

*Samythopsis*, n. gen.

*Samythopsis grubei*, n. sp. (Pl. XLVIII. fig. 3; Pl. XXVIIA. fig. 8).

*Habitat*.—Trawled at Station 298 (off the American coast, south of Valparaiso), November 17, 1875; lat. 34° 7' S., long. 73° 56' W.; depth, 2225 fathoms; bottom temperature 35°·6, surface temperature 59°·0; sea-bottom, blue mud.

A form of moderate size, measuring about 28 mm. in length, and having a diameter of 2·5 mm. at its widest part in front. The spirit had not reached the specimens very thoroughly, since they were enclosed in their tubes.

The cephalic lobe is subquadrangular, with a prominent papilla at each angle anteriorly. Numerous smooth tentacles occur beneath the frontal lobe, and in one specimen very much longer tentacles are present in the middle line; and it is possible others exist in the perfect animal. The mouth opens immediately below the latter, at the anterior border of the narrow cephalic region, which has before it the frontal arch, then the cephalic lobe with two ridges posteriorly. The cephalic region is separated from the rest of the body, both dorsally and ventrally, by a prominent nuchal fold, which is notched on each side in front of the first bristle-tuft. The dorsal surface of the body is convex throughout, the ventral flattened anteriorly, and grooved posteriorly. In addition, the anterior (or thoracic) region, *i.e.*, the division bearing the bristles, is marked by prominent, thickened ridges, somewhat lighter in colour than the rest of the body. There are seventeen pairs of bristle-bundles, the first being considerably elongated. The wings of the bristles are feebly developed, and the tip is slightly curved and finely tapered.

As in *Samytha* the uncini commence on the fourth bristled segment, and extend to the tip of the tail. In front the pads occur below the setigerous processes, and behind the transverse thickened bands which characterise the anterior region. In the posterior division they are situated at the base of the long cirri peculiar to this part. Above the latter is a short dorsal process. The crown of the hooks (Pl. XXVIIA. fig. 8) is elongated, and the dental edge shows six teeth, the inferior being considerably larger than the adjoining. A prominent intermediate process occurs between the last tooth and the anterior inferior projection. In its general outline the hook approaches that of *Amphicteis*, especially in the marked inflection of the dorsal margin, but it more closely resembles *Samytha* in dentition.

The cirri along the posterior region are characteristic. Just before the anal enlargement is reached they become considerably shorter, and the first on that region is short, flattened, and somewhat clavate in outline, while the second is almost globular. They are absent in the other segments. A short and slightly tapered cirrus occurs on each side