

insertion of the antennæ, on either side of the free edge of the anterior lip, separated as yet in the middle by a rather broad interstice. They are comparatively small, elliptical in form, and, on the outer side, drawn out to a conical point, the rudiment of the powerful biramous mandibular legs occurring in the Nauplius stage.

The three succeeding pairs lie in close contact with each other, forming rather broad transverse intumescences, which, at the inner corner, jut forth as rounded, somewhat posteriorly pointing lobes, double on the last pair (the maxillipeds).

The part of the body posterior to the above described parts, constituting the rudiment of the tail, is quite smooth, and somewhat flattened at the extremity, which is broadly truncate, with a very faint emargination in the middle. On either side of the emargination three very short spines are seen to arise from the edge.

*First Calyptopis Stage* (figs. 4-19).—The body has in this stage a length of about 1 mm., and exhibits (see figs. 4, 5) a more distinct limit between an anterior and a posterior division, the latter being, however, as yet much shorter than the former.

The carapace is now more fully developed, with the free portion broader, mantling over, as it were, the bases of the limbs, and forming anteriorly a hood-like expansion, that covers from above the anterior extremity of the body. The free edges are quite smooth and evenly curved, without teeth or projections, forming, however, a slight incurvation at the sides of the buccal area.

The posterior division of the body lacks as yet every trace of segmentation, constituting merely a simple, cylindrical projection, generally bent at a more or less distinct angle. It is, however, rather mobile, and admits, by the aid of a well-defined assemblage of muscles adjoining it on the upper face, of being stretched in nearly the same axis as the anterior division. At the extremity it is somewhat flattened and abruptly truncate, and has the terminal edge (see fig. 19) armed with a row of twelve strong ciliated spines, the six median about equal, the outer three on either side rapidly increasing in length to the innermost, which is very large and projected far beyond the rest. Besides the above-mentioned terminal spines a pair are seen arising from the ventral face at some distance from the extremity, each of the spines originating a little within the lateral edge.

Immediately in front of the posterior division of the body may be observed a faint and close wrinkling of the integument as a first indication of the segmentation of the trunk (see fig. 6).

The ocellus is distinctly perceptible, placed in the middle line at some distance from the anterior margin of the carapace (see fig. 6). When highly magnified (fig. 7) it is found to contain two small refracting bodies protruding from the pigment anteriorly.

On either side of the ocellus, and somewhat dorsally, occur beneath the hood-like expansion of the carapace (see figs. 4, 5) two large cellular bodies, of a somewhat compressed, semicircular shape, but as yet, however, comparatively indistinctly defined.