

projection from one edge of the disc (Pl. XLIII. fig. 1). The exact dimensions of the two colonies are as follows :—

	A.	B.
Length,	6·5 cm.	7·0 cm.
Breadth,	7·3 „	8·5 „
Thickness,	3·0 „	2·0 „
Length of peduncle,	2·0 „	3·0 „
Average thickness of peduncle,	1·0 „	1·5 „

The thickness gradually diminishes from the point where the stalk is attached to the opposite end, which was probably the upper edge of the colony. The peduncle rapidly tapers downwards from the point where it joins the disc to a small irregularly shaped area of attachment (Pl. XLIII. fig. 1). The colour is on the whole a pale slate-grey. The anterior ends of the Ascidiozooids have more of a dull bluish tint, and the investing mass between them is whiter. The peduncle is of an earthy brown colour, and is strongly wrinkled transversely (Pl. XLIII. fig. 1).

The Ascidiozooids are conspicuous externally over the greater part of the surface. The rounded areas visible vary from 1 to 6 mm. in length; the general size is 4 mm. As a rule they are larger at the lower edge of the colony near the peduncle, and smaller at the opposite end (Pl. XLIII. fig. 1). This is exactly what would be expected if the young Ascidiozooids were formed at the upper free end of the colony, and is the reverse of the condition found in *Colella*, amongst the Distomidæ, where the new Ascidiozooids are added to the base of the colony.

In some places the apertures are distinctly four-lobed, in others they are circular, and sometimes they appear irregular; when they are widely open they are always circular in outline. In an Ascidiozooid which appears on the surface as 4 mm. in diameter, the apertures are about 2 mm. apart (Pl. XLIII. fig. 1).

A section through the colony (Pl. XLIII. fig. 2) shows that the Ascidiozooids occupy only an outer zone which takes up about one-third of the thickness, leaving a central region formed of test only. The Ascidiozooids are of rounded or ellipsoidal form, and vary considerably in antero-posterior length; all sizes from 4 to 8 mm. are common (Pl. XLIII. fig. 2). The body is nearly equally wide throughout its length, and there is no division into thorax and abdomen.

The test is solid and massive; in the interior of the colony, although firm, it is not at all hard; it has an elastic feeling, and is moderately tough. The minute fibrillation extends through the test matrix in all directions. The test cells are small and not numerous. They are mostly of rounded forms. The vessels are a conspicuous feature in sections of the test. They are mostly of small calibre, but they branch frequently (Pl. XLIII. fig. 3) and their terminal swollen bulbs are large.

The musculature of the mantle is moderately strong. The numerous fine muscle bands form a close network (Pl. XLIV. fig. 9, *m.*). The sphincters are well developed,