

All the thirty-one known forms of the Elpidiidæ seem to be characterised by having the calcareous ring composed of only five spicules which are either firmly united with one another, thus forming a pentagonal figure which surrounds the gullet as in *Elpidia glacialis*, or are more loosely combined with one another, by having the arms of the spicules not lying side by side as in the preceding species, but only joined with one another by their ends as is the case in *Kolga hyalina*, Dan. and Koren, or, lastly, the spicules are separated at certain distances from one another, as is plainly shown in most of the species. The various kinds of rings may with advantage be described more in detail.

Each spicule which composes the ring consists of a short, insignificant central part, from which a greater or smaller number of rod-like arms diverge towards each side; the ends of these are in general flat, enlarged, perforated and branched, but sometimes simple, pointed, or slightly obtuse. In *Elpidia glacialis* each spicule consists of only eight arms in all, two of which—viz., those two which are placed posteriorly and internally when the ring is in its proper position—are large and, lying along their whole length side by side and closely united to the corresponding arms of the adjacent spicules, help to form a pentangular figure; of the rest of the arms the posterior outer ones join one another at their ends, and this sometimes seems to be the case even with the anterior inner ones. A correct idea of the composition of this calcareous ring may be gained by referring to my report on the Elpidia.¹ According to Danielssen and Koren² each spicule in *Irpa abyssicola* is likewise composed of eight rod-like arms, four of which diverge towards each side, but judging by the description and plates given of these authors, the combination between the separated spicules cannot take place in the same manner as in *Elpidia glacialis*; most probably some of the arms reach or cross the corresponding arms of the adjacent spicules, thus constituting a pentagonal ring.

According to the observations of the same authors³ each spicule in *Kolga hyalina* gives off fourteen rods, seven of which diverge towards each side; several of the posterior rods, which are the longest, join their ends to those of the adjacent spicules, thus forming a complete pentagonal ring. In all the eight or nine species of this family which I have had the opportunity to examine, the five spicules are found at certain distances from one another, consequently no complete ring is present. Each spicule in *Scotoplanes globosa*, *Scotoplanes papillosa* (Pl. XXXVII. fig. 12), and *Scotoplanes robusta* (Pl. XXXVII. fig. 9) is made up of eight rods, of which four diverge towards each side. *Peniagone vitrea* possesses spicules, which send out about sixteen rods, eight towards each side; and each spicule in *Elpidia willemoësi* (Pl. XXXVII. fig. 1) and *Parelpidia elongata* (Pl. XXXVII. fig. 2) is remarkable for possessing as many as twenty or thirty rods.

¹ Mémoire sur l'Elpidia (Kongl. Sv. Vet.—Akad. Handl., Bd. xiv. No. 8, Stockholm, 1877).

² Echinodermer fra den Norske Nordhavsexpedition (Nyt Mag. for Naturvid., Bd. xxiv. 3).

³ Echinodermer fra den Norske Nordhavsexpedition (Nyt Mag. for Naturvid., Bd. xxv. 2, 1879).