

This species diverges from *Staurocephalus rubrovittatus*,<sup>1</sup> Grube, in the structure of the bristles, which are much more slender in the new form. The articulated tentacles of *Staurocephalus rudolphii*, D. Chiaje,<sup>2</sup> readily separate it from the new species. It more nearly approaches Keferstein's *Staurocephalus ciliatus*,<sup>3</sup> from which, however, it differs in the structure of the bristles and in the absence of the eyes. The new form is specially distinguished by the great length of the terminal portions of the bristles.

#### Family LUMBRINEREIDÆ.

The Lumbrinereidæ are represented by a tolerably numerous series (about fifteen different species), several of which are new. In most of the previous voyages examples of the family have occurred, though in varying numbers. Thus Grube describes two species, in the Annulata Cæstediana, from the coast of South America and the adjoining Ocean. Schmarda gives upwards of half a dozen from the most diverse parts of the world, but his classification is somewhat confused. A large number (about fifteen or sixteen) are described by Kinberg in the voyage of the frigate "Eugenie"; while only three occur in Grube's Annelids of the "Gazelle" Expedition. Four genera and five species are represented in the latter author's Philippine Annelids. The species found in the Challenger range from tide-marks to very great depths (*e.g.*, 2225 fathoms), indeed, Ehlers has already shown that the common *Lumbriconereis fragilis*, O. F. Müller, procured in the "Porcupine" Expedition, descends to 1380 fathoms.

One of the most comprehensive resumé's of the group is that of the late Prof. Grube,<sup>4</sup> whose extensive acquaintance with foreign Annelids peculiarly fitted him for such a task.

In regard to the dental apparatus in this group, the colour, even in small examples, is generally of darker hue than in the Eunicidæ. The maxillæ are characteristically elevated in front of the posterior (spathulate) processes, so that the blades curve downward in front and the spathulate appendages behind. The horny plates (great dental and lateral) are symmetrical. In the usual position in which many are found after preservation, the points of the maxillæ, and the cutting edges of the great dental plates, are directed upward. Moreover, a symmetrical arrangement of the three ventral horny plates (the two lateral in front and the great dental plate behind) is visible inferiorly. In protrusion of the proboscis, again, the lateral plates become external instead of anterior. The mandibles are generally ankylosed in front. From the position and curvature of the various parts of this apparatus it is difficult to give a fair representation of the parts.

<sup>1</sup> *Archiv f. Naturgesch.*, 1855, p. 97, and 1860, *char. emend.*, p. 79.

<sup>2</sup> *Memorie s. storia, &c.*, iii. p. 166 (*Nereis di rudolphi*) and p. 176, Tav. xliii. fig. 13, &c.

<sup>3</sup> *Zeitschr. f. wiss. Zool.*, Bd. xii. p. 99, Taf. viii. figs. 13-19.

<sup>4</sup> *Jahres-Bericht. der Schles. Gesellsch. f. nat. Cultur.*, 1878, pp. 78-109.