

MORPHOLOGY OF THE SCHIZOPODA.

All the principal types of this group being represented in the collection made during the Challenger Expedition, it may, I think, be apposite to discuss here in what relation the Schizopoda stand to other Crustacea, and what is the systematic position to be at present assigned to these forms, as also how the group may properly be subdivided.

As is well known, Milne-Edwards, the great reformer of carcinology, ranked these Crustacea, of which, however, a few forms only had at that time been recorded, side by side with the Squillacea in his order Stomatopoda, ranging also therein the genus *Leucifer* together with certain spurious genera, that since then have been found to be only larval forms of other known Crustacea. Dana, in his great work on the Crustacea of the United States Exploring Expedition, adopts the views of Milne-Edwards as to the systematic position of the Schizopoda, ranging them in his order Anomobranchiata, which perfectly corresponds with the order Stomatopoda of the first named author; and several other carcinologists have since then done the same. Such a classification must, however, in my judgment, at present be regarded as decidedly unsatisfactory, the Schizopoda being undoubtedly much more nearly related to the Eubranchiata or Decapoda of Milne-Edwards than to the Anomobranchiata (Stomatopoda). It will, I think, be absolutely necessary to restrict the order Stomatopoda to the Squillacea only, a group of Crustacea differing in many points very materially from all other Podophthalmia, whereas the genus *Leucifer* may find its appropriate place side by side with *Sergestes*, among the lower Decapods (Penæidea). Thus the Schizopoda are either to be regarded as forming a distinct order, or to be ranged in the order of the Decapoda or Eubranchiata of Dana. The last mentioned view has also been held of late by several distinguished modern zoologists, and the striking similarity in their external form often exhibited by these Crustacea to the lower Macrura (Caridea), has even led certain of these zoologists to regard the Schizopoda as merely forming a section of that tribe of the Decapoda. In my opinion, however, it is more appropriate at present to assign to this group the rank of a distinct tribe or suborder, there being several well-marked characters distinguishing these Crustacea rather sharply from all other known Decapods.

Of such characteristics peculiar to the group, the following may be set forth :—

1. The presence of strongly developed natatory branches (exopods) on all the limbs of the trunk or legs is, perhaps, the most striking feature distinguishing this group, and