

smaller transverse vessels crossing each mesh but not interrupting the stigmata. The meshes are square, and contain each about six long narrow stigmata.

*The Dorsal Lamina* is a plain narrow membrane.

*The Tentacles* are of two sizes, placed alternately; they are numerous, and the larger ones are of considerable size.

*The Dorsal Tubercle* is small, and has an inconspicuous rounded aperture placed close to the anterior end of the dorsal lamina.

*The Alimentary Canal* is moderately large. It forms a narrow loop. The stomach is large and has well-marked longitudinal folds.

*The Reproductive Organs* are in the form of polycarps, which project from the inner surface of the mantle. They are unisexual, and the male and female polycarps differ in form. Endocarps are also present.

*Localities.*—(a) Station 313, January 20, 1876; lat.  $52^{\circ} 20' S.$ , long.  $67^{\circ} 39' W.$ ; depth, 55 fathoms; bottom, sand; bottom temperature,  $47^{\circ} \cdot 8 F.$  (b) Samboangan, in the Philippine Islands; depth, 10 fathoms.

A considerable number of specimens of this species were obtained off Cape Virgins, at the extremity of the Strait of Magellan, from a depth of 55 fathoms, and one small colony, which seems not to be distinguishable specifically from the others, was obtained off Samboangan, in the Philippine Islands, at a depth of 10 fathoms.

Most of the specimens from the Strait of Magellan are attached to large individuals of *Molgula gigantea*, and form incrusting layers over the upper part of the test. The edges of the colony are in some places very thin spreading membranes composed of test only, while in other places they form free projecting lobes and contain Ascidiozooids. A few of the colonies are not incrusting, but project upwards from a small area of attachment in the form of more or less lobed flattened expansions (Pl. XLVI. fig. 9).

The dimensions given above are those of a small colony. Some of the incrusting specimens attain a much larger size (upwards of 20 cm. in length). The thickness varies somewhat. The colour is always greyish, but in some cases it is a slaty blue-grey, while in others it has a distinctly pink tint. The anterior ends of the Ascidiozooids are very conspicuous on the surface. In some colonies they occupy the entire surface of the colony, being merely separated by lines (Pl. XLVI. fig. 9), but in others a small amount of investing mass of a distinctly lighter colour may be seen between the Ascidiozooids. The branchial and atrial apertures are obscurely four-lobed. They generally appear circular until carefully examined.

The Ascidiozooids are flattened antero-posteriorly, a very rare condition amongst Compound Ascidians. They vary in size from 1 mm. to 8 mm. in greatest diameter. The smaller ones are mostly placed in the thin spreading margins of the colony, but they occasionally occur between larger Ascidiozooids in the centre of the mass.