Ereutho, Malmgren.

Ereutho kerguelensis, n. sp. (Pl. XXVIIIA. figs. 20, 21).

Habitat.—Dredged at Station 149G (off London River, Kerguelen), January 29, 1874; lat. 48° 50′ S., long. 69° 18′ E.; depth, 110 fathoms; surface temperature, 40°·2; sea-bottom, volcanic mud.

The larger example measures 30 mm. in length, with a diameter at its widest part anteriorly of about 3 mm., exclusive of the feet.

In general configuration this form agrees with *Ereutho*, Malmgren, having thirteen pairs of bristle-tufts. The frilled cephalic lobe had evidently been surmounted by a series of grooved tentacles, while inferiorly are a number of smooth ones. The dorsum anteriorly is very rugose, and the large buccal surface is almost papillose.

The bristles begin on the buccal segment, and number thirteen pairs. They are borne on setigerous processes, which correspond in length to those of the common Zetlandic form. The bristles (Pl. XXVIIIA. fig. 20) differ from those of the latter species in having shorter and less attenuate tips. Both are distinctly serrate, the points being situated on rudimentary wings, which are only indicated in certain positions by a double line at the edge of the bristle, and most distinctly marked in the Zetlandic form. Below the fifth, sixth, and seventh setigerous processes are three greatly expanded glandular areas, somewhat in the form of suckers. Moreover, each bristle-tuft is ensheathed by an anterior and posterior cuticular lamella, which terminates superiorly in a distinct papillary process, longest anteriorly. Each process is composed of cuticle and hypoderm.

The hooks (Pl. XXVIIIA. fig. 21) somewhat resemble those of *Ereutho smitti*, Malmgren, but they bear three distinct teeth, viz., the great inferior fang, and two above it. A well-marked heel exists posteriorly. The ventral outline presents a somewhat prominent convexity near the middle. The anterior inferior process is less produced than in *Polycirrus aurantiacus*, as figured by Malmgren.

The pale greyish mud in the intestine was mainly composed of Diatoms, sponge-spicules, and here and there a fragment of a Radiolarian.

The hypoderm in this species is very largely developed on the ventral arch, that is on the region below the bristle-bundles. It forms a thick, glandular, and somewhat lax investment, and there is no separation of the area outside the nerve-cords as in the common British *Polycirrus*. The dorsal arch of the hypoderm is much thinner. The nerve-cords are large and rounded, and have a fibrous sheath externally. The circular muscular layer is strong. The longitudinal ventral muscles are somewhat narrow and extended, though thicker than the dorsal, which meet in the median line. The œsophagus shows externally a thin series of longitudinal fibres, then a firm circular belt and the glandular lining. The great glands of the anterior third and ova are present in the body-cavity.