Both ova and a testis were found in the abdomen of the Ascidiozooids. The vas deferens is coiled spirally around the testis. Several very large tailed larvæ (Pl. XL. fig. 13) were also found in the colony. In these the young test is very distinctly broken up into a network by numerous polygonal bladder cells (see Pl. XL. figs. 13, 14). The tail and its urochord are both very distinct, although the larva figured is evidently in an advanced stage of development; the three rows of stigmata in the branchial sac are already formed. Two pigmented sense organs are present, and the larva is provided at its anterior end with three well-developed adhering organs (Pl. XL. figs. 13, 15; the latter figure shows the termination of one of the adhering organs on the surface of the test, highly magnified).

I have given these details in regard to the specimens from Tangier Bay, as they may possibly turn out to be distinct from Verrill's variety, although they are certainly closely allied to it. To decide the matter both forms would require to be examined in the living condition.

Leptoclinum albidum, var. grande, nov. (Pl. XXXV. figs. 11-14).

The Colony is a large incrusting mass prolonged at its edges into considerable lobes and ridges with rounded ends. It is attached by the entire lower surface. The upper surface is uneven and is slightly rough all over. The colour is opaque whitishgrey.

The length is 8.5 cm., the greatest breadth is 6.5 cm., and the thickness varies from 1 mm. to nearly 1 cm.

The Ascidiozooids are very numerous but small. They are arranged so as to form a close reticulum over the whole surface. A few common cloacal apertures are visible. The Ascidiozooids are placed vertically in the test. In the thickened portions they only occupy the outer layer of the colony. Their branchial apertures occupy slight rounded projections on the surface.

The Test is hard and firm. It is relatively of large amount. It is of a dull greyish-white colour, and is quite opaque throughout. The matrix is densely crowded with calcareous spicules in all parts except in the immediate neighbourhood of the branchial apertures. Test cells are also abundant in the matrix; they are of very small size, and are mostly rounded in form. No bladder cells are present. The spicules are large and are of regular stellate shape. The rays are long and have sharp points.

The Mantle is rather thick and muscular. The branchial sphincter is well developed, and there are retractor muscles on each side of the body.

The Branchial Sac is small. The stigmata are short, but regularly arranged.

The Endostyle is narrow. Its course is straight.

The Alimentary Canal is of small size.