the Monotremata.

WEDNESDAY, JUNE 16.

SOCIETY OF GLASS TECHNOLOGY (at Sheffield), at 2.50.

CORRELATIVE SCIENCE SOCIETY (at Royal Botanic Society of London), at 3.—Chemical Physics—The Dynamics of Molecular Motions, Planetary Nebulae, Critical Velocity (Conference).

LONDON DERMATOLOGICAL SOCIETY (at St. John's Hospital, Leicester Square), at 4.30.—Sir Humphry Rolleston, Bart.: The Relations of Dermatology and General Medicine (Annual Oration).

ROYAL METEOROLOGICAL SOCIETY, at 5.—J. E. Clark, I. D. Margary, and R. Marshall: Report on the Phenological Observations in the British Isles from December 1924 to November 1925.—S. M. Bower: Report on Winter Thunderstorms in the British Islands from January 1 to March 31, 1925.—Dr. E. Kidson: Abnormal Rates of Ascent of Pilot Balloons in the Lower Levels of the Atmosphere at Melbourne.

THURSDAY, JUNE 17.

ROYAL SOCIETY, at 4.30.—Sir Arthur Schuster: A Review of Mr. George W. Walker's Magnetic Survey (1915).—Lord Rayleigh: The Continuous Spectrum of Mercury Vapour in relation to the Resonance Line 2536.52.—Prof. O. W. Richardson: Structure in the Secondary Hydrogen Spectrum. IV.—Prof. W. L. Bragg and J. West: The Structure of Beryl, Be₃Al₂Si₆O₁₈.—Prof. A. P. Laurie: On the Change of Refractive Index of Linseed Oil in the Process of Drying and its Effect on the Deterioration of Oil Paintings.

INSTITUTE OF PATHOLOGY AND RESEARCH (St. Mary's Hospital, Paddington), at 5.—J. E. Barnard: The Microscopy of the Filterable Viruses.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, at 5.—Sir Thomas Lewis: Observations upon Blood Vessels of the Human Skin (Croonian Lectures) (4).

CHEMICAL SOCIETY, at 8.—A. Hassell and Dr. C. K. Ingold: The Chemistry of Polycyclic Structures in Relation to their Homocyclic Unsaturated Isomerides. Part VII. Tautomerism corresponding with that of Nitrosophenol and Quinone-oxime in the Dicyclopentane Series.—F. R. Goss, Dr. C. K. Ingold, and I. S. Wilson: The Nature of the Alternating Effect in Carbon Chains. Part VIII. The Nitration of some Benzylamine Derivatives with Special Reference to the Respective Roles of the Ions, Salts, and Bases.—E. L. Hirst: The Structure of the Normal Monosaccharides. Part V. Fructose.—W. N. Haworth and E. L. Hirst: The Constitution of the Disaccharides. Part XI. The Relationships of Fructose, γ -Fructose, and Sucrose.

ROYAL SOCIETY OF TROPICAL MEDICINE AND HYGIENE (Annual General Meeting) (at 11 Chandos Street, W.), at 8.15.—Col. S. P. James: Epidemiological Results of a Laboratory Study of Malaria in England.—Presentation of the Manson Medal to Prof. E. Marchiafava, in recognition of the part he took, with other Italian investigators, in the elucidation of the life-history of the Parasites of Human Malaria.

FRIDAY, JUNE 18.

ROYAL ASTRONOMICAL SOCIETY (Geophysical Discussion), at 5.—Prof. E. V. Appleton and Dr. G. C. Simpson: Electrical Discharges in the Atmosphere. Chairman: Col. H. G. Lyons.

ROYAL SOCIETY OF MEDICINE (Balneology and Climatology Section) (Annual Meeting), at 5.

GEOLOGISTS' ASSOCIATION (at University College), at 7.30.—Dr. D. R. Grantham: The Petrology of the Shap Granite.—G. W. Young: Notes on the Shoshone Valley, Yellowstone National Park, U.S.A. (Lecture).

ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Seton Gordon: The Golden Eagle and its Neighbours.

ROYAL SOCIETY OF MEDICINE (Study of Disease in Children) (at Children's Hospital, Birmingham).

CONFERENCES.

SATURDAY, JUNE 12.

PHOTOGRAPHIC CONVENTION OF THE UNITED KINGDOM (at Edinburgh). SOUTH-EASTERN UNION OF SCIENTIFIC SOCIETIES (at Colchester).—A. Farquharson: The Social Constitution of a County.—G. E. Hutchings: The Choice of Maps for Regional Surveys.—Dr. C. Tierney: Some of Nature's Secrets.