plates have a large hemispherical protuberance which occupies all of the plate, except a narrow flat border all round. The rhomos consist of two separated triangular spaces, their bases separated as in *A. elegans*, Hall. The column has from three to four lines in length at the point of attachment, encased in an ovoid mass which is either a secretion of the column itself, or a parasitic Zoophyte, or, perhaps, a sponge. The surface of this part, as well as that of the tumid part of the plates, is covered with small polygonal pits. Near South Bay, Manitoulin Island; Prof. R. Bell, H. G. Vennor.

ZOOPHYTA.

Genus ZAPHRENTIS, Rafinesque.

Z. CINCTOSA, n. sp.—This species is three or four inches in length, and from nine to fifteen lines in diameter, engirdled with strong angular annulations, usually most abruptly elevated on the upper side, the spaces between concave. Tabulæ well developed ; septa extending nearly or quite to the centre in the body of the coral, but in the bottom of the cup (as shown by one specimen) only about half way to the centre. Some of the individuals are more or less curved. Surface with very distinct rounded septal ridges, nearly three in one line, crossed by minute engirdling striæ. Huronia Point, and two miles north of MeLeod's Harbour, on the east side of Cockburn Island, Lake Huron, also in the township of Derby, near Owen Sound, in the Clinton and Niagara formations. Prof. R. Bell.

Z. BIGSBYI, n. sp.—Turbinate, either straight or gently curved; from four to six inches in length, and from one ineh to nearly three inches in diameter. Tabulæ well developed; three or four septa in the width of two lines. Cup moderately deep, with a rounded elevation in the bottom. Surface unknown. Differs from Z. Stokesi in its larger size, and more developed tabulæ. Huronia Point, and two miles north of McLeod's Harbour, on the east side of Cockburn Island, Lake Huron. Clinton and Niagara formations. Prof. R. Bell.

. Genus CYSTIPHYLLUM, Lonsdale.

C. HURONENSE, n. sp.—From one to three inches in length, rather slender, straight or irregularly eurved. Cup well developed, conical, inner surface with depressed convex vesicles, the largest of which rarely exceed the diameter of one line. Surface usually deeorticated, but when perfect with from eight to ten septal striæ in the width of two lines. Huronia Point, and two miles north from McLeod's Harbour, on the east side of Cockburn Island. Clinton and Niagara formations. Prof. R. Bell.