

and there is no doubt, indeed, that the Elasipoda as well as the Pedata approach much nearer in this respect than the Apoda to the typical Echinoderms. I cannot conceive how the fact that the Elasipoda have retained more larval characteristics than the Apoda can in any way subvert this opinion. Lastly, concerning the mutual position of the Elasipoda and the Pedata, the former certainly are in one respect more nearly related to the typical Echinoderms than are the latter, viz., by their madreporic canal often communicating with the exterior, and that too not only by one pore but sometimes by a great number of pores crowded close together so as to form a kind of exterior "madreporic tubercle," but this peculiarity alone does not seem to me to decide their relative position. No doubt, the Pedata have, on the other hand, many important characteristics which may entitle them to a higher place in the series of Echinoderms.

But disregarding their position as Echinoderms, and considering only their general development as animals, I cannot but think that the Elasipoda have already in certain respects attained a higher development than all the other Echinoderms, and that this development is gradually advancing in a direction approaching the higher classes of animals. This opinion is founded on the following reasons:—

1. The form of the body is distinctly bilaterally symmetrical, with the ventral and dorsal surfaces clearly distinguishable from each other, with the mouth on the ventral surface and often with a head-portion plainly marked off from the rest of the body.

2. The ambulacral appendages of the ventral surface alone are intended for locomotion, these being in the typical Elasipoda particularly large and arranged on each side of the body in a single row; and the locomotive organs of the one side are accurately opposed to those of the other side so as to form distinct pairs, almost recalling the legs of an insect or the locomotory organs of one of the Polychœta, &c.

3. These locomotory organs show the most evident tendency to appear in fixed places and in a fixed number in every species of the more typical Elasipoda, and that their number is often rather limited, as, for instance, in *Elpidia glacialis*, which has always four pairs of pedicels, *Scotoplanes globosa*, which has five pairs, &c.

4. The dorsal appendages are so modified as to perform functions far different from those of the ventral appendages.

5. These dorsal appendages, like the ventral ones, have a tendency to become fixed in number so that every species may have a certain number situated in a certain place on the back.