reefs), with fragments of drift-wood from some distant land, sometimes bored, or covered with attached valves of oysters. Here, too, the surface features have been variously modified, partly by faults, but mostly by denudation, by which different layers of the oolitic strata have been exposed, so as to modify the nature of the soils according to the character of the rocks from which they have been derived, for there is little evidence of foreign detrital matter (except in one or two cases) being spread over the land or remaining in this neighbourhood.

NOTICES OF MEMOIRS.

I.—Note on the Transition from Carboniferous to Permian.

Communicated by Count A. G. von Marschall, F.C.G.S., etc.[1]

In Spitzbergen the late German Expedition obtained the following fossils from Horn Sound, on the south-west coast:—

1. *Spiriferina Hoeferiana*, sp. n.
2. *Spirifer Wilczeki*, Toula.
3. „ *striatus*, Martin?
4. „ *lineatus*, Martin, sp.
5. „ ———, var. *elliptica*, Sow.?
6. *Camarophoria crumena*, Martin, sp.
7. *Productus Weyprechti*, Toula.
8. „ sp. (comp. *P. Prattenianus*, Norwood).
9. „ *undatus*, Defr.?
10. „ *Wilczeki*, sp. n.
11. „ *longispinus*, Sow.
12. „ *Spitzbergianus*, sp. n.
13. „ (*Strophalosia*) *Cancrini*, M. Vern. and K.
14. *Strophalosia Leplayi*, Gen.
15. *Chonetes Verneuiliana*, Norw. and Pratten; var. nov.
16. „ *granulifera*, Sow.
17. „ sp. ind.
18. *Pecten* (*Aviculopecten*) *Wilczeki*, sp. n.

With the exception of one species, the individuals are all of small size. Some are genuine *Carboniferous* species, and some genuine *Permain*; and they appear to be transitional from the Carboniferous limestones to the Zechstein; all occurring in a well-determined group of strata; but some, characteristic elsewhere of one or other of the above-mentioned formations, being found occasionally in the same hand-specimen, as *Productus longspinus* and *Strophalosia Cancrini*. This circumstance may be regarded as corroborative of the gradual passage from the Carboniferous to the Permian, as held by Prof. Geinitz for Nebraska, and by Dr. G. Stache for the southern Alps.

II.—The Geology of the Burnley Coal-field.

This work, which is one of the recently published Memoirs of the Geological Survey of England and Wales, includes a description of the country around Clitheroe, Blackburn, Preston, Chorley, Haslingden, and Todmorden, and explains Quarter-sheets 88 N.W., 89 N.E., and 92 S.W. of the One-inch Geological Map. It is by

[1] From the Proceed. Imp. Acad. Sci. Vienna, June, 1874, vol. lxx. p. 133.

Professor Hull and Messrs. Dakyns, Tiddeman, Ward, Gunn, and De Rance.

The work contains a description of the physical features of the district, a detailed account of the Carboniferous rocks along the Ribble Valley, special accounts of the Burnley and Chorley Coal-fields, with notices of the Permian and Triassic rocks, of the Glacial and Post-Glacial Drifts, Igneous rocks, minerals, etc. There is also an extensive catalogue of the fossils from the Carboniferous rocks, prepared by Mr. Etheridge, and a list of works and papers relating to the geology of Lancashire and some parts of the adjacent country, by Messrs. Whitaker and Tiddeman.

REPORTS AND PROCEEDINGS.

Geological Society of London.—I.—April 14th, 1875.—John Evans, Esq., F.R.S., V.P.R.S., President, in the Chair.—The following communications were read:—

1. "Descriptions of New Corals from the Carboniferous Limestone of Scotland." By James Thomson, Esq., F.G.S.

In this paper the author described some forms of corals from the Carboniferous Limestone of Scotland, which he regards as new species, and as belonging to three new genera allied to *Clisiophyllum*. In the group which he names *Rhodophyllum* the calice is circular and shallow; the epitheca thin and smooth; the septa thin and numerous; and the columellar boss dome-shaped, slightly raised above the inner margin of the primary septa, and clapsed by subconvolute ridges. The species referred to this genus are *Rhodophyllum Craigianum*, *R. Slimonianum*, *R. Phillipsianum*, *R. Argylianum*, *R. reticulatum*, and *R. ellipticum*. *Aspidiophyllum* has the calice generally circular, shallow; the septa forming thin laminæ for about half their length from within, when they become flexuous, and the columellar boss promient and helmet-shaped. The species are named *A. Koninckianum*, *A. Huxleyanum*, *A. cruciforme*, *A. elegans*, *A. Hennedii*, *A. Danai*, *A. dendrophyllum*, *A. ellipticum*, *A. Pagei*, *A. scoticum*, and *A. laxum*. The third genus, *Kurnatiophyllum*, is most nearly allied to *Rhodophyllum*, but has the columellar space slightly raised above the inner margin of the primary septa, and crowned by bending or wavy lamellæ, some of which pass over the central space in sinuous folds. The species are described under the names of *R. concentricum*, *clavatum*, *Tyleranum*, *intermedium*, *ellipticum*, *Ramsayanum*, *Youngianum*, *Harknessianum*, *lamellifolium*, *bipartitum*, *octolamellosum*, *Haimianum*, *Edwardsianum*, and *Davidsonianum*. In a specimen of *Aspidiophyllum Huxleyanum* the author noticed in the open interseptal space a small tube, 4 lines long, around the inner margin of which there was a group of oval bodies, which, from their close proximity to the inner margin of the primary septa and their form, he is inclined to think may be ova.

2. "On the Probable Existence of a Considerable Fault in the Lias near Rugby, and of a New Outlier of the Oolite." By J. M. Wilson, Esq., M.A., F.G.S.