mural pores are on the lateral faces of the cells and about midway between the tabulae. The tabulae are thus as numerous as in F. helderbergiae. The corallum is lenticular in shape, and accordingly the only difference between the two species is in the shape of the corallum. It was only in the Favosites bed that the shape of the corallum was observable and this only in cross section. Here the corallum usually gives, at right angles to the bedding plane, a round or elongate cross section with the corallites growing in all directions from a central point. A few, however, were noticed which had a semicircular cross section with the flat portion lying on the bedding plane and the corallites growing from the center of the flat portion. It seems, then, that we have the lenticular, the hemispheric, as well as the spheric shaped corallums in this 3 foot Favosites bed.

It seems to be a question worth considering whether two distinct species should be based wholly on the form of the colonies of which the individuals are exactly alike. Might not the shape of the colonies be determined by the varying conditions of growth?<sup>2</sup>, <sup>3</sup>

## Favosites sphaericus Hall

Found from the Upper Manlius to the Lower New Scotland inclusive, being specially abundant in the Favosites bed. One specimen from the Coeymans measured 12mm in length by 10mm in width; the tubes averaged a diameter of .3mm with a few as wide as .5mm. The angles of the walls were quite nodose. On one specimen from the Upper Manlius the tubes averaged about .2mm in diameter, while the corallum was 5mm long by 3mm wide at the

<sup>&</sup>lt;sup>1</sup>After this determination was made, it was found that Lambe had reached a similar conclusion four years previously.

Contrib. Can. Pal. v.4, pt 1, 1899, p.7.

<sup>&</sup>lt;sup>2</sup>F. niagarensis was established by Hall in 1852. Pal. N. Y. 2:125. F. helderbergiae was established by Hall in 1874. N. Y. State Mus. Nat. Hist. 26th Rep't. p.111.

<sup>&</sup>lt;sup>a</sup>Girty concludes from a study of F. helderbergiae and F. conicus Hall from the Helderberg of Albany county, N. Y., that both may refer to the same organism at different stages of growth and preservation. Girty, G. H. A Revision of the Sponges and Coelenterates of the Lower Helderberg Group of New York. N. Y. State Mus. 48th An. Rep't. 1894. pt 2.