

several of the Synaptidæ have such olfactory organs either attached to the nerve-ring itself or lying immediately in its proximity. Lately Danielssen and Koren as well as myself have exhibited in our respective reports that *Elpidia glacialis* and *Kolga hyalina* are provided with such organs not only at the nerve-ring but also all along the two lateral ambulacral nerves of the trivium.

In *Elpidia glacialis* the main nerve-cords, excepting the odd one of the ventral surface, communicate at their junction with the pharyngeal ring with a small auditory sac. On making a closer examination of the ambulacral nerves one will find that each of the ventral lateral cords carries these sacs, usually five or slightly more, scattered all over their length, while the remaining nerve-cords seem to be without any such; one or two may usually be observed near the points where the pedal nerves join the main cords. The auditory vesicles are provided interiorly with an epithelial lining, are spherical, about 0.2 mm. in diameter, and seem in general to be attached close to the nerve-cords; they contain five to twenty otoliths of a characteristic ovate shape, with one of the ends rounded, while the other is slightly tapered and truncated. The otoliths (Pl. XXXVI. fig. 25) measure in length about 0.036 mm. and in breadth 0.02 mm., and are made up of from three to four distinct layers, the innermost of which has a granular appearance. When regarding the layers posteriorly, viz., from the rounded end, they are marked out by concentric circles.

Danielssen and Koren mentioned in their already cited memoirs that *Kolga hyalina* possesses no less than fifty-six auditory sacs, two of which are situated close to each of the chief dorsal nerves not far from the ring and twenty-six along each lateral ventral nerve. It is most probably a fact that the odd main cord is regularly without any auditory vesicles, and that the dorsal cords only possess such vesicles anteriorly in the neighbourhood of the pharyngeal ring; at least I never found any exceptions to this rule. According to Danielssen and Koren, each auditory vesicle in the above-mentioned species contains from 20 to 130 otoliths, the form of which is either oblong and composed of different layers, or round and presenting concentric circles. I suppose that these latter, the rounded ones, are only the former observed from the round end, and thus the layers must of course present the appearance of concentric circles. My intention is to enumerate below all the cases in which auditory vesicles have been found, but I draw a special attention to the fact that I have not had the opportunity of examining as many forms as I should have wished, owing to the scanty material at my command.

In *Kolga nana* about thirteen auditory vesicles are present along each of its ventral, lateral nerve-stems, each vesicle containing about twenty otoliths.

In *Parelpidia elongata* auditory vesicles are found at the nerve-ring enclosing up to thirty or thirty-five otoliths, the length of which varies from 0.021 mm. to 0.04 mm.

*Elpidia incerta* possesses a great number of auditory vesicles disposed along each side