

VII.—NEW SERIALS.

THERE is quite a crop of new serials devoted to geology and allied sciences. The first is *Verhandelingen van het Geologisch-Mijnbouwkundig Genootschap voor Nederland en Koloniën*, a quarto published at 's Gravenhage, of which four parts appeared in 1912–13. These contain papers by Waterschoot van der Gracht on North Brabant Coal-field; a most valuable bibliography of all the Netherlands East Indies by R. D. M. Verbeek, arranged in islands; *Ursus etruscus* from Tegelen by E. T. Newton; Red Flinty Clay by J. Lorié and H. G. Jonker; and Jura Erratics from Kloosterholt by J. F. Steenhuis.

In the second, *Memorie dell'Istituto Geologico della R. Università di Padova*, vol. i, 1912 (edited by Giorgio Dal Piaz), large quarto, Padova, we have papers by the editor on the Geotectonics of the Brenta and the Lake of Santa Croce, and on the Bathonian fauna of Monte Pestello; by R. Fabiani on the type of *Crocodylus vicetinus*, Liogy; by G. Stefanini on the Miocene Mammals of Venetia; and by A. De Toni on the Brachiopoda of the *Ceratites trinodosus* zone of Monte Rite.

The third, entitled *Monographias do Serviço Geologico e Mineralogico do Brasil*, vol. i, 1913, Rio de Janeiro (Ministerio de Agricultura), is also a quarto and is entirely occupied by J. M. Clarke's Fosseis Devonianos do Parana, a valuable and exhaustive paper illustrated by twenty-seven excellent plates of Trilobites, Molluscs, Brachiopods, and Echinoderms, with text in Portuguese and English.¹

The fourth new serial hails from Canada and is called *Bulletin of the Victoria Memorial Museum*, No. 1, and appears to be an issue from the Geological Survey. It is an octavo, is dated October 23, 1913, and is published at Ottawa. This contains many papers by Bather, Lambe, Raymond, Wilson, and Johnston on geological subjects, and by others on zoology, botany, and anthropology.

VIII.—BRIEF NOTICES.

1. UNDERGROUND WATER FOR COMMERCIAL PURPOSES.—Under this title Dr. Frank L. Rector, of New York, has written a compact and useful handbook of 98 pages (London, Chapman & Hall, 1913, price 4s. 6d. net). Although written round American points it is equally applicable to this country. Beginning with the source of water, the author deals with ground water, distribution and properties, springs, wells and construction, watersheds, mineral waters, chemical and bacteriological examination, and appends useful rules and tables of capacities of tanks, pipes, cylindrical vessels, pressures per square inch, and expansion at different temperatures. A short bibliography and a clear index close the volume.

2. PALÆONTOLOGY FOR 1912.—The Zoological Record issued by the Zoological Society of London has reached its 49th volume. It is not generally known that this valuable publication includes palæontological as well as recent zoological papers and is of the greatest value

¹ A large number of the illustrations are reproduced in Bull. 164, New York State Museum, 1913, for comparison with New York forms.

to geologists. Compiled by specialists in all its branches, it should always be referred to by anyone engaged in work on the fossil forms. The separate sections, Mammalia, Aves, Mollusca, etc., can be separately obtained from the Zoological Society at a reasonable price, and as the contents of the papers are indexed into groups one can easily find the forms upon which one is working.

3. FORAMINIFERA.—Frederick Chapman describes numerous Foraminifera from deep borings in the Mallee, about 6 miles east of the South Australian boundary. He does not at present state the age, but the forms appear to be of low Tertiary age. Other groups are described and figured, and perhaps that of most interest is an *Antedon*, new, but referred by comparison to a Port Jackson form. (Proc. Roy. Soc. Victoria, xxvii, pt. i.)

Heron-Allen and Earland write on the Foraminifera in their rôle as world-builders; a review of the Foraminiferous limestones and other rocks of the Eastern and Western Hemispheres (Journ. Quekett Micro. Soc., xii). This is a general paper, but brings together a good deal of information otherwise buried in various publications.

Rufus M. Bagg, on the Pliocene and Pleistocene Foraminifera from Southern California (Dept. of Interior, U.S. Geol. Survey, Bull. 513, 92 pp. and 28 pls.), renders available a large number of forms for comparison, all carefully worked out and illustrated. Very little is new, but such monographs are of considerably more than local interest.

4. SPONGITES SAXONICUS.—Dettmer (Neues Jahrbuch, 1912 (2), 114–26) discusses the various forms known as *Spongites saxonicus*, Geinitz, from the Chalk. He compares them with Foraminifera, worm-casts, and fucoïd stems, and figures various specimens of each kind, suggesting that these curious remains may have several origins. Similar forms are fairly abundant in our own Chalk, and readers of the GEOLOGICAL MAGAZINE will recall Dr. Bather's recent communication on worm-casts from the English Chalk (1911, pp. 481, 549) preserved in the British Museum.¹

REPORTS AND PROCEEDINGS.

GEOLOGICAL SOCIETY OF LONDON.

1. January 7, 1914.—Dr. Aubrey Strahan, F.R.S., President, in the Chair.

The following communications were read—

1. "The Ordovician and Silurian Rocks of the Lough Nafuoey Area (County Galway)." By Charles Irving Gardiner, M.A., F.G.S., and Sidney Hugh Reynolds, M.A., F.G.S., Professor of Geology in the University of Bristol.

The Lough Nafuoey area is a direct continuation of the Kilbride area (described in 1912), from which it is separated by the Finny River. It forms a ridge about 4 miles long, which reaches its highest point (1,678 feet) at Curraghrevagh Mountain, and slopes steeply down to Lough Nafuoey on the north, and more gradually to Glen Trague on the south.

¹ See also T. McK. Hughes, on *Spongia paradoxica*, GEOL. MAG. 1884, p. 185.