

and there are few (five or six) marginal spines on the outer edge of its exopodite. In the older larvæ the dactylus of the raptorial limb shows traces of six spines besides the marginal one.

In the youngest *Alimerichthus* which has been observed (Pl. VIII. fig. 8) the flagellum of the second antenna is represented by a bud, as are also the appendages of the third thoracic somite, and the third, fourth, and fifth thoracic somites are crowded together so that the sum of their lengths is about equal to the length of each one of the three last thoracic somites, upon which there are no traces of appendages. There are five pairs of fully developed and functional abdominal appendages, and five distinct abdominal somites, the first four wider than the thorax, but the fifth very narrow and deeply constricted off from the telson, upon the anterior edge of which the sixth pair of abdominal appendages are represented by buds. The telson is wider than long, and nearly four times as wide as the abdomen. It has six pairs of marginal spines with numerous minute secondary spines between the submedians, ten or eleven on each side between the submedian and adjacent intermediate, and a single one internal to the base of the lateral. The margin of the telson, between the submedian and the intermediate, makes an angle of about 45° with the principal axis of the body. A comparison of this larva with the corresponding stage of *Alima gracilis* (Pl. IV. fig. 5), or of *Alima macrophthalma* (Pl. VIII. fig. 1), shows that there is every reason for believing that it is preceded by an earlier stage like the youngest observed stage of *Alima gracilis* (Pl. IV. fig. 4), of *Alima macrophthalma* (Pl. VII. fig. 2), or *Alima (Squilla) empusa* (Pl. I. fig. 4), and that at this time the third, fourth, and fifth thoracic somites are long and without appendages like the sixth, seventh, and eighth; the fifth abdominal somite and its appendages absent or rudimentary, the sixth absent, and the telson spatulate, with the submedians wide apart, and the secondary dentations between the submedians and intermediates about as large as the primary spines. As we know that some, and probably all, of the *Alima* larvæ hatch from the egg in this condition, and do not pass through a free *Erichthoidina* stage, this is undoubtedly true of the *Alimerichthus* also.

In the next stage which has been observed (Pl. IX. fig. 3) the appendages and somites are all present, the exopodites of the first five abdominal appendages carry at their bases the rudimentary buds which are to become the gills, the telson is shorter and wider than before, and the intermediate marginal spines have travelled backwards until the posterior margin of the telson is nearly transverse between them. The sixth abdominal appendages are still small, but in the next stage, the one shown in Claus's fig. 30, they are nearly as long as the telson, with six or seven marginal spines on the outer edge of the exopodite and with the inner spine longer than the outer, with an obscure lobe on its outer margin near the base. The whole hind body is now wide and flat, and there are indications of five or six marginal spines on the inner edge of the dactylus of the raptorial claw.