

State is also raised to specific rank, as it has very different characters from the Toad-flax-leaved Tea-tree with which it has previously been confused.

## VIENNA.

Academy of Sciences, October 23.—K. Stosius and E. Philippi: On the action of ammonia on the esters of citraconic acid, mesaconic acid, and itaconic acid.—A. Kailan: On the chemical effects of penetrating radium radiation on potassium bichromate, potassium chromate, and potassium permanganate.—H. Handel-Mazzetti: Descriptions of new Chinese plants in the genera *Carpinus*, *Podophyllum*, *Ehretia*, *Microcaryum*, *Trigonotis*, *Onosma*, *Ceropegia*, *Pentasacme*.—L. Abolin: The influence of chemicals on colour change in fish. The action of infundin and adrenalin on the melano- and xantho-phores of the minnow *Phoxinus*. The assumption of male erythro-phore colouring by females treated with infundin.—V. F. Brotherus: New Chinese mosses from the Handel-Mazzetti expedition.

November 6.—Molecular compounds of phenols. IV.—G. Weissenberger, F. Schuster, and K. Schuler: The behaviour of binary systems with phenol and phenol-ethers. V.—G. Weissenberger and F. Schuster: Vapour pressure curves.

## WASHINGTON.

National Academy of Sciences (Proc. Vol. 10, No. 10, October).—P. W. Bridgman: Some properties of single metal crystals. Crystals of zinc, cadmium, bismuth, antimony, tellurium, and tin were examined. Some interesting results are as follows: zinc, linear compressibility is nearly seven times as great parallel to the rotational axis as perpendicular to it, and electrical resistance decreases under pressure. Tellurium, linear compressibility parallel to, and thermal expansion along, the axis are negative. Electrical resistance, except for antimony, is greatest across the plane of easiest cleavage or slip. Cadmium forms two polymorphic forms at 20° C. under pressures of 3000 and 6000 kg./cm.<sup>2</sup>—A. A. Noyes and H. W. Estill: Effect of insulin on the lactic fermentation. Insulin increases by 20-25 per cent. the amount of acid produced from glucose by *Lactobacillus bulgaricus*. It is hoped that work on these lines will aid in standardising insulin preparations.—M. T. Bogert and M. Chertcoff: A new group of dyes from poison gases through the 2-aminothiazoles as intermediates. The preparation of thiazole dyes of Doebner violet type. These substances dye silk, wool, and mordanted cotton a green tint similar to malachite green, but bluer and more dull. They are fugitive in direct sunlight. The poison gases used were dichloro ether, chloroacetone, and chloroacetophenone.—M. T. Bogert and P. S. Nisson: (1) The synthesis of terephthal green and terephthal brilliant green from cymene. These new dyes, compared with malachite and brilliant green (triphenylmethane derivatives), dye wool and silk a yellow green. They compare favourably in tinctorial power and fastness. (2) Further experiments in the field of the terephthalic acid derivatives.—E. B. Wilson and W. J. Luyten: A statistical discussion of sets of precise astronomical measurements (IV.); the mass-ratio in binaries. The apparent clustering of mass-ratios about unity is probably due to observational selection; the actual association may not be materially different from random mating.—H. Shapley: Note on the thermokinetics of dolichoderine ants. The speed of ants varies with changes of temperature. When the temperature was under control, maximum speed was attained by one species of ant, *Tapinoma*, at 36° C. Through a limited range of temperature, the speed-temperature ratio is constant.

NO. 2877, VOL. 114]

## Official Publications Received.

The North Staffordshire Field Club. Transactions and Annual Report, 1923-24. Edited by S. A. H. Burne. Vol. 58. Pp. 157+41-66+70. (Stafford.) 7s. 6d.

Society for the Provision of Birth Control Clinics. First Annual Report of the Walworth Women's Welfare Centre, 1924. Pp. 16. (London: 153A East Street, S.E.17.)

Memoirs of the Asiatic Society of Bengal. Vol. 8, No. 3: The Boats of the Ganges, by James Hornell; The Fishing Methods of the Ganges, by James Hornell. Pp. 171-238. (Calcutta.) 2.13 rupees.

The South-Eastern Naturalist: being the Twenty-ninth Volume of Transactions of the South-Eastern Union of Scientific Societies, including the Proceedings at the Twenty-ninth Annual Congress, held at Guildford, 1924. Edited by Edward A. Martin. Pp. lxxxvii+99. (London.) 5s. net.

British Honduras. Annual Report of the Forest Department for the Year ending 31st March 1924. Compiled by C. L. Stocker. Pp. 18+1 map. (London: Crown Agents for the Colonies.)

Department of the Interior: Bureau of Education. Bulletin, 1924, No. 5: The Chief State School Official. By Prof. Ward G. Reeder. Pp. iv+67. Bulletin 1924, No. 9: Intelligence of Seniors in the High Schools of Massachusetts. By Stephen S. Colvin and Andrew H. MacPhail. Pp. vi+39. Bulletin, 1924, No. 16: Objectives in Commercial Engineering; Report of the Second Conference on Business Training for Engineers and Engineering Training for Students of Business, Pittsburgh, Pennsylvania, May 1 and 2, 1922. Prepared by Glen Levin Swiggett. Pp. iii+66. (Washington: Government Printing Office.) 10 cents each.

The National Physical Laboratory, Teddington, Middlesex: Metrology Department. Gauge Testing. Pp. 39. (Teddington.)

The University of Manchester: the Manchester Museum. Museum Publication 88: Report of the Museum Committee for the Year 1923-24. Pp. 20. (Manchester: Manchester University Press; London: Longmans, Green and Co.) 6d. net.

The Manchester Museum: Museum Handbooks. Publication 87: Outline Classification of the Animal Kingdom. By Prof. Sydney J. Hickson. Fifth edition. Pp. 28 (interleaved). (Manchester: Manchester University Press; London: Longmans, Green and Co.) 6d.

Transactions of the Royal Society of Edinburgh. Vol. 53, Part 3, No. 29: Notes on Fossil Plants from the Old Red Sandstone of Scotland. II.: Nematophyton Porfarense, Kidston sp.; III.: On two Species of Pachythea (*P. media* and *P. fasciculata*) based on the Characters of the Algal Filaments. By Dr. R. Kidston and Dr. W. H. Lang. Pp. 603-614+2 plates. (Edinburgh: R. Grant and Son; London: Williams and Norgate, Ltd.) 2s. 6d.

Journal of the Marine Biological Association of the United Kingdom. New Series, Vol. 13, No. 2, November. Pp. 319-530. (Plymouth.) 7s. net.

Publication de la Commission Géodésique Néerlandaise (Uitgegeven door de Rijkscommissie voor Graadmeting en Waterpassing). Observations de Pendule sur la mer pendant un voyage en sous-marin de Hollande à Java, 1923. Par Dr. F. A. Vening Meinesz. Pp. iii+16. (Delft: Boekhandel J. Waltman, Jr.)

Smithsonian Miscellaneous Collections. Vol. 76, No. 12: "Adaptations" to Social Life; the Termites (Isoptera). By Dr. Thomas E. Snyder. (Publication 2786.) Pp. 14+3 plates. Vol. 76, No. 13: Preliminary Archeological Explorations at Weeden Island, Florida. By J. Walter Fewkes. (Publication 2787.) Pp. 26+21 plates. (Washington: Smithsonian Institution.)

Department of the Interior: Bureau of Education. Suggestions for the Observance of American Education Week, November 17-23, 1924. Pp. 36. (Washington: Government Printing Office.) 5 cents.

Department of the Interior: United States Geological Survey. Professional Paper 127: The Composition of the Earth's Crust. By Frank Wigglesworth Clarke and Henry Stephens Washington. Pp. v+117. (Washington: Government Printing Office.) 20 cents.

Sixty-second Annual Report of the Secretary of the State Board of Agriculture of the State of Michigan, and Thirty-sixth Annual Report of the Experiment Station from July 1, 1922, to June 30, 1923. Pp. 504. (East Lansing.)

Annual Report of the Board of Regents of the Smithsonian Institution, showing the Operations, Expenditures, and Condition of the Institution for the Year ending June 30, 1923. (Publication 2724.) Pp. xii+554+142 plates. (Washington: Government Printing Office.) 1.50 dollars.

Department of the Interior: United States Geological Survey. Mineral Resources of the United States, 1915. Part 1: Metals. Pp. iv+99A+1000+3 plates. Mineral Resources of the United States, 1916. Part 1: Metals. Pp. v+73A+871+3 plates. Part 2: Nonmetals. Pp. v+1115+4 plates. Mineral Resources of the United States, 1917. Part 1: Metals. Pp. v+79A+980+8 plates. Part 2: Nonmetals. Pp. vi+1293+1 plate. Mineral Resources of the United States, 1918. Part 1: Metals. Pp. iv+149A+1096+9 plates. Part 2: Nonmetals. Pp. viii+1557+10 plates. (Washington: Government Printing Office.)

Proceedings of the Liverpool Geological Society. Session the Sixty-fifth, 1923-1924. Part 1, Vol. 14. Edited by C. B. Travis. Pp. xx+98+4 plates. (Liverpool.) 5s.

## Diary of Societies.

TUESDAY, DECEMBER 23.

INSTITUTION OF AUTOMOBILE ENGINEERS (Informal Meeting) (at 83 Pall Mall), at 6.30.—Demonstration and Discussion on Anti-dazzle Devices. HULL CHEMICAL AND ENGINEERING SOCIETY (at Grey Street, Hull), at 7.45.—A. E. Butterfield: The Development of Unattended Navigation Lights.

SATURDAY, DECEMBER 27.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—F. Balfour Browne: Concerning the Habits of Insects (I). Insect Collecting and what it leads to.