

They are all wide open and are each about 1.5 mm. in diameter. Probably the stiffness of the test caused by the sand prevents the apertures being closed.

When a section is made across one of the lobes of the colony it is seen that the Ascidiozooids are placed at right angles to the surfaces and extend from each side about one-third of the way inwards, while the central and remaining third is even more sandy than the outer surface.

The Ascidiozooids are very minute, although the colony is of such large size, and as they are surrounded on all sides by grains of sand, many of them of about their own size, it is rather difficult to make them out. When removed from the test and cleared of sand they are found to be cylindroidal in shape (Pl. XXXII. fig. 2). There is no separation into regions, and the breadth is very much the same all along the body. The thorax is usually about half the total length, and the abdomen the remainder; the post-abdomen is exceedingly short (Pl. XXXII. figs. 2, 5). So much imbedded sand is present in this species that the amount of test substance is very small relatively to the size of the colony. There is far more sand than test in the mass which invests the Ascidiozooids. The presence of this sand makes the test firm but brittle, changes its colour, and renders it quite opaque.

The branchial siphon is short, and the aperture is surrounded by six short lobes (Pl. XXXII. fig. 2). The atrial aperture is provided with a languet.

The branchial sac is rather thick walled and opaque. In most cases the stigmata are small and rounded, and both the transverse and the fine longitudinal vessels are wide (Pl. XXXII. fig. 4, *tr.*), but in one of the Ascidiozooids examined the stigmata were found to be larger and more numerous and the vessels much smaller than usual (see Pl. XXXII. fig. 3, *tr.*). The endostyle is very wide (Pl. XXXII. fig. 2, *en.*).

The œsophagus is short, and leads straight backwards to the large globular stomach (Pl. XXXII. fig. 5, *st.*) which lies on the ventral edge of the abdomen about half way back. The wall of the stomach is thick, but is not folded. The intestine leads back from the stomach for some distance, and then turns dorsally and anteriorly to become the rectum (Pl. XXXII. fig. 5, *i.* and *r.*). The intestine varies in calibre; on leaving the stomach it widens for a short distance, then narrows and then finally widens again before turning dorsally. The loop between the intestine and the rectum is moderately wide, and the abdomen as a whole is about as large in every way as the thorax. The rectum is long and is very conspicuous on account of the dark-coloured balls of fæcal matter which it contains (Pl. XXXII. figs. 2, 5, *r.*). It varies in calibre according to the amount of its contents.

The post-abdomen forms merely a small rounded projection on the lower end of the intestinal loop (Pl. XXXII. fig. 5, *p.ab.*). The ova and the spermatocysts are closely placed and lie alongside one another. The vas deferens was not visible in the Ascidiozooids examined. No larvæ were found.