latter reaching beyond the tip of the extended telson. The carapace has a long median dorsal spine, and it exposes the posterior half of the third abdominal somite.

|   | Length of carapace on middle line including rostru   | n,      |   |    | .50 | inch. |
|---|--|---------|---|----|-----|-------|
|   | Length of exposed hind body,                         | •       | • | •  | ·20 | "     |
|   | Total length from tip of broken rostrum,             | •       |   |    | ·70 | "     |
|   | Length from tip of rostrum to tip of postero-lateral | spines, |   |    | .78 | "     |
|   | Width of carapace between bases of postero-lateral   |         |   | .• | .26 | ,,    |
| 1 | Width of hind body                                   |         |   |    | .16 |       |

In addition to the larvæ which have been described, the Challenger collection contains numerous specimens from various localities, which must represent closely related adults. It also contains specimens of two somewhat peculiar larval types, which join to their distinctive characteristics so many features which are shared by all the *Lysioerichthus* larvæ that I place them in this group.

One of them, which is represented by several specimens from Rio Janeiro, is shown in profile view in Pl. IX. fig. 11, and in dorsal view in Pl. XI. fig. 6, while the telson, the raptorial claw, and the seventh thoracic limb are shown in figures 7, 8, and 9. It is a little younger than Claus's Squillerichthus triangularis, but it belongs to the same or a closely related adult. The dactylus of the raptorial claw of the oldest specimen in the Challenger collection is smooth, but in Claus's larva six marginal spines were visible underneath the cuticle. This, as well as the width and flatness of the hind body, the depth of the carapace, and the ventral infolding of its lateral edges, and the shape of its telson and uropods (fig. 7) show its close relationship to the Lysiocrichthus larvæ which have already been described, and the flat oval raptorial claw (fig. 8) and the dilated oval scale-like form of the appendages to the exposed thoracic limbs of the older larvæ (fig. 9), indicate that the adult is one of the lower or Coronis-like species of the genus Lysiosquilla. In Claus's larva, which is slightly more advanced than the oldest one in the Challenger collection, the raptorial claw exhibits under the cuticle indications of six marginal spines, and this author therefore regards it as the young of one of the six-spined species of Squilla (p. 131). The fact that the young Lysiosquilla excavatrix has a smaller number of marginal spines than the adult male, shows that the presence of six spines in the larva is no evidence that they are not more numerous in the adult, and while it is true that most of the adult Lysiosquillæ have more than six spines, and that some of them have less, there are several species in which the adult has only six. Claus says (p. 131) that the telson of this larva exhibits the Squilla-type, but as all known species of Squilla and all the Alima larvæ have numerous secondary marginal spines between the submedian and intermediate marginal spines of the telson, while our specimens, as well as the one figured by Claus, have only one such secondary spine, its relationship is obviously with Lysiosquilla rather than Squilla.

<sup>&</sup>lt;sup>1</sup> Metamorphose der Squilliden, fig. 13.