

of the most characteristic peculiarities of the Echinoderms in general, and doubtless plays a much greater rôle in their life.

“With regard to the sensory organs of the Elasi-poda, it is very remarkable that auditory organs in the shape of small sacs, with a greater or smaller number of otoliths, are often very abundantly developed, while no traces of eyes are apparent, and that these organs are in connection not only with the nerve ring but also with the two lateral ventral nerve stems. Possibly the well-developed auditory organs, together with the tactile organs, viz., the dorsal processes, can to some extent supply the want of eyes. With good reason it may be asked why many species are so richly provided with auditory organs—some species have fifty sacs or more—while other forms are totally devoid of them. As is well known, only a few shallow water Holothurians are furnished with auditory vesicles, but these have always their place at the nerve-ring.

“In the Elasi-poda, as in the majority of the Holothu-rioidea, the sexes are distinct. The embryo of the Echinoderms commonly leaves the egg in a condition very different from the adult state, and their larvæ live under conditions totally different from those under which the adult passes its existence. Thus, while the adult animal moves slowly along the floor of the bottom, the larvæ are found living on the surface of the sea, carried about by winds and currents, until they have reached that stage in their evolution, when it becomes necessary for their existence and further development to retire to the shores or the bottom of the sea. In some Echinoderms the embryo passes into the adult condition without any free larval stage, which seems to be the case with several shallow water Holothurians, and doubtless even with the Elasi-poda. If these latter were subject to a more complicated metamorphosis, it is most probable that their larvæ would not be able to live at the surface of the sea, but keep close to the floor of the ocean. It may be stated here that during the Challenger Expedition some particularly inter-

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FIG. 112.—*Psychropotes longicaula*, Théel.