be made out sufficiently clearly to give the following data:-Corallum astræiform, made up of polygonal corallites from 3 to 7 mm. in diameter with deep calyces that join each other in sharp-edged outlines and that have steep sloping sides and a rounded boss, roughly 2 mm. in breadth, at the bottom. Each corallite is contained within its own walls from which spring lamellar vertical septa whose free edges are moderately conspicuous in the calyces. Septa, numbering from about thirty to forty, alternately long and short, the former continued to the centre where they are twisted, the latter about one-half or slightly more than one-half the length of the former. Dissepiments convex, arching evenly upward and outward and filling the interseptal loculi in a circumferential area whose breadth is equal to the length of the secondary septa or about one-fourth the diameter of the corallite. Within the outer area is a zone of dissepiments or vesicles that rise upward toward the centre and in combination with the proximal ends of the primary septa form a subvesicular mass that appears at the bottom of the caly x as a rounded projection.

The presence of continuous vertical septa such as the above in corallites that are enclosed by definite walls makes clear the necessity of removing the species represented by this specimen from the genus Arachnophyllum (Strombodes); although some details of structure are obscured by crystallization yet sufficient characters are preserved to suggest affinities to Acervularia to which genus this species is for the present at least assigned.

Locality and formation.—Manitouwaning, Grand Manitoulin Island, Lake Huron, collected by A. Murray; Niagara formation

CHONOPHYLLUM CANADENSE, Billings, sp.

Ptychophyllum Canadense, Billings. 1862, Palæoz. Fossils, vol. I, p. 107.

Canadense, Billings. 1866. Cat. Silurian Fossils of Anticosti, p. 34.