

also in the great length of the narrow hind body. His collection contained numerous specimens, all very similar in general appearance to the one which he traced to its adult form, from various localities in the Indian and Atlantic Oceans. They are all narrow and elongated and from 16 to 42 mm. long.

The Challenger collection also contains numerous specimens from many widely separated localities; all so similar to the one which Claus studied that they must pertain to closely related adults, and I therefore place them all in a provisional genus *Pseuderichthus*. One of them  $1\frac{1}{100}$  inches long, from a collection made between Tenerife and St. Thomas, is shown in dorsal view in Pl. XII. fig. 6, while various parts of its body, more highly magnified, are shown in Pl. VI. figs. 2 and 6, and Pl. XIII. figs. 12 and 14. The telson and uropods of a very similar but much larger specimen,  $1\frac{3}{4}$  inches long, from Volcano, are shown in Pl. VI. fig. 7. Another much smaller species, which undoubtedly belongs in the same group, although it is much wider and flatter than the one figured above, is shown in side view in Pl. V. fig. 4. It is  $\frac{2}{8}$  inches long, and is from a gathering made between Api and Cape York. In all the older larvæ of this group the submedian spines of the telson are very long and slender, and are tipped with movable spinules, as in the adult *Pseudosquilla*; the proximal joint of the exopodite of the uropod is bordered by numerous (six to twelve) spines, the terminals are much longer than the others, and the dactylus of the raptorial claw often exhibits traces of two or three marginal spines under the cuticle. As all these characteristics are features of resemblance to the adult *Pseudosquilla*, and as Claus has obtained a very complete series of stages connecting one of these larvæ with an adult of this genus, there can be little doubt that they are all *Pseudosquilla* larvæ.

While it is very closely related to both *Lysioerichthus* and the *Erichthus* of *Gonodactylus*, and united to both these larval types by intermediate larval forms, I believe the following features may be relied upon as diagnostic of the *Pseuderichthus* larva. It is distinguished from the *Lysioerichthus* by the position of the postero-lateral spines of the carapace, which are near the dorsal surface; by the narrowness of the carapace, which is at least twice as long as wide, shallower than in *Lysioerichthus*, and not at all, or only very slightly, infolded along its lateral edges; by the elongation of the hind body, the length of the submedian spines of the telson, the presence of numerous spines on the outer edge of the proximal joint of the exopodite of the uropod, and the very great elongation of the outer one of the two ventral spines on its basal joint. It is distinguished from the *Erichthus* of *Gonodactylus* by the fact that the postero-lateral spines of the carapace are short, usually only one-fourth or one-third as long as the carapace, while they are usually more than half as long in the *Gonodactylus* larva, and also by the fact that the rostrum is usually short and compressed, and armed at about the middle of its ventral edge by a large acute curved spine, in front of which there are often two or three smaller spines.