consisting of Algæ, minute Crustacea, Polyzoa, Sponges, Foraminifera, and sandy mud containing numerous minute organisms.

Parasites are rare in this family.

The notion that the Eunicidæ bore into telegraph-cables has been promulgated by so careful an observer as Mr. C. Stewart,[1] now Conservator of the Museum of the Royal College of Surgeons of England. He says, speaking of the so-called *Lithognatha worslei*, that he has not been able to find a description of any (Annelid ?) having calcareous jaws, and therefore "this feature seems to me so important as to justify a distinct genus being made for it." In this connection, however, it may be stated that it would be very difficult to find any representative of the families of the Eunicidæ, Lumbrinereidæ, Onuphididæ, and others without such dental armature. Further, his having concluded that because it was the only form having calcareous jaws brought up with the cable off Singapore, it must have been the borer, is not altogether warranted. It is more likely that the species, like *Nereis pelagica*, and others under the same circumstances, simply took possession of the tube of a true borer (if it really occurred in it), and that its calcareous jaws had no connection with the making of that perforation.

Nematonereis, Schmarda.

Nematonereis schmardæ, n. sp. (Pl. XXXVII. figs. 6, 7, 8 ; Pl. XVIIIA. figs. 16–19).

Habitat.—Dredged at Station 122 (off Barra Grande, a little south of Pernambuco, on the coast of Brazil), September 10, 1873 ; lat. 9° 5′ S., long. 34° 50′ W. ; depth, 350 fathoms ; surface temperature, 77°·5 ; sea-bottom, red mud.

A small form, measuring in its fragmentary condition about 18 mm. in length and a little more than 1 mm. in breadth.

The body is slightly diminished in front, and the segments, with the exception of the first two, are narrower anterior to a line passing transversely at 12 mm. from the snout than posterior to it.

The head (Pl. XXXVII. fig. 6) agrees with that of Schmarda's *Nematonereis unicornis* in regard to shape and position of the eyes (except that these are more distinctly lateral in the present form) ; but as the tentacle is only represented by a fragment of its base, comparison in this case is lost. The under surface of the snout presents a deep median groove.

The dental apparatus of this form approaches that of the Eunicidæ. The maxillæ (Fig. 26) have a broad base, and taper to a blunt and somewhat abruptly curved point. As in other organs of the same kind the basal region is hollow, and the horny investment increases in thickness toward the tip. The left great dental plate has five or six

[1] *Journ. Roy. Micr. Soc.*, ser. 2, vol. ii. pp. 717–719, pl. ix., 1881.