

The internal longitudinal bars in the branchial sac are wide (Pl. XLV. figs. 7, 8, *i.l.*). The larger transverse vessels, which bound the rows of stigmata, are provided with delicate horizontal membranes, which are exactly like the alternate smaller transverse vessels which cross the meshes (Pl. XLV. fig. 7, *tr.* and *tr'*).

The stigmata in the fully developed sac are long and narrow (Pl. XLV. fig. 7), and much larger than in the other species of the genus; but in the young sac they are shorter and more rounded, and closely resemble those of *Goodsiria placenta* and *Goodsiria pedunculata*. Figures 5 and 6 show the condition of the stigmata in the younger sacs, and figure 6 also shows, in the very young Ascidiozoid, an arrangement of the internal longitudinal bars which suggests the presence of three rudimentary folds. This interesting indication of a relationship to the branchial sac of *Goodsiria placenta* is totally lost as the Ascidiozoid grows older. The stigmata are very regular in the adult sac, and the ciliated cells are well marked (Pl. XLV. fig. 8).

The endostyle is well developed. Its course is straight. In a transverse section of the ventral part of the body (Pl. XLV. fig. 16) the structure and relations of the endostyle are well seen. Its ventral-most part is continuous with the mantle (*m.*), and so separates the right and left halves of the peribranchial cavity (Pl. XLV. fig. 16, *p.br.c.*). The cells on the floor of the endostyle bear very long cilia, which in a transverse section project as a large tuft (Pl. XLV. fig. 16, *en.*), while the sides bear shorter and less conspicuous cilia.

The œsophagus is short (Pl. XLV. fig. 17, *œ.*). It runs backwards and ventrally to open into the small globular stomach (*st.*). There are usually about six well-marked folds upon the right side of the stomach. A transverse section (Pl. XLV. fig. 18) shows in addition a single large fold, which projects far into the interior, nearly dividing it into two cavities. The intestine is wider than the œsophagus (Pl. XLV. fig. 17, *i.*). It runs ventrally for a short distance from the stomach, and then turns anteriorly and then dorsally in a wide loop, running parallel to the stomach and œsophagus till it reaches the dorsal edge of the body, where it again turns anteriorly to become the short rectum (Pl. XLV. fig. 17, *r.*). The anus (*α.*) has a reflected margin. The stomach is provided with a short cœcum projecting from its left hand side, and not visible in figure 17. It curves towards the intestine in a semicircle (Pl. XLV. fig. 19).

The polycarps are not very conspicuous, as they are deeply buried in the mantle (Pl. XLV. fig. 13). When dissected out they are seen to be ovoid or flask-shaped bodies (Pl. XLV. fig. 14), with short projecting ducts. They are hermaphrodite, the same polycarp containing both ova and spermatocysts (Pl. XLV. fig. 13, *o.* and *t.v.*). The oviduct and vas deferens are occasionally seen cut in sections in the form of small tubes, the former slit-like and the latter circular in section (Pl. XLV. fig. 13, *o.d.* and *v.d.*). A few endocarps are also present projecting from the mantle into the peribranchial cavity. They are of the usual irregular shapes, with corrugated outlines (Pl. XLV. fig. 15).

Although I have not found any buds in the colonies examined, I am inclined to think