

along the dorsal edge of the branchial sac, and is crossed transversely by the horizontal membranes which bear the languets. At each side of this membranous area, just where the stigmata commence, is a row of smaller languets, exactly similar in size, shape, and position to the triangular flaps which support the internal longitudinal bars; these two rows, however, at the sides of the dorsal lamina, have no bars attached to their apices (Pl. XXXVI. fig. 11).

The tentacles are not numerous, and are all of one length (Pl. XXXVI. fig. 10, *tn.*). They spring from a circular band of muscular fibres which forms the posterior end of the branchial sphincter.

The dorsal tubercle is ovate in outline, and lies in a shallow peritubercular area, out of which it projects fully half way across the præbranchial zone to the base of the tentacles (Pl. XXXVI. fig. 10, *d.t.*). The neural gland and the ganglion form a rounded opaque mass, situated immediately posteriorly to the dorsal tubercle.

One colony of *Ecteinascidia fusca*, formed of several individuals, was obtained at Banda, Moluccas; depth, 17 fathoms.

*Ecteinascidia turbinata*, Herdman (Pl. XXXVI. figs. 1-6).

*Ecteinascidia turbinata*, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1879-80, p. 724.

*External Appearance.*—In this species many individuals are united into a colony by delicate, much-branched, but short stolons. The shape of each individual is elongated, and sometimes almost pyriform. The anterior three-fourths is nearly cylindrical, while the posterior part tapers rapidly to a short slender stalk, continuous with the stolon. The anterior end is broad, truncated or rounded. The apertures are sessile and minute, they are both at the right side of the anterior end, and are not lobed.

The surface is smooth. The colour is a light yellowish-brown.

Length of the body, 3 cm.; breadth of the body (near the anterior end) 1 cm.

*The Test* is thin and membranous; it is transparent.

*The Mantle* is thin.

*The Branchial Sac* is simple. The internal longitudinal bars are narrow, but well marked, they are borne on stout connecting ducts; there are no papillæ. The transverse vessels are all of one size, and are very wide; no horizontal membranes are present. The meshes are greatly elongated antero-posteriorly, and contain each two or three long narrow stigmata.

*The Dorsal Lamina* is represented by a series of tentacular languets.

*The Tentacles* are simple and filiform, and are of three lengths placed alternately; there are about twenty of the long and twenty of the medium size, and forty of the short ones.

*The Dorsal Tubercle* is elongated, and tapers posteriorly. The aperture is anterior, and the horns are coiled.

*The Viscera* extend slightly beyond the branchial sac posteriorly.