

The supracæsophageal ganglion is well-developed; in one of the specimens two nerves were indistinctly visible starting from the ganglion and directed towards the antennæ; if my observation be correct there can be little doubt that these are the antennal nerves. I have not observed the commissures which unite the supracæsophageal ganglion with the thoracic ganglion; the latter is large and oval, and probably only represents the first larger ganglion of the thoracic chain of *Lepas*. Neither the small eye near the supracæsophageal ganglion nor the large compound eyes at the base of the antennæ are present; the pigment which is so richly distributed over all the organs and parts of *Lepas australis* is totally wanting in the male Cypris of *Scalpellum*. This no doubt finds its explanation in the circumstances under which the little animal is destined to live.

Of great importance is the fact that the dorsal invagination, which, as we have seen, causes the division of the body of *Lepas* into a capitulum and a peduncle, is totally lost in the metamorphosis of the Cypris of the male of *Scalpellum*; hence there is no trace of this division to be observed in the full-grown males. This want of a peduncle, together with the smallness of the orifice of the mantle and the total absence of valves, form the most characteristic features of the male in question.

*The metamorphosis of the Cypris-larva*, in its latest stage (as figured), into the full-grown male, is now, I think, easy to understand. In this respect at least it quite corresponds to the metamorphosis of *Lepas*. The difference between the latest stage of the Cypris of *Lepas australis* and the young Cirriped of that species is not greater, nor less either, I think, than that between the attached Cypris of *Scalpellum regium* and the young male; to say that the complementary male of *Scalpellum* is in its Cypris stage, or thereabouts, is not in accordance with the facts.

The valves of the Cypris are first of all shed. The cells of the mantle or sack soon develop a distinct membrane of chitin at their surface, which no doubt is as efficient a protection as the shell was, but which contains no carbonate of lime and therefore is not so brittle. When the wall of the male is quite intact, its impenetrability makes it absolutely unfit for transference from absolute alcohol into oil of cloves; the alcohol leaves the little body faster than the oil enters it, whence the body-wall becomes shrivelled. As the internal structure is best studied in a specimen placed in oil of cloves, and as for its investigation by transverse sections the passing through oil of cloves was also necessary, I found it very useful, when the specimens were quite sound, to make a little opening in the wall before transferring them into the oil. For the rest, this internal structure is very simple. The antennæ and the very delicate thorax with the legs are the only parts which show that the little body belongs to an articulate animal; the whole interior of the body is filled with a mass of connective tissue with very wide meshes, serving to keep the different organs in their places.