

HYOLITHES COMMUNIS Billings.

Plate xiv, figs. 3, 3a-e.

Hyolithes communis Billings, 1872. Can. Nat., new ser., vol. vi, p. 214, figs. 1a, b, of p. 213.

Compare *H. impar* Ford.

Original description.—"This species attains a length of about eighteen lines, although the majority of the specimens are from ten to fifteen lines in length. The ventral [dorsal] side is flat (or only slightly convex) for about two-thirds the width, and then rounded up to the sides. The latter are uniformly convex. The dorsum [ventrum], although depressed convex, is never distinctly flattened, as is the ventral [dorsal] side. The lower lip projects forward for a distance equal to about one-fourth or one-third the depth of the shell. In a specimen whose width is three lines the depth is two lines and a half.

"The operculum is nearly circular, gently but irregularly convex externally and concave within. The ventral [dorsal] limb is seen on the outside as an obscurely triangular, slightly-elevated space, the apex of the triangle being situated nearly in the center of the operculum. The base of the triangle forms the ventral [dorsal] margin. This limb occupies about one-third of the whole superficies of the external surface. The remainder, constituting the dorsal [ventral] limb, is nearly flat, slightly elevated from the margin towards the center. On each side of the apex of the ventral [dorsal] limb there is a slight depression running from the nucleus out to the edge. On the inside there is an obscure ridge corresponding to each one of the external depressions. It is most prominent where it reaches the edge. These two ridges meet at the center and divide the whole of the inner surface of the operculum into two nearly equal proportions.

"The surface of the operculum is concentrically striated. The shell itself in some of the specimens is covered with fine longitudinal striæ, from five to ten in the width of a line. The shell varies in thickness in different individuals. In some it is thin and composed of a single layer, but in others it is much thickened by concentric laminae, and thus approaches the structure of a *Salterella*. There are also fine encircling striæ, and sometimes obscure subimbricating rings of growth."

With the exception of reversing the use of the terms ventral and dorsal, little can be added to the above very complete description of the Canadian specimens, but those from Troy, New York, show that the shell was partitioned off by imperforate septa near the apex, in the same manner as *H. impar* and *H. communis* var. *Emmonsii*.

H. Emmonsii Ford is very closely related to this species, and, I think, not more than a variety of it, as the characteristic depression on the flattened face of *H. Emmonsii* is slightly shown on a specimen of *H. communis*, and other specimens still further unite them.