

lower end, and longitudinally plicated. The transverse vessels are narrow, and all of much the same size. The internal longitudinal bars are strong, and the papillæ are large, but of one size only. The meshes are square, and contain each three or four stigmata.

*The Endostyle* is conspicuous, and terminates at the base of the ventral edge of the sac.

*The Dorsal Lamina* is closely ribbed transversely, and the margin is bluntly serrated.

*The Tentacles* are very numerous and crowded; they are long and slender, varying in thickness, but all of much the same length.

*The Dorsal Tubercle* is very complicated, and occupies a deep triangular peritubercular area. It forms an irregularly curved and coiled pattern, with no obvious horns.

This is a very remarkable species, and in external appearance (Plate XXXIV. figs. 1 and 2) is distinctly pyriform. The dimensions given above are those of the smaller specimen; the other one measures 7.5 cm. in length, and 4 cm. in breadth; it has several Ascidians and a few other animals adhering to its test.

The greater part of the test is remarkably thin and easily torn; on the elevated ridge, however, between the siphons (Pl. XXXIV. figs 1 and 2), it is very thick. In one of the specimens a *Crenella* was found imbedded in this part of the test.

The body, when removed from the test, has a most characteristic appearance (Pl. XXXIV. fig. 3). The siphons are long, narrow, and echinated, the branchial measuring 1.2 cm., and the atrial 0.8 cm. in the smaller specimen, while in the larger they are 1.8 cm. and 1.4 cm. respectively.

On the right side of the body there is a "branchial area," defined by the extension of the mantle into a sort of free crenated border, the points between the crenations being produced into longer or shorter sharp processes. The ventral part of this branchial area is raised into a smooth rounded pad (Pl. XXXIV. fig. 3). This, at the anterior end, joins an irregular collar which surrounds the base of the branchial siphon, and is continued as a crested ridge along the dorsal edge to the base of the atrial siphon, lying under the prominent ridge which was noticed as running between the two siphons in the description of the external appearance. The large, globular, visceral side, when viewed from the right, appears outside the branchial area dorsally, and more especially ventrally.

The plication of the branchial sac is not well marked, and produces, as seen from the inside (Pl. XXXIV. fig. 4), merely a little irregularity in the position and direction of the interstigmatic vessels. The slanting direction in which the transverse vessels run in the part of the branchial sac figured (fig. 4) is not constant, but was observed in one part of the branchial sac.

The condition of the ~~dorsal~~ tubercle is very remarkable. The peritubercular area is triangular and deep, and its cavity is entirely occupied by a convoluted dark marking (Pl. XXXIV. fig. 5, *d.t.*), which appears to represent the dorsal tubercle. The