

THE
VOYAGE OF H.M.S. CHALLENGER.

ZOOLOGY.

REPORT on the KERATOSA collected by H.M.S. Challenger during the years
1873-76. By N. POLÉJAEFF, M.A. of the University of Odessa.

INTRODUCTION.

THE Keratose Sponges do not belong to the deep-sea fauna; it is therefore not surprising that the number of forms brought home by the Challenger Expedition does not exceed the comparatively small number of thirty-seven (twenty-one new, three undeterminable). But if not numerous, the collection is still very interesting, embracing as it does almost all the genera of the horny sponges hitherto distinguished, and most of the specimens being in a very good state of preservation.

Entering upon their classification and description, I feel myself in a position rather different from that which I occupied some months ago when writing about the Challenger Calcareae. For in this latter case I had to deal with but one elaborate system (that of Haeckel), and my task consisted simply in the reconciliation of Haeckel's systematic arrangement with the modern state of spongiological knowledge. In the group of Keratose Sponges the classifier meets with many detailed systems, constructed in many instances upon radically different principles. My first task is consequently to show which of the existing systems is to be most recommended, and with what modifications. There are two ways of doing this. One way might be called "historical," and would consist of a critical discussion in chronological order of all the systems of the horny sponges we possess; the second might be called "morphological," and would consist of a critical discussion of the comparative systematic value of their different organs. I purpose choosing this latter mode, for the following reasons. Firstly, because it ensures the avoidance of superfluous repetitions, the existing arrangements of the Keratosa being con-