

is terminal and projecting, while the atrial is on the dorsal edge, fully one-third of the way from the anterior to the posterior end, and projecting. Both are very indistinctly lobed.

The surface is even but roughish, and partly covered by foreign bodies. The colour is a dull greyish-brown, but dull yellow round the apertures.

Length of the body, 8 cm.; breadth of the body, 3 cm.

*The Test* is not very thick and not tough, but is very stiff, like cardboard. It is white on section and on the inner surface.

*The Mantle* is thin, and adheres closely to the test; the musculature is feeble.

*The Branchial Sac* has four folds upon each side. The transverse vessels are of two sizes, about twelve narrow ones being placed between every two larger ones. There are about twelve internal longitudinal bars on the folds, and six in the interspaces. The meshes are transversely elongated, and contain twelve stigmata each.

*The Dorsal Lamina* is a narrow plain membrane, with the edge even.

*The Tentacles* are simple and closely placed; they are stout, and about forty in number, all of one length.

*The Dorsal Tubercle* is oblong, lies in a very large triangular peritubercular area, and is directed forwards and to the left.

This is a very large species to belong to the genus *Polycarpa*. It stands erect, attached by the posterior end, and having the branchial aperture uppermost (Pl. XXIII. fig. 1). The test, though not thick, is very stiff, and has a few shell fragments and other foreign matter adhering.

The branchial sac is strong, and has very wide internal longitudinal bars (Pl. XXIII. fig. 2, *i.l.*). These are numerous, and form well developed folds. In the interspaces the meshes are transversely elongated. The larger size of transverse vessel is very wide, as wide as one of the rows of stigmata. This sac is somewhat irregular in parts, and in two places in the portion figured (Pl. XXIII. fig. 2) the passage of one row of stigmata into two rows is seen. In the middle of the lower edge of the figure some of the stigmata are reduced to very small oval or rounded apertures. The tentacles are large, are all of one length, and are crowded together.

The intestine forms a very wide loop. The polycarps are deeply imbedded in the mantle, and hence only project slightly. In the genital masses some of the mature ova, which were incidentally examined, had each several distinct germinal spots.

Two specimens of *Polycarpa rigida* were obtained off East Moncœur Island, in Bass Strait, at Station 162; April 2, 1874; depth, 38 to 40 fathoms; bottom, sand.