

The differences just noted in the bristles are borne out by an examination of the dental apparatus, for though this has been crushed, apparently by the dredge, sufficient remains for identification. The maxillæ have eleven larger translucent hard tips, and the basal ridges do not correspond. The spathulate processes posteriorly are broader. The outer line of the brown horny dentary region of the great plates forms a bluntly angular projection instead of the straight line which characterises the former. The left plate has four, the right five, teeth. The outer lateral plate in front is considerably larger, and instead of a single long inner tooth, there are two (both shorter). Moreover, the adjoining posterior plate has a process which projects forward into the notch between the two teeth. The inner lateral plate has a shorter tooth than in the former species. The dentary surface of the mandibles presents ventrally a crescentic aspect, with a V-shaped median notch. The outer tips are black, and from them a brownish veined band curves from side to side.

In the intestine are little sand masses containing numerous *Globigerinæ* and other Foraminifera, with sponge-spicules, sand-grains, and other debris.

The structure of the body-wall of this form (Station 141) corresponds in general with the European type, but the muscular fasciculi are less regular. The nerve-cords, with the large superior neural canal, are embraced by the ventral longitudinal muscles in the same manner. A comparatively narrow pedicle connects the area with the hypoderm inferiorly.

The dental apparatus of this species somewhat approaches the *Lumbriconereis* (*Notocirrus*) *tetraurus* of Schmarda,<sup>1</sup> from the Cape and Chili, but the presence of a considerable dorsal cirrus on the foot, and the structure of the posterior hooks, are essential points of difference. Grube's *Lumbriconereis cavifrons*,<sup>2</sup> from the same region (Lime Bay, Cape of Good Hope), is easily distinguished by the presence of seven teeth in the great dental plates and the almost globular excavated head; while his *Lumbriconereis capensis*<sup>3</sup> has from five to seven teeth in the great dental plates, the foot is abbreviated and the lamella short and bluntly rounded. He does not describe the head, so that the details are incomplete.

*Lumbriconereis bifurcata*, n. sp. (Pl. XXXVI. figs. 10, 11, 12; Pl. XVIIA. fig. 16).

*Habitat*.—Dredged at Station 232 (off the southern shores of Japan), May 12, 1875; lat. 35° 11' N., long. 139° 28' E.; depth, 345 fathoms; temperature of the bottom 41°·1, surface temperature 64°·2; sea-bottom, green mud.

The single fragmentary example measured about 145 mm. in length and about 5 mm. in breadth.

The head (Pl. XXXVI. figs. 10, 11) in the preparation forms a somewhat acute cone, marked dorsally by a few longitudinal streaks. Ventrally the mouth and other

<sup>1</sup> *Op. cit.*, I. ii. p. 117.

<sup>2</sup> *Annel. Novara-Exped.*, Zool. Theil., p. 13, Taf. i. fig. 5.

<sup>3</sup> *Jahres-Bericht. der Schles. Gesellsch. f. nat. Cultur.*, 1878, p. 95.