

left is somewhat broader than the right. The *mantle-margin* extends far over the head dorsally and is not emarginate, but slightly undulating ventrally. The *siphon* is short, terminating far short of the depression between the ventral arms.

The *Head* is broad, and the *eyes* very prominent.

The *Arms* are subequal, the order of length being 4, 1, 2, 3; they are one-fourth the length of the body, all are flattened and taper evenly to fine points. The *suckers* are in four series (fig. 4), except in the right dorsal arm, where they appear to be in two, probably owing to its state of extreme compression; they are of medium size, many are deeply notched proximally and distally, and provided with fine meridional grooves on the margin (fig. 6); the *horny ring* is smooth and surrounded by a papillary area. The *hectocotylus* was not seen, the only specimen being a female. The *umbrella* is small, widest between the lateral arms, where it reaches up to the sixth or seventh row of suckers. The *buccal membrane* has five distinct points, the ventral edge being thickened and forming a large folded *spermatid pad* (fig. 3); it bears no suckers. The *outer lip* is thick, and marked with fine longitudinal grooves; the *inner* is papillate.

The *Tentacles* are as long as the mantle, with a three-sided flattened *stem*, much broader proximally than distally. The *club* is slightly expanded, with a narrow protective membrane below, a broad one above, and a distinct web outwardly (fig. 5). There are five or six series of *suckers*, slightly larger in the middle than at the margins, on very long slender peduncles; the *horny ring* is smooth.

The *Surface* bears a number of small irregularly scattered papillæ, and four or five elongated warts on the dorsum near the origin of the fins, and some folds in the skin on the ventral surface; probably these are due to contraction.

The *Colour* is a dull grey with a bluish shade above inclining to yellow below.

The *Jaws* are shown in figs. 7, 8.

The *Shell* (figs. 9–11) has an elongate oval *outline*, broadest one-third of the way back and rounded off at both ends. The free *chitinous margin* is narrow anteriorly, then broader, evanescent posteriorly, a deep calcareous *outer cone* forming the posterior extremity of the shell; it is but slightly exposed on the *dorsal surface*, which bears only faint indications of a median ridge, and is beset with fine granules disposed in rows parallel to the anterior margin. The *ventral surface* is elevated so as to give the shell a more than average thickness; the *last loculus* has an index of 33, and is bounded by a tranverse hemielliptical curve; the *striated area* is excavated, but slightly convex in the middle line. The *inner cone* consists only of the slightly elevated limbs, which run along three-quarters of the striated area and unite with each other as a flattened fillet posteriorly. The *spine* has lost its extreme point, but it is strong, and has a raised knife-like ridge developed upon its ventral aspect¹ (fig. 11).

¹ Whence the specific name.