

*Leptoclinum albidum*, var. *luteolum*, Verrill (?) (Pl. XL. figs. 10–15).

*Leptoclinum luteolum*, Verrill, Brief Contributions to Zoology, &c., Amer. Journ. Sci. and Arts, ser. 3, vol. i. No. 6, p. 443, June 1871.

Half a dozen colonies obtained during the cruise of the "Porcupine" in Tangier Bay, on the coast of Morocco, on August 5, 1870, from a depth of 35 fathoms, resemble closely the named specimens of Verrill's *Leptoclinum albidum*, var. *luteolum*. What the colour was when living is unknown; after fifteen years' preservation in alcohol it is a dull greyish-white, with darker lines running along the rows of Ascidiozooids.

The shape of the colonies is irregular (Pl. XL. figs. 10, 11). They are incrusting, and are attached by the greater part of the lower surface. The edges are rounded and projecting; they contain no Ascidiozooids. The thickness is considerable. It may extend up to 4 mm. In such a case the Ascidiozooids occupy only the upper 2 mm. or so of the colony, and the lower half is solid test.

The Ascidiozooids are fairly numerous, but small. They are placed vertically in the test, and their anterior ends are visible as minute rounded dots on the surface. They are so arranged that their anterior ends form lines which branch and unite at fairly equal distances so as to form a close network over the surface (Pl. XL. fig. 10). Each line is really formed of two rows of Ascidiozooids closely placed and running parallel. Between the rows is found a canal-like extension of one of the common cloacal cavities, while the meshes of the network are formed by areas of test towards which the ventral surfaces of the surrounding Ascidiozooids are turned. This arrangement in linear and branched systems is exactly the same as that found in many species of the genus *Botrylloides* (see p. 40, and Pl. I. fig. 4). In museum specimens of *Leptoclinum albidum*, var. *luteolum*, Verrill, from North America, the same arrangement of the Ascidiozooids is seen, but it is usually not so well marked as in the colonies from Tangier Bay, figured on Plate XL.

The common cloacal apertures are numerous and conspicuous (Pl. XL. figs. 10, 11). They are ovate or elliptical slits, generally about 2 mm. in length and 1 mm. across at the widest point. The surface of the colony is uneven and rather rough.

The test is of considerable thickness, and is hard and firm. The matrix is closely crowded with test cells and spicules. A few bladder cells are also present in some parts. The test cells are rather large. They are of rounded and ovate forms and are granular. The spicules are stellate and fairly regular (Pl. XL. fig. 12).

The mantle is moderately muscular, the branchial sphincter is well developed, and there are strong retractor muscle bands running along the dorsal edge of the thorax.

The branchial sac is long and narrow. The stigmata are large and are arranged in three rows separated by wide transverse vessels. The endostyle is very large and conspicuous. The dorsal languets are long and narrow.