

increases in size towards the top, which is large and irregularly convex. The posterior half or two-thirds forms a short stout peduncle. The colour varies from dark grey near the point of attachment to light yellowish-grey at the upper end. The surface is very uneven, but is smooth and glistening.

The length is about 8 cm., the greatest breadth is 5.5 cm., and the greatest thickness is 2.5 cm.

*The Ascidiozooids* are very large (up to 2 cm. in antero-posterior extent, and about 2.5 mm. at the widest point). The body is divided into three distinct regions; the thorax is about 4 mm. in length, the abdomen 3 mm., and the post-abdomen from 2 mm. to 14 mm. in length. The branchial and the atrial apertures are both six-lobed. The Ascidiozooids are placed vertically in the colony, with their anterior ends on the convex upper surface; there is no arrangement in systems, and no common cloacal apertures are present.

*The Test* is firm and cartilaginous in the lower part of the colony, but soft and gelatinous in the upper part. It is semi-transparent and of a grey colour throughout, varying from a dark bluish-grey at the posterior end to a light yellowish-grey on the upper surface. The matrix of the test is crowded with minute cells of various shapes; no bladder cells or pigment cells are present. There are very few vessels in the test.

*The Mantle* is strong, and has a well-developed musculature. The muscle bands on the branchial region are very thick, and they branch to form an irregular network. Over the long genital region of the body the mantle contains a number of closely placed longitudinally running bundles of muscle fibres. These are narrow, and do not branch. In the intestinal region the mantle is thin, with little or no musculature.

*The Branchial Sac* is large, and contains a great number of stigmata, which vary in size from small round openings to very long narrow slits. The transverse vessels differ greatly in their breadth. Where they lie between rows of small stigmata they are very broad, but where the stigmata in the adjacent rows are long, the transverse vessels are considerably reduced in size. There are no horizontal membranes, but the transverse vessels bear rows of irregularly shaped papillæ projecting into the interior of the sac, and usually having their free ends more or less lobed. As a rule, these papillæ are largest where the neighbouring stigmata are small.

*The Endostyle* is large and conspicuous. It has a very undulating course.

*The Dorsal Lamina* is formed of a large number of closely placed languets.

*The Tentacles* are numerous and of different lengths, but are not arranged with any regularity.

*The Dorsal Tubercle* is in the form of an ovate slit of considerable size, surrounded by broad raised margins.

*The Alimentary Canal* is large, and is of an opaque greyish-yellow colour. The stomach is large, and its wall is longitudinally folded. The rectum is very wide.