

pereion which is considerably more extended than in the preceding specimens, and leaves the pleon embayed in a fork of considerable depth.

The eyes are supported on long, slender, bi-articulate ophthalmopoda. The first pair of antennæ has the peduncle tri-articulate and supports two flagella, of which the larger is furnished with a number of membranous cilia, which I believe to be auditory in their function; the smaller is slender and in an incipient condition: the second pair of antennæ is short, tapering, and multi-articulate; at its base, situated within the margin of the carapace, is the foramen of the future phymacerite, and leading up to it the cellular substance of the green gland, whose walls appear more delicate than those of the preceding species: the oral apparatus is hard and firm, and the long, slender calcified tendon of the mandible is threadlike and extremely delicate: the first pair of siagnopoda is two-branched, curved and armed with several strong spines, some of which are fringed with minute pointed processes, and the whole apparatus is in close contact with the anterior extremity of the pereion, the anterior angle of which supports a small two-jointed appendage similar to that which we found at earlier stages in the other specimen; on the outer side, also, there exists a small rudimentary process which is not seen in either of our other specimens, and which Milne-Edwards figures<sup>1</sup> as being the incipient stage of "les mâchoires de la deuxième paire et la première paire de pattes-mâchoires"; the next as well as the five succeeding pairs, appears to be in a similar condition to those of the preceding example, but the seventh or ultimate pair is considerably longer and quite equals in size the largest of the preceding, a circumstance that is more dependent upon specific than upon developmental differences, since the specimens of other species which are larger in size have their posterior pair in a much more immature condition.

Again, in this present specimen the pleon is in a very immature condition, none of the pleopoda being beyond the early budding stage except the posterior pair, and that but slightly advanced.

#### DEVELOPMENT OF THE SCYLLARIDÆ.

The foregoing paragraphs contain an account of the development of the Palinuridæ, so far as the specimens in the present collection enable me to trace it; but some others in my possession, which were obtained on the coast of Coromandel, by Sir Walter Elliot, still further illustrate the progressive changes in the genera of the Scyllaridæ.

The specimens appear to me to be identical with that described by Desmarest under the name of "Phyllosome grandes-cornes," and by Leach as *Phyllosoma laticorne*, but which from the character of its antennæ appears to belong rather to the Scyllaridæ than to the Palinuridæ. The progressive development of the young of the two families is probably so nearly similar, that the history of one would be the repetition of the other. Our specimens, which are numerous, are only 16 mm. in length, or about half that of the

<sup>1</sup> *Loc. cit.*, pl. xxviii. fig. 3, c.d.