

is of considerable importance, and it is probable that another genus may be necessary for those species with the bifid posterior processes.

Lumbriconereis, Blainville, *char. emend.*

Lumbriconereis pettigrewi,¹ n. sp. (Pl. XXXVI. figs. 7, 8, 9; Pl. XVIIIA. figs. 11–15).

Habitat.—Dredged at Station 141 (off the Cape of Good Hope), December 17, 1873; lat. 34° 41' S., long. 18° 36' E.; depth, 98 fathoms; bottom temperature 49°·5, surface temperature 66°·5; sea-bottom, green sand.

A species about 100 mm. in length and nearly 2·5 mm. in breadth; apparently in considerable abundance.

In external appearance it very much resembles *Lumbriconereis fragilis*, O. F. Müller, but, as the specific distinctions rest on so many minute points, little reliance can be placed on the former.

Viewed from the dorsum, the head (Pl. XXXVI. fig. 7) forms a somewhat pointed cone, generally with a median groove or depression, which, however, does not reach the apex. At the sides posteriorly the ventral "bosses" often project a little beyond the margin. A few longitudinal streaks occur on the ventral surface. In the buccal segment the oral margin is deeply crenate, and marked by longitudinal lines. From the boss on each side a ridge proceeds backward and inward on the roof of the mouth, and the two are separated by a deep groove.

The maxillæ (Fig. 4) are dull brownish, and the spatulate processes posteriorly (Fig. 5) are blackish-brown. The great dental plate on each side presents four teeth. The lateral plates, which are arranged transversely in front, are terminated dorsally by a prominent tooth, the outer (and larger) plate having the longer. These teeth turn inward when the sides of the dental apparatus are drawn together. Close behind the outer lateral tooth is a small horny patch, followed after an interval by a longer bar running backward to the posterior third of the maxilla on each side. The halves of the mandible (Fig. 6) are ankylosed anteriorly, and have a broad V-shaped ventral surface, the dark and nearly parallel lines passing from side to side continuously.

The feet are similar to those of the Norwegian examples of *Lumbriconereis fragilis*, but the bristles are less developed, and do not possess the blackish-brown tinge in their shafts. The contour of the upper part of the lobe is also different, and there are only three black spines in the Challenger form, whereas in the European there are five or six. The groups of bristles, however, are about the same number in the tenth foot (Pl. XXXVI. fig. 8) of each, viz., five, the upper (Pl. XVIIIA. fig. 11) being the longer. In *Lumbri-*

¹ Named after my colleague, Prof. Pettigrew, well known for his anatomical researches and for his elaborate investigations on flight.