calcareous deposits of the same shape as those which are present in the real body-wall. In the processes of *Oneirophanta mutabilis*, a number of long rods are found, the ends of which are enlarged, flattened, and perforated (Pl. XXXI. fig. 2); it is most peculiar that these rods do not lie transversely but in the direction of the length of the processes, the flexibility of which becomes thus rather limited. In *Lætmogone* (Pl. XXXIV. fig. 1), *Ilyodæmon*, and *Pannychia* (Pl. XXXII. fig. 11) alone the terminal parts of the pedicels are supported by one or several perforated terminal plates, which in the last-mentioned genus are covered externally by another more irregular and fragile network. It is of great interest to note that this exterior network can be developed from the small wheels which are present in a great number in the body-wall and even in the pedicels; a glance at Plate XXXII., fig. 12, will give plain evidence of this fact. The felly of the wheels gives off branches which become connected with one another, and construct an irregular network which grows gradually larger, while at the same time the original wheel becomes reduced and finally totally disappears.

Concerning the two muscular layers of the body-wall I have nothing of importance to note. In different species these layers attain different degrees of thickness. The circular muscular fibres, or rather the transverse ones, constitute a thin layer which, extending from the one ambulacrum to the other, seems to be divided into five areas separated from one another by the ambulacra. Danielssen and Koren[1] have stated the same to be the case in *Kolga hyalina*. According to these authors, however, *Elpidia glacialis* should have a continuous circular muscular layer anteriorly as well as posteriorly, while this layer should be divided into areas at the middle of the body.[2] The longitudinal muscular fibres are disposed in five simple bands; no sign of a division into two parts is present, if the tendency of the muscular fibres to be crowded towards each side be not regarded as such, only a few fibres being discernible along the middle of each muscular band. The connective tissue which combines the muscular fibres contains in general calcareous spicules. The longitudinal muscular bands do not send out retractor muscles towards the gullet.

The Calcareous Ring.

All the Elasipoda possess an internal skeleton in the shape of a calcareous ring, which surrounds the gullet and is in most cases of such a peculiar structure that it forms an important characteristic of the order in question. Unfortunately, the material which has been to my disposal was too insufficient to allow an examination of as many forms as was desirable, notwithstanding which the results of my researches

[1] Echinodermer fra den Norske Nordhavsexpedition, p. 86 (Nyt Magazin for Naturv., Bd. xxv., 2; Christiania, 1879).

[2] *Loc. cit.*, p. 100.