

Official Publications Received.

Ceylon Journal of Science. Section A, Botany. Annals of the Royal Botanic Gardens, Peradeniya. Vol. 9, Part 2, November 22. Pp. 119-241. (Peradeniya: Department of Agriculture; London: Dulau and Co. Ltd.) 3 rupees.

Spolia Zeylanica. Issued from the Colombo Museum, Ceylon. Edited by Dr. Joseph Pearson. Vol. 12, Parts 47 and 48. Pp. 335-408. (Colombo.)

Report of the Botanical Survey of India for 1923-24. Pp. 13. (Calcutta: Government Printing Office.)

Appendix No. 2 to the Annual Report of the Chief of the Bureau of Navigation, 1924. Annual Report of the Naval Observatory for the Fiscal Year 1924. Pp. 25. (Washington: Government Printing Office.)

The Indian Forest Records. Vol. 10, Part 5: Analysis of the Tanning Properties of certain Burma *Lagerstroemias*. By E. Pasupati; reported by J. A. Pilgrim. Pp. 28. 7 annas. Vol. 10, Part 8: The Constituents of some Indian Essential Oils. Part 13: The Essential Oil from a new Species of *Andropogon* occurring in the Etawah District, U.P. By John Lionel Simonsen. Pp. 13. 3 annas. Vol. 10, Part 10: The Mangroves of South Tenasserim; being an Account of an Investigation of various Products of the Littoral Forests of Southern Burma. By J. A. Pilgrim. Pp. iii+73. 15 annas. (Delhi: Government Central Press.)

Commercial Intelligence Department, India. Agricultural Statistics, 1921-22. Vol. 2: Area, Classification of Area, Area under Irrigation, Area under Crops, Live-Stock, and Land Revenue Assessment, in certain Indian States. Pp. ii+v+83. (Calcutta: Government of India Central Publication Branch.) 15 annas; 1s. 6d.

Transactions of the Royal Scottish Arboricultural Society. Vol. 38, Part 2, October. Pp. 69-155+27-86. (Edinburgh.) 3s.

Bulletin of the American Museum of Natural History. Vol. 50, Art. 6: Insect Sounds. By Frank E. Lutz. Pp. 333-372. (New York.)

The Physical Society of London. Proceedings. Vol. 37, Part 1, December 15. Pp. 74. (London: Fleetway Press, Ltd.) 6s. net.

Leeds University. Twentieth Report, 1923-24. Pp. 164. (Leeds.)

Diary of Societies.

SATURDAY, JANUARY 3.

GEOGRAPHICAL ASSOCIATION (Annual Meeting) (at London School of Economics), at 9.30 A.M.—S. W. Rider and Capt. T. K. M. Booth: Discussion on School Geography.—Miss A. Hicks and others: Discussion on The Beginnings of Geography.—J. A. Mortlock, Miss J. A. Hardy, and others: Discussion on The Teaching of Climate.—Miss L. C. Read, C. C. Carter, and others: Discussion on Home Geography.—Mr. Cattell-Jones, Rev. J. I. Miller, and others: Discussion on School Geography Clubs and Journeys.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—F. Balfour Browne: Concerning the Habits of Insects (IV). The Habits of the Dragonfly.

GILBERT WHITE FELLOWSHIP (at 6 Queen Square, W.C.), at 3.—Dr. W. Martin: Gilbert White as Antiquary.

MONDAY, JANUARY 5.

MATHEMATICAL ASSOCIATION (at London Day Training College), at 10.20 A.M.—Prof. J. E. A. Steggall: The Neglect of Arithmetic in Schools.—A. Buxton: An Application of the Bessel Functions to a Problem in Optical Resolution. Discussion on Tangency and Limits in Geometry.

EUGENICS EDUCATION SOCIETY (at University College), at 11.—National League of Health, Maternity, and Child Welfare.—Dr. J. A. Hadfield: Mental Health of the School Child.

ROYAL DUBLIN SOCIETY, at 4.—Lecture adapted to a Juvenile Auditory.

VICTORIA INSTITUTE (at Central Hall, Westminster), at 4.30.—Brig.-Gen. Sir Wyndham Deedes: Great Britain and the Palestine Mandate.

BRITISH PSYCHOLOGICAL SOCIETY (Education Section) (at University College), at 6.—Dr. P. B. Ballard, T. Raymont, and others: Discussion on the recent Report to the Board of Education on Psychological Tests of Educative Capacity.

ARISTOTELIAN SOCIETY (at University of London Club), at 8.—Prof. G. Dawes Hicks: The Dynamic Aspect of Nature.

SOCIETY OF CHEMICAL INDUSTRY (London Section) (at Chemical Society), at 8.—W. Irwin: An Early Chapter in the Benzol Industry.

INSTITUTION OF THE RUBBER INDUSTRY (London Section) (at Engineers' Club), at 8.—A. Healey: Mechanical Structure of Rubber.

SCIENCE MASTERS' ASSOCIATION (Annual Meeting) (at University of Leeds), at 8.45.—Sir Berkeley Moynihan, Bart.: Presidential Address.

TUESDAY, JANUARY 6.

SCIENCE MASTERS' ASSOCIATION (Annual Meeting) (at University of Leeds), at 10 A.M.—Prof. J. H. Priestly: Peat and the Plants that Grow upon it.—A. Yorkshire Problem.—C. B. Fawcett: The Distribution of Population.—At 12, Prof. R. Whiddington: The Trend of Modern Physics.—Prof. R. W. Whytlaw-Gray: The Inert Gases.—At 5.30, Prof. W. Garstang: The Songs of the Birds.

MATHEMATICAL ASSOCIATION (at London Day Training College), at 2.30.—Prof. G. H. Hardy: What is Geometry? (Presidential Address).—Dr. H. B. Heywood: The Reform of University Mathematics.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—F. Balfour Browne: Concerning the Habits of Insects (V). The Habits of the Water-Beetle.

MANCHESTER LITERARY AND PHILOSOPHICAL SOCIETY (at Manchester), at 3.30.—Dr. J. E. Myers and F. Fairbrother: A Few Chemical Curiosities.

ASSOCIATION OF UNIVERSITY WOMEN TEACHERS (at University College) at 5.—Prof. F. Soddy: The Economics of Life.

INSTITUTION OF PETROLEUM TECHNOLOGISTS (at Royal Society of Arts), at 5.30.

INSTITUTE OF MARINE ENGINEERS, at 6.30.—C. H. Wright: Some Considerations in connexion with the Measurement of Liquid Fuel Storage and Liquid Depths.

INSTITUTION OF ELECTRICAL ENGINEERS (North-Western Centre) (at 17 Albert Square, Manchester), at 7.

INSTITUTE OF METALS (Birmingham Section) (at Chamber of Commerce, Birmingham), at 7.—T. H. Gant: Cobalt: Its Production and Some of Its Uses.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN (Scientific and Technical Group), at 7.

INSTITUTION OF AUTOMOBILE ENGINEERS (Coventry Section) (at Broad-gate Café, Coventry), at 7.15.

WEST YORKSHIRE METALLURGICAL SOCIETY (at George Hotel, Huddersfield), at 7.30.—The Value of some Workshop and Laboratory Tests.

RÖNTGEN SOCIETY (at British Institute of Radiology), at 8.15.—Dr. N. S. Finzi: Some Developments in Deep-Radio Therapy.

WEDNESDAY, JANUARY 7.

SCIENCE MASTERS' ASSOCIATION (Annual Meeting) (at University of Leeds), at 10 A.M.—Prof. A. Smithells and others: Discussion on the Connection between Science Teaching in Schools and Universities.

ROYAL SOCIETY OF ARTS (Dr. Mann Juvenile Lectures (1)), at 3.—Lt.-Col. G. M. Richardson: Dogs in War.

ROYAL DUBLIN SOCIETY, at 4.—Lecture adapted to a Juvenile Auditory.

GEOLOGICAL SOCIETY OF LONDON, at 5.

INSTITUTION OF ELECTRICAL ENGINEERS (Wireless Section), at 6.—Prof. E. Mallett and A. D. Blumlein: A New Method of High-Frequency Resistance Measurement.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS (at Engineers' Club), at 7.—O. Stott: Water Gauge.

SOCIETY OF CHEMICAL INDUSTRY (Bristol Section) (at Bristol University), at 7.30.

JUNIOR INSTITUTION OF ENGINEERS (at Royal Society of Arts), at 7.30.—Dr. A. Russell: Presidential Inaugural Address.

ROYAL MICROSCOPICAL SOCIETY (Biological Section), at 7.30.

THURSDAY, JANUARY 8.

LEAGUE OF NATIONS UNION (at University College), at 11.30.—Prof. H. G. Fleure: Geography and the League of Nations.

CHILD-STUDY SOCIETY (at University College), at 3.—Prof. E. W. MacBride: The Evidence for the Existence of Environmental Influence on the Course of Heredity.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—F. Balfour Browne: Concerning the Habits of Insects (VI). The Habits of Insects and the Work of Man.

LINNEAN SOCIETY OF LONDON, at 5.

INSTITUTION OF ELECTRICAL ENGINEERS, at 6.—H. W. Taylor: Three-Wire Direct-Current Distribution Networks: Some Comparisons in Cost and Operation.

INSTITUTION OF ELECTRICAL ENGINEERS (Dundee Sub-Centre) (at University College, Dundee), at 7.30.—F. J. Lawson: Telephone Cable Practice.

INSTITUTION OF ELECTRICAL ENGINEERS (Irish Centre) (at Trinity College, Dublin), at 7.45.

ROYAL SOCIETY OF MEDICINE (Obstetrics and Gynaecology Section), at 8.—J. P. Maxwell: Osteomalacia in China.

INSTITUTION OF MECHANICAL ENGINEERS (Glasgow Branch) (at Glasgow).—L. A. Legros: Traction across Rough and Roadless Country (Lecture).

INSTITUTION OF MECHANICAL ENGINEERS (Cardiff Branch) (at Cardiff).

FRIDAY, JANUARY 9.

ROYAL DUBLIN SOCIETY, at 4.—Lecture adapted to a Juvenile Auditory.

ROYAL SOCIETY OF ARTS (Indian Section), at 4.30.

ROYAL ASTRONOMICAL SOCIETY, at 5.

PHILOLOGICAL SOCIETY (at University College), at 5.30.—Miss Beatrice Saxon Snell: Anglo-French Building Terms.

SOCIETY OF CHEMICAL INDUSTRY (Manchester Section) (at 16 St. Mary's Parsonage, Manchester), at 7.—N. Simpkin and F. S. Sinnatt: The Melting Point of Coal Ash. Part 2.—Prof. H. S. Taylor: The Properties of a Catalytic Surface.

WEST CUMBERLAND SOCIETY OF CHEMISTS AND ENGINEERS (at Workington), at 7.—E. H. Todd: The Structure of Matter.

INSTITUTION OF MECHANICAL ENGINEERS (Informal Meeting), at 7.—The Maintenance of High-Compression Oil Engines.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN, at 7.—A. Keighley: Colour and Sunshine: Some Mountain Villages of Southern France.

INSTITUTE OF METALS (Sheffield Section) (at Sheffield University), at 7.30.—A. H. Munday: Die-casting.

NORTH-EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS (at Literary and Philosophical Society, Newcastle-upon-Tyne), at 7.30.—J. L. Taylor: Theory of Longitudinal Bending of Ships.

INSTITUTION OF MECHANICAL ENGINEERS (Leeds Branch) (at Leeds).—H. W. Bannister: The Scientific Treatment of Boiler Feed-Water.

INSTITUTION OF MECHANICAL ENGINEERS (Liverpool Branch) (at Liverpool).—L. A. Legros: Traction across Rough and Roadless Country.

NORTH-EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS (Middlesbrough Graduate Section).—R. F. Batley and J. Black: Debate on Diesel Engines: Four-Cycle v. Two-Cycle.

SATURDAY, JANUARY 10.

INSTITUTE OF METALS (London Section) (at Institute of Marine Engineers), at 7.30.—Dr. R. H. Greaves: Extensometers.