

Official Publications Received.

BRITISH.

Journal of the Chemical Society: containing Papers communicated to the Society. November. Pp. iv+2827-3093+x. (London: Gurney and Jackson.)

Department of Scientific and Industrial Research. Report of the Food Investigation Board for the Year 1927. Pp. vi+123. (London: H.M. Stationery Office.) 4s. net.

The Indian Lac Association for Research. Bulletin No. 1: Physical Properties of Shellac Solutions, Part 1. By M. Rangaswami and M. Venugopalan. Pp. 14. (Nankum.)

Proceedings of the Geologists' Association. Edited by A. K. Wells. Vol. 39, Part 3. Pp. 223-368+plates 13-23. (London: Edward Stanford, Ltd.) 5s.

Commonwealth of Australia: Council for Scientific and Industrial Research. Bulletin No. 37: Paper-Pulp and Cellulose from the Eucalypts by the Sulphite Process. By L. R. Benjamin and J. L. Somerville. Pp. 84. Pamphlet No. 9: A Forest Products Laboratory for Australia; Justification for its Creation, Outline of its Organisation and Rough Estimate of Cost. By A. J. Gibson. Pp. 28. (Melbourne: H. J. Green.)

Journal of the Marine Biological Association of the United Kingdom—New Series, Vol. 15, No. 3, November. Pp. 735-879 (Plymouth.) 5s. net

FOREIGN.

Report of the Aeronautical Research Institute, Tôkyô Imperial University. No. 44: On the Interference of Wind Tunnel Walls of Rectangular Cross-Section on the Aerodynamical Characteristics of a Wing. By Kwan-ichi Terazawa. Pp. 69-81. (Tôkyô: Koseikai Publishing House.) 0.17 yen.

University of California Publications in Zoology. Vol. 30, No. 13: The Molts of the Loggerhead Shrike, *Lanius ludovicianus* Linnaeus. By Alden H. Miller. Pp. 393-417. 30 cents. Vol. 32, No. 1: A Distributional Summation of the Ornithology of Lower California. By Joseph Grinnell. Pp. 390. 3.75 dollars. (Berkeley, Calif.: University of California Press; London: Cambridge University Press.)

Bergens Museum. Arsberetning, 1927-1928. Pp. 112. Bergens Museums Arbok 1928. Naturvidenskapelig rekke. Hefte 2. Pp. 52+49. (Bergen: A/S John Greigs Boktrykkeri.)

Diary of Societies.

SATURDAY, DECEMBER 29.

ROYAL INSTITUTION OF GREAT BRITAIN (at Institution of Electrical Engineers), at 3.—A. Wood: Sound Waves and their Uses (II.): Signalling in Air and Water.

MONDAY, DECEMBER 31.

ROYAL GEOGRAPHICAL SOCIETY (at Æolian Hall), at 3.30.—Madame Gabrielle M. Vassal: A Journey through French Indo-China (Christmas Lectures to Young People) (I.).

BRITISH PSYCHOLOGICAL SOCIETY (Education Section) (in Botanical Theatre, University College), at 5.30.—Dr. P. B. Ballard: The Psychological Basis of the Break at Eleven Years of Age.

TUESDAY, JANUARY 1.

ROYAL INSTITUTION OF GREAT BRITAIN (at Institution of Electrical Engineers), at 3.—A. Wood: Sound Waves and their Uses (III.): Notes and Noises.

TELEVISION SOCIETY (at Engineers' Club, Coventry Street), at 8.—J. C. Rennie: Scanning Methods used in Television.

WEDNESDAY, JANUARY 2.

INSTITUTION OF ELECTRICAL ENGINEERS (Wireless Section), at 6.—Capt. P. P. Eckersley, T. L. Eckersley, and H. L. Kirke: The Design of Transmitting Aerials for Broadcasting Stations.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS (at Caxton Hall), at 7.—G. Wilkinson: Economic Application of Electricity to Low Temperature Heating Purposes.

ROYAL MICROSCOPICAL SOCIETY (Biological Section).

THURSDAY, JANUARY 3.

ROYAL SOCIETY OF ARTS, at 3.—Capt. Sir Arthur Clarke: Ships and Lighthouses (Dr. Mann Juvenile Lectures) (I.).

ROYAL INSTITUTION OF GREAT BRITAIN (at Institution of Electrical Engineers), at 3.—A. Wood: Sound Waves and their Uses (IV.): How Sounds are Analysed.

LINNEAN SOCIETY OF LONDON, at 5.—C. E. Moss: A New Genus of the Hydrocharitaceae from the Zambesi.—G. S. Carter and L. C. Beadle: (a) The Fauna of the Swamps of the Paraguayan Chaco in Relation to its Environment. I. Physico-chemical Conditions of the Environment; (b) Notes on the Habits and Development of *Lepidosiren paradoxa*.—W. A. Cunnington: The Argulidae of the Expedition to Brazil and Paraguay.—R. Gurney: The Branchiopoda of the Expedition to Brazil and Paraguay.—E. Meyrick: The Microlepidoptera of the Expedition to Brazil and Paraguay.—J. Stephenson: The Oligochaeta of the Expedition to Brazil and Paraguay.—H. W. Parker: The Amphibia and Reptilia of the Expedition to Brazil and Paraguay.

SOCIETY OF CHEMICAL INDUSTRY (Bristol Section) (jointly with Chemical Society) (in Chemical Department, Bristol University), at 7.30.—Prof. W. E. Garner: Some Properties of Flame and Combustion.

FRIDAY, JANUARY 4.

ROYAL GEOGRAPHICAL SOCIETY (at Æolian Hall), at 3.30.—Dr. H. R. Mill: Capt. Cook and the Great Southern Continent (Christmas Lectures to Young People) (II.).

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INSTITUTION OF ELECTRICAL ENGINEERS (Meter and Instrument Section), at 7.—W. H. Lawes and others: Discussion on Precautions in the Use of Standard Instruments.

INSTITUTION OF MECHANICAL ENGINEERS (Informal Meeting), at 7.—Major A. W. Farrer: The Engineer Salesman Abroad.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN (Informal Meeting of Pictorial Group), at 7.—Discussion on the Prints in the Holcroft Collection.

JUNIOR INSTITUTION OF ENGINEERS, at 7.30.—K. W. Willans: The Geared Steam Locomotive.

GEOLOGISTS' ASSOCIATION (at University College), at 7.30.—Dr. K. W. Earle: Previous Land Connexions in the Lesser Antilles (Lecture).

SOCIETY OF CHEMICAL INDUSTRY (South Wales Section) (at Thomas Café, Swansea).—A. Grounds: Preparation of Coal for the Market.

SATURDAY, JANUARY 5.

ROYAL INSTITUTION OF GREAT BRITAIN (at Institution of Electrical Engineers), at 3.—A. Wood: Sound Waves and their Uses (V.): The Ear and What it Does.

PUBLIC LECTURES.

FRIDAY, JANUARY 4.

IMPERIAL COLLEGE OF SCIENCE, at 5.30.—Dr. R. Campbell: Mountains and their Origin (Swiney Lectures). (Succeeding Lectures on Jan. 7, 9, 11, 14, 16, 18, 21, 23, 25, 28, and 30.)

SATURDAY, JANUARY 5.

NEW EDUCATION FELLOWSHIP (English Section) (in Library, Central Hall, Westminster), at 5.30.—Sir Michael Sadler: Examinations.

CONGRESSES.

DECEMBER 31 TO JANUARY 5.

CONFERENCE OF EDUCATIONAL ASSOCIATIONS (at University College).

Monday, Dec. 31, at 3.—Earl of Lytton: Some Aspects of the Problem of Education in India (Presidential Address).

At 5.30.—British Psychological Society (Education Section).—Dr. P. B. Ballard: The Psychological Aspect of the New School Organisation.

Tuesday, Jan. 1, at 2.30.—Society for Experiment and Research in Education.—J. H. Whitehouse and others: Ruskin and Education.

At 3.—School Nature Study Union.—Dr. C. Tierney: Nature's Architecture.

Wednesday, Jan. 2, at 2.30.—Royal Drawing Society.—Rev. S. A. McDowall and others: The Value of Drawing to the Study of Science.

At 5.—Prof. H. G. Fleure, Miss M. D. Brock, E. R. Thomas, A. Saywell, and others: Joint Conference on the Influence of Examinations on Education.

Friday, Jan. 4, at 11 A.M.—British Broadcasting Corporation.—Demonstration of Educational Broadcasting.

At 2.30.—Medical Officers of Schools Association.—Dr. A. A. Mumford: Physical Activity and Physical Training in Relation to Scholastic and University Progress.

JANUARY 2 TO 5.

SCIENCE MASTERS' ASSOCIATION (at Cambridge).—Prof. A. C. Seward: Presidential Address.—Prof. A. S. Eddington: The Interior of a Star.—Prof. T. M. Lowry: The Arrest and Promotion of Chemical Change.—J. T. Saunders: Raising Animals in Cultures and their Use.—Prof. E. V. Appleton: Large Scale Optical Experiments.—Sir William Pope: Colour Photography.—Prof. J. Barcroft: Hamoglobin.

JANUARY 3 TO 5.

GEOGRAPHICAL ASSOCIATION (at London School of Economics).

Thursday, Jan. 3, at 11.30 A.M.—Prof. J. Süch: Geomorphological Problems of the Eastern Alps.

At 5.—Dr. P. W. Bryan: Natural Environment related to Human Activity in the Corn Belt of N. America.

At 6.15.—W. Clayton and others: Discussion on Rural School Work; Geography in the Rural School.—Miss E. N. Broom and others: Discussion on Preparatory School Work; Outdoor Geography.—Miss E. G. R. Taylor and others: Discussion on Senior and Central School Work; Sketch Maps: the Shorthand of Geography.

Friday, Jan. 4, at 10 A.M.—E. J. Orford and others: Discussion on Educational Re-organisation and the Teaching of Geography.

At 11.45 A.M.—Sir H. G. Lyons: The Geographer and his Material (Presidential Address).

At 2.30.—Prof. C. B. Fawcett: The Balance of Urban and Rural Populations.

Saturday, Jan. 5, at 10.30 A.M.—Dr. Vaughan Cornish: On Linguistic Frontiers in Central Europe dating from Heathen Times.

At 11.45 A.M.—Hon. Secretary: Summary of the Results of Discussions held on the previous days.

JANUARY 3, 4, AND 5.

NORTH OF ENGLAND EDUCATION CONFERENCE (at Heaton Secondary Schools, Newcastle-upon-Tyne).

Thursday, Jan. 3, at 11.15 A.M.—The Marquess of Londonderry: Presidential Address.

At 2.45.—Miss E. R. Conway and others: School Books.

Friday, Jan. 4, at 10 A.M.—A. R. Pickles and others: Free Place Examinations.

At 11.15 A.M.—Miss L. Jowitt and others: Social Activities in Education

At 2.45.—A. Watson and others: Education in Relation to Industry and Commerce.

Saturday, Jan. 5, at 10 A.M.—F. A. Hoare and others: The League of Nations and the Schools.