the fourth and fifth. The outline of the carapace is about as before, except that it is now deeply emarginated on the middle line. The posterior border of the telson is slightly emarginated; the submedian spines have approached each other, and the intermediates, which are now much larger than the seven secondary dentations, have moved backwards, as have also the laterals.

In the next stage (No. 5, Pl. VIII. fig. 1) more important changes have taken place. The third, fourth, and fifth thoracic appendages are represented by buds, and their somites have become reduced in length, so that the sixth is as long as all three of them. The abdomen is now much wider than the thorax, and its somites all end posteriorly in acute spines. The labrum is a little further back, and the anterior end of the carapace narrower than at stage 4, but the telson is essentially like that of stage 4, although it is a little more emarginated in the middle line. In stage 6 (fig. 2) the labrum is still further back, the flagellum of the second antenna and the appendages of the third, fourth, and fifth thoracic somites are elongated, and the latter are obscurely divided into joints; the appendages of the sixth, seventh, and eighth thoracic somites are represented by buds, the abdomen is wider and more depressed, and the appendages of the sixth somite are parallel but well developed. The space between the lateral and the intermediate spines of the telson is now equal to the space between the intermediate and the submedian, and the posterior border is deeply notched on the middle line. In the oldest larva in this series (No. 7, fig. 3) the appendages all have essentially their adult forms, and the more important changes are the lengthening of the hind body, the flattening and widening of the abdomen, and especially the widening of the sixth abdominal somite and the anterior end of the telson. This is now nearly rectangular, and deeply notched on the middle line; the submedian spines are more approximated, and the intermediates further back.

Although the collection contains no specimens which serve to connect this larva with a specific adult, its close resemblance to the more typical *Alimæ*, especially *Alima bidens*, gives every reason for believing that it is the young of one of the higher multicarinate species of the genus *Squilla*.

The specimens are all from the coast of Australia, and all these which were drawn were from Cape Howe and its vicinity.

Alimerichthus.—Inasmuch as the *Erichthus* type of Stomatopod larvæ presents a very much greater diversity of forms than the *Alima* type, and as it is preceded by a *Erichthoidina* stage which is absent in the *Alima* larvæ, there can be no doubt that the latter type is a secondary modification of the *Erichthus* type, and that the greatly elongated *Alimæ* like *Alima gracilis* (Pl. VI. fig. 3) are more divergent from the primitive larva than the shorter and broader forms like *Alima macrophthalma* (Pl. VIII. fig. 3). Although Milne-Edwards and Dana have attempted to show that the two types are sharply separated, Claus has pointed out that among the *Alimæ* themselves there is a series of larvæ,