

terminal part of the wing is frequently abraded. In others the wing or guard projects as a slight process beyond the tip of the distal fang, and has a rib or thickened band along its dorsal edge. In some the entire wing has been removed by friction.

About the forty-fourth somite one or two hooks occur inferiorly in each foot. They are likewise yellowish, have a large fang, a bifid crown, and guards or wings at the tip. In some of the posterior feet hooks with three processes exist (Pl. XIXA. fig. 13), and it would appear from the minute structure of those in front that these also occasionally occur throughout.

The food consists of minute Algæ and muddy debris containing fragments of Crustacea, sponge-spicules, Foraminifera, and Diatoms. Firm ovoid pellets are formed in the sacculations of the posterior region of the alimentary canal.

Two fragments of the anterior region (measuring from 8 to 9 mm. in diameter), apparently of the adult of the same species, occurred with the others. These somewhat differ in regard to the branchiæ, which, though commencing on the fourth foot as in the foregoing case, soon exhibit a greater number of branches. Thus at the tenth foot there are thirteen or fourteen divisions. The tentacle is proportionally shorter, being only a little longer than the antennæ. The colour of the dental apparatus is dark brown, the basal spathulate plate of the maxillæ being blackish. In regard to the number of teeth on the various plates, these larger forms quite agree with the smaller. The maxillæ, however, show a characteristic median ridge at the tip (Pl. XXXVII. fig. 20), and at the lateral edges are also furnished with a prominent keel; indeed, the shape is peculiar. The differences in colour and in the development of the hard ridges are apparently due to age.

The ventral longitudinal muscles in a large example are somewhat ovoid in section, and their massive inner edges approach rather closely, so that the nerve-area is lengthened. The large neural canal lies below the cords, and the brownish granular mass fills up the region above them. The nerve-area proper shows superiorly two fibroid regions surrounded by a granular belt which also invests the neural canal. Certain of the vertical and oblique fibres are inserted above the nerve-area, while others (oblique) pass downward by the side. In a small specimen the nerve-area was shorter from above downward, probably from the less developed condition of the ventral longitudinal muscles internally.

The teeth in this species somewhat resemble those of Kinberg's *Eunice indica*<sup>1</sup> from Banks Strait, but the longer and more distinctly moniliform appendages of the head diverge. The dorsal cirri are also boldly articulated, whereas they are smooth in Kinberg's form. The bristles do not differ much. In the structure of the foot and in the large size of the dorsal cirrus *Eunice torresiensis* also resembles *Eunice australis*, De Quatrefages,<sup>2</sup> but the great dental plates have four teeth in the latter.

<sup>1</sup> *Öfversigt k. Vetensk.-Akad. Förhandl.*, 1864, p. 562.

<sup>2</sup> *Annelés*, vol. i., 1865, p. 321.