

circular muscle, which can be recognised with the naked eye, as a thick swelling on the inner side of the wall. In transverse section it shows a circular or oval figure, fastened on one side to the wall; it is formed by extremely strong pleating of the endodermal circular muscular layer.

The large number of perfect septa is also of importance; on the other hand, I have entirely disregarded the nature of the surface of the body, so that forms both with smooth and with warty wall may find their place in the family.

*Tealia*, Gosse.

Wall covered with numerous, irregularly scattered warts; body broader than high, tentacles numerous, retractile, all of equal size.

*Tealia bunodiformis*, n. sp. (Pl. VI. fig. 4, Pl. VIII. figs. 3-5).

Warts very numerous, small, densely crowded together, with a tendency to arrangement in longitudinal rows. Surface of the body encrusted with foreign substances.

*Habitat*.—Shore of Tristan da Cunha. October 15, 1873. Three specimens.

*Dimensions*.—Breadth, 1·5-2·0 cm.; height, 1·0 cm.

Three small forms, collected as shore inhabitants on the coast of Tristan da Cunha, belonged to this Actinia, which, in consequence of the strong contraction of the body and the influence of the alcohol, had lost in great measure the marked characteristics of its external habit of body. They had been partially injured by being detached, and were otherwise so much contracted, that the oral disk and tentacles were covered by the margin of the mural membrane, and the body formed a shapeless mass, from 1·5-2 cm. in diameter.

The wall is encrusted in some parts with sand granules and covered with numerous papillæ, which are simply small elevations of the supporting substance covered with the usual epithelium. As they are of unequal size and irregularly and thickly distributed over the surface, the animals must be referred to the genus *Tealia* (Gosse). The constitution of the circular muscle, which is intermediate between that of *Tealia crassicornis* and of *Leio-tealia nymphæa*, also favours this view.

The circular muscle (Pl. VI. fig. 4) is chiefly endodermal, and projects into the gastric cavity as a thick swelling on the upper margin of the wall. It shows an oval figure in transverse section. The margin of the muscle, where it is attached to the wall by a very narrow base, is pierced by a cord of connective substance, which soon divides into two smaller cords only running a little way. The supporting lamellæ covered with muscular fibrillæ run out from the latter; they are extremely long in the middle of the swelling and only slightly ramified, whilst they are shorter towards the sides, and form numerous lateral branches.