Polyeunoa, n. gen.

Polyeunoa lævis, n. sp. (Pl. XII. fig. 2; Pl. XX. fig. 8; Pl. VIIA. figs. 12, 13).

Habitat.—Numerous examples were dredged at Station 145A (off Prince Edward Island), December 27, 1873; lat. 46° 41′ S., long. 38° 10′ E.; depth, 310 fathoms; surface temperature 41°.5; sea-bottom, volcanic sand.

Two fragmentary specimens also occurred at Station 310 (in the Strait of Magellan), January 10, 1876; lat. 51° 27′ 30″ S., long. 74° 3′ W.; depth, 400 fathoms; bottom temperature 46°.5, surface temperature 50°.5; blue mud.

The body is extremely elongated, indeed, with the exception of Achloë astericola and Polynoë scolopendrina it exceeds all the British species, and approaches Lepidasthenia in this respect, though it quite differs in the structure of the bristles from the latter. In regard to fragility it certainly leans to the former. The length of some of the longer examples is about 55 mm., and the greatest breadth (including the bristles) about 11 mm. The number of bristled segments varies from seventy-three to seventy-five in such specimens. The body is either pale, or marked along the dorsum by very regular touches of madder-brown, which occupy in some the entire breadth of the dorsum, but in others diminish to a slender streak of pigment in the centre. The ventral surface is either pale, or in those with much dorsal pigment has a tinge of the same colour along each side anteriorly.

The head is pale, with two moderately large black eyes situated wide apart at the posterior margin, and they are only partially visible in a dorsal view. Each has a whitish speck in the centre. The anterior pair are placed on the lateral prominence, their pigment being carried somewhat in front of it. They are larger than the posterior pair, and also have a distinct white speck in the centre. The marginal position of all the eyes gives a wide clear space in the centre of the head. The tentacle is a slender, elongated, tapering process arising from a broad base. It considerably exceeds the palpi in length. The antennæ are likewise long, and taper to a filiform extremity, which reaches about two-thirds along the palpi. The tentacular cirri are also long, the upper exceeding the palpi in length, and the tip is filiform. The dorsal cirri are of the same tapering filiform character, with very long attenuate tips. The surface of all these processes is perfectly smooth. The palpi are of average length, smooth, and with a pointed The smooth ventral cirrus is comparatively long, extending considerably beyond the base of the bristles. The ventral papilla is slightly developed, appearing as a small bluntly conical process posteriorly. Two long tapering styles come off below the anus, and terminate the body.

The feet have somewhat the appearance of those in Achloë astericola, the