

This is a very elegant species, and differs from the two other species of *Ecteinascidia* externally in its more definite shape and the delicacy of its test. The individuals are united by their narrow posterior ends to a delicate, much-branched stolon (Pl. XXXVI. fig. 2). They are attached to this stolon at short intervals, and consequently are crowded pretty closely together, forming large colonies (Pl. XXXVI. fig. 1). Buds of various sizes are also found here and there attached to the stolons (fig. 2). The shape of the individuals or ascidiozooids varies from cylindrical to conical, the anterior end being broad and rounded, while the posterior is narrow. The test is very thin and quite transparent, allowing the viscera to be seen through distinctly.

The branchial sac is rather different from those of *Ecteinascidia crassa* and *Ecteinascidia fusca*. The transverse vessels are extremely wide, and have no horizontal membranes attached to them (Pl. XXXVI. fig. 3). The internal longitudinal bars are narrow, and are borne on strong but short connecting ducts, which widen out as they approach the bar, and are narrow where they join the transverse vessels. They are very different from the wide triangular flaps found in *Ecteinascidia crassa* and *Ecteinascidia fusca*. The meshes are much elongated antero-posteriorly, and the stigmata are narrower in comparison to the interstigmatic vessels than in the other two species of *Ecteinascidia*.

The languets (Pl. XXXVI. fig. 6, *l.*) are of moderate length, are rather distantly placed (about their own length apart), and are tentacular in shape, in place of being triangular and flattened antero-posteriorly as usual. The membranous area on which they are placed is much narrower than in *Ecteinascidia fusca*, but has a band of muscular fibres running down its centre (fig. 6).

For a short distance on each side of this dorsal membranous area there is no internal longitudinal bar, although short papillæ are seen projecting from the transverse vessels in a longitudinal row on each side, and evidently representing the connecting ducts (Pl. XXXVI. fig. 6, *c.d.*).

The tentacles are very dissimilar, the longest ones being about seven times as long as the shortest. The intermediate ones are scarcely half the length of the longest ones. Calling them A, B, and C, they are found to be arranged alternately thus:—A, C, B, C, A, &c. (Pl. XXXVI. fig. 4, *tn.*, *tn.'* and *tn.''*). The elongated dorsal tubercle tapers from the anteriorly placed aperture so as to become carrot-shaped.

On account of the length of the branchial sac, the alimentary and genital viscera only extend slightly beyond its posterior end. The stomach is small, and forms the posterior end of the visceral mass. The intestine after leaving it runs for a short distance anteriorly, and then slopes across the left side of the posterior part of the branchial sac from the ventral to the dorsal edge, along which it is continued anteriorly, as the conspicuous dark-coloured rectum, towards the anteriorly placed atrial aperture (Pl. XXXVI. figs. 1 and 2).

The genital glands occupy the intestinal loop; the ovary is placed alongside, and