

*tr* and *tr''*), usually placed alternately, as seen in the figure. No narrow horizontal membranes were noticed.

It is impossible to say with certainty whether this specimen should be described as a new species or referred to *Polycarpa longisiphonica*. I prefer to take the latter course until more specimens have been examined, and it has been determined whether or not that species has a wide range of variation.

The specimen measures 3.8 cm. in length and 2.2 cm. in greatest breadth. It was obtained at Station 162, April 2, 1874; lat. 39° 10' 30" S., long. 146° 37' 0" E.; depth, 38 fathoms; bottom, sand and shells.

*Polycarpa bassi*, n. sp. (Pl. XLIX. figs. 1-3).

*External Appearance.*—The body is oblong in outline, and somewhat compressed laterally. The posterior end is rounded, and the area of attachment is on its left side. The anterior end is broad and truncated, it runs obliquely forwards and ventrally. The dorsal and ventral edges are nearly straight and parallel, the body being of much the same breadth all the way down. The apertures are placed rather far apart, at the ventral and dorsal extremities of the long anterior end of the body. They are sessile and not conspicuous. The branchial is more anterior than the atrial. The surface is uneven and rough, being marked with prominent ridges and grooves, which are chiefly longitudinal, and having here and there sand grains and a few shell fragments attached. The colour is a dark ruddy brown.

The length of the body is 4.4 cm., the greatest breadth of the body is 3 cm., and the thickness is 1.8 cm.

*The Test* is thin but tough.

*The Mantle* is very thick, but the musculature is only slightly developed.

*The Branchial Sac* is strong and rather coarse. It is long and curved with the concavity dorsal. It has four large folds upon each side. The internal longitudinal bars are wide and ribbon-like. There are five or six upon each fold, and two or three only in the interspace. The meshes are much elongated transversely and rather irregular; each contains about twelve stigmata. The transverse vessels are all of much the same size; occasional smaller ones are present for short distances.

*The Dorsal Lamina* is narrow, and is a perfectly plain membrane with neither ribs nor teeth.

*The Tentacles* are large and simple; there are about thirty.

*The Dorsal Tubercle* is elliptical in outline, and is prominent though not large. It lies in a deep triangular peritubercular area, and the horns, which are turned inwards, form two closely placed spirals, each having several turns. The aperture is directed posteriorly, and the longer axis of the tubercle is transverse.