The surface is irregular, but not rough; towards the base it is much corrugated transversely. The rest of the surface is more or less seamed and wrinkled. The colour is a dirty white, becoming slightly darker towards the base.

Length of the body, 9.5 cm.; breadth of the body, 6 cm.

The Test is thin and soft, but fairly strong.

The Mantle is very delicate, and is closely united to the inner surface of the test. The musculature consists chiefly of a number of fine bundles of fibres running longitudinally.

The Branchial Sac has four folds upon each side, and the most dorsal one on each side is placed very close to the dorsal lamina. There are three wide internal longitudinal bars on each side of a fold, and about six in the interspace. The alternate transverse vessels are wider than the intermediate ones. The meshes are immensely elongated transversely, and contain each about twenty stigmata.

The Dorsal Lamina is a rather wide and perfectly plain membrane, having no ribs nor teeth.

The Tentacles are simple; there are twenty long with occasional small intermediate ones.

The Dorsal Tubercle is heart-shaped, and both horns are turned inwards.

This is a large species, probably the largest species of *Stycla* yet known, and it has more the appearance of an *Ascidia* than of one of the Cynthiidæ (Pl. XIX. fig. 1). The apertures are very peculiar; the branchial looks as if it had eight lobes and the atrial about six (the numbers characteristic of the genus *Ascidia*), but in reality there are only four principal lobes, and the others are merely small projections or folds lying between. The stalk is clearly the slightly narrowed posterior end of the animal, by which it is attached. This region is considerably seamed transversely.

The test is rather thin and soft, considering the size of the body, and is closely attached to the delicate mantle lying below it.

The branchial sac has the usual eight folds, but they are not large, and have comparatively few internal longitudinal bars. As a result the meshes are very wide (Pl. XIX. fig. 2), and contain in the spaces between the folds as many as twenty stigmata. Most of the transverse vessels are slight; they are much smaller than the internal longitudinal bars, and are alternately a little larger and a little smaller. Here and there, however, at considerable distances, a much wider transverse vessel occurs (Pl. XIX. fig. 2, near the top of the figure). All of these vessels have wide horizontal membranes attached to their inner surfaces (Pl. XIX. fig. 2, h.m.).

The tentacles are simple and are of two sizes. There are twenty of the larger size, and a smaller number of shorter ones which only occur in occasional spaces.

Two specimens of this large species were dredged in the Antarctic Ocean, to the south of