

Among the Actiniæ with degenerate tentacles, I described in my former Challenger Report a new species, in which the extent of retrogression of the tentacles can be recognised in a degree attained by no other form. I was compelled to dispense with a detailed description of its structure, since the only specimen at my disposal was on the one hand much mangled, and on the other rendered so brittle by preservation in chromic acid that it could not be methodically investigated. I am glad to be in a position to fill up the deficiency by means of two specimens found in the supplementary material, both well preserved, although considerably altered in shape by violent contraction. In both cases, as in the example previously described, the stomatodæum is so much evaginated as to take the place usually occupied by the oral disc, the latter falling outwards from this point like a body-wall (Pl. I. fig. 13). On the other hand, pedal disc and body-wall are alike deeply retracted on the lower side. The body-wall forms a cup like the shell of a *Patella*, the pedal disc projecting into the cup somewhat like the body of the *Patella*. In so marked a de-formation, dimensions can with difficulty be given, and can serve only for approximate orientation. In the larger of the two specimens (from 120 fathoms at Station 305A), the pedal disc had a diameter of about 2 cm., the distance between the edge of the oral disc and the mouth reached 2.5 cm.; the length of the stomatodæum was at most places 1.5 cm., and at the siphonoglyphes more than 2 cm. The corresponding dimensions of the smaller example (Station 147; depth, 1600 fath.) are essentially less,—diameter of pedal disc, 0.07 cm.; radius of oral disc, 1.2 cm.; length of the stomatodæum, 1.0 cm. From the nature of the contraction may be inferred that in both cases the dimensions of oral disc and stomatodæum are excessive, as the result of evagination, while those of the pedal disc are too small.

On the pedal disc are about 160 radial furrows, of which, however, only a proportion reach the centre, the rest dying out sooner or later. The ridges between the furrows are somewhat toothed, in the manner formerly described by me as occurring in *Polystomidium* and *Polysiphonia*. In the centre of the pedal disc lies a pit about the size of a pin's head, which cannot be proved to be an opening.

On the exterior of the body-wall also, similar ridges, alternating with furrows, run longitudinally from pedal to oral disc; their number is greater, being close on 400; they differ in size, some few of less considerable development rising between every two of the stronger ridges. At the edge of the oral disc they all pass into a strong circular ridge, which forms the sharp boundary between body-wall and oral disc.

The pedal disc and body-wall possess on their inner surfaces the circular muscle-fibre layer occurring in all Actiniæ; on the body-wall this is strongly pleated, and the more so, the nearer we approach to the upper edge. In the immediate neighbourhood of the edge the pleating is so marked that one may term it a sphincter; it causes here the circular ridge mentioned above as occurring at the upper edge of the body-wall