

broader. A considerable hiatus then exists between it and the inferior setigerous lobe, which has, besides the setose, simple falcate bristles with a slight guard at the tip (Pl. XVI_A. fig. 7). The inferior lobe is elongate, and nearly of uniform diameter till near the tip. The ventral cirrus is shorter than a vertical line falling from the latter. There is thus a primary division of the foot into two superior and two inferior processes.

At the fifty-seventh foot the superior lobe and its basal process are very large. The latter is occupied by the two great and closely approximated pigment-masses. The dorsal cirrus again becomes longer than the vertical diameter of the foot. The latter still shows the two primary divisions, and the bristles do not require special mention.

A small hyaline sheath occurs in the bottle, and the species is in all probability a tube-dweller.

Much of the intestine is empty, but posteriorly a quantity of soft greyish debris is present. Only fine granules and sand-grains are visible in the latter.

The arrangement of the paragnathi resembles that characteristic of Kinberg's *Pseudonereis*,¹ so far as can be gathered from the description, but neither his *Perinereis gallapagensis* from the Gallapagos Islands, nor his *Perinereis formosa* from the littoral corals of Honolulu, approaches the foregoing. The present species would seem rather to come under *Platynereis*.

The cutaneous elements are largely developed ventrally in this form, and the nerve-cords are situated close to the surface in the median line, that is, have no pedicle. The ventral longitudinal muscles are somewhat ovoid in transverse section, the external superior fold passing far inward. A peculiar streaked granular area lies on each side of the vessel above the nerve-cord, but the exact nature of this tissue is doubtful. It may represent the male reproductive elements. The glandular lining of the alimentary canal is largely developed in this species.

Nereis (Platynereis) arafurensis, n. sp. (Pl. XXXIV. figs. 10, 11, 13).

Habitat.—Dredged in the Arafura Sea.

Head nearly as long as broad; tentacles rather larger than the head; eyes large and furnished with lenses. Palpi shorter than in *Nereis dumerilii*. Tentacular cirri absent. Paragnathi of proboscis—I., II., and III. absent; IV. indistinctly angular groups of minute points; V. absent; VI. somewhat ovoid groups of similar points; VII. and VIII. short and indistinctly double rows. Maxillæ straw-coloured at the base, with a narrow band of deep brown along the cutting edge and tip; five or six teeth below the fang. First segment broader than the succeeding, with a median nuchal angle directed

¹ *Op. cit.*, p. 174.