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

ZOOLOGY.

REPORT on the Calcarea dredged by H.M.S. Challenger during the years 1873-76. By N. Poléjaeff, M.A. of the University of Odessa.

## INTRODUCTION.

In December 1882 I received from Mr. John Murray, for the purpose of scientific investigation, all the Calcarea brought home by the Challenger Expedition. The investigation has been conducted in Graz, at the Institute of Prof. F. E. Schulze, and indebted as I am to Prof. F. E. Schulze for the whole of my spongiological education, I am now still more under obligation to him for the encouraging interest which he has manifested in the progress of this investigation, for his liberality in placing at my disposal all his own Calcarea, and for the kindness with which he procured me access to the precious collection which Prof. Oscar Schmidt presented to the Joanneum at Graz. For all this I express to Prof. F. E. Schulze my heartfelt gratitude. I have also to fulfil the agreeable obligation of thanking Dr. E. v. Marenzeller of Vienna, Prof. J. Steenstrup of Copenhagen, Dr. G. C. J. Vosmaer of Naples, and particularly-Mr. H. J. Carter of Budleigh-Salterton, for the amiability with which my requests, if in any way realisable, were received and answered.

The Calcarea of the Challenger Expedition have been found to belong to thirty species, twenty-three of which are quite new. The greater part of the specimens being very well preserved, and there being amongst them many very interesting forms, I considered it my duty not to limit myself to a simple description of the collected material, but to try to solve some questions which, thanks to recent investigations, have been brought before the scientific world. The principal question, which logically includes in