

*The Antennulæ* (figs. 1-5).—These limbs, constituting in the Nauplius and Metanauplius stages simple, non-articulate stems, exhibit each of them (fig. 1) in the earliest Calyptopis stage described above, and apparently corresponding to the second Calyptopis stage of *Nyctiphanes*, a slender non-articulate peduncle, bearing at the apex two very small, uniarticulate flagella, the outer a little longer than the inner, and provided with a pair of slender bristles and two sensory appendages.

In the following (last) Calyptopis stage, these limbs (fig. 2) are much more fully developed, the peduncle being rather strong, and divided into three distinctly defined joints, of which the basal is by far the largest, and projects at the end exteriorly as a strong spine, denticulate at the inner edge, and reaching almost to the end of the peduncle. The second joint is quite short, and bears at the inner edge two strong ciliate setæ. The last joint is almost twice as long, and has a single bristle internally. The flagella do not exhibit any essential difference from those in the preceding stage.

In the Furcilia stages the number of bristles along the inner edge of the peduncle has become somewhat augmented, and the two flagella have slightly increased in length, though still uniarticulate. In the last of these stages (see fig. 3) the long apical bristles of the flagella are lost, and the two sensory appendages of the flagellum, arising originally from the tip, are now affixed to a ledge-like projection of the inner edge, near the base.

In the Cyrtopia stages the peduncle (fig. 4) has a somewhat greater similarity to that of the adult animal, the spine springing from the basal joint being somewhat reduced in size, and both the flagella considerably elongated and divided into a number of distinctly defined articulations.

But not till the last stage described above—the first post-larval stage—do the antennulæ (fig. 5) assume their definitive form, differing only from those of the adult animal in the dorsal leaflet of the basal joint being still but slightly indicated, and in the flagella having not yet attained their full length.

*The Antennæ* (figs. 6-8).—The structure of these limbs is much the same throughout all the Calyptopis and Furcilia stages. They differ widely from those in the adult animal both in form and function, constituting, as they do, very mobile, biramous natatory organs of much the same appearance as that described above in the larvæ of *Nyctiphanes*, and strongly reminding one of the second pair of antennæ in the Calanoid Copepoda.

In the last Furcilia stage some of the natatory setæ are sometimes, however, found to be obliterated (see fig. 6), though in other respects no difference in the structure of the organs has yet arisen.

But in the next, or first Cyrtopia stage, these organs (fig. 7) are seen to have suddenly undergone a total alteration alike in structure and function, having lost their great mobility, and assumed a form more in accordance with that of the adult animal. The basal part is shortened and has lost its segmentation, whereas a slender spine has sprung from the end externally, representing the basal spine of the adult animal. Of