distinction between the outer longitudinal muscular layer γ and the integument much more clearly than is so often the case in other Schizonemertea, where these two have become blended, but which also enables us to trace the course of radial nerve-fibres coming from the plexus or the longitudinal stems, and innervating (after having traversed the muscular layer γ and this basement tissue) the glands and sense-cells of the integument. Cerebratulus corrugatus is, moreover, the species in which, for this reason, I was able to determine the direct part which the longitudinal nerve-trunks take in the innervation of the skin (Pl. XIV. fig. 2), whereas, even in this very favourable specimen, I never noticed the faintest trace of a similar participation of nerve-branches directly springing from these stems in the innervation of the subjacent musculature. In that case such branches would have to take an opposite course, and would have to traverse in the first instance the circular muscular layer β . This was never observed. It will be seen in the paragraph more especially treating of the nervous system, as well as in the chapter devoted to general considerations, that this fact is, in my opinion, not without morphological importance.

The specimen of *Cerebratulus corrugatus* is also of great importance in demonstrating the relation of the medio-dorsal medullary nerve and the branches springing from it at right angles as so many thickenings of the plexus (Pl. XIII. fig. 2).

Cerebratulus parkeri, n. sp. (Pl. XIV. fig. 5; Pl. XV. figs. 5, 16).

A well-preserved specimen of a Schizonemertean was collected in the New Zealand waters, which, I think, may safely be looked upon as belonging to a distinct species.

I have dedicated this species to the naturalist who of late years has done so much for our knowledge of the New Zealand fauna, and whose anatomical preparations and zoological collections from those regions have excited the admiration of visitors to the Colonial and Indian Exhibition of 1886.

The head and anterior body fragments of Cerebratulus parkeri are thus described in M'Intosh's preliminary notes:—

"A fragment of the anterior portion, measuring about 34 mm. in length, and about 7 mm. in diameter at its flattened and widest region. The cephalic furrows and mouth conform to the ordinary type. The body is somewhat rounded anteriorly; flattened towards the posterior end of the fragment.

"Transverse sections of the rounded anterior region show that the muscular walls of the body are greatly thickened the longitudinal muscular fibres form a very thick coat all round, especially, as usual, opposite the nerve-cords. . . . The circular muscular coat is uniformly thick, the longitudinal layer within it being excavated superiorly by the large channel for the proboscis, and laterally by the very large and very muscular vascular canals—a little below each nerve-trunk. The thickened part of