on the foundation, is completely free from incrustation. The soft mesoglœa of the cœnenchyme is, with reference to histological differentiation, in the same relation to the body-wall as it is in *Zoanthus*, since here also, in addition to the other points of marked agreement, the nucleated fibres are supplanted by mesoglœal cells.

"With a view to observing the mesenterial arrangement, I studied two examples, one of medium size, and one fully grown; both exhibit the regular macrotype. In the younger specimen occurred a symmetrical arrangement of the pairs of mesenteries; of these there were sixteen, seven being regularly distributed on each side of the directives. The other polyp possessed nineteen pairs, of which nine were situated on the one side, and eight on the other."

Epizoanthus elongatus,* n. sp. (Pl. I. fig. 2).

"The individual polyps form elongated cylindrical tubes, the body-wall is flattened above, with a marked indentation, but terminates without radial furrows; colour of the colony a yellowish-grey."

Habitat.—Station 322, off Monte Video; February 26, 1876; 21 fathoms.

Dimensions.—Height of the polyps, 0·05–1·0 cm.; breadth, 0·15–0·4 cm.

"This species can only be externally distinguished from the preceding. The colony is 10 cm. high, consisting of about 100 individuals, and lives on a bundle of the siliceous threads of a *Hyalonema*, about 3 mm. only in thickness. The largest polyps are long cylindrical tubes, about 8–10 mm. high and 3–4 mm. broad; in their neighbourhood occur gradations to the youngest buds, which are small warts projecting from the cœnenchyme, of 0·5–2 mm. in height, 1·5–2·5 mm. in breadth. All the animals are in a state of the most marked contraction; the horizontal upper surface of the body-wall is more or less flattened, and exhibits a circular indentation. This part of the body-wall is entirely free from radial ridges and furrows. The colour of the colony is a greyish-yellow.

"The body-wall is thinner than in the preceding species, and possesses in its outer zone the same deposits, though in smaller quantity. The remaining anatomical and histological relations agree closely with those of the former species, but it is important to observe that the sphincter is less strongly developed. The body-wall is drawn inwards less deeply; its sphincter is in transverse section correspondingly short, but curved, and pointed at both ends. The generative organs consisted of ova in the five specimens investigated."

Epizoanthus cancrisocius,* Studer (Pl. I. fig. 15).

Colony much incrusted, and consequently so brittle as to break readily in pieces; individual polyps slim, body-wall at the upper end bent outwards in the contracted