NOTICES OF MEMOIRS.

I.—On the Orbitoidal Strata near Auspitz, Moravia. By M. A. Rzehak. [Proceed. Imp. Geol. Instit. Vienna, July 31, 1882.] (Communicated by Count Marschall, F.C.G.S., etc.)

THE prevailing deposits are soft sandstones and blue marls, distinctly stratified, and resting on menilitic shales. The marks include in one locality remains of *Meletta*, and in another some few Foraminifera, probably referable to a late Oligocene horizon ("Tongrian-Aquitanian"). A deposit lithologically and chronologically distinct from the "soft sandstones" appears on the Steinberg and on the south slope of the Haidenberg. It is a highly calcareous sandstone, with intermediate conglomerates, including fragments of crystalline, massive, and schistose rocks, and with occasional layers of green clay containing Foraminifera, on the whole of older Oligocene type. A fine-grained bed of the sandstone contains Foraminifera, including a large Dentalina, possibly Dentalina Herculea, Gümbel, a "Nummulitic" form. Other organic remains in the sandstone are fragments of Shells, Corals, Polyzoa, and rarely teeth Other organic remains in the of Squalidæ. Nummulite-like shells are very frequent in some strata. These lenticular shells, beset with small tubercules, are Orbitoides. They are identical with, or, at least, very near to Orbitoides aspera, Gümbel; and equal in size to those from the Buda Marls, though smaller than the Bavarian specimens. These Orbitoidal beds are evidently the most ancient member of the Tertiaries in the Auspitz district, being coeval, isotopic, and partly isopic, with those of Kirchberg, in Lower Austria, and of Stokerau, north of Vienna. They are of the same age as the upper strata of Priabona, and Hoffmann's "Orbitoidal Horizon" in Hungary.

The Foraminiferal clay of Rikolschiz is, in some respects, allied to that of the Hungarian Middle Oligocene (Clavulina Szaboi beds). Their Foraminiferal fauna, especially the Orbitoides, imparts to them more of the "Alpine" than of the "Carpathian" types. Possibly, together with the analogous Hungarian deposits, they may constitute a special geological province, connecting the "Alpine" with the

"Carpathian Sandstone Zone."

II.—GLACIAL SECTIONS AT YORK, AND THEIR RELATION TO OTHER DEPOSITS. By J. EDMUND CLARK. [Geol. and Polytechnic Soc. W. Riding of Yorks, vol. vii. pp. 421-439.]

In this paper details are given of a number of sections of Glacial and Alluvial deposits in the neighbourhood of York. The occurrence of *Ursus spelæus* (identified by Mr. W. Davies, F.G.S.) in the valley gravel appears to be the first record of a carnivorous mammal in this deposit near York. Mr. Clark mentions that in the deposits at Overton, Mammoth, Hippopotamus, etc., have been found.