

mantle of *Goodsiria placenta*, and the muscle bands are rather stronger and more regularly arranged (Pl. XLIV. fig. 7, *m.*). Most of them run longitudinally and transversely. The mantle is considerably pigmented; large patches of opaque white pigment corpuscles occurring every here and there.

The branchial sac is large and thin-walled, but differs from that of *Goodsiria placenta* in having the folds slight and the stigmata very small. There are three folds on each side of the sac, but they are very irregularly developed, being sometimes of fair size (Pl. XLIV. fig. 6, *br.f.*), while at other times they are quite rudimentary, and are represented merely by areas where a few of the internal longitudinal bars are unusually closely placed (Pl. XLIV. fig. 6, *br.f'*). This condition recalls what is seen in *Styela grossularia* and some other members of the Styelinæ amongst Simple Ascidians. There may be from six to two internal longitudinal bars on a fold. There are usually three or four internal longitudinal bars in each interspace, in place of two as in *Goodsiria placenta*. Horizontal membranes are either absent or very slightly developed on the wide and irregular transverse vessels. The stigmata are numerous but very small (Pl. XLIV. fig. 6, *sg.*). They are rather irregularly arranged, the rows being frequently inclined, and occasionally splitting up into two rows or uniting again as new transverse vessels form or as two neighbouring vessels join (see Pl. XLIV. fig. 6). The ciliated cells are rather small, and their free ends do not project. There are a few muscle fibres developed in the vessels of the branchial sac, chiefly in the transverse vessels.

The endostyle is large and conspicuous. Its course is straight. The dorsal lamina has a plain edge, and the ribs are not so distinctly marked as in *Goodsiria placenta*.

The alimentary canal is fairly large. The œsophagus is short but wide; it curves posteriorly and then ventrally to enter the stomach. The stomach is nearly globular in shape. It is directed dorso-ventrally. Its wall is thick and is thrown into a large number of longitudinal folds. There are usually about twenty well-marked folds; they are strongly developed about the middle of the stomach and die away towards the œsophageal and intestinal ends. The intestine leaves the ventral end of the stomach, and almost at once turns anteriorly and then dorsally. It curves round the anterior edge of the stomach, forming rather a narrow loop, and then, opposite the œsophagus, it turns sharply forwards to become the rectum, which runs anteriorly for a short distance along the dorsal edge of the branchial sac. The intestine is rather wider than that of *Goodsiria placenta*, and the typhlosole in its interior is thrown into a series of convolutions which are visible through the comparatively thin walls of the intestine. The rectum is narrower than any other part of the alimentary canal. The system of branched tubules with dilated terminal bulbs is exceedingly well developed all over the walls of the intestine, and it communicates with the anterior edge of the stomach by the usual duct and vesicle. The vesicle on the wall of the stomach where the duct opens is apparently not so well developed as in *Goodsiria placenta*.