WALCOTT.

Surface marked by undulating lines of growth parallel to the margin of the aperture, a few radiating lines usually on the sides, and several of the opposite arranged in lines that cross each other at right angles on some shells; on others the papillæ are arranged in lines parallel to the lines of growth and without reference to the order of those in the adjoining lines; the interior surface is covered with a fretted surface brought out by depressed, irregular, inosculating lines; this surface varies in force and character, and some shells are almost smooth inside; a narrow, smooth space extends all around the margin of the inside of the aperture.

The associated opercula vary in form and outline; the shell is calcareous, concavo-convex, rising to a blunt point more towards one end than towards the other; from this point, which is the center of the concentric undulations of growth, narrow, radiating undulations extend to the margin. Surface with concentric and radiating undulations; fine inosculating lines subparallel to the concentric undulations and fine papillæ on the spaces between the inosculating lines; interior surface convex, smooth, or showing the undulations of the outer surface; at the center, corresponding to the apex of the outer surface, a small round scar appears to be indicated on some specimens.

There are two forms known to me that correspond in a measure to this: one is that figured by Eichwald (Lethea Ross., pl. xl, fig. 19a-c) as Hyolithes paradoxodus, which appears to be the cast of a portion of the outer chamber and one of the conical inner chambers; it may be, however, only a superficial resemblance. The second was discovered when examining the type of Metoptoma anomala Billings (Pal. Foss., vol. i, p. 89), in the collection of the Geological Survey of Canada. I found it to be the cast of the chamber of habitation of some species of Matthevia. It may be that of M. variabilis, but it is impossible to identify it from the specimen. It was found in a bowlder of limestone at Point Levis, Canada.

Formation and locality.—Upper Cambrian. Limestone resting on Potsdam sandstone, one mile northwest of Saratoga Springs, New York. The species is associated with Cryptozoa poriferum Hall (Thirty-sixth Ann. Rep. N. Y. State Mus. Nat. Hist., description of pl. vi, 1884), Platyceras minutissimum Walcott, Ptychoperia (L.) calcifera Walcott, Dicellocephalus Hartti Walcott, and D. speciosus Walcott.

Bull. 30-15 (951)