within. Septa numbering from about thirty-two to thirty-eight in average sized corallites, alternately long and short, the longer passing to the centre, the shorter reaching about half-way. Curved dissepiments in the outer part of the interseptal spaces in a single or at times apparently in a double series. Tabulæ close-set, about twenty in a space of 5 mm., deflected downward at their margins, difficult to make out in the silicified specimens examined. Epitheca well developed, shewing faint annular markings and longitudinal septal lines.

The corallites of this species are more slender than those of the preceding and the septa are less numerous.

Locality and formation.—Grand Manitoulin Island, Lake Huron, collected by Alexander Murray in 1847; also by R. Bell and H. G. Vennor, 1865 ; by J. Townsend, 1883 and by R. Bell, 1891 ; Niagara formation.

Rominger mentions its occurrence in the Niagara rocks of Point Detour, Lake Huron.

DIPHYPHYLLUM SIMCOENSE, Billings, sp.

Eridophyllum Simcoense, Billings. 1859. Canad. Journ. vol., IV. new series, p. 132, fig. 27.

Diphyphyllum stramineum, Billings. 1859. Ibid, p. 135.

" *stramineum*, Nicholson 1874. Rep. Palæont. Prov. Ontario, p. 33, pl. V, fig. 6

Eridophyllum Simcoense, Nicholson 1874 Ibid, p. 34, pl. VI, fig. 5.

Diphyphyllum Simcoense, Rominger. 1876 Geol. Surv. Michigan, Fossil Corals, p. 122, pl. XLVI, figs. 3 and 4.

Amplexus or *Diphyphyllum*, Whiteaves, 1892. Geol. Surv. Canada, Contr. Canad. Palæont., vol. I, pt. IV, p 270, pl. XXXV, figs. 2, 2a.

Corallum bushy, composed of flexuous, cylindrical corallites radiating upward from a small basal beginning and rapidly increasing by lateral budding so as to form colonies at times 25 cent. high and equally broad. Corallites varying in diameter