All the mesenteries are unusually muscular; the primary mesenteries are sterile, and reach to the stomatodæum, while the secondaries are incomplete but bear generative organs. I observed a few acontia; cinclides, on the other hand, are wanting.

In conclusion, I might refer to the possibility that Phellia spinifera may be only a variety of Phellia pectinata. In the sole example from Station 320, the spinose knobs were developed only on the upper part of the bark-like body-wall, and even here not abundantly; so that its appearance is intermediate between the characters of Phellia pectinata and Phellia spinifera. In spite of this, I have retained the separation of the two species, because the musculature of the oral disc of Phellia pectinata does not yield, on further study, the characteristic appearance drawn in Pl. II. fig. 8. In this respect, the transitional form agrees with the type of Phellia spinifera.

## Family 8, AMPHIANTHIDÆ, R. Hertwig.

Genus Amphianthus, R. Hertwig.

Amphianthus ornatum,\* n. sp. (Pl. I. fig. 8).

Body-wall beset with numerous (about 26) longitudinal rows of papillæ; the latter are for the most part recognisable by the naked eye, and are not arranged in transverse series.

Habitat.—(a) Station 56, May 29, 1873; depth, 1075 fathoms. One specimen. (b) Station 241, June 23, 1875; depth, 2300 fathoms. Three specimens. (c) Station 244, June 28, 1875; depth, 2900 fathoms. One specimen.

Dimensions.—Height, 0.2-0.5 cm.; length of the pedal disc, 0.3-2 cm.

The five specimens which I describe under the name of Amphianthus ornatum have on the one hand many points of resemblance to Amphianthus bathybium, on the other to Cylista (Bunodes) minuta; with the latter they agree in the form of the papillæ, but differ from it in the divergent shape of the body and in characteristics of the family Amphianthidæ, as also in the absence of acontia; with the former, on the other hand, they tally in general habits, but exhibit a divergent condition of the body-wall. Amphianthus bathybium possesses small papillæ, recognisable only with the aid of a lens, and arranged in small groups, with a tendency to transverse series. In Amphianthus ornatum, however, they are large, and comparatively isolated in position; they form about 20-30 longitudinal rows, which die out sooner or later at some distance from the lower end of the body-wall. The papillæ are not all of one size; indeed, it even happens that rows of larger and smaller alternate.

In the very young specimen from Station 244, only twelve rows of papillæ were present, all most regularly distributed on the periphery of the body, and all of essentially similar structure, since both in the size and number of the papillæ the individual