

*Euphione*, n. gen.

*Euphione elisabethæ*, n. sp. (Pl. IX. fig. 3; Pl. XVII. fig. 7; Pl. XVIII. fig. 10; Pl. VIIIA. figs. 3-6).

*Habitat*.—Dredged at Station 142 (south of the Cape of Good Hope), December 18, 1873; lat. 35° 4' S., long. 18° 37' E.; depth, 150 fathoms; bottom temperature 47°·0, surface temperature 65°·5; green sand.

Length about 35 mm., breadth at the widest part (including bristles) 23 mm.

A large and remarkable form, the stalked and rotate papillæ giving the back a characteristic appearance. The body is broadly fusiform or nearly elliptical in outline, and is only a little less elevated ventrally than dorsally.

The head somewhat resembles that of *Lepidonotus*. The eyes occupy the posterolateral border of the head, and are so close as to be almost connate. They are nearer each other and much less distinct than those of *Iphione muricata*. The tentacle is of moderate length, reaching a little beyond the palpi, and narrows below the distal enlargement from which the filiform tip proceeds. The two latter parts are whitish while the column is greyish. The antennæ are of similar colour and shape, and are proportionally long. The tentacular and dorsal cirri follow the same outline, and the constriction below the swollen tip is in all well shown. The palpi are covered by a series of long conical papillæ which give them a very hirsute appearance (under the microscope). These papillæ show a crenated internal region, and the tip is in many furnished with a palpocil. They are continued to the tip of the organ, though the distal papillæ are short. All the cirri have a dense cuticle, except at the tip, and though many adventitious structures (*e.g.*, mud and sponge-spicules) are attached, their surface is quite smooth. The ventral cirri are subulate and proportionally large. The ventral papillæ (or mamillæ) are much more prominent than in *Iphione*, but somewhat less than in *Lepidonotus*. They become distinct on the seventh foot, as in the latter. The mouth opens on the ventral surface as in *Lepidonotus*.

The scales are thirteen in number on each side, and therefore the same as in *Iphione*, but their texture is flexible and leathery, and their surface is studded with warts or papillæ as in *Lepidonotus*. The first scale is rounded, the rest more or less elongated transversely, so that the general shape is rhomboidal—the anterior edge, however, being incurved, and the posterior convex. The most characteristic feature is the presence of the peculiar rotate papillæ on their surface, some being small and adpressed, others large and elevated on a pedicle. These processes occur mostly on the inner region of the scales, the outer border being occupied by softer elongated spinose papillæ, which in shape somewhat resemble a prickly pear. Continuing along the border inward these gradually merge into irregularly rotate forms. The latter marginal papillæ are much