

amongst the Challenger Nemertea. I have already indicated (p. 37) why I wish to bring it under the genus *Cerebratulus*, rather than under *Lineus*, where M'Intosh placed it.

The following notes were made by him concerning the Challenger specimens.

"Dredged in considerable abundance in Royal Sound, Kerguelen, January 27, 1874, in 25 fathoms.

"Stat. 149, off Christmas Harbour, Kerguelen, 120 fathoms, small specimens.

"Stat. 151, off Heard Island, 7th Febr. 1874, 75 fathoms. Some reach the length of 200 mm., and much contracted forms have a diameter of about 15 mm. In the œsophagus of one was a blackish mass of sand-grains, sponge-spicules, Diatoms, and mud."

In M'Intosh's previous publications the description of *Lineus* (*Cerebratulus*) *corrugatus* contains the following characteristic features:—

"Body rather abruptly pointed anteriorly, and more gradually posteriorly. The œsophageal region is marked externally by a series of prominent and somewhat regular rugæ, which sweep from the mouth dorsally and ventrally.

"Colour dark olive throughout, with the exception of a white band, which crosses the anterior border of the snout, and passes backward to the posterior third of the lateral fissure, where it bends dorsally and terminates."

"The special characters are the very large mouth, with the prominent rugæ, which show that the animal probably possesses unusual powers of œsophageal protrusion—a supposition borne out by the great development of the external circular muscular fibres, the dorsal longitudinal coat, and the other fibres of the organ. The internal glandular lining is also very firm."

A couple of figures are added, one a section of the proboscis, the other a section of the ventral body-wall. The latter should be compared with our fig. 6 on Pl. XIII. It will then be seen that M'Intosh's "pigmentary layer, divided by a definite black band," is our superficial and deeper layers of the integument (*Isg* and *Idg*). The "black band" between them is no other than our external secondary basement membrane. What M'Intosh designates as the "curious translucent stratum cut into somewhat regular spaces" is our basement layer proper (*B*), comparable to that of *Eupolia* and *Carinina*, and radially traversed by bundles of contractile and nervous fibres, which bring about the "regular spaces" alluded to.

On the whole, our two figures will be seen to correspond very well, only M'Intosh omits the nervous layer and the innervation of the œsophagus. The large mouth and folded lips were very conspicuous in the Challenger specimens, the head of one, seen from the ventral surface to show the mouth, being figured on Pl. XIII. fig. 5.

The different series of sections which I have made through four specimens of *Cerebratulus corrugatus* were very instructive in several respects, although they all conform to the well-known Schizonemertean type. It is especially the considerable development of basement tissue of the integument (Pl. XIII. fig. 6, *B*), which not only brings out the