

*The Reproductive Organs* are in the form of polycarps, which are, however, unisexual.

*Locality*.—Station 315, January 26, 1876; lat. 51° 40' S., long. 57° 50' W.; depth, 5 to 12 fathoms; bottom, sand and gravel.

I place in this species two somewhat dissimilar colonies which were obtained off the east coast of the Falkland Islands, at a depth of 5 to 10 fathoms. The colony from which the dimensions given above are taken is a pyriform mass with a short and narrow stalk (Pl. XLIV. fig. 1). The stalk has been cut, but it was probably not more than 1 or 2 cm. in length.

The second specimen is very different in external appearance. It consists of a small rounded head attached to an enormously large peduncle. The head has evidently been injured, it looks as if the greater part of one side had been torn off, and what is left of that side is decayed and irregular: it measures 2·3 cm. in length, 2·1 cm. in breadth, and 1·5 cm. in greatest thickness. The peduncle is uneven, corrugated, and rough on the surface, is partially incrustated with colonies of Polyzoa, and has a few small black sand grains imbedded in its lower part. It measures 7·5 cm. in length, and is about 2 cm. in thickness. Throughout this great length of peduncle there are no Ascidiozooids, and although the head is incomplete, still there is no reason to suppose that it was any larger, if as large, as that of the other colony.

In both specimens the heads contain a large number of Ascidiozooids. In the pyriform specimen the branchial and atrial apertures of the Ascidiozooids are prominent and very conspicuous, even more so than is shown in the figure (Pl. XLIV. fig. 1). With a Coddington lens, or under a low power of the microscope, the apertures are seen to be distinctly four-lobed.

The region immediately around the branchial and atrial apertures is of a dark grey colour, with a slight bluish tinge, and in some cases of a decided slate colour, while the rest of the surface is much lighter (Pl. XLIV. fig. 1), being of a slightly hyaline whitish-grey. In the other specimen the head is of much the same colour as that just described, while the peduncle is of a dull grey colour throughout its length.

In sections the test is much lighter. In some places it is almost white, and has a distinct hyaline tint. It is very tough and cartilaginous, and contains vessels which branch and terminate in dilatations usually filled with blood-corpuscles. In sections through the test of the lower part of the colony imbedded sand grains are also found. In the injured specimen the apertures are scarcely so prominent as in the other, and are both irregularly four-lobed.

The test cells are in most places numerous, but in some regions they are very abundant, especially around the bodies of the Ascidiozooids. There they are always of a fusiform shape, and are placed with their long axes parallel to the surface of the Ascidiozoid. The opacity of the test is doubtless due to the presence of the slightly pigmented test