mated to each other at each successive moult, are now separated by a space equal to only $T_{0000}^{2\frac{4}{10}}$ or less than $\frac{1}{40}$ of the total length, while in stage 1 the distance between them is T_{0000}^{85} of the total length. As shown in Pl. VIII. fig. 6, there are fourteen short acute spines between the submedians, with still smaller spines between them, and there are fifteen small acute dentations between each submedian and the intermediate of the same side, which is about equal in length to the submedian.

The uropod of a specimen of the same size, which was captured at the surface by the Challenger expedition, between Api and Cape York, is shown in ventral view in Pl. VIII. fig. 4. The exopodite is now divided into a paddle and a second joint, and the latter has five spines on its outer margin. The ventral prolongation from the basal joint ends in a short outer spine and a much longer inner one, which has a rounded lobe on its outer margin, near the base.

From the table of measurements given above the following measurements may be selected as showing the character of the changes through which the larva passes during its growth. They are all in thousandths of the total length from the tip of the rostrum.

						No. 2.	and the second			10.000
Rostrum,					187	182	174	160	111	80
Carapace, exclusive of rostrum,					357	350	367	345	381	404
Width of carapace between bases	s of a	antero-latera	spine	s, .	194	182	148	115	101	88
Width of carapace between bases					301	289	314	249	212	158
Length of abdomen including tel				٠.	382	395	403	408	435	444
Distance between submedian spin	nes o	f telson,	•		76	85	56	67	31	24

While Alima gracilis differs from ordinary Alima in many respects, especially the great elongation of the body, the shortness of the carapace, and the elongation of the telson, Claus has figured a series of Alimæ which shows that the shorter and wider species are connected with the elongated ones by so many intermediate forms that there can be no doubt that the adults which they represent are all closely related. The Challenger collection also contains great numbers of these intermediate forms, and I give in Pl. VII. fig. 7 and Pl. VIII. fig. 7 figures of the telson and the raptorial claw of one of them, which resembles Alima gracilis in the shape of its carpus, while its telson and the general outline of the body are so much like Faxon's larva as to indicate that it is the young of a species of Squilla very closely related to Squilla nepa. Α number of specimens of this larva were collected by the Challenger on April 13, 1876, The carapace makes about half the total length of the body, and near Sierra Leone. it exposes the posterior end of the sixth thoracic somite, while the tips of its posterolateral spines, each of which has a small secondary spine about midway between the base and the tip, extend backwards to the plane of the suture between the first and