

imposed layers. The cells are transversely sub-oval or sub-triangular, usually with one curved side and two straight sides. In some parts of the mass, especially on the edges, they approach the sub-circular polygonal form, but usually they are wider in the one direction than in the other. The width is in general three-fourths of a line (sometimes one line), and the height half a line. The bottom of the mass is either in part or wholly covered by a thin, smooth, but concentrically undulated epitheca.

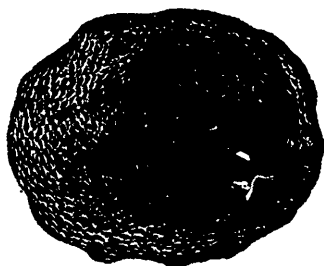


Fig. 5.



Fig. 6.

Fig. 5. *Alveolites Goldfussi*.—Upper side of a small specimen.

Fig. 6. *Alveolites Fischeri*.—One side of a frond.

This species resembles *A. suborbicularis* (Lamarck) of the Devonian Rocks of England, France, and Germany; but in that species there is a groove on one side of the cell, and a corresponding ridge on the side opposite. I have not been able to detect these characters in very well preserved specimens of *A. Goldfussi*, and feel satisfied that it is therefore a distinct species.

Locality and formation.—Lot 25, con. 5, Bosanquet. Hamilton Shales.

Collectors.—A Murray, J. Richardson.

ALVEOLITES FISCHERI.—*N. Sp.*

(See Fig. 6.)

Description.—This species is found in the shape of flattened, palmate, obscurely branching fronds, celluliferous on both sides. Some of the fragments appear to be portions of undulated expansions, two to four lines in thickness, and several inches wide. The majority of the specimens, however, indicate a palmated form, two to four inches