

DEVELOPMENT OF SERGESTES.

Our knowledge of the development of this genus is still imperfect, although it is the result of the examination of numerous specimens obtained at different times by different persons, of their comparison with one another, and of deductions drawn from the general appearances of the animals and the relative proportions of their parts.

As in all the species of this order, the brephalos, or the organism as it first issues from the ovum, is unknown. The ovum is most probably deposited in the sea and hatched in the warmer waters of the ocean.

In the genus *Leucifer* Professor Brooks has fortunately been enabled to procure some ova, which he found not united to the parent, as they generally are in the higher Crustacea, by means of organic tissue attaching them to the pleopoda, nor carried in pouches, or in ovisacs, as in *Mysis*, *Gammarus*, &c., but rather as if they were entangled amongst the pereopoda and cohering to one another.

The youngest form that we know is that shown in the annexed figure (fig. 49) taken from the drawing of Dr. v. Willemoes Suhm.

“Zoea of *Sergestes*, $\times 244^1$ nat. size, just hatched, H $\frac{1}{7}$, 28 August, 1875, in the 10 of Latitude, on the passage from Hilo to Tahiti.

“Length of the abdomen,	0.21 mm.
Length of the carapace, without spines,	0.35 „
Length, entire,	0.56 „
Greatest breadth of the carapace,	0.38 „
Length of a^1 ,	0.7 „

“First antennæ four-jointed at the base, which disappears later.

“*oc.* The early formation of the eye; right and left of the deeply situated Nauplius eye. Mandibles apparent; first maxillæ and labium not visible and perhaps not yet formed, although the palpus of the first maxilla is very distinct, as also the second maxilla, maxilliped, and gnathopod. When the yolk mass in the interior does not hide anything one observes some grain-like substance with bright bladders between. The posterior spine of the carapace does not go exactly straight backwards but upwards. The rostrum is certainly wanting.”

The above are the notes made regarding this specimen by Dr. v. Willemoes Suhm, after whom I have named it.

Elaphocaris suhmi.

It differs from all other specimens at this stage in the absence of a rostrum, which is generally so persistent a feature. The great fronto-lateral spinous processes are remarkable for their length, and still more for being biramose, the division commencing at

¹ From which our figure, for convenience, is reduced one-third, or to about 163.3.