

None of these have any localities attached to them, but most of them are merely pieces taken from colonies which occur in the collection, and therefore they can be readily referred to their proper species and localities. In the case of the present specimen, however, and one or two others, there is nothing else belonging to the same species in the collection, and therefore there is no clue to the locality from which it was obtained.

The specimen is a slice cut out of a large colony, and measures rather more than 9 cm. in length by about 4 cm. in greatest breadth and 1 cm. in thickness. From the shape of the specimen it is probable that the colony was a large rounded mass, and there is no evidence in favour of its having been pedunculated. It is impossible to say whether the colony was elongated from the base upwards or not, as, on account of the irregularity in the arrangement of the Ascidiozooids, it cannot be determined with certainty whether the slice was cut from the colony longitudinally or transversely.¹ The colour on the outside is simply that of the test, a warm light grey, as the Ascidiozooids are so scattered and so deeply placed in the colony as scarcely to show through at all. The large Ascidiozooids are of an opaque yellowish-brown colour, and are placed very irregularly in the test (Pl. XXIV. fig. 11). The body is nearly cylindrical and is not divided externally, but dissection shows that the branchial region occupies the anterior half or so, and the intestinal and genital parts the remainder.

The test is very compact, and has quite a cartilaginous feeling. It is of the same colour and structure throughout. The small test cells are very numerous, and in some places are densely crowded. No vessels are visible.

The mantle is not so thick as might be expected from the size and opacity of the body. The longitudinal muscle bands on the thorax are moderately strong, but they do not form a continuous layer. On the abdomen they become much thinner and gradually die away. The branchial siphon has six lobes, and the sphincter is well developed.

There are about twenty rows of stigmata in a large sized branchial sac, and there are usually about twelve in each row. The stigmata vary considerably in size in different sacs (see Pl. XXIV. figs. 12, 13, *sg.*), probably to a great extent according to the size and age of the Ascidiozooids. Figure 12 shows an average sized set of stigmata, while figure 13 was probably taken from a very young branchial sac. The endostyle is large and conspicuous, and has an undulating course.

The languets are tentacular in form, but very short (Pl. XXIV. fig. 14, *l.*) and rather closely placed. They are united by a distinct membrane (the dorsal lamina, Pl. XXIV. fig. 14, *d.l.*), behind which is placed a band of muscle fibres (*m.f.*).

The alimentary canal forms a long narrow loop. The stomach is long and has its thick wall folded transversely as in *Atopogaster aurantiaca*. The intestine is rather narrow, and undulates considerably in its course.

¹ I am inclined to think that it must have been a slightly oblique longitudinal section. If so, the colony would probably have been about 10 cm. in length and 4 cm. in breadth.