resemblances of the Nemertean proboscis to this organ make it more likely that the true homologies point in this direction rather than in the way of the ingenious theory (of the *hypophysis cerebri*) of my friend Prof. Hubrecht.

There are twelve pairs of scales, which are pale, rather thick, and friable, quite smooth, and beautifully though not regularly reticulated, the margin alone being granular (Pl. XIX. fig. 8, and Pl. XVII. fig. 6).

About twenty-three feet occur on each side, and the fleshy part of each is largely developed. Dorsally a wedge-shaped depression makes the base of each bifid. The dorsal division is wholly devoid of bristles, and forms a soft, conical, and minutely granular elevation.

The ventral branch of the foot is much developed, forming a long, slightly tapered process with a bifid tip. It bears one or two long, stiff, light amber-coloured bristles, the appearance of the body being characteristic in this respect. The tip in most is slightly bent from injury (Pl. XIA. fig. 7), then the bristle gradually widens downward to a kind of shoulder, after which the shaft is cylindrical. The whole to a certain extent resembles what the central axis of the ordinary ventral bristle is in the Polynoidæ, all the processes being absent. A single large spine occurs as a support to this region.

In the structure of the body-wall (Pl. XXXIIA. fig. 6) this form deviates from the ordinary type of the Polynoidæ. The cuticle throughout the greater part of the section is indistinct, the only part where it is clearly visible being the dorsal arch, just over the dorsal longitudinal muscles and median line. On the other hand, the hypoderm is greatly developed. As in the Nemerteans, the layer consists of large areolæ with fibro-granular meshes, when cut obliquely, or of a series of vertical spaces with intervening fibro-granular bands in vertical sections. Its thickness is also remarkable.

The muscles of the body-wall are formed somewhat after the type of those in the Polynoidæ, but they are less bulky, the contrast between this and such as *Lepidonotus squamatus* being very striking. Thus there are a pair of dorsal longitudinal muscles, thick externally, and thin internally; a pair of ventral longitudinal muscles, which are small and but slightly curved. The oblique muscles pass over the inner margin of the latter, and, meeting or nearly meeting in the middle line, form an arch over the nerve-cords. The latter are proportionally large and rounded, occupying the thickness of the hypoderm, with the exception of a superficial region. The large cords lie close together, separated only by a median raphe, and their tissue in section is more lax than usual. The muscles forming the arch of the foot and the dorsum are feebly developed.

Granular masses were present at the bases of the feet, and probably represent the male elements.

Mr. Haswell[1] mentions that *Lepidonotus melanogrammus*, from Broughton Islands,

[1] *Proc. Linn. Soc. N. S. Wales*, vol. vii. p. 284, pl. viii. fig. 13, &c.