are of the highest interest. The composition of the calcareous ring in the Pedata and Apoda being already well known it is unnecessary to enter into particulars. The ring is composed of ten or more usually solid pieces or ossicles of a net-shaped structure, the five pieces of which, corresponding to the longitudinal muscles, are termed radial. In very few cases as, for instance, in *Embolus*, Selenka, the calcareous ring is entirely absent, and sometimes it is more or less rudimentary.

In the Deimatidæ the calcareous ring is made up of a fragile spongy network. When trying to isolate the ring from the surrounding tissues it is very often spoiled because of its fragility. In *Lætmogone* the ring (Pl. XXXVII. fig. 11) seems to constitute a thin continuous network without any visibly separate ossicles and with its exterior part presenting numerous larger or smaller wrinkles. By treating it with a solution of potass, the ring is usually broken in pieces, but five large irregular fragments are commonly left, which are the radial ossicles. To judge by the insufficient material which has been at my disposal, the calcareous ring in *Ilyodæmon maculatus* is constructed in the same manner as that of the former species, though it differs by being perforated for the passages of the ambulacral nerves and vessels. In *Oneirophanta mutabilis* the ring is more plainly made up of radial and interradial pieces, the radial ones being comparatively solid, of a more definite shape, and notched instead of being perforated (Pl. XXXVII. fig. 4). The interradial pieces, fifteen (?) in number, are more fragmental, cup-shaped, and extremely fragile. The calcareous ring (Pl. XXXVII. fig. 3) seems to be of the same construction in *Deima* as in *Oneirophanta*, though possibly more fragile.

Amongst the three families which belong to the order Elasipoda, the Deimatidæ and particularly the genus *Oneirophanta* bear the strongest resemblance to the Apoda and the Pedata with regard to the composition of the calcareous ring. The Psychropotidæ seem to form a transition between the Deimatidæ and the Elpidiidæ, but, unfortunately, I have not had the opportunity to study the structure of their calcareous ring more in detail. Most of the representatives of this family being in a highly macerated condition, the calcareous matters being almost dissolved, and the individuals which remained in an uninjured state being very few in number, any more detailed examination has been impossible. Though the imperfection of our knowledge at present precludes positive assertion, there is every reason to believe that the calcareous ring in the family in question must be highly undeveloped, and made up of an extremely thin and fragile network which does not always form a continuous ring, but, as in *Euphronides depressa* is composed of five small pieces separated from one another. From what I have been able to observe in the Psychropotidæ, each piece seems to bear a certain resemblance to the spicules which compose the ring in some of the Elpidiidæ, but with the difference that, instead of a few, a great number of rods are present, which anastomose with one another and form a network.