from 3 to 6 or 7 mm., frequently roughened by annular swellings of growth and constrictions, covered by an epitheca shewing minor growth markings and longitudinal septal furrows. There is a marked variation in different colonies in the number of horizontal spurs connecting the corallites: in some specimens they are numerous from about 2 to 4 mm. apart vertically, springing outward from all sides of the corallites, in others they occur at less frequent intervals whilst in some they appear to be almost absent. Septa short, bearing arched carinæ on their sides, divisible into two sizes, primaries and secondaries, numbering in all from about thirty to forty, the primaries seldom reaching half way to the centre of the visceral chamber, the secondaries very short, projecting but little inside of the single row of curved dissepiments in the interseptal spaces. In transverse sections of the corallites the dissepiments have the appearance of an inner wall about 5 mm, distant from the wall proper as in the Silurian species D. cæspitosum, Hall. Tabulæ well developed. flat, horizontal, bent slightly down at their edges; from ten to fifteen occurring in a space of 5 mm.

This species is somewhat similar in inside structure to D. cæspitosum, Hall from which it differs principally in having shorter and less numerous septa.

The coral from the Devonian (Stringocephalus zone) of Dawson Bay and vicinity, Lake Winnipegosis. described by Mr. Whiteaves (op. cit. pp. 270 and 271), and mentioned by him as bearing "a remarkably close resemblance in size, shape and internal structure" to "the Diphyphyllum stramineum of Billings," is here referred to D Simcoense with which the writer considers D. stramineum to be conspecific, a view already expressed by Dr. Rominger in his excellent work on fossil corals.

Locality and formation.—Abundant in the Corniferous formation of Ontario; also from the middle Devonian of Lake Winnipegosis.

OMPHYMA ERIPHYLE, Billings, sp.

?Omphyma subturbinata, Milne-Edwards and Haime. 1855. Brit. Foss. Corals, p. 288, pl. LXVIII, figs. 1, 1 a—c.