when the tip is viewed directly in front or behind. Both anterior and posterior hooks are very prominent, generally reaching, in the preparation, the ends of the shafts of the dorsal bristles. The ventral bristles are similar to the dorsal, only more slender.

The greyish pellets (which abounded in the intestine) consisted of finely granular mud loaded with multitudes of Diatoms, most being linear, Crustacean hairs, fragments of cuticle, and a very few minute Foraminifera.

This species occupies tubes of greyish mud, lined by the usual tough secretion, and strengthened by the long linear leaves of pines, pieces of leaf-stalks and leaves, straws, stones, fragments of Echinoderms, and other structures. The linear leaves of the pines are arranged longitudinally, as in the case of the needle-like spicules of the Hexactinellid sponge. Moreover, as usual, one surface of the tube is better protected than the other, so that the latter is probably the lower surface, though this is uncertain. The longest tube measures about 80 mm., and has a diameter of 6 mm. at its wide part. A portion of a linear leaf, however, projects beyond the aperture. The tube is slightly tapered from before backward, and somewhat curved. Although in some cases there are two linear leaves of the pines, only one is attached to the tube, showing that a rude exterior was important, or that full advantage was not taken of the structure.

In transverse section of a female both dorsal and ventral muscles are somewhat flattened, partly from the distention of the perivisceral chamber by large and small ova. The disproportion between the dorsal and ventral arches of the circular muscular coat is not so marked as in several of the previous forms. The strong oblique muscles pass to the circular coat inferiorly, but do not decussate, the rounded nerve-cord occupying the space between them, and presenting a small median neural canal. The usual muscular arch of fibres from the alimentary canal occurs superiorly. A ventral groove, probably due to the contraction of the strong oblique muscles, exists in the middle line.

Marenzeller [1] describes a form (*Onuphis holobranchiata*) from the western shores of the Island of Ino Sima, Japan, in which a single large branchial process exists, but the anterior feet and the bristles are so characteristically different that no confusion is possible, though the dental apparatus is somewhat allied.

Nothria willemoesii,[2] n. sp. (Pl. XLI. figs. 4–10; Pl. XXVIA. figs. 1–4; Pl. XXXVA. fig. 1).

Habitat.—Dredged off Amboina, in 100 fathoms.

A fragment of the anterior region of the body, measuring about 38 mm. in length and 3·5 mm. in diameter, is alone available for examination.

[1] *Denkschr. d. math.-nat. k. Akad. d. wiss. Wien*, Bd. xli. p. 24 (sep. Abd.).

[2] Named in honour of Dr Rudolf v. Willemoes-Suhm, whose promising zoological career was cut short by his untimely death during the voyage.