VOYAGE OF H.M.S. CHALLENGER.

ZOOLOGY.

REPORT on the Tunicata collected during the Voyage of H.M.S. Challenger during the years 1873-76. By William A. Herdman, D.Sc., F.L.S., F.R.S.E., Professor of Natural History in University College, Liverpool.

PART I.—ASCIDIÆ SIMPLICES.

PREFACE.

This collection of Tunicata, entrusted to me for description by the late Sir C. Wyville Thomson, was placed in my hands early in May 1879. As most of the specimens were in muslin bags packed in large bottles, it was difficult to form a correct idea of the size of the collection. When unpacked and arranged roughly in species it proved to be much larger than had been at first estimated. Since then I have several times received from Mr. Murray bottles of Tunicata which had been accidentally included in other collections, and specimens which had been overlooked in sorting out the different groups. The pelagic forms taken in the tow-net (including the Pyrosomidæ, the Appendiculariidæ, and the Thaliacea) did not reach me till some time afterwards.

My first object was to separate the collection of fixed Tunicata into Simple, Social, and Compound Ascidians. I then commenced to work through the first two of these groups in

¹ I wish here to record my deep sense of indebtedness to Sir Wyville Thomson, for having given such an important piece of work into my charge, and for the ever ready and valuable advice with which he aided me during the first part of my investigations.