The Dorsal Tubercle is broadly cordate, with both horns rolled inwards.
In external appearance this species is not unlike Microcosmus polymorphus, Heller, but it is scarcely so rough and irregular in shape. The apertures are both distinct and prominent (Pl. XIV. fig. 1), especially the branchial, and the test in their neighbourhood is considerably thickened and corrugated, elsewhere it is rather thin. The mantle is strong, and muscle bands are greatly developed on the right side and on the dorsal region of the left. In the branchial siphon, alove (anterior to) the circlet of tentacles, four large bluntly conical processes project from the lower edge of the sphincter muscle into the lumen of the tube, and form a sort of imperfect diaphragm.

Another point in which this species differs from Microcosmus polymorphus, is the branchial sac, which has only six folds on each side. The folds are rather narrow compared with the interspaces (Pl. XIV. fig. 2). The transverse vessels are strong, and are usually alternately larger and smaller (the latter are very frequently traversed by the stigmata). Sometimes, however, there are three sizes occurring alternately (Pl. XIV. fig. 4, tr., tr.' and $t r . .^{\prime \prime}$ ). Besides this, about every fifteenth vessel is enormously enlarged (Pl. XIV. fig. $3, t r \cdot x$. ), and forms a broad band traversing the sac.

There are eight or nine internal longitudinal bars on the upper side of the fold, so that the figure (Pl. XIV. fig. 4, br.f.), only shows half of the fold. The meshes in the interspace between the folds are of two distinct sizes, and there are six of each kind. The larger ones are overlapped by the fold, and about three of them are usually hidden (Pl. XIV. fig. 2).

One specimen of this species was obtained in Torres Strait, between Australia and New Guinea, at Station 188 ; September 10, 1874 ; lat. $9^{\circ} 59^{\prime}$ S., long. $139^{\circ} 42^{\prime}$ E. ; depth, 28 fathoms; bottom muddy.

## Microcosmus propinquus, Herdman (Pl. XIV. figs. 5 and 6).

Microcosmus propinquus, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1880-81, p. 55.
External Appearance.-The body is oblong-ovate or almost triangular in shape, and is compressed laterally. It is attached by the posterior two-fifths of the ventral edge. The anterior end is narrow, and terminates in the branchial projection; the dorsal and ventral edges slope backwards to the broad and rounded posterior end. The branchial aperture is terminal, and is situated on a large projection turned ventrally and slightly to the left side. The atrial aperture is also prominent; it is on the dorsal erge, three-fourths of the way from the anterior to the posterior end, and is directed dorsally.

The surface is wrinkled and minutely grooved, but not covered with excrescences; it is somewhat corrugated around the apertures, and has a few foreign bodies adhering.

The colour is pale yellow, with a reddish-brown tinge here and there.
Length of the body, 7.5 cm .; breadth of the body, 5 cm .

