Eunice bassensis, n. sp. (Pl. XXXIX. fig. 16; Pl. XXIA. figs. 8, 9).

Habitat.—Dredged at Station 162 (off East Moncœur Island, Bass Strait, South Australia), April 2, 1874; lat. 39° 10′ 30″ S., long. 146° 37′ E.; depth, 38 fathoms; surface temperature, 63° 2; sea-bottom, sand and shells.

This fragment, consisting of about two inches of the tip of the tail and about two inches in front of it, seems to differ from any of the foregoing, and especially from Eunice pycnobranchiata, to which, perhaps, it appears to be most nearly related, by the very distinctly jointed dorsal cirrus (Pl. XXXIX. fig. 16), which consists of four divisions. In the former species none are visible in cirri from the same region of the body. The branchiæ are also larger, each having nine rather elongated pinnæ, whereas Eunice pycnobranchiata has but three very thick lobes. The ventral cirrus is also more obtuse than in the latter species, the foot of which, moreover, has blackish spines, whereas they are golden in the present form. The branchiæ are continued to the tip of the tail, being gradually reduced to a single short process. The caudal cirri are boldly segmented.

The foot bears three long yellowish spines superiorly, and inferiorly a long pale yellowish or golden hook (Pl. XXIA. fig. 9) with three distal processes, viz., a main fang and two sessile teeth superiorly.

The dorsal bristles conform to the usual type. The compound forms (Pl. XXIA. fig. 8) are characterised by a shaft devoid of superior striæ, though it has the ordinary microscopic file-like markings (from minute spines). The tip is bifid, and there would seem to be less of the alteration in the proportion of the limbs of the fork than is generally found in the posterior region of the body.

The fragment belongs to a female, and is distended with minute ova. These have a tough capsule.

The intestine contains fragments of the chitinous fibres (root-fibres?) formerly observed, branches of Polyzoan allied to *Crisia*, Ostracoda, and the usual sandy mud mixed with numerous sponge-spicules and Diatoms.

In the form of the branchiæ this species resembles *Eunice quoya*, Valenciennes (De Quatrefages).<sup>1</sup>

The nerve-area is somewhat trilobed in section, for there are two lateral and a smaller median lobe superiorly, but it is doubtful how far the state of the preparation may be connected with this appearance. The neural canal is inferior.