general characteristics to those belonging to *Favosites*, but they are distinguished by the larger size of their corallites, by the septa being represented only as striæ and by the tabulæ inosculating so as to give rise to a tissue of arched vesicles. One species may be mentioned as occurring very commonly in the corniferous limestone, viz., *M. convexa.*

Genus SYRINGOPORA.—Corallum aggregate, at first creeping, then sending up numerous vertical, cylindrical corallites, which are usually flexuous and sub-parallel and are connected together by numerous transverse connecting processes. Septa rudimentary, tabulæ well developed, usually funnel-shaped, but they may be simply curved, while in one cross-section I examined they were almost or quite horizontal.

The affinities of the group of the Syringoporidæ are disputed, it having usually been placed among the Alcyonaria, but it seems to be very closely connected in several points with the Favositidæ. The hollow connecting processes shown in the genus Syringopora are morphologically nothing more than mural pores, and there appears to be a tendency even in Favosites towards the production of these processes, since the mural pores in that genus are almost invariably situated upon minute papillæ. It is also worthy of note that where the corallites come into direct contact typical mural pores are produced. The septa are also both in Favosites and Syringopora in the form of vertical rows of calcareous spines.

The species most commonly represented in the Corniferous Limestone are *S. Hisingeri*, with very slender corallites closely aggregated and presenting a rugged or knotty appearance.

S. Maclurei, consisting of long only slightly flexuous corallites.

S. Perelegans, distinguished from the preceding by the diameter of the corallites being less and by them presenting a less flexuous appearance.

Genus AULOPORA.—Corallum creeping, corallites pyriform, trumpet-shaped or cylindrical, the cavity of each communicating with that of the one from which it springs. Septa absent or represented in a rudimentary fashion by rows of minute spines.

Although placed in a separate order the corals of this genus often bear a close resemblance to young colonies of Syringopora before the latter have commenced to send up vertical corallites.