

the Apoda and Pedata, of course with several exceptions, belong to the shores. The more important peculiarities in the organisation of the Holothurioidea, especially of the Elasipoda, may now be pointed out.

“It is known that a large majority of the so-called shallow water forms, viz., the Apoda and most of the Dendrochirotae, have a cylindrical or fusiform body, the former destitute of all pedicels and processes, the latter provided with small cylindrical pedicels, either irregularly scattered all over the body or arranged in rows along the ambulacra. Consequently, no clear distinction between the dorsal and ventral surfaces is here marked out. In the rest of the Dendrochirotae and the Aspidochirotae, on the contrary, more or less clearly marked dorsal and ventral surfaces are present, carrying processes or pedicels scattered or in rows.

“A glance at the figures given in this account, and representing types of the three families into which the Elasipoda are divided, will clearly show that they are characterised by a ventral and dorsal surface, distinctly marked the one from the other, and, in general, by the bilateral symmetry of the body,—characters which they have in common with the Aspidochirotae and part of the Dendrochirotae; but above all, by the unusual symmetry in the arrangement of the pedicels and processes. The following peculiarities cannot be too clearly expressed as characterising the Elasipoda:—The ambulacral appendages of the ventral surface alone are intended for locomotion, these being in the typical Elasipoda particularly large, and arranged in a single row on each side of the body; and the locomotor 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 locomotor organs of one of the Polychæta. As a rule the locomotor organs of the Elasipoda are not to be compared with such true pedicels as are common in other Holothurids, but are rather to be regarded as processes or ‘ambulacral papillæ.’

“These locomotor 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 their number is often limited, as, for instance, in *Elpidia glacialis*, which has always four pairs of pedicels, *Scotoplanes globosa*, which has seven pairs, &c.

“The dorsal appendages are so modified as to perform functions far different from those of the ventral appendages. These dorsal appendages, like the ventral ones, have a tendency to become definite in number, so that every species may have a certain number situated in certain fixed positions on the back.

“From the size of the pedicels and their incapability of extension, and from the fact that the pedicels mostly lack a terminal plate, and sometimes even a sucking disk, the Elasipoda seem to be unable to move in the same manner as most of the Echinoderms, by attaching the suckers to surrounding bodies. Besides, their often firm external skeleton, and the shortness of their body-form, probably prevent them from moving by the extension and contraction of their bodies. From the size of the pedicels and their