In this larva, which is 1 inch long, the carapace makes, with the rostrum,  $\frac{400}{1000}$ , the exposed hind body  $\frac{600}{1000}$ , and the telson  $\frac{200}{1000}$  of the total length.

Even if the close resemblance between this larva and the one from which Faxon reared a young Squilla empusa did not indicate that Alima bidens is also a Squilla, this could be inferred with great certainty from the examination of the larva itself, since it resembles the adults of this genus in the presence and in the small number of spines on the inner edge of the dactylus of the raptorial claw, in the depression and width of the hind body, in the presence of a median-dorsal carina on the carapace and on the telson, in the presence of acute spines on the postero-lateral angles of the abdominal somites, in the presence and in the small number of marginal spines on the outer edge of the proximal joint of the exopodite of the uropod, in the relative length of the two spines of its ventral process, in the presence of a secondary tooth on the outer edge of the inner and longer spine, in the relative positions of the marginal spines of the telson, in the presence of a single minute dentation inside the base of the lateral, and a number of dentations (more than three) between the intermediate and the submedian. While it is true that there are some adult Squillæ which do not shew all of these characteristics, and while no one of them is in itself perfectly diagnostic, it is also true that there are no Stomatopods in which they are all united except members of the genus Squilla, and we may therefore decide, with all the certainty which is possible in absence of direct proof, that Alima bidens is the larva of one or perhaps of two species of the higher carinate Squillæ. The presence of three secondary spines on the inner edge of the postero-lateral spine of the carapace of Claus's larva, and of only two in our specimen, possibly corresponds to a specific difference between the adults.

Alima macrophthalma.—The Challenger collection contains a number of specimens of an Alima larva of a type which is quite different from that of which Alima gracilis is an example, and I have selected from a surface gathering, made near Cape Howe, the series which is shown in Pl. VII. figs. 1-6; Pl. VIII. figs. 1-3.

It is possible that these are not all of one species, but the differences between them are so slight that, if not the same, they must at least belong to adults which are very closely related, and as I am not able to identify the larva with any of the published descriptions, I propose for it the provisional name Alima macrophthalma, on account of the great size of the eyes as compared with the very small eye stalks.

The youngest larva which I have found, No. 1, is essentially like No. 2. The telson is shown in Pl. VII. fig. 2; No. 2, which is shown in Pl. VII. fig. 1, is  $4\frac{9}{10}$  mm. long; No. 3, shown in fig. 4, is  $6\frac{4}{10}$  mm. long; No. 4, shown in fig. 5, is  $8\frac{4}{10}$  mm. long; No. 5, shown in Pl. VIII. fig. 1, is  $8\frac{75}{100}$  mm. long; No. 6, shown in fig. 2, is  $11\frac{11}{100}$  mm. long, and No. 7, shown in Pl. VIII. fig. 3, is 19 mm. long.

The most prominent diagnostic characteristics of Alima macrophthalma are as follows. The eye-stalks are very short, and the eyes large with very broad tips; the