

distinctly separated from the thorax, but the post-abdomen is conspicuous (Pl. XXVI. figs. 6, 7). The Ascidiozooids are not at all numerous, and some of them seem to be partially decayed. Possibly the colony may have been in a dying condition when it was found.

The test is singularly soft considering its thickness. The test cells are rather large, and they are very abundant. The musculature of the mantle is much stronger than is usual in the Polyclinidæ. The muscle fibres are of large size. The branchial aperture is very distinctly six-lobed (Pl. XXVI. fig. 6), and the atrial aperture is provided with a prominent languet.

The branchial sac is of quadrate form and very opaque. The endostyle is small and inconspicuous.

The abdomen differs somewhat in size in different Ascidiozooids. Figures 6 and 7 on Plate XXVI. show two specimens, in one of which (fig. 6) the intestine reaches much further beyond the branchial sac than it does in the other (fig. 7). The stomach is smooth walled.

The post-abdomen is usually three or four times as long as the combined thorax and abdomen, and about half their breadth. It is sometimes dilated at the end to form a bulb with a small terminal knob (Pl. XXVI. fig. 7). Both ova and spermatoc vesicles are found in the same post-abdomen, and the large vas deferens is always a conspicuous object (Pl. XXVI. figs. 6, 7, *v.d.*), running in an irregular and convoluted course along the dorsal edge of the post-abdomen.

*Polyclinum molle*, n. sp. (Pl. XXV. figs. 7-9).

*The Colony* is an irregularly rounded mass, somewhat compressed laterally, and attached by the whole of the lower end. The upper surface is wide and convex, the lower is rather narrower and is flattened. The surface is uneven but smooth. The colour is dark grey.

The length is 2.4 cm., the breadth is 3.3 cm., and the thickness 1.5 cm.

*The Ascidiozooids* are of moderate size and not very numerous. They appear to be placed quite irregularly in the colony, and no systems are present. The body is from 6 to 8 mm. in length and 1.5 mm. in greatest breadth, and the three regions are clearly distinguishable.

*The Test* is soft and flexible. It is of a dull grey colour and moderately transparent. Large numbers of minute sand-grains are imbedded in it, especially in the outer layers. The test cells are abundant and of all shapes, most of them much branched; some of those in the outer layer are very granular. No bladder cells are present.

*The Mantle* is thick and opaque, but not very muscular. The chief muscle bands run longitudinally.