

effuse below. The space between the cells is marked with irregular, flexuous, broken striæ, four or five in the width of one line; the elevated margin at the sides of the cells exhibits from seven to nine short oblique ridges or tubercles. In the longitudinal rows, the cells are sometimes in contact with each other, and often separated by distances equal to half their own length, or a little more. In *T. Davidsoni*, the cells are not arranged in linear series, and the striæ are of a different form.

*Locality and formation.*—Lot 25, con. 5, Bosanquet.

*Collectors.*—A. Murray and J. Richardson.

Genus ALVEOLITES.—(Lamarek.)

The following three species appear to belong to this genus:

ALVEOLITES ROEMERI.—*N. Sp.*

*Description.*—Stems from two to three lines in diameter, usually cylindrical, but sometimes sub-palmate, branching. Cells transversely oval, about half a line wide and one-fourth of a line in length; in general distant from each other from half a line to two-thirds of a line in the longitudinal direction of the stem, and half that distance in the transverse direction.

In some specimens the cells are not quite so distant as above stated, and it may be that these should constitute a distinct species. In *A. labiosa* (*Canadian Journal*, March, 1859), the cells, when perfect, are scarcely one-fourth of a line wide; *A. cryptodens* (*Loc cit*), is, upon the whole, a larger species, with the cells about a line distant.

The stems appear to bifurcate at an angle of from 50° to 60°; but the specimens are not sufficiently perfect to determine this character with certainty.

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

*Collectors.*—A. Murray, J. Richardson.

ALVEOLITES GOLDFUSSI.—*N. Sp.*

*Description.*—This species occurs in irregularly circular depressed masses, several inches wide and one or two inches in height. The corallites radiate from a point in the bottom, and the mass, rapidly increasing in width, has a very obtusely turbinate form, flattened and undulated on the top, and apparently composed of horizontal super-