

"The mesogloea of the mesenteries is strongly constructed, and on it can be recognised well-developed muscle-pennons. The generative organs, borne in the supporting lamina, consisted of ova in the individual which I investigated. The mesenterial filaments are of the customary structure.

"The mesenterial arrangement is to be referred to the macrotype. The specimen investigated possessed thirty-six mesenteries, of which five pairs pertained to the dorsal zone, and thirteen pairs to the ventral; in the latter zone were ranged regularly, on each side of the directives, six pairs, consisting of a macro- and a micro-mesentery.

"The body-wall is drawn inwards at a right angle; on the inner side of this region a definite endodermal sphincter may be recognised. The pleatings of the endodermal muscle-lamina are more clearly marked than in *Palythoa axinellæ*; and produce on the mesogloea prominent antler-like prongs. The accretions are continued on to the indrawn region of the body-wall, but die out at its lower edge, where the oral disc commences."

The identity of this animal with *Palythoa anguicoma* is doubtful, as Norman, who created the species, gave no figure of it. I was influenced by the circumstance that eighteen rough radial furrows are ascribed to this form; besides which the incrustation on it should be only superficial.

Palythoa, sp. (?) *

Habitat.—(a) Station 135 A, off Inaccessible Island, October 16, 1873; 60–90 fathoms. (b) Station 135 c, off Nightingale Island, October 17, 1873; 100–150 fathoms.

In the same bottle with *Palythoa anguicoma* was another species of *Palythoa*, which recurred in a second tube, the contents of which were dredged a day later than the first, and at a greater depth. The specimens in question could easily be distinguished from individuals of *Palythoa anguicoma* by containing black particles of hornblende. Erdmann attempts to separate the two species, and gives the following description:—

"In this species also the larger part of the material consists of individuals torn away from the colony; one colony, which was undoubtedly not mutilated, was represented by three individuals, ranged behind one another on a ribbon-like cœnenchyme. Externally this species differs from the preceding in colour only, which is in this case a dull grey-brown; besides this, from the greater firmness and unevenness of the body-wall, it may be recognised that the mass of accretions is greater. The body-wall presents, in contrast to the former species in which the relations are reversed, a considerable zone charged with accretions, opposed to a slightly-developed soft zone of mesogloea. In the latter there passes close under the endoderm a cell-canal, frequently constricted, but rarely interrupted; external to this follow immediately the accessory deposits, so that of the numerous canals and spaces observed in the preceding species only a few roundish cell-islets are preserved."