

and is surrounded by a simple crown of very minute papillæ, the importance of which will be discussed under the rubric "ambulacral system." By means of this aperture the external medium communicates with a spacious cavity, inside which the small completely retractile tentacles are situated, disposed near and around the aperture. It is most probable that the tentacles can be extended outside the body. In the retracted condition of the tentacles and the surrounding perisoma, no traces of any oral disk corresponding to that in the rest of *Elasipoda* have been found, unless the insignificant circular fold which lies close behind the tentacles may be considered as such. Even in a few other cases, as, for instance, in *Benthodytes selenkiana*, &c., the crown of tentacles can be drawn within the body, but this seems to take place in the same manner as in the *Aspidochirotæ*, the oral end of the body not being transformed into a proboscis.

The most anterior portion of the alimentary canal is usually dilated into a cavity (Pl. XLIII. fig. 1), which is termed the oral cavity, and which extending backwards close to the circular water-vessel is attached by numerous fine threads to the calcareous ring, to the tentacular canals, &c.; behind the oral cavity a narrower, usually very short, sometimes red or violet portion is to be observed, termed the pharynx, which is separated by a minute circular fold or valve (Pl. XLIII. fig. 1, and Pl. XXXVI. fig. 1) from the long and wide intestine, which, forming the convolutions spoken of before, terminates in the anus, which is closed by a muscular sphincter. The pharynx, which is surrounded anteriorly by the circular water-vessel (Pl. XLIII. fig. 1), and the circular pseudhæmal vessels, is connected with these by numerous strong threads. The cloaca, or the most posterior dilated portion of the intestine being attached to the body-wall by numerous powerful bands and threads is either of very little importance, as in the *Deimatidæ* and in several forms of the two other families, or it is, on the contrary, well developed and of an unusual size, as is the case in *Elpidia verrucosa*, *Scotoplanes robusta*, *Euphronides depressa*, &c. Some of the representatives of the *Elpidiidæ* are characterised not only by having an uncommonly large cloaca, but particularly by the fact that the latter gives off a large, wide cæcal prolongation towards the left side, which sometimes extends forwards towards the middle of the body, attaining, at the same time, a very remarkable breadth; such a cloaca is present in the following species:—*Achlyonice paradoxa*, *Scotoplanes globosa*, *Scotoplanes albida*, *Elpidia glacialis*, *Kolga nana*, and *Kolga hyalina*, Dan. and Kor. Sometimes the cloaca seems to vary in size in different individuals of the same species, as in *Benthodytes abyssicola*, &c. In *Deima fastosum* the cloaca is separated from the intestine itself by a small circular fold. In *Oneirophanta* and *Deima* the hind-most or anal portion of the digestive tract is noticeable in that it can be extended beyond the anus which thus becomes surrounded by a circular mound (Pl. XL. fig. 3). By a careful investigation one will find that this anal portion consists of a highly muscular double-wall including a large circular cavity, which, as far as I