limbs.—MM. Alezais and Peyron: The histogenesis and origin of the chordomes.—E. Burnet: A new method of diagnosis of Mediterranean fever. The test proposed is the intradermal reaction produced by a drop of a broth-culture of Micrococcus melitensis.— M. Léger and A. Baury: The shrew, Crocidura Stampflii, and the plague in Senegal. This animal has been proved to carry plague, and also fleas. Its destruction should be carried out systematically along with the rat.

# Official Publications Received.

Agricultural Research Institute, Pusa. Bulletin No. 123, 1921: The Bundelkhand Cottons: Experiment in their Improvement by Pure Line Selection. By B. O. Burt and Nizamuddin Hyder. Pp. iv +15. (Caloutta: Government Printing Office, 1921.) 4 annas. Memoirs of the Department of Agriculture in India. Entomological Series, Vol. 7, No. 6: Life-Histories of Indian Insects. Diptera: Sphryracephala Hearseiana, Westw. By S. K. Sen. Pp. ii +33-38+ plates 4 and 5. (Pusa: Agricultural Research Institute.) 12 annas: 1s

+33-38+plates 4 and 5. (Pusa: Agricultural Research Institute.) 12 annas; 18.

Annals of the Transvaal Museum. Vol. 8. Part 3: New South African Heterocera. By L. B. Prout and A. E. Prout. Pp. 149-186. (Cambridge: At the University Press.)

Canada. Department of Mines: Mines Branch. Annual Report on the Mineral Production of Canada during the Calendar Year 1990. Pp. 80. (Ottawa.)

Report of the Department of the Naval Service for the Fiscal Year ended March 31, 1921. (Sessional Paper No. 39: A. 1922.)

Pp. 38. (Ottawa.)

The Journal of the Institute of Metals. Edited by G. Slaw Scott. Vol. 26. Pp. x+760+34 plates. (London: Institute of Metals.) 31s. 6d. net.

Pp. 38. (Ottawa.)

The Journal of the Institute of Metals. Edited by G. Slaw Scott. Vol. 26. Pp. x+760+34 plates. (London: Institute of Metals.) 31s. 6d. net.

Abridged Edition of Tide Tables for Vancouver and Sand Heads, B.C., and Slack Water for First Narrows and Active Pass, with Tidal Differences for the Strait of Georgia. Pp. 45. (Ottawa: Tidal and Current Survey, Naval Service Department.)

Memoirs of the Department of Agriculture in India. Chemical Series, Vol. 6, No. 2: The Effect of Environmental Factors on the Alkaloidal Content and Yield of Latex from the Opium Poppy (Papaver Sommiferum), and the Bearing of the Work on the Functions of Alkaloids in Plant Life. By Dr. H. E. Annett. Pp. ii+59-154. (Calcutta: Thacker, Spink and Co.; London: W. Thacker and Co.) 2 rupees; 2s. 9d.

Proceedings of the Rochester Academy of Science. Vol. 6, No. 2: Minerals in the Niagara Limestone of Western New York. Bv A. W. Giles. Pp. 57-72. Vol. 6, No. 3: The Funci of our Common Nats and Pits. By C. E. Fairman. Pp. 73-115+plates 15-20. (Rochester, N.Y.)

Uganda Protectorate: Annual Report of the Department of Agriculture for the Nine Months ended 31st December, 1920. Pp. 67. (Kampala: Department of Agriculture.)

Calendario della Basilica Pontificia del Santissimo Rosario in Valle di Pompei per l'Anno 1922. Pp. 240. (Valle di Pompei: Scuola Tip. Pontificia.)

## Diary of Societies.

# THURSDAY, FEBRUARY 23.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Prof. A. G. Perkin: Dyeing: Ancient and Modern (2).

ROTAL INSTITUTION OF GREAT BRITAIN, at 3.—Prof. A. G. Perkin: Dyeing: Ancient and Modern (2).

Institution of Electrical Engineers, at 3.30 and 8.—Meeting in Commemoration of the First Meeting of the Society of Telegraph Engineers on February 28, 1872.

ROTAL SOCIETY, at 4.30.—C. D. Ellis: \$\theta\$-ray Spectra and their Meaning.—Prof. A. E. Conrady: A Study of the Balance.—Dr. J. S. Owens: Suspended Impurity in the Air.—R. V. Southwell: The Free Transverse Vibrations of a Uniform Circular Disc clamped at its Centre, and the Effects of Rotation.—A. E. Oxley: Magnetism and Atomic Structure. II. The Constitution of the Hydrogen-palladium System and other similar Systems.—T. Carleman and Prof. G. H. Hardy: Fourier's Series and Analytic Functions.—Prof. A. McAulay: Multenions and Differential Invariants. II. and III.

ROTAL SOCIETY OF MEDICINE (Balneology and Climatology Section), at 4.30.—Dr R. L. J. Llewellyn and others: Discussion on The Etiology of Gout.

CHILD-STUDY SOCIETY (at Royal Sanitary Institute, 90 Buckingham Palace Road, S.W.I), at 6.—A. E. Haves: Phonoscript.

INSTITUTION OF AERONAUTICAL ENGINEERS (at Royal Society of Arts), at 7.30.—Lt.-Col. Moore-Brabazon: The Early Days of Aviation (Presidential Address).

CONCRETE INSTITUTE, at 7.30.—H. K. Dyson: What is the Use of the Modular Ratio?

ROTAL SOCIETY OF MEDICINE (Urology Section), at 8.30.—Prof. P. J. Cammidge: The Source of the Amylolytic Ferment of the Urine.—Dr. G. A. Harrison: Glycosuria in Renal Disorders.

## FRIDAY, FEBRUARY 24.

ASSOCIATION OF ECONOMIC BIOLOGISTS (in Botanical Lecture Theatre, Imperial College of Science and Technology), at 2.30—Dr. J. Rennie: (a) The Present Position of Bee Disease Re-

NO. 2730, VOL. 109

search; (b) Demonstration of Polyhedral Disease in Tipula

search; (b) Demonstration of Polyhedral Disease in Tipula Species.

ROYAL SOCIETY OF ARTS (Joint Meeting of the Dominions and Colonies and Indian Sections), at 4.30.—Prof. W. A. Bone: Brown Coals and Lignites: Their Importance to the Empire.

ROYAL SOCIETY OF MEDICINE (Study of Disease in Children Section), at 5.—Dr. C. P. Lapage and Dr. W. J. S. Bythell: Tonic and Atonic Hearts in Children (with Radiographic Illustrations).

PHYSICAL SOCIETY OF LONDON (at Imperial College of Science and Technology), at 5.—Dr. H. Levy: The Number of Radio-active Transformations as Determined by Analysis of the Observations.—Prof. C. H. Lees: A Graphical Method of Treating Fresnel's Formule for Reflection in Transparent Media.—Research Department of the General Electric Co., Hammersmith: Demonstrations of a Rapid Weighing Balance, and an Electrostatic Voltmeter.—F. C. Dyche-Teague: Demonstration of the Physical Properties of Cellactite.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN, at 7.—H. Main:

Of Cellactite.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN, at 7.—H. Main:
A Pilgrimage to Provence.

Institution of Production Engineers (at Institution of Mechanical Engineers), at 7.30.—G. W. Eastwood: Intensive Production of Automobile Bodies.

JUNIOR INSTITUTION OF ENGINEERS, at 8.—Prof. E. G. Coker: Curved Beams, Rings, and Chain Links.

ROYAL SOCIETY OF MEDICINE (Epidemiology and State Medicine Section), at 8.—Dr. Evelyn D. Brown: The Relation between Puerperal Septicemia and other Infectious Diseases, with Reference to the Admission of Maternity Cases into Isolation Hospitals.

ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Prof. J. Joly: The Age

ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Prof. J. Joly: The Age of the Earth.

#### SATURDAY, FEBRUARY 25.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Prof. E. A. Gardner: Masterpieces of Greek Sculpture (2).

### MONDAY, FEBRUARY 27.

Institute of Actuaries, at 5.—C. H. Maltby: Results of an Investigation into the Effects of Different Valuation Bases upon Surplus.

PIUS.
INSTITUTION OF MECHANICAL ENGINEERS (Graduates' Association Meeting), at 7.—Sir Henry Fowler: Metallurgy in Relation to Mechanical Engineering.
ROYAL SOCIETY OF ARTS. at 8.—Prof. A. F. C. Pollard: The Mechanical Design of Scientific Instruments (Cantor Lecture) (2).
ROYAL SOCIETY OF MEDICINE (Odontology Section), at 8.—Clinical Engineering.

ROYAL SOCIETY OF MEDICINE (Odontology Section), at 8.—Clinical Evening.

MEDICAL SOCIETY OF LONDON (at 11 Chandos Street, W.1). at 8.30.—
G. G. Turner, Sir Lenthal Cheatle, W. H. Clayton-Greene, W. James, and W. G. Howarth: Discussion on The Treatment of Tuberculous Glands.

### TUESDAY, FEBRUARY 28.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Sir Arthur Keith: Anthropology of the British Empire: Series 1: Racial Problems in Asia and Australasia (2).

ROYAL SOCIETY OF MEDICINE (Medicine Section), at 5.30.—Dr. E. I. Spriggs and O. A. Marxer: A Review of Sixty-one Cases seeking Relief after Short-circuiting Operations.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN, at 7.—T. Bell: Present day Portraiture

Present-day Portraiture.

LILUMINATING ENGINEERING SOCIETY (at Royal Society of Arts), at 8.—L. Gaster and others: Discussion on Industrial Lighting: Ideal Requirements (legislative and otherwise) and Practical

Ideal Requirements (legislative and otherwise) and Fractical Solutions.

ROYAL ANTHROPOLOGICAL INSTITUTE, at 8.15.—Miss R. M. Fleming: Sex and Growth Features in Racial Analysis.

INSTITUTION OF AUTOMOBILE ENGINEERS (Informal Meeting) (at Institution of Mechanical Engineers), at 8.30.—Demonstration of, and Discussion on, Various, Recording Instruments used on Motor Cars.

### WEDNESDAY, MARCH 1.

NEWCOMEN SOCIETY (at Caxton Hall, Westminster), at 5.—R. Young: Timothy Hackworth and the Locomotive.

ROYAL SOCIETY OF MEDICINE (Surgery Section). at 5.30.—Informal Discussion on The Treatment of the Acute Obstruction resulting from Carcinoma of the Colon.

INSTITUTION OF ELECTRICAL ENGINEERS (Wireless Section). at 6.—E. B. Moullin and L. B. Turner: The Thermionic Triode as Rectifier.

SOCIETY OF ARTS, at 8.—E. Moor: The Duplex-coupler Pianoforte.

Pianoforte.

Society of Public Analysts and Other Analytical Chemists (at Chemical Society), at S.—R. V. Wadsworth: The Theobromine Content of Cacao Beans and Cocca.—A. H. Bennett and F. K. Donovan: The Determination of Aldehydes and Ketones by Means of Hydroxylamine.—R. E. Essery: The Value of Fish Scales as a Means of Identification of the Fish Used in Manufactured Products.—N. Evers and G. D. Elsdon: The Examination of B.P. Ointments.

## THURSDAY, MARCH 2.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Prof. H. M. Lefroy: The Menace of the Insect Pest: The Balance of Life in Relation to Insect Pest Control (1).

ROYAL SOCIETY, at 4.30.—Probable Papers.—Prof. L. N. G. Filon and H. T. Jessop: The Stress-optical Effect in Transparent Solids strained beyond the Elastic Limit.—W. E. Curtis: The Structure of the Band Spectrum of Helium.—S. Datta: The Spectrum of Beryllium Fluoride.—W. G. Palmer: The Catalytic Activity of