

South Africa, but appears to be absent from the area of winter rainfall. Two noteworthy features of cell structure are the presence of pink sap and a solid anthocyanin body in pigmented cells, and of elongated, slit-like pits in the ventral tissue of old thalli.

M. R. LEVYNS: Some evidence bearing on the past history of the Cape flora. At the present time, the main area of occupation of the Cape flora is along the coastal belt of South Africa. Recent work by geologists and archaeologists indicates that in Quaternary times South Africa was subjected to considerable fluctuations of climate. During pluvial phases conditions would have allowed the Cape flora to occupy much larger areas than it does to-day. During arid times the existence of this flora would have been challenged, and it is suggested that the importance of the mountains of southern Africa lies in the fact that they provided a refuge for the flora when in danger of extermination. This would explain the concentration of species on the mountains of the Cape.

### Geneva

Physical and Natural History Society (May 19).

A. CHAIX: Geology of the Hirmente (Haute-Savoie). A detailed stratigraphical and tectonic study.

A. JAYET: The presence of Riss quaternary deposits at Bellegarde (Departement de l'Ain). Road repair work has exposed a succession of formations containing non-striated alpine rocks and local rocks. It is concluded that this is the nose of the Riss glacier, previously thought to extend nearly to Lyons.

June 16.

TH. POSTERNAK: Constitution and synthesis of phenicine, the pigment of *Penicillium phoeniceum*. Phenicine is the 4, 4'-dimethyl-2, 2'-dioxidiquinone. The hexa-acetate of its leuco-derivative is produced by Thiele's reaction, starting from Brunner's ditoluquinone; saponification followed by oxidation leads to phenicine.

E. A. H. FRIEDHEIM: Contribution to the chemotherapy of African sleeping sickness. Experiments with arsenic-sulphonic acids. Oxynaphthoquinones have a trypanocidal effect, and on combining them with substances of known therapeutic value, such as phenylarsinic acids, a definite chemo-therapeutic effect is obtained. A convenient compound of low toxicity and high trypanocidal effect is the sodium salt of 4-(4-arsono-anilino)-1, 2-naphthoquinone-8-sulphonic acid. This has given good results with human trypanosomiasis.

F. CHODAT and M. G. MARTIN: Ineffectiveness of colchicine in purely nuclear process. Cultures of *Staphylococcus aureus* are not sensibly affected by colchicine. Bacteria being essentially nuclear in nature, this confirms previous work on the garlic showing that this alkaloid affects the protoplasm of the cell and not the nucleus.

J.-PH. BUFFLE, CH. JUNG and P. ROSSIER: Observations and new theory of a lacustrine optical phenomenon: iridation of March 8, 1938. This phenomena seems to have been an inferior rainbow. Wartmann's view, also held by Forel, that it was due to interference produced by pulverulent matter forming a 'grid' on the surface of the water, is not supported by the measurements made.

## Appointments Vacant

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:

DEMONSTRATOR IN BOTANY in the University of Leeds—The Registrar (October 3).

DEMONSTRATOR IN BACTERIOLOGY in the University of Leeds—The Registrar (October 3).

LECTURER IN MECHANICAL ENGINEERING in the Norwich Technical College—The Principal (October 3).

DIRECTOR OF DAIRY RESEARCH IN INDIA—The High Commissioner for India, General Department, India House, Aldwych, London, W.C.2 (October 10).

JUNIOR LECTURER IN CHEMISTRY in the Imperial College of Tropical Agriculture, Trinidad—The Secretary, 14 Trinity Square, London, E.C.3 (October 17).

DIRECTOR of the John Innes Horticultural Institution—The Secretary, Manor House Annexe, Watery Lane, Merton Park, London, S.W.20.

DEMONSTRATOR IN CHEMISTRY AND PHARMACY in the Portsmouth Municipal College—The Registrar.

LECTURER IN MECHANICAL ENGINEERING in Natal Technical College—Arthur Perrott, Regent Palace Hotel, London, W.1.

## Reports and other Publications

(not included in the monthly Books Supplement)

### Great Britain and Ireland

Rothamsted Experimental Station, Harpenden: Lawes Agricultural Trust. Report for 1937. Pp. 225. (Harpenden: Rothamsted Experimental Station.) 2s. 6d. [139]

Standing Commission on Museums and Galleries. Second Report. Pp. 39. (London: H.M. Stationery Office.) 9d. net. [149]

The Macaulay Institute for Soil Research. Collected Papers, Vol. 1. Edited by Dr. W. G. Ogg. Pp. 16+54 papers. (Aberdeen: Macaulay Institute for Soil Research.) 21s. [159]

Committee on Bird Sanctuaries in Royal Parks (England). Report for 1937. Pp. 32. (London: H.M. Stationery Office.) 6d. net. [169]

Joint Board of Research for Mental Disease: City and University of Birmingham. Annual Report, 1937-38. Pp. 16. (Birmingham: The University.) [199]

Department of Scientific and Industrial Research. Report of the Chemistry Research Board for the Triennial Period ended 31st December 1937; with Report of the Director of Chemical Research. Pp. vii+146+7 plates. (London: H.M. Stationery Office.) 3s. net. [199]

### Other Countries

Field Museum of Natural History. Geological Series, Vol. 6, No. 21: New Crocodilians from the Upper Paleocene of Western Colorado. By Karl P. Schmidt. Pp. 315-322. 15 cents. Zoological Series, Vol. 20, No. 32: Hemiptera from Iraq, Iran and Arabia. By W. E. China. Pp. 427-438. 15 cents. Zoological Series, Vol. 20, No. 33: Orthoptera from Iraq and Iran. By B. P. Uvarov. Pp. 439-452. 20 cents. Zoological Series, Vol. 20, No. 34: Birds of the Crane Pacific Expedition. By Ernst Mayr and Sidney Camras. Pp. 453-474. 20 cents. (Chicago: Field Museum of Natural History.) [139]

University of Illinois: Engineering Experiment Station. Bulletin No. 301: The Friction of Railway Brake Shoes at High Speed and High Pressure. By Prof. Herman J. Schrader. Pp. 52. 60 cents. Bulletin No. 302: Fatigue Tests of Riveted Joints; a report of an investigation conducted by the Engineering Experiment Station, University of Illinois, in cooperation with the Department of Public Works, State of California. By Prof. Wilbur M. Wilson and Frank P. Thomas. Pp. 114. 1 dollar. Reprint No. 12: Fourth Progress Report of the Joint Investigation of Fissures in Railroad Rails conducted by the Engineering Experiment Station, University of Illinois, in cooperation with the Association of American Railroads and the Rail Manufacturers' Technical Committee. By Prof. Herbert F. Moore. Pp. 52. 15 cents. (Urbana, Ill.: University of Illinois.) [149]

Royal Observatory, Hong Kong. The Law of Storms in the China Sea. By C. W. Jeffries and G. S. P. Heywood. (Appendix 3 to Hong Kong Meteorological Results, 1937.) Pp. 26+19 plates. (Hong Kong: Royal Observatory.) 2 dollars. [169]

Proceedings of the California Academy of Sciences, Fourth Series, Vol. 22, No. 7: The Templeton Crocker Expedition of 1934-35, No. 36: Additional New Fishes. By H. Walton Clark. Pp. 179-186. Vol. 23, No. 17: On some Birds rare in, and hitherto unrecorded from, Chiriqui Province, Panama. By M. E. McLellan Davidson. Pp. 255-262. Vol. 23, No. 18: Studies in the Andrenidae of North America, I (Hymenoptera). By E. Gorton Linsley. Pp. 263-282. Vol. 23, No. 19: Notes on the Breeding Seasons of the Rocky Beach Fauna of Monterey Bay, California. By Prof. Willis G. Hewatt. Pp. 283-288. Vol. 23, No. 20: Review of the Genus *Gastrodex* (Lygaeidae, Hemiptera). By Robert L. Usinger. Pp. 289-302. Vol. 23, No. 21: A New Rodent of the Genus *Nesoryzomys* from the Galapagos Islands. By Robert T. Orr. Pp. 303-306+plate 25. Vol. 23, No. 22: Mammals from Sikang, China. By Robert T. Orr. Pp. 307-310. (San Francisco: California Academy of Sciences.) [199]

Annual Report on Forest Administration in Malaya, including Brunei, for the Year 1937. By J. P. Mead. Pp. ii+80+5 plates. (Kuala Lumpur: Government Printer.) 1 dollar; 2s. 4d. [199]

Statens Meteorologisk-Hydrografiska Anstalt. Årsbok, 19, 1937. ii. Nederbörden i Sverige (Precipitation in Sweden). Pp. 16+1 plate. (Stockholm: P. A. Norstedt and Söner.) 2.50 kr. [199]