which, starting with Alima gracilis, with its short carapace and elongated hind body, leads, through many intermediate types, to a larva which is short and wide, and almost completely covered by the elongated carapace, like an Erichthus, although its general structure is Alima-like. For this larva, which he justly regards as the ancestral form from which the Alima larvæ have been produced, Claus proposes the provisional generic name Alimerichthus, as expressing its double relationship, to Alima on the one hand, and Erichthus on the other.

He figures a single advanced larva of this type 18 mm. long from the Indian Ocean, but as he gives no account of its early stages, the occurrence in the Challenger collection of younger specimens of this type is a matter of great interest, as these younger larvæ show that the young Alimerichthus, like the young Alima, passes through a stage in which the last six thoracic somites have no appendages, while the raptorial limbs of the second thoracic somite and the first pairs of abdominal appendages are well developed and essentially like those of the adult.

I have selected from a collection made, February 29, 1886, in the South Atlantic, off the coast of South America, in lat. 36° 9′ 8″ S., long. 48° 22′ W., the two specimens which are shown in Pl. VIII. fig. 8, and Pl. IX. fig. 3, and which represent a form which is very closely related to, but probably not identical with the one figured by The youngest, shown in Pl. VIII. fig. 8, is 8.715 mm. long, and the next stage, shown in Pl. IX. fig. 3, is 15.52 mm. long, while Claus's Alimerichthus is 18 mm. long, so that we probably have, in this series, three successive moults in the history of the larva for which Claus's generic name may be retained without a specific Alimerichthus is characterised as follows—A short wide Alima with a short hind body which is wide and flat in the older larvæ. The mouth is near the middle of the carapace, and the rostrum is less than half as long as the carapace, which has a median dorsal spine, and moderately long antero- and postero-laterals. There is a secondary spine on the inner edge of the postero-lateral close to its base, and a very prominent acute spine projecting outwards from the lateral edge of the carapace, about midway between the bases of the antero- and postero-lateral spines, and two or three smaller ones projecting inwards between this and the one at the base of the postero-lateral. length of the carapace, measured on the middle line, from the tip of the rostrum, makes much more than half the total length, and it covers all of the thorax except the tip of the eighth somite, while the tips of the postero-lateral spines are in the line of the anterior edge of the telson. The eye stalks are about as long as the eyes, which have swollen globular tips, the width of the carapace equals about one-third the total length, the telson is wider than long, with six marginal spines, and numerous secondary spines between the submedians and also between each submedian and the adjacent intermediate. The inner spine of the basal prolongation of the uropod is slightly longer than the outer,

¹ Metamorphose der Squilliden, p. 147, Taf. viii. fig. 30.