

ventral surface of the basal joint of the uropod is usually much longer than the outer, and is usually furnished with a tooth on its outer edge, and in the older specimens there are indications, underneath the cuticle, of spines on the inner edge of the dactylus of the raptorial claw. In his classical paper on the Metamorphosis of the Stomatopoda, Claus pointed out that there are so many features of resemblance between the *Alima* and the various forms of *Erichthus* that the larval nature of *Alima* cannot be doubted. Milne-Edwards and Dana had found it difficult to draw any line between the two genera; the first-named writer placing in the genus all *Erichthidæ* in which the ocular segment is exposed, while Dana includes in it those forms in which the distance from the anterior edge of the carapace to the mouth is greater than the distance from the mouth to the posterior edge. Claus shows that neither of these features serves to discriminate between *Alima* and *Erichthus* in every case, and he figures and describes a larval type which is intermediate between the two, having the elongated flattened carapace and the exposed eyes, but the mouth well forward, and the thoracic region well covered by the carapace. For this intermediate larval type he proposes the name *Alimerichthus*. Claus was not able to connect any one of his *Alimæ* with a specific adult, but he shows that they resemble the adults of the *Squilla* type very closely, and he correctly decides that they are the larvæ of this type, although he erroneously believes that they belong to the *Lysiosquilla* branch, rather than to the true *Squillæ*.<sup>1</sup> He says there can be no doubt that we must seek their adult representatives in the *Squilla*-group, and that the *Alima* larva, as distinguished from *Erichthus*, belongs exclusively to the genus *Lysiosquilla*, which is characterised, like the *Alima* larva, by the elongation and loose articulation of the abdomen. The lower members of the genus *Squilla* are loosely articulated, like the *Lysiosquillæ*, and the hind body is about as long in the one genus as it is in the other, and there is therefore no reason for believing that any of these larvæ are young *Lysiosquillæ*, although later researches have shown that he is correct in his surmise that they pertain to the *Squilla*-group.

In a paper which was published in 1879<sup>2</sup> I described a series of *Alima* larvæ, which were procured in abundance in the Chesapeake Bay, a locality where *Squilla empusa* is common, while no other Stomatopod is known to occur there, and I therefore advanced the opinion that this larva, a young stage of which is shown in figs. 4 and 5 of Pl. I., is a young *Squilla*. Three years before, Faxon reared from a similar but slightly more advanced larva, a young *Squilla*, which had the characteristics of the adult *Squilla empusa*, and although his results were not published until 1882<sup>3</sup> the proof that *Alima* is a young *Squilla* is due to him. It is of course possible that some species of *Lysiosquilla* may also pass through an *Alima* stage, but I shall show that, among

<sup>1</sup>Metamorphose der Squilliden, p. 154.

<sup>2</sup>On the larval stages of *Squilla empusa*.

<sup>3</sup>Selections from Embryological Monographs compiled by Alexander Agassiz, Walter Faxon, and E. L. Mark, I. Crustacea, Cambridge, 1882, *Bull. Mus. Comp. Zool.*, vol. ix. No. I., pl. viii. figs. 2, 3.