The Branchial Sac is delicate. The internal longitudinal bars are narrow but distinct; they are undulating, and are supported by broad horizontal membranes, provided with triangular flaps, to the apices of which the bars are attached. There are no papillæ. The transverse vessels are narrow, and all of one size. The meshes are regular, elongated antero-posteriorly, and contain each about three long and regular stigmata, with parallel sides and rounded ends.

The Dorsal Lamina is represented by a series of long narrow languets, with undulating edges, and tapering to a fine point.

The Tentacles are filiform, few, and distant.

The Dorsal Tubercle is irregularly oval in outline.

The Viscera are prolonged beyond the branchial sac posteriorly, and extend into the narrow posterior part of the body.

This is a strong and moderately large species (Pl. XXXVI. fig. 7). The individuals or Ascidiozooids are united by a short rough stolon, which is merely a prolongation of their posterior ends. On this stolon the test is very thick and strong; while over the anterior part of the body it is usually thinner; in one individual the dark-brown longitudinally running muscle bands of the mantle show through distinctly. The posterior part of the body, into which the intestine is prolonged, is much narrower than the anterior or branchial region. The apertures are both near the anterior end, and are not far apart. They are sessile, but distinct, and are lobed, though usually only indistinctly and irregularly. When most distinct, the lobes seem to be six round the atrial aperture and seven or eight round the branchial.

The appearance of the mantle is rather characteristic, the dark reddish brown muscle bands showing very distinctly as fine distant lines on the thin membrane.

The branchial sac (Pl. XXXVI. fig. 8) is rather like that of *Ecteinascidia crassa*; it differs from it chiefly in the stigmata being longer, while the transverse vessels are relatively narrower, and in having the large triangular connecting ducts or flaps of the horizontal membranes shorter and placed rather further apart (Pl. XXXVI. figs. 8 and 13). In *Ecteinascidia crassa* the points of these flaps, when laid down on the sac (fig. 13), extend past the tops of the stigmata of the next row, while in the present species they only extend three-quarters of the way down the stigmata of their own row (fig. 8). In consequence of the length of the stigmata, the meshes in the present species are elongated antero-posteriorly, while in the *Ecteinascidia crassa* they are square (compare figs. 8 and 13, Pl. XXXVI.). The stigmata are usually very regular, with rounded ends. Figure 9 shows a slight irregularity which was noticed.

The languets in this species are long and narrow, tapering gradually to a point. When stretched out, each overlaps the succeeding one by about half its length (Pl. XXXVI. fig. 11, l.). They are arranged down the centre of a wide membranous area which runs