## VOYAGE OF H.M.S. CHALLENGER.

## ZOOLOGY.

REPORT on the Entozoa collected by H.M.S. Challenger during the Years 1873-76. By Dr. O. von Linstow of Göttingen.

## INTRODUCTION.

THE number of Entozoa included in the spoils of the Challenger Expedition is remarkably small in comparison with the large collection of Vertebrates. This is mainly due to the fact that the exploration was for the most part marine, and not terrestrial, and that it concerned not only the regions near the coast, but also to a very large extent the deep For it follows from the nature of the life-history of Helminths, that these forms must occur more and more sparsely in proportion to the distance from the shore. Nematoda, Gordiacea, Acanthocephala, Trematoda, and Cestoda, with few exceptions (among Nematodes and Trematodes), the sexually mature forms are parasitic in some organ, such as the stomach, which communicates with the outer world, and from which the numerous eggs pass out with the excrement. On the soil or in the water the ova find their way into another organism, within which they develop into larvæ, and are usually encapsuled until they pass along with their intermediate host into the original victim, where they become sexually mature. Not a few Helminths, such as many digenetic Trematodes and the Gordiaceæ, have in their developmental cycle to pass through two intermediate hosts. That the Vertebrata which inhabit the high seas are remarkably free from Helminths is without doubt due to the fact that the ova are too widely scattered in the infinite mass of water to have much chance of reaching their proper intermediate hosts; and, further, that even when they do so, there is again in the