

matrix is homogeneous, and is crowded with small rounded test cells. There are no bladder cells and very few vessels present.

*The Mantle* is not strong. The muscle bands are mainly longitudinal, and are placed far apart.

*The Branchial Sac* is small, and contains comparatively few stigmata. The transverse vessels are wide and have no horizontal membranes. The stigmata are small round openings regularly placed.

*Locality*.—Unknown.

This species, like *Atopogaster informis*, is founded upon a fragment of a colony, preserved in absolute alcohol, which is unlike any other specimen in the collection, and is not labelled with any locality or date.

It is a slice measuring about 4.5 cm. in greatest length, 2 cm. in greatest breadth, and 1 cm. in greatest thickness, and has been probably cut from a colony of rounded form at least 5 cm. in height and 4 cm. in breadth.

The small Ascidiozooids are irregularly scattered through a zone of test about 1 cm. in width forming the outer layer of the colony (Pl. XXV. fig. 13). This outer layer of test is of a pale liver-colour, and the contained Ascidiozooids are opaque yellowish-brown. The Ascidiozooids do not show through, as the surface layer of test is almost opaque, consequently they do not affect the colour of the outside of the colony. The central mass of test, in which there are no Ascidiozooids (Pl. XXV. fig. 13), is of a lighter colour, being dull yellowish-grey.

The minute rounded cells in the test are exceedingly abundant, and the dark colour and opacity of the outer layers are undoubtedly due to their presence.

The whole body of the small Ascidiozoid is quite opaque (Pl. XXV. fig. 13) although the mantle is by no means very thick. The branchial sac is in a low state of development (Pl. XXV. fig. 14), and resembles closely the condition of the smallest sacs of *Atopogaster informis* (compare Pl. XXIV. fig. 13, and Pl. XXV. fig. 14).

The alimentary canal forms a comparatively short loop and is quite opaque. The reproductive organs extend for a variable distance behind the intestinal loop, and in some cases form a comparatively long narrow post-abdomen. In sections through the colony the post-abdomen is seen to be occupied by numbers of mesoderm cells placed on both sides of a double median membranous septum.

Although this species may resemble *Atopogaster informis* so distinctly in the structure of the branchial sac, still they are not at all closely allied. They differ greatly in the size of the Ascidiozooids, the condition of the test, and in various other details of structure described above.