

DESCRIPTION OF THE GENERA AND SPECIES.

NEMERTEA.

A. PALÆONEMERTEA.

Family CARINELLIDÆ.

Carinina, n. gen.

Closely allied to Carinella, from which it differs in the presence of a distinct posterior brain lobe, situated with the rest of the brain and nerve-stems in the integument, outside of the body musculature. A ciliated canal penetrates into this posterior brain lobe.

Carinina grata, n. sp. (Pl. I. figs. 1-3; Pls. II., III., IV.; Pl. VI. figs. 1-3; Pl. XI. figs. 1, 2).

Two specimens of this new genus and species were obtained in the dredge, both from considerable depths, and from the same part of the Atlantic Ocean, namely, to the east of the United States (Stations 45, 47). The bottom is recorded to be blue mud, and the depth 1240 and 1340 fathoms respectively. This is the greatest depth from which Nemertea have been brought to light, and it is worthy of notice that this deep-sea form, which is at the same time the representative of a new and distinct genus, should be characterised by peculiarities of structure, hereafter to be more fully recorded, which are diametrically opposite to certain of the most striking features of the pelagic genus *Pelagonemertes* and of other forms that generally occur close to the surface. The most striking of these characters is the exceptionally strong development of muscular tissue in the body-wall, and coincident with this, the considerable reduction of the inter-muscular connective tissue, which in the surface forms becomes a gelatinous matrix in which both the internal organs and the musculature are embedded.

It can hardly be doubted that this opposite line of development is to a large extent influenced by the much more considerable resistance to be overcome by an animal that has to move about at so great a depth of water.

Of the external appearance of the fragments of this new species little need be said.