

The adult genus *Pseudosquilla* is not sharply limited, as the various species are very closely related to *Gonodactylus* on the one hand, and to *Coronida* and *Coronis* on the other, and we should not expect the larval type to be more definite than the adult, and as a matter of fact the collection contains larvæ which closely resemble *Pseuderichthus* although they may possibly be *Gonodactylus* larvæ, and others which may possibly be *Lysiosquilla* larvæ.

The Challenger collection contains very few young larvæ of this type, and I have not been able to trace its metamorphosis, although Claus has given reasons for believing that it hatches as an *Erichthoidina*, and afterwards undergoes a retrograde metamorphosis, losing and afterwards redeveloping all the thoracic appendages, except the first and second pairs.

The *Erichthoidina* from St. Vincent, shown in Pl. XII. fig. 3, may possibly be a young *Pseudosquilla*, although it more closely resembles the *Gonodactylus Erichthus*.

#### *The Gonerichthus larva and the Metamorphosis of Gonodactylus.*

The last larval type which I shall discuss is represented in the Challenger collection by numerous specimens, a few of which I have selected and drawn.

One of these, from St. Vincent, is shown in Pl. XII. fig. 5, while the telson and uropods of another specimen, from the Celebes Sea, in the same stage of development, and belonging to the same or a closely related species, are shown in Pl. XIII. fig. 9. The fully grown larva,  $1\frac{28}{100}$  inches long, of another species from the West Pacific, lat.  $17^{\circ} 29' N.$ , long.  $141^{\circ} 21' E.$ , is shown in profile in Pl. XV. fig. 11, and from above in fig. 6, and the telson and uropods of a closely related species  $1\frac{1}{2}$  inches long, from Volcano Island, in the West Pacific, are shown, more enlarged, in fig. 7.

The carapace of another species,  $\frac{60}{100}$  inch long, from the Celebes Sea, is shown in Pl. XV. fig. 1, and the telson of a young *Gonodactylus* of the *Chiragra* type in the adult condition is shown in Pl. XVI. fig. 5. This specimen, which is  $\frac{9}{10}$  inches long, was taken with the trawl in 18 fathoms, west of the Philippine Islands, at Station 208. This latter specimen had the raptorial claw fully developed, and it exhibited all the characteristics of the adult *Gonodactylus*. It is certainly a young *Gonodactylus* closely related to, or possibly a specimen of, *Gonodactylus chiragra*, and a comparison of its telson and uropods with those of the various larvæ which have just been noticed will show that there is the closest agreement in every particular. In all of these larvæ, as in the young *Gonodactylus*, the sixth abdominal somite has a pair of submedian spines near its posterior edge, and its postero-lateral angles are produced into acute spines. The telson is slightly wider than long, its submedian spines are long and slender, but shorter than they are in *Pseuderichthus*, and without the movable spinules of the latter. The telson is notched on the middle line, and there are from fourteen to twenty small secondary spinules on