

examination, and thus I have been enabled to trace the development of this species through all its numerous successive stages comprised between the second *Calyptopis* stage and the adult form. Of still earlier stages, on the other hand, no examples were found in the collection, and hence I have deemed it advisable to treat of the development of the present form next after *Nyctiphanes australis*, of which the earliest larval stages found have been described above.

With a view to show the progressive development of the several limbs, I have carefully dissected specimens of all the stages here described; and in Pl. XXX. series of figures of the same limbs, in different stages of development, have been given. I first propose to describe in general the more marked stages, and then shall pass on to a detailed investigation of the chief modifications the limbs undergo during development.

A. *General Description of the successive Larval Stages* (Pl. XXIX.).

Second Calyptopis Stage (figs. 1, 2).—From the corresponding stage of *Nyctiphanes australis*, this is easily recognised by the spine-like projection formed by the carapace posteriorly, as also by the anterior margin of the hood-like frontal part being finely denticulate. Moreover, the terminal segment of the tail (telson) would appear to be somewhat more produced and slightly deviating in its armature. In all other respects the larva closely resembles the corresponding stage of *Nyctiphanes*. Length of body $1\frac{1}{2}$ mm.

Last Calyptopis Stage (fig. 3).—This is precisely the same stage figured by Professor Claus in his treatise referred to above. It corresponds to the last described larval stage of *Nyctiphanes*, from which, however, it differs, in addition to the characters distinguishing the former stage, by the presence, on either side, of a well-marked lateral denticle projecting from the lower margin of the carapace posterior to the middle. Length of body 2.20 mm.

First Furcilia Stage (figs. 4, 5).—The most prominent feature distinguishing this stage from the two preceding ones, is the pronounced development of the compound eyes, which have now become mobile and freely projecting beyond the edges of the carapace, instead of, as in the *Calyptopis* stages, being immobile and hidden beneath the hood-like frontal part of the carapace. In accordance therewith, the anterior part of the carapace is somewhat altered, a distinct emargination having appeared on either side, limited beneath by an acute angle (the antero-lateral corners), and marking off in the middle a broad frontal plate arching over the basal part of the eye-pedicles and the antennular peduncles (see fig. 5). This plate has a somewhat cordiform shape, being slightly produced in the middle, and having the lateral edges evenly curved and finely denticulate.