

THE
VOYAGE OF H.M.S. CHALLENGER.

ZOOLOGY.

REPORT upon the CRINOIDEA collected during the Voyage of H.M.S. Challenger during the Years 1873-76. By P. HERBERT CARPENTER, D.Sc., Assistant Master at Eton College.

**PART I.—GENERAL MORPHOLOGY, WITH DESCRIPTIONS
OF THE STALKED CRINOIDS.**

P R E F A C E.

THE circumstances under which I have come to be charged with the duty of reporting upon the entire collection of Crinoidea made during the Challenger Expedition are as follows.—The researches of my father, Dr. Carpenter, C.B., F.R.S., early led me to take a special interest in *Comatula* and its allies. Some of his statements respecting the anatomy of the arms having been called in question, I was led to reinvestigate the matter towards the end of the year 1875, by methods which were almost unknown during the progress of his researches nearly fifteen years before; and I had the pleasure of verifying all those points in his descriptions of the arms of the European *Comatulæ* which other observers had disputed. I was then working in the zoological laboratory of Prof. C. Semper at Würzburg, who most kindly placed at my disposal the arms of some tropical *Comatulæ* which he had obtained in the Philippines. It soon appeared that the minute structure of Crinoids offered a promising field for investigation, and Prof. Semper therefore generously put into my hands several specimens of a remarkable tropical *Actinometra* as material for a monograph of the type. This work occupied me during the whole of the year 1876