

Eucalyptus stock which has no foliage of its own can be nourished by a parasitic *Loranthus*, *i.e.* that a relationship may be established analogous to that between the stock and scion in a grafted plant. The injurious effect upon the host plant is due to the excessive transpiration rate of the parasite, which causes the host plant to suffer from lack of water, particularly during dry periods.—G. F. Hill: Termites from the Australian region: descriptions of new species and hitherto undescribed castes. Eight species are proposed as new, including two species of *Eutermes* from W. Australia and one species each from N. Queensland and N. Territory, one species of *Calotermes* each from Victoria and N. Territory, and two from Lord Howe Island. The alate imagos of two species of W. Australian *Eutermes*, hitherto known in the sterile castes only, and the soldier caste of two species of *Calotermes* (from Victoria and W. Australia respectively), hitherto known in the alate form only, are described for the first time. One of the latter, *C. obscurus* (Walker), until recently known only from the badly-damaged type and a very inadequate description, has been re-discovered in the type locality and fully described. A new name (*C. rufinotum*) is proposed for the Victorian species previously described in detail and provisionally referred to the last-mentioned species by the writer.—J. A. Smith: The graduation of the circle. Early graduations by hand, and the ingenious steps in the evolution of the "graduating engine" were outlined. The design and construction of modern machines such as the Swasey were described. The attainable precision is of the order of a maximum deviation of one-tenth of an inch at one mile.

VIENNA.

Academy of Sciences, February 5.—Scientific results of the expedition to the Anglo-Egyptian Sudan (Kordofan) undertaken by F. Werner in the year 1914. XXI.—I. Sjöstedt: Isoptera, reporting two new kinds of termites, with an appendix by R. Ebner on termite buildings. XXII.—W. Adensamer: Mollusca, including those of the Blue Nile.—H. Pettersson: Communication from the Radium Institute, No. 176. Theory of the method of atomic disintegration. A simple arrangement is described which enables the H-particles and reflected α -particles from disintegrated elements to be observed when weak radium C or thorium C preparations are used. The use of this arrangement for observing the number of H-particles emitted simultaneously by a disintegrated nucleus is shown by a series of measurements with aluminium.—H. Handel-Mazzetti: *Plantae novae Sinenses*. Thirty-second contribution, including three new species of *Lysimachia*.—A. Köhler: The granulite and granulitegneiss problem in the south-western forest quarter of Lower Austria near Säusenstein, Wieselburg and Melk.—O. Wettstein: A new species of mouse from Lower Austria.—R. Andreasch: On carbamide and guanidine derivatives of the sulpho-fatty acids.—O. Lehmann: The geographical results of Dr. H. Handel-Mazzetti's journey through Guidschau (Kweitschou) in South-Western China.

Official Publications Received.

Department of the Interior: Bureau of Education. Bulletin, 1924, No. 32: A Study of 260 School Consolidations. By J. F. Abel. Pp. iv+39. 10 cents. Bulletin, 1924, No. 29: Legislation on the Junior High School. By Paul W. Terry and William J. Marquis. Pp. iii+42. 10 cents. Bulletin, 1925, No. 1: Educational Directory, 1925. Pp. iii+201. 25 cents. Bulletin, 1924, No. 28: Fiscal Support of State Universities and State Colleges. By Dr. Clarence Howe Thurber. Pp. iv+164. 20 cents. Bulletin, 1924, No. 36: A Manual of Educational Legislation, for the Guidance of Committees on Education in the State Legislatures. Pp. iii+51. 10 cents. (Washington: Government Printing Office.)

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Scientific Reports of the Agricultural Research Institute, Pusa (including the Reports of the Imperial Dairy Expert, the Physiological Chemist, and the Secretary, Sugar Bureau), 1923-24. Pp. iv+141. (Calcutta: Government of India Central Publication Branch.) 1 rupee; is. 8d.

Report of the Department of Mines for the Fiscal Year ending March 31, 1924. Pp. iii+71. (Ottawa: F. A. Acland.) 15 cents.

Canada. Department of Mines: Geological Survey. Memoir 142, No. 123 Geological Series: Preliminary Report on the Clay and Shale Deposits of Ontario. By J. Keele. Pp. iii+176+9 plates. 25 cents. Summary Report, 1923, Part B. Pp. 115B. Summary Report, 1923, Part C1. Pp. 168C1. Summary Report, 1923, Part C2. Pp. 44C2. (Ottawa: F. A. Acland.)

Scientific Papers of the Institute of Physical and Chemical Research. No. 14: Spectroscopic Evidence of Isotopy. By H. Nagaoka, Y. Sugiura and T. Mishima. Pp. 112. 1 yen. No. 15: The Results of the Analyses of the Soils and the Ashes of some Sugar Cane. By I. Wada, S. Ato and S. Kato. Pp. 113-124. 20 sen. No. 16: Application of X-ray Diffraction to the Determination of the Transformation Temperature of Thallium. By G. Asahara. Pp. 125-137+2 plates. 40 sen. No. 17: Distribution of Electric Field in Metal Arcs and the Stark Effect observed in Arcs of Silver, Copper, Magnesium, Chromium, Nickel, Cobalt, Iron and ten other Metals. By H. Nagaoka and Y. Sugiura. Pp. 139-167+plates 3-17. 250 sen. No. 18: Spectrum of Mercury under heavy Current Excitation. By M. Fukuda. Pp. 169-183+plates 18-20. 60 sen. (Komagome, Hongo, Tokyo.)

Conseil Permanent International pour l'Exploration de la Mer. Publications de Circonstance, No. 85: Observations on the Witch (*Pleuronectes cynoglossus* L.) and its Growth. By Arvid R. Molander. Pp. 15. (Copenhague: Andr. Fred. Høst et fils.)

The National Physical Laboratory. Report for the Year 1924. (Published for the Department of Scientific and Industrial Research.) Pp. 221. (London: H.M. Stationery Office.) 8s. 6d. net.

British Research Association for the Woollen and Worsted Industries. Annual Report, 1924. Pp. 19. (Headingley, Leeds.)

Proceedings of the University of Durham Philosophical Society. Vol. 7, Part I, 1923-1924. Pp. 68. (Newcastle-on-Tyne.) 5s.

University Ideals: the Presidential Address to the Yorkshire Natural Science Association, Session 1924-25. Genetics and Wool Production: an Address to the Pan-Pacific Science Congress held at Sydney University, August 1923. By Prof. Aldred F. Barker. Pp. iv+60. (Leeds.) 5s.

Diary of Societies.

TUESDAY, APRIL 14.

INSTITUTE OF ELECTRICAL ENGINEERS (East Midland Sub-Centre) (at Loughborough College, Loughborough), at 6.45.—A. B. Mallinson and others: Discussion on Justifiable Small Power Plants.

WEDNESDAY, APRIL 15.

INSTITUTE OF AUTOMOBILE ENGINEERS (Birmingham Graduates' Meeting) (at Chamber of Commerce, Birmingham), at 7.30.—A. Weatherstone: High-speed Motor-cycle Engine Valve Gears.

INSTITUTE OF ELECTRICAL ENGINEERS (Sheffield Sub-Centre) (at Royal Victoria Hotel, Sheffield), at 7.30.—Dr. F. S. Goucher: The Strength of Metals at High Temperatures.

THURSDAY, APRIL 16.

INSTITUTE OF CHEMISTRY (Belfast Section) (at the Queen's University, Belfast), at 7.30.—Prof. Symmers: Address.

INSTITUTE OF METALS (London Local Section) (at Institute of Marine Engineers), at 7.30.—C. H. M. Jenkins: Metals in the Gaseous State.

OPTICAL SOCIETY (at Imperial College of Science and Technology), at 7.30.—J. Guild: The Geometrical Solution of Colour Mixture Problems.—Peeling and Van Neck: Exhibition and Description of the Hahn-Goertz Workshop Microscope; The "Artisol" Mirror Arc Lamp.

FRIDAY, APRIL 17.

DIESEL ENGINE USERS' ASSOCIATION (at Engineers' Club, Coventry Street, W.1), at 3.30.—J. L. Chaloner: Recent Oil-engine Developments.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN (Pictorial Group), at 7.—Dr. H. D'Arcy Power: The Reproduction of Colour and Tons.

JUNIOR INSTITUTION OF ENGINEERS, at 7.30.—W. T. Dunn: Vertical Retorts.

NORTH-EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS (Middlesbrough Graduate Section) (at Cleveland Scientific and Technical Institution, Middlesbrough), at 7.30.—Question Night.

ROYAL SOCIETY OF MEDICINE (Electro-Therapeutics Section), at 8.30.—Sir Henry Gauvain: The Organisation and Work of a Light Department in a Surgical Tuberculosis Hospital.—Dr. G. Murray Levick: The Selection of Apparatus for the Production of Artificial Sunlight.—Prof. Russ and Dr. Peacock: Ultra-violet Radiation.

SATURDAY, APRIL 18.

INSTITUTE OF BRITISH FOUNDRYMEN (Lancashire Branch, Junior Section) (at Municipal College of Technology, Manchester), at 7.—A. Hill: Foundry Materials.

BOLTON AND DISTRICT MANAGERS' AND OVERLOOKERS' ASSOCIATION (at the Institute, Henry Street, Bolton), at 7.30.—B. Robinson: Education and Industry.