

Fragments of Crustacea, Confervæ, Diatoms, and other debris occurred in the intestine.

In the structure of the body-wall this form approaches *Nereis diversicolor*, O. F. Müller, rather than *Nereis pelagica*, Linn., especially in the fold of the ventral muscles and in the position of the nerve-cords. The vertical muscles seem to be largely developed. No neural canals are visible, but the specimen is too much softened for minute examination. The perivisceral cavity is loaded with the debris of cells and granules.

*Nereis (Platynereis) tongatabuensis*, n. sp. (Pl. XXXIV. figs. 7, 8, 9; Pl. XVI A. figs. 5, 6, 7).

*Habitat*.—Dredged at Station 172 (off Nukalofa, Tongatabu), July 22, 1874; lat. 20° 58' S., long. 175° 9' W.; surface temperature, 75°·0; depth, 18 fathoms. On the mud of a coral reef.

Head very slightly longer than broad, mottled with pigment; tentacles longer than the head; eyes larger than in the former, and all with lenses. Palpi large, mottled with pigment. Tentacular cirri very long, the longest reaching to the fourteenth segment. Paragnathi of proboscis minute—I. and II. absent; III. absent or indistinct; IV. angular patches of very minute points; V. absent; VI. rows of minute points in single series; VII. and VIII. form a series of bars of very minute points. The maxillæ are deep brownish at the tip, straw-coloured at the base. The first segment is longer than the next. Both anterior and posterior feet have longer lobes than *Nereis kobiensis*. The anterior dorsal cirri are also longer. Dorsal bristles spinose as in the former; no other form present in the example. The upper series of the inferior bristles have long spinose, the inferior short falcate tips.

The specimen measures about 33 mm. in length, and at its broadest part in front is about 2·5 mm. in diameter.

The body is widest in front, just behind the head, and gradually diminishes towards the posterior end, which, however, is incomplete. Like *Nereis dumerilii* the feet have two pigment-patches, and a smaller exists on the body at their base. Moreover, a distinct line of pigment passes from side to side at the latter, the band thus crossing the segment nearer its anterior than its posterior border. The dorsum is prominently rounded in front from the included proboscis, but has a slight groove throughout the rest of its extent. A much more decided median groove occurs, from head to tail, ventrally. The number of segments in imperfect examples is of little moment.

The head (Pl. XXXIV. fig. 7) is longer than broad, and about the length of the antero-posterior diameter of the first two segments. The tentacles are comparatively long, exceeding the diameter of the head, and the tip is filiform. The palpi present the usual shape. There are four large eyes, the anterior pair exceeding the others in size, and having the lens at the outer and anterior margin. There is also a minute and indistinct