

The Tentacles are few and short.

Locality.—(a) Station 308, January 5, 1876; lat. $50^{\circ} 8' 30''$ S., long. $74^{\circ} 41' 0''$ W.; depth, 175 fathoms; bottom, blue mud. (b) Station 311, January 11, 1876; lat. $52^{\circ} 45' 30''$ S., long. $73^{\circ} 46' 0''$ W.; depth, 245 fathoms; bottom, blue mud; bottom temperature, 46° F. (c) 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. (d) Station 12 of "Lightning" expedition in 1868; lat. $59^{\circ} 36'$ N., long. $7^{\circ} 20'$ W.; depth, 530 fathoms; bottom, "Atlantic ooze"; bottom temperature, $6^{\circ} \cdot 4$ C. ($= 43^{\circ} \cdot 5$ F.).

Under this species I have united a number of specimens which resemble one another more or less closely.

About two dozen small specimens were obtained at Station 308, off the west coast of Patagonia, from a depth of 175 fathoms. The dimensions given in the above description are taken from one of the largest colonies, the smaller ones are only a couple of millimetres across. About twenty specimens were obtained at Station 311, at the western end of the Strait of Magellan, from a depth of 245 fathoms. Most of these are also small, but one or two extend to a larger size (2 to 2.5 cm. in length) than that of the specimens from Station 308. One large colony was obtained at Station 320, off the east coast of Patagonia, from a depth of 600 fathoms. In some respects this specimen differs from the others, and it may possibly be a distinct variety. A few small colonies obtained on September 6, 1868, during the cruise of the "Lightning," at Station 12, in the "warm area" of the Færoe Channel, from a depth of 530 fathoms, so closely resemble the South American forms that they are practically indistinguishable. Closely related to these specimens which are placed in the species proper there is another which I have regarded as forming a distinct variety (*var. magnizoidium*, see below).

In the typical specimens of *Leptoclinum tenue* the colony is small and rounded, and forms a thin incrusting layer, generally with a rather uneven upper surface (Pl. XXXIX. fig. 8). As a rule no common cloacal apertures are visible in the preserved specimens, but in one or two colonies a single centrally placed elliptical slit was present.

The Ascidiozooids are large and conspicuous. Their anterior ends form rounded projections on the upper surface, generally of an elliptical or nearly circular shape (Pl. XXXIX. fig. 9), and measuring about 0.5 mm. in the longer diameter. The Ascidiozooids are inclined at an angle to the surface of the colony, and are short antero-posteriorly. They are not arranged in definite systems (Pl. XXXIX. fig. 9).

The test, although opaque, is thin and rather soft. Its upper layer tears off readily, leaving the Ascidiozooids adhering to the lower part of the colony. A surface view of this upper layer of test, under a low power (Pl. XXXIX. fig. 10), shows the arrangement of the spicules very clearly. They are most numerous in the test immediately around the bodies of the Ascidiozooids, where they form dark circumscribing lines; inside these