

mode of formation of starch grains in the latex of the Euphorbiaceæ.—Maurice Lenoir: The telophase of the first division in the embryonic sac of *Fritillaria imperialis*.—Vittorio Pettinori: The toxic action of *Amanita phalloides*. This poison acts not only on vertebrates, but also on infusoria, small crustaceans, the larvæ of insects and fishes. It has no action on the isolated heart of the frog, and probably is without action on lizards and frogs.—Gilbert Ranson: The cause of the green coloration appearing on oysters. The pigment of *Navicula ostrearia*, which is unaffected by the digestive juices of the oyster, is shown to be the cause of the green coloration.—Harry Plotz: Some observations on the mechanism of serum anaphylaxy. In anaphylaxy produced by serum injection two factors intervene: the physico-chemical state of the serum used for the sensitising injection, and the physico-chemical state of the second injection.—Georges Bourguignon and Mlle. Renée Déjean: Double chronaxy of the optical system in man.—Jean Camus and J. J. Gournay: Researches on diabetes and diuresis.

MELBOURNE.

Royal Society of Victoria, November 20.—J. Ewart: Stock poisoning in the Northern Territory. Along the main stock route in the Northern Territory very heavy losses of stock have been experienced in recent years and their cause has been in doubt. The cause was determined, by actual experiments carried out in Central Australia on a herd of cattle, to be poisoning due to *Indigofera boviparda*, the indigo cattle bane, and to *Isotropis atropurpurea*, the poison sage. The former is well known as a cattle-killer in Western Australia, but was not previously recorded as killing stock in the Northern Territory. It loses its poisonous properties when dried in a hot sun, owing to the ready decomposition of its alkaloid "cygnin." The *Isotropis* was not previously recorded as a poisonous plant. It is less poisonous than *Indigofera boviparda*, but the poison is more stable. An extract obtained by Dr. Young is poisonous to guinea-pigs, but the nature of the poison is as yet unknown.—C. Fenner: The Bacchus Marsh basin, Victoria. At a period somewhat earlier than middle Tertiary, the whole of Eastern Australia, including Victoria, consisted of low undulating highlands and vast level plains, well wooded and well watered. Under these conditions great brown coal deposits of Victoria, etc., were built up. Later there came some differential uplift of the land, and associated with this there was an outpouring of basaltic lava (the "older basalts"), and about this time the subsidence of Bass Strait possibly commenced. Later, there was another volcanic period (the "newer basalts"); these flows dammed up many of the streams, and filled up some of the old valleys, forming lakes and twin streams and causing a complete change in the drainage system. The faulting which followed or accompanied this volcanic period gave rise to the great mountain system of Eastern Australia. Locally it caused additional alteration in the stream activities. Thenceforward the natural downward cutting, side-swinging, and headward erosion of the Bacchus Marsh streams brought about the formation of the basin as it exists to-day.—A. H. Coulsen: Geology of the Coimadai area, Victoria, with special reference to the Limestone series. Lower Ordovician and Permo-Carboniferous glacial rocks form the basement of the area, but the paper is concerned with the Kainozoic rocks. These comprise gravels, sands, etc., monchiquite dykes and basalt. The limestone, or more properly dolomite, contains fossils and a very finely laminated mudstone

with small grains which bear a strong resemblance to the pollen grains of *Pinus*. The grains sometimes have a quadrate centre and at others there is a suggestion of spines and wings. The fossils are all referable to the Pleistocene. The extreme uniform fineness of grain and the absence, with one or two possible exceptions, of calcareous organisms, suggest that the dolomitic limestone is the result of deposition of a chemical precipitate of magnesian limestone and differential leaching, in places, giving a more magnesian limestone. Basaltic lava flows followed the sedimentation in the lake, but were preceded by the outburst of a fine ash which has only been found in the limestone lake. The outpouring of basalt completely altered the drainage system of the area. Pyrete and Goodman's Creeks came into existence and deposited, in their initial stages, high level gravels as a capping over the older rocks. In deepening their channels they carried away much of the softer gravels of the old "Bullengarook River," destroyed the limestone lake, and removed most of the limestone, the remnant of which is now covered by the higher gravels of these streams.

Official Publications Received.

- Carnegie Institution of Washington. Year Book No. 23, November 1, 1923, to June 30, 1924: with Administrative Reports through December 12, 1924. Pp. xx+43+325. (Washington, D.C.)
- Medical Schools of the World. Pp. 26. (New York: The Rockefeller Foundation.)
- Commonwealth of Australia: Institute of Science and Industry. Bulletin No. 28: Problems of the Viticultural Industry. By A. V. Lyon. Pp. 84. (Melbourne: H. J. Green.)
- University of Oregon Publication. Vol. 2, No. 7, November: A Proposed Classification of Igneous Rocks. By Edwin T. Hodge. Pp. 72. (Eugene: University of Oregon Press.) 1 dollar.
- Ministry of Agriculture, Egypt: Technical and Scientific Service. Bulletin No. 47: Cotton Growing in Relation to Climate in Egypt and the Sudan. By C. B. Williams. Pp. ii+31+9 plates. (Cairo: Government Publications Office.) 5 P.T.
- The South African Journal of Science. Vol. 21, November: Comprising the Report of the South African Association for the Advancement of Science, 1924, Cape Town. Pp. xi+698+xx. (Johannesburg.) 30s. net.
- Hampstead Scientific Society. Report of the Council and Proceedings, with a List of the Members, for the period October 1922 to September 1924. Pp. 70. (London: 32 Willoughby Road, N.W.3.)
- Nyasaland Protectorate: Department of Agriculture. Bulletin No. 1 of 1924: The Destruction of Vegetation and its Relation to Climate, Water Supply and Soil Fertility. Part 1: General Effects of the Destruction of Vegetation, by Dr. F. Dixey; Part 2: The Relation of Forest Vegetation to Climate, Water Supply and Soil Erosion, by J. B. Clements; Part 3: The Erosion of Arable Soil in Nyasaland and Methods of Prevention, by A. J. W. Hornby. Pp. 16. (Zomba.)
- Smithsonian Institution: The Smithsonian Institution's Study of Natural Resources. Niagara Falls: its Power Possibilities and Preservation. By Samuel S. Wyer. (Publication 2820.) Pp. vi+28+2 plates. (Washington, D.C.)
- Carnegie Institution of Washington. Annual Report of the Director of the Laboratory for Plant Physiology. (Extracted from Year-Book No. 23, for the Year 1924.) Pp. 155-143. (Washington, D.C.)
- New South Wales. Department of Mines: Geological Survey. Bulletin No. 7: Gold. By E. J. Kenny. Pp. 60+10 plates. 2s. Bulletin No. 8: Aluminium (Alumite and Bauxite). By L. F. Harper. Pp. 21. 1s. Bulletin No. 11: Cadmium and Mercury, or "Quicksilver." By E. J. Kenny. Pp. 12. 1s. (Sydney: Alfred James Kent.)

Diary of Societies.

SATURDAY, FEBRUARY 21.

- BRITISH PSYCHOLOGICAL SOCIETY (at University College), at 3.—Miss Isabel Burnett: Motives in the Acquisition of Skill.—Prof. T. H. Pear: On Forgetting the Unpleasant: An Examination into Recent Criticisms of Psycho-analysis.
- ROYAL INSTITUTION OF GREAT BRITAIN, at 8.—W. Rothenstein: The Artist's Relation to Social and Religious Life (II.).
- PHYSIOLOGICAL SOCIETY (at London School of Medicine for Women), at 4.—G. Briscoe: Pressure of Phrenic Effects on Conduction of Respiratory Impulses.—E. E. Hewer and M. F. Lucas-Keene: Histological Preparations of certain Foetal Tissues (Human).—J. W. Pickering: The Supposed Deficiency of Pro-Thrombin in Haemophilic Blood.—W. Cramer: The Process of Secretion in the Thyroid Gland.—J. F. Fulton: Plurisegmental Innervation of Single Muscle Fibres (Frog).—A. St. G. Huggatt and Prof. J. Mellanby: Preparation and Properties of Secretin.—R. E. Havard and G. A. Ray: The Effect of Exercise on Blood Phosphate.—J. B. S. Haldane: Some Effects of ingesting $MgCl_2$ and $SrCl_2$.—A. D. Ritchie: Chloroform Rigor in Frog's Muscle.—J. H. Burn and H. P. Marks: The Relation of the Thyroid Gland to the Action of Insulin.—F. C. Kelly: The Effect of Iodine on the Metabolism