the following profile of the mountain, called by him Tschermak's Berg. By Blomstrand and myself it had formerly been called Middle Hook.

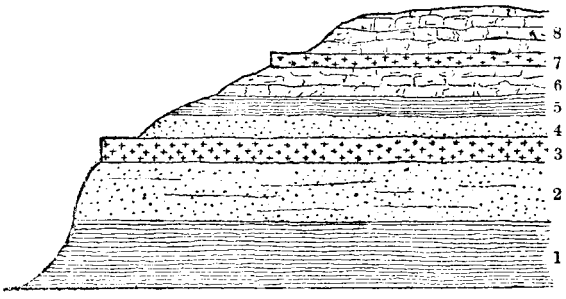

Fig. 13.—Profile of Tschermak's Berg, in Ice Sound, by von Drasche.

1. Black bituminous marl, with many coprolites, Cephalopoda, and bivalves. 2. Reddish sandstone, with but few fossils. 3. Diabase. 4. Reddish sandstone, like 2. 5. Clay-slate. 6. Limestone, with very evident traces of the action of waves. 7. Thin stratum of diabase. 8. Grey limestone.

Ekman Bay.—The bottom of the fiord is occupied by a glacier, off which the fiord is for a considerable distance so shallow that a boat cannot be rowed in it. The sides are formed of two mountains, which in an architectural respect are the finest I know of on Spitzbergen, and which on that account were by us distinguished with the names Colosseum and Capitolium. The geological structure of both is clearly identical; they consist of horizontal Mountain Limestone strata, succeeded by a bed of gypsum marl, divided with the utmost regularity into niches and beautiful rows of pillars, on which rests a roof of diabase, which, however, does not here form the terrace with precipitous sides at the summit of the mountain. The Mountain Limestone strata further up the fiord rest (as seen in the profile Fig. 7, given in the last Number of the Geol. Mag., at p. 68) on the Liefde Bay strata.

(*To be continued in our next Number.*)

NOTICES OF MEMOIRS.

Remarks on the Organization and Systematic Position of Receptaculites. By C. W. Gümbel. [Beiträge zur Kenntniss der Organisation, u. s. w.] From the Transactions of the Royal Bavarian Academy of Sciences, Math.-Phys. Class. Vol. XII. Part I. 4to. 49 pages, 1 plate. Munich, 1875.

VARIOUS opinions have been held as to the zoological place of the fossil known as *Receptaculites*, occurring in the Silurian system, but represented by a fine species throughout the Devonian rocks of the Rhenish system. It has been referred by some to the Sponges, and by others to the Foraminifera. Dr. Gümbel's late microscopic researches on the internal structure of this interesting fossil place its nature in a clear light. As already described by

Billings, it possesses a skeleton consisting of two walls or floors, each made up of rhombic plates, fitting in one to another; separating and supporting the two floors or decks are a great number of thickish, calcareous, vascular columns, which are traversed by an internal canal with ramifications in each of the floors. After illustrating this structure, Gümbel points out that the calcareous skeleton, therefore, possesses an anastomosing canal-system; and hence the columns are not analogues of Sponge-spicules, nor is the whole structure equivalent to the embryonal form of Sponges, as regarded by Billings; but, on the contrary, corresponds closely with *Foraminifera*, among which it forms a genus, not of the *Orbitolitidæ*, as suggested by Salter, but strictly near the *Dactyloporidæ*, as an allied family—that of the *Receptaculidæ*. These conclusions are clearly illustrated by numerous accurate drawings from Dr. Gümbel's microscopic sections of *Receptaculites*.

The bibliography and history of opinion as to the nature of this fossil creature are fully given by Dr. Gümbel. The localities and range are also indicated. *Ischadites* and *Tetragonis* have not yet been submitted to close study; but the author is of opinion that, though closely allied to *Receptaculites*, they have specific, if not subgeneric, differences. A synonymic list of the known fossil forms coming under these names is given at pages 38–40; and other probably allied forms are also enumerated. T. R. J.

REVIEWS.

DESCRIPTION GÉOLOGIQUE DE LA CRAIE DE L'ILE DE WIGHT. Par M. CHARLES BARROIS, Préparateur de Géologie à la Faculté des Sciences de Lille.

HARDLY any spot in the United Kingdom is so attractive to all classes of people as the Isle of Wight. To the geologist, however, this island is of peculiar interest, owing to the number of formations there represented, and the admirable cliff sections and fruitful fossiliferous localities around its coast. Hence it has been the subject of numerous papers and memoirs. But room has still been left for further research, of which M. Barrois has availed himself, and in the present paper he has given the result of his observations.

After reviewing the literature on the subject, the author proceeds to give a topographical sketch of the position of the Chalk, which is divided by an anticlinal line running east and west along the island into two portions, dipping in opposite directions.

The southern mass rests on the Upper Greensand, and consists of Chloritic Marl (zone of *Am. laticlavius*), overlain by the Chalk Marl (zone of *Scaphites æqualis*). This latter is a compact, greyish-blue chalk, with conchoidal fracture, containing numerous nodules of iron pyrites, about 115 feet thick. The general dip is from 5 to 10 degrees to the south.

The flints in this district, though apparently intact, fall to pieces