

GENERAL CONSIDERATIONS.

In venturing at the close of this Report on the Nemertea, collected by H.M.S. Challenger, to leave the region of demonstrated facts and actual observations, and to enter upon that of speculation and suggestion, I gladly avail myself of the permission for so doing granted to me by the editor, Mr. John Murray. I thought it necessary to ask for that permission, because general speculations on the ancestry of the Chordata hardly appeared to me to fit into the framework of these Reports. My desire in this case to deviate from a rule which I held to be salutary, was due to the fact that of late these speculations have been conducted along very varying channels, an entirely new one having only very lately been opened by Bateson's important series of papers on *Balanoglossus*. An attempt to give more depth to one of these channels, and thus to lead into it the attention of a greater number of my fellow-workers, especially commended itself to me, since it was my conviction that the lines laid down by myself in former publications derived considerable support from the Challenger material, and were thus entitled to a renewed and full consideration.

I would formulate the proposition, to the further development of which this chapter is to be devoted, as follows:—

More than any other class of invertebrate animals, the Nemertea have preserved in their organisation traces of such features as must have been characteristic of those animal forms, by which a transition has been gradually brought about from the archicæulous Diploblastic (Cœlenterate) type to those enterocæulous Triploblastica, that have afterwards developed into the Chordata (Urochorda, Hemichorda, Cephalochorda, and Vertebrata).

It will be seen that this statement excludes the idea of any direct ancestral relations between Nemertea and Chordata. If any such relation were proposed, it might with good reason be asked—considering the very extensive variation which is met with amongst Nemertea—which species or which genus was more particularly pointed to. The question in itself condemns the proposition which leads to it.

It will, moreover, be seen that this statement accepts the outcome of Bateson's researches and speculations, in so far as the points of agreement between *Balanoglossus* and *Amphioxus* are fully recognised. A provisional link between these two, and an