

On examining the tentacles in *Elasipoda* one finds that they are always arranged in a single crown. I must say, however, that I feel somewhat uncertain concerning the tentacles in the genus *Deima*, because I never saw them fully extended (Pl. XLIII. fig. 3). When drawn inside the body and closely crowded they appear to be irregularly disposed, and have almost the aspect of a double crown. The tentacles of the *Elasipoda* are generally to be regarded as equal in size, though it may be noted that sometimes one or several present a distinct tendency to become smaller than the rest. A great number of individuals of the same species having very often been at my disposal, I have had the opportunity of observing that while the tentacles in the more adult individuals are of equal size, those in the young forms are often unequal, one or more being sometimes almost rudimentary; in *Oneirophanta* especially this is obvious, while at the same time it becomes evident that no given tentacle is smaller than the other. However, it must not be overlooked, that even in fully-developed individuals of the above cited genus as well as of *Ilyodæmon*, *Orphnurgus*, &c., some of the tentacles are more or less incompletely developed, only existing in the shape of small protuberances.

The tentacles of the *Elasipoda*, from ten to about twenty in number, vary considerably in shape; they resemble most the peltate or digitate type as found in the *Aspidochirota* and in some of the *Synaptidæ*. A more or less stiff stem supports the terminal part, which is either large, round, more or less discoidal, and without any visible processes, or with rudimentary ones as is the case in *Latmogone*, *Ilyodæmon*, *Achlyonice*, or which is comparatively small and provided with many or few, larger or smaller, simple, digitiform or branched processes (comp. Pl. XLIV.). *Deima* bears comparatively minute tentacles, which seem capable of being fully retracted; in most of the other forms which belong to the order in question, only the processes or their tops are retractile. The tentacular suckers, which according to Quatrefages<sup>1</sup> and Semper are found in a few *Synaptidæ*, are altogether lacking in the *Elasipoda*.

The *Holothurioidea* possess besides tentacles two kinds of external ambulacral appendages, which according to Semper are termed "ambulacral pedicels" and "ambulacral papillæ." These two kinds of appendages are either found in the same animal as, for instance, in *Colochirus*, Troschel, *Mülleria*, Jäger, *Stichopus*, Brandt, and in numerous species of the genus *Holothuria*, L., &c., or they exist singly in different species, consequently there are either only pedicels present as in the most species of *Cucumaria*, Blainville, *Thyone*, Oken, *Thyonidium*, Düb. and Koren, *Holothuria vagabunda*, Sel., &c., or only ambulacral papillæ as in *Holothuria albiventer*, Semp., *Holothuria squamifera*, Semp., &c. The ambulacral pedicels are cylindrical, usually of a comparatively inconsiderable size, and terminate in a kind of disk-like sucker, which is strengthened by a calcareous plate or plates; the ambulacral papillæ, on the contrary, are conical and without any terminal disk-like sucker, are usually dorsal in position, and

<sup>1</sup> Mémoire sur la Synapte de Duvernoy (Annales des scienc. nat., 2 sér. tom. xvii., 1842).