are very remarkable on account of their great flatness. In other forms as, for instance, Scotoplanes insignis, Elpidia willemoësi, &c., the body decreases in height backwards, its posterior portion becoming almost flat, while the contrary may be observed in the genus Psychropotes, which is remarkable for the height of its posterior and the flatness of its anterior extremity. In several species, as in Scotoplanes robusta, Peniagone vitrea, Elpidia willemoësi, &c., the body is produced anteriorly into a narrow, longer or shorter neck-like part, which is directed straight downwards.

Another peculiarity which characterises the external appearance in a great number of Elasipoda is the presence of a brim which surrounds either the posterior extremity of the body as in Scotoplanes insignis, Elpidia willemoësi, &c., or both the posterior and the anterior extremities, as in Scotoanassa diaphana, or only the anterior one, as in Elpidia purpurea and Enypniastes eximia, or which, finally, extends round the whole body, as in the Psychropotidæ, where it sharply defines the dorsal from the ventral surface. The brim in question, which originates in an enlargement of the layer of connective tissue of the perisoma, is broad and rather thin, and the wide tubes which penetrate it and unite the pedicels with the ambulacra often become visible externally, thus giving the brim a somewhat fin-like appearance. Sometimes, as in Scotoplanes insignis and Elpidia willemoësi, &c., this fin-like brim becomes bipartite at the posterior extremity. The Psychropotidæ are easily distinguished by the possession of this brim, which surrounds the body and attains such a breadth at the anterior end as to give it the appearance of a more or less distinct head.

The two orders Apoda and Pedata sometimes have the mouth and anus almost terminal at opposite poles of the cylindrical or fusiform body, sometimes on the contrary directed upwards, as in several Dendrochirotæ remarkable for their ascidia-shaped body. In a great number of Aspidochirotæ the mouth and the oral disc are more or less distinctly turned towards the ventral surface.

In the Elasipoda the mouth and the surrounding oral disk, though situated either at or near the anterior end of the body, are always more or less evidently directed towards the ventral surface; in many forms, indeed, the mouth lies in the same plane as the ventral surface. Even in forms characterised by a body of cylindrical shape, as, for instance, *Parelpidia*, the oral disk has a slight though definite ventral inclination. Again, one cannot invariably describe the mouth as terminal, because in numerous forms such as *Elpidia purpurea*, and in all the Psychropotidæ the dorsum projects considerably beyond the mouth. Now, the under surface of this projection lies in the same plane as the ventral surface or trivium, and thus the mouth seems to be placed on the ventral surface at some distance from the anterior extremity.

Here, then, it is evident that the dorsum projecting beyond the mouth constitutes in a measure the anterior end of the body, but it is of importance to remember that the peritoneal cavity does not extend beyond the mouth, or, at most, very slightly, so that