

the same way, and (2) that here the word metamorphosis has quite a different meaning from what it has in entomology.

Of the genus *Nymphon* I was able to compare the larvæ of the species *Nymphon brevicollum*, *N. hamatum*, and *N. longicoxa*. Of *Nymphon brevicollum* I have figured the youngest stage observed in figs. 12 and 13; an older one, which has three pairs of legs fully developed and the fourth already planned in the form of two lateral processes, has been drawn from the ventral side in fig. 1 of Plate XX.

On the ovigerous legs of the same animal I found together larvæ in both the stages I have figured, and also in intermediate stages. Taking a small number of these larvæ from the leg to study them under the microscope, I often observed the membranes of earlier stages between them. These membranes, and especially the parts which belong to the fore-part of the body, are attached to one another by means of long threads; these threads take their origin in the first joint of the foot-jaw, which bears a protuberance perforated by the thread. In the interior of the joint, and also of the empty membrane of this joint the thread can be traced a short way, but in neither to a great extent, as in the joint it is covered by the food-yolk, and in the membrane soon ceases after having passed the protuberance.

The larvæ of *Nymphon hamatum* which I was able to study were already furnished with four legs. Their condition was not extremely favourable for minute investigation, especially because the food-yolk makes the whole body opaque. The third pair of cephalic appendages are but small, and have each the form of a two-jointed stump bearing a pair of small spines at the extremity. The fore-part of the body of this larva is figured in fig. 3, Plate XX. An apparatus of a very singular shape, and, of course, closely connected with the protuberance perforated by the long thread in the larva of *Nymphon brevicollum*, is situated as in that species in the first joint of the foot-jaw. Numerous bottle-shaped sacs are placed near each other, and in such a way that their necks meet in one point. Each neck terminates in a small semilunar border, which covers a small slit; through this slit a thread passes, that can be easily observed as it runs through the throat of the bottle-shaped sac. The widened part of the bottle has in its interior two or more vesicles, which seem to be filled with an opaque protoplasm, covering in all probability the origin of the thread. Every bottle has its own thread, and of these more than ten are easily counted. I have figured this apparatus in fig. 4, Plate XX. The study of the apparatus is very difficult, as it is not transparent, being covered at one side by the food-yolk. The different bottle-shaped sacs are enclosed in a granular mass, with which very fine fibres seem to correspond. I could follow these fibres to a certain distance from the apparatus, where they are covered by the food-yolk; and from their pale appearance, and the circumstance that they are not easily coloured by picrocarmine (as the muscles, fig. 4, are), I felt inclined to look upon them as nerve-fibres.

The same organ, but of a somewhat different shape, occurs also in the mandibles of