

THE  
VOYAGE OF H.M.S. CHALLENGER.

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ZOOLOGY.

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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.

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PART II.—ASCIDLÆ COMPOSITÆ.

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PREFACE.

THE first part of this Report, treating of the ASCIDLÆ SIMPLICES of the collection, was published in the end of 1882, and at that time it seemed probable that the remainder of the Tunicata could be described in a second and considerably smaller part which would be ready for publication some time in 1884. The Compound Ascidiæ, however, proved on careful examination to be a much larger and more varied group than had been anticipated. On account of the difficulty in finding good diagnostic characters, and of the similarity which different species sometimes show in their external appearance, it has been necessary to submit nearly all the specimens in the collection to a detailed histological examination, and portions of most of them have had to be sectioned—a slow and laborious proceeding—before the relations of their different parts could be satisfactorily determined. Then, in the case of a few species, some interesting peculiarities in regard to reproduction by gemmation, having an important bearing upon the mode of formation of the colony, required a careful and lengthened examination. For these