

*Ascidia placenta*, Herdman (Pl. XXXI. figs. 1-3).

*Ascidia placenta*, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1879-80, p. 715.

*External Appearance.*—The body is elongated, oblong, elliptical or oval in shape, and is flattened laterally; the anterior end is slightly the narrower, and the posterior end is rounded. It is attached by a small area a little posterior to the middle of the left side. The apertures are both on the right side; they are sessile, and not conspicuous. The branchial is nearly median and terminal; the atrial is a short distance from the dorsal edge, nearly half-way down from the anterior to the posterior end.

The surface is rather creased by seams running for the most part longitudinally, and is slightly roughish or velvety.

The colour is a yellowish-grey or horn colour.

Length of the body, 6.5 cm.; breadth of the body, 4 cm.

*The Test* is rather thin, soft, and easily torn. It is roughish about the base of attachment. The inner surface is smooth and glistening. Vessels are feebly developed.

*The Mantle* is moderately muscular.

*The Branchial Sac* is delicate, and is slightly plicated longitudinally. The transverse vessels are all of one size. The internal longitudinal bars are moderately strong, and bear at the angles of the meshes very long curved papillæ, connected by delicate transverse membranes. The stigmata are long and narrow, and are usually wider than the interstigmatic vessels; there are eight to twelve in a mesh. The meshes are large and rather longer transversely than antero-posteriorly.

*The Dorsal Lamina* is not ribbed, or only slightly so in places. Every here and there a large tooth in the form of a short finger-like process is present, and between these are usually three or four smaller ones.

*The Tentacles* are filiform, about twenty-four in number, and all of one length.

*The Dorsal Tubercle* is longish elliptical in shape, and is placed antero-posteriorly, with the opening at the anterior end.

This species is much compressed laterally, and as its point of attachment is near the centre of the left side, it must have lived in a more or less horizontal position, as an expanded flattened cake-like structure (Pl. XXXI. fig. 1). In external appearance it resembles *Ascidia tenera* somewhat, but they differ greatly in details of structure.

The branchial sac is very delicate (Pl. XXXI. fig. 2), and the stigmata are long and in some places rather irregular. The papillæ are very large, and are found bent in all directions. The smaller intermediate ones which are occasionally present may be connected by delicate transverse vessels, much slighter than the usual ones.

The dorsal lamina is usually devoid of transverse ribs, as represented in figure 3, but in some parts of its extent very slight ribs are present, running towards the larger marginal teeth.