

This is a very remarkably shaped animal (Pl. XXIV. fig. 1). The body is somewhat globular, with an anterior process containing the branchial siphon, and is supported upon a stalk, which, however, is clearly a mere process of the posterior end. This stalk is about as long as the body, and is curved round ventrally. The apertures are both prominent and distinctly four-cleft (Pl. XXIV. fig. 1). The surface is considerably grooved and ridged, but otherwise smooth; it has a yellowish-white colour.

The branchial sac presents a curious appearance in the single specimen known, from the circumstance that all the vessels are engorged with blood corpuscles, thus forming a natural injection. Most of the transverse vessels are of the same size (Pl. XXIV. fig. 2), but occasionally a larger one is met with. The meshes are slightly elongated transversely, and are rarely divided by a horizontal membrane.

The margin of the anus is cleft into a series of processes. The atrial siphon has at its base a diaphragm, which has its free edge finely fringed. The polycarps are large; tentacular endocarps are also present.

One specimen of *Polycarpa pedata* was dredged near the Philippine Islands, at Station 212; January 30, 1875; lat. 6° 55' N., long. 122° 15' E.; depth, 10 to 20 fathoms; bottom, sand.

*Polycarpa radicata*, Herdman (Pl. XXIV. figs. 3-5).

*Polycarpa radicata*, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1880-81, p. 75.

*External Appearance.*—This species is club-shaped and erect, consisting of a globular body, supported on a narrow stalk equalling the body in length. The anterior end is rather broader than the posterior, which is continuous with the stalk; the edges are convex. The stalk is long and narrow, and spreads out somewhat at the lower end, where it is attached. The apertures are both at the anterior end, they are sessile and inconspicuous, with the lobes indistinct. The branchial is on the ventral edge of the anterior end, while the atrial is about the centre, and is slightly the more anterior of the two.

The surface is even, but slightly sandy. The colour is a dull greyish-yellow.

Length (total), 3.5 cm.; breadth of the body, 1.7 cm.; length of the body, 2 cm.

*The Test* is moderately thick and strong, but not stiff.

*The Mantle* is closely united to the test, and is thin.

*The Branchial Sac* has four folds upon each side. There are three narrow transverse vessels between each pair of wide ones. The internal longitudinal bars are ribbon-like, they are close and numerous on the fold, but few in the interspaces. The meshes are transversely elongated, and contain each six to twelve stigmata.

*The Dorsal Lamina* is narrow.

*The Tentacles* are simple and numerous; there are about fifty, crowded together; they are of different sizes, but do not alternate.