VOYAGE OF H.M.S. CHALLENGER.

ZOOLOGY.

REPORT on the Anatomy of the Deep-Sea Mollusca collected by H.M.S. Challenger in the years 1873-76, by Paul Pelseneer, D.Sc., Professor in the Normal School, Bruges.

A Report on the Anatomy of the Deep-sea Mollusca collected by the Challenger was projected many years ago, but Mr. Murray was unable to place the material in the hands of a naturalist till the systematic Reports had been completed. It was only recently, on the completion of my Report on the Pteropoda, that the examination of the material collected was entrusted to me.

This material consisted exclusively of Gastropoda (not including Isopleura or Amphineura), of Scaphopoda, and of Pelecypoda. There was no great wealth either of species or of specimens.

In studying the collection I had a twofold purpose.

1st, To note the interesting peculiarities in the structure of the new or unfamiliar Molluscs from the deep sea.

2nd, To compare the structure of these Challenger Molluscs with that of other known forms, and especially with those from the littoral zone, or from the lesser depths; to elucidate as far as possible by such comparisons what modifications may have been produced in the structure of the different parts; to consider the state of the sense organs (and especially the eyes) in the absence of light, and of the respiratory organs and associated structures in conditions of considerable pressure, etc.

I have therefore restricted my study of the Challenger specimens to those obtained from depths greater than are usually reached. I have not had to do with forms collected from a hundred or two hundred fathoms, which are more frequently obtained, and consequently better known.

¹ Narr. Chall. Exp., vol. i. part ii. p. 1072.