VOYAGE OF H.M.S. CHALLENGER.

ZOOLOGY.

REPORT on the Gephyrea collected by H.M.S. Challenger during the Years 1873-76. By Dr. Emil Selenka, Professor in the University of Erlangen.

INTRODUCTION.

Among the Gephyrea collected during the Challenger Expedition, many different genera are represented, but the number of species is comparatively small. The twenty-eight species to be afterwards discussed are distributed over eleven genera, and these already known. Two of these genera were indeed described as new by the late R. von Willemoes-Suhm in his letters published in the Zeitschrift für wissenschaftliche Zoologie and in his manuscript notes. But an examination of the original specimens has shown that one of these is really a Bonellia, and the other, designated Leioderma, n. gen., by v. Willemoes-Suhm, a true Phymosoma. The latter species, along with some other more or less damaged specimens, must, moreover, be excluded from our description, since their state of preservation was not such as to admit of an accurate diagnosis of their specific characters. None of them, however, exhibited any important peculiarities.

The habitat and distribution of some of the species are of special interest. Some forms which had previously been found only near the shore, were on the Challenger Expedition dredged from very considerable depths. One new deep-sea species was found in the Pacific and also in the North Atlantic Ocean, and in regard to other forms the range of distribution was shown to be much wider than had hitherto been recognised.

If one may venture to draw general conclusions from the scanty material at our disposal, it appears probable that the tube-inhabiting Gephyrea (genus *Phascolion* and many species of *Phascolosoma*) occur especially in the greater depths, where as yet there has been found only a single example of the free-living forms of the genus *Phymosoma*.