Leptoclinum moseleyi, n. sp. (Pl. XXXVII. figs. 9-14).

The Colony is a flat incrusting expansion of irregular shape. It is attached by a considerable portion of the lower surface, but the edges are free, slightly projecting, and corrugated in places. The colour is white on the lower surface, and brownish on the upper. The surface is even and moderately smooth.

The length is 5.3 cm., the greatest breadth is about 2 cm., and the thickness is 1 to 2 mm.

The Ascidiozooids are fairly numerous, and are of moderate size. They are distributed evenly over the upper surface of the colony, and no common cloacal apertures are visible. The bodies of the Ascidiozooids are placed mainly at right angles to the surface, and are divided distinctly into two regions, thorax and abdomen.

The Test is not large in amount, but is exceedingly hard and stiff. It consists of a clear homogeneous matrix, in which are imbedded a few small test cells and a very large number of calcareous spicules. The test matrix in the lower part of the colony is almost entirely occupied by the spicules, and in that region no test cells are visible. The spicules are mostly stellate in form, and are of fairly large size. The size and shape of the rays vary considerably in different spicules.

The Mantle is moderately thick and muscular. The branchial sphincter is particularly strong. The retractor muscles are well developed.

The Branchial Sac is very large. It has four rows of well developed stigmata arranged with regularity.

The Dorsal Lamina is represented by a series of very large triangular languets.

The Tentacles are of two sizes, the larger of which is rather long. They are placed alternately.

The Alimentary Canal is relatively of small size. It lies on the dorsal side of the posterior end of the thorax.

Locality.—Samboangan, Philippine Islands; depth, 10 fathoms.

One colony of this very remarkable species was obtained off Samboangan in the Philippine Islands, from shallow water. It is probably the most thoroughly calcareous species that is known.

The colony forms an elongated expansion of irregular form (see Pl. XXXVII. fig. 9), attached by the greater part of the lower surface, and having the edges free and projecting. The upper surface is rather depressed in the centre, and some of the corrugations of the margin curl slightly over it. The lower surface is flat, and is of a dull white colour. The upper surface varies in colour from white to dark brown (Pl. XXXVII. fig. 9). The greater part of it is of a yellowish-brown or fawn colour. The rounded edges are always white.