

*The Mantle* is fairly strong. The muscle bands are delicate but rather closely placed. They run chiefly in a transverse direction on the thorax.

*The Branchial Sac* is large and has many stigmata. The transverse vessels are wide and are all of the same size. The stigmata are very long and narrow. They are arranged with regularity.

*The Endostyle* is conspicuous. It has a very undulating course.

*The Dorsal Lamina* is composed of long triangular languets with pointed ends.

*The Tentacles* are large. There are about eight very long and the same number of smaller ones placed alternately.

*The Alimentary and Reproductive Viscera* are closely placed, and form a large opaque mass tapering towards the posterior end.

*Locality*.—Station 320, February 14, 1876; lat.  $37^{\circ} 17' S.$ , long.  $53^{\circ} 52' W.$ ; depth, 600 fathoms; bottom, green sand; bottom temperature,  $37^{\circ} \cdot 2 F.$

This species is represented by a large irregularly shaped mass and a few small lumps, all obtained from Station 320, off the east coast of South America, at a depth of 600 fathoms. The large mass, from which the measurements given above are taken, incrusts a fragment of a corallum<sup>1</sup> (Pl. XXVII. fig. 3), while the smaller colonies are attached to pieces of a Polyzoön. The smaller specimens are merely rounded lumps, and they agree in other particulars with the larger colony. The colour is a dark grey, which is produced by the test, while the bodies of the Ascidiozooids show through as patches of a lighter and slightly yellowish grey. No common cloacal apertures are visible, but the surface is not in perfect condition, being torn in places and somewhat distorted.

The Ascidiozooids are scattered apparently quite irregularly, and are fairly numerous (Pl. XXVII. fig. 3). They dip into the mass at various angles and are of different lengths. The anterior part of the body which shows through the transparent upper layer of test is from 1 mm. to 3 mm. in its greatest length.

The test is very soft, and as there is a good deal of it the colony as a whole is soft and easily deformed. It has evidently become considerably flattened and distorted in places from pressing against the sides of the bottle in which it was preserved. The outer layer of the test very readily tears off as a thin membrane; it is perfectly transparent. In this many sand-grains and fragments of sponge spicules and other foreign bodies are imbedded (see Pl. XXVII. fig. 4, where *o.s.* indicates the outer surface), and they are even found more rarely in the deeper layers of the test. The cells are particularly large, and give off very long and much-branched processes (Pl. XXVII. fig. 4, *t.c.*).

The colony is not attached by the entire lower surface. The rounded growing edges, which contain smaller and more regularly arranged Ascidiozooids, project freely and are not attached. The upper central part of the large colony has some of its Ascidio-

<sup>1</sup> Belonging to one of the Stylasteridæ.