I have shown that the *Alima* larva resembles the adults of the genus *Squilla* in the depression of the hind body, the presence of marginal spines on the dactylus of the raptorial claw, in the small number of marginal spines on the outer edge of the exopodite of the uropod, in having its inner spine longer than the outer, with a lobe or dentation on its outer edge, and in the presence of numerous secondary spines between the submedian spine and the intermediate marginal spine of the telson.

In all of these respects *Alimerichthus* resembles *Alima*, and it is, therefore, beyond question, a *Squilla* larva, but it differs from *Alima* in the great width of its telson and the absence of spines on its abdominal somites, as well as in its resemblance to the more primitive *Erichthus* larva.

The comparative study of the adult Stomatopoda teaches that the genera *Lysiosquilla* and *Squilla* are two divergent branches from a common stem, and that the primitive *Squillæ* were more like this stem-form, and therefore more like *Lysiosquilla* than the more specialized species. In the genus *Squilla*, *Squilla* (*Chlorida*) *microphthalma* and its allies are the closest living representatives of the stem-form, and they resemble the lowest species of the genus *Lysiosquilla* in the small size and the approximation of the eyes, the small size of the antennæ and uropods, the loose articulation of the hind body, and the width of the telson. I shall show further on that the larva of *Lysiosquilla*, as well as of the more primitive genera of Stomatopoda, is an *Erichthus*, and that all the true *Alimæ* are *Squilla* larvæ. The common ancestor of *Lysiosquilla* and *Squilla* must therefore have passed through an *Erichthus* stage. If it be true that the characteristics of the *Alima* larva are the result of secondary modification, it is of course quite possible that the most modified adult *Squillæ* might have their larvæ the least modified, but in the absence of any proof that this is the case, it is more natural to believe that the most typical *Alimæ* are the young of the most typical *Squillæ*, and that *Alimerichthus*, the most primitive and *Erichthus*-like of the *Alimæ*, is the young of a smooth loosely articulated and primitive *Squilla*, like *Squilla* (*Chlorida*) *microphthalma*. While this conclusion cannot be accepted without question, in the absence of direct proof, there is much reason for believing that *Alimerichthus* is the larva of a *Squilla* closely related to *Squilla microphthalma*, and this decision receives added force from the fact that several of the most conspicuous peculiarities of *Alimerichthus* as distinguished from *Alima*, such as the width and shortness of the telson, and the loose articulation of the hind body, are points of resemblance to *Squilla microphthalma*. In the true *Alimæ* the postero-lateral angles of the abdominal somites end in acute spines, which are not developed in *Alimerichthus*, and, as *Squilla microphthalma* is the least costate of the true *Squillæ*, this is another point of resemblance. It is not probable, however, that *Alimerichthus* is specifically identical with *Squilla microphthalma*, and future research may prove that its adult form is an unknown and still more primitive *Squilla*.