

largest of the specimens previously described, yet in many parts they have advanced further in characteristic development (Pl. XIIc. fig. 2).

The ophthalmopoda are still long and biarticulate, the stalk being long, slender and cylindrical, the eye at its extremity being long and pear-shaped.

The first pair of antennæ affords evidence of its permanent form; it has a peduncle of three subequal cylindrical joints which terminate in two short flagella, the inner of which is slender and cylindrical, while the outer is flatter, broader and sharply pointed, and on the convex side supports a few membranous cilia.

The second pair of antennæ is three- or four-jointed. The joints appear within an outer case that is less articulated (Pl. XIIb. fig. 4c). The first is short and cylindrical, the second is long, flattened, and produced to a sharp point at the outer distal angle, the third is short and cylindrical, and the fourth or last is flat, wide and produced to a point. Within the outer integument, which is next to be shed, the structure exhibits the appearance of a series of narrow lobes at the margin similar to those that we see in *Scyllarus* and *Arctus*. The distance of the antennæ from the oral apparatus is a little less than half the length of the animal, and is occupied by distinctly formed hepatic lobes arranged in a beautifully radiating series of branches. The mandibles are smaller than in the preceding specimens, but the calcified tendon is long, slender, and feeble as compared with those of the preceding specimens. I could detect no synnhipod, and the apophysis is broad and of extreme tenuity.

The first pair of siagnopoda (Pl. XIIb. fig. 4e) is two-branched, and lies closely attached to the double lobed *metastoma*; the two branches are tipped with three or four hairs on each, which from their relative proportion appear like important spines; the second pair of appendages (fig. 4f) is in the form of a flat oblong plate, and corresponds with that of the adult; two small branches are also visible within a common outer sac.

The next pair (fig. 4g) is in a very incipient stage, and consists of a simple elongated sac, without exhibiting any evidence of its future condition. An example of this is likewise seen in *Phyllosoma brevicorne*, Leach,<sup>1</sup> which induces me to think that both forms belong to a genus of *Scyllaridæ*.

The next pair of appendages (fig. 4h), which I believe corresponds with the first pair of gnathopoda, is developed in the form of a true leg; it is only five-jointed, and carries a long sub-cylindrical branchial sac attached to the coxa or first joint; the second joint is long and cylindrical, except for a small lobe or projection that exists on the outer surface, one-third distant from the coxal joint; the next two joints are subequal and of the same diameter as the last, whereas the one or perhaps two terminal become suddenly smaller and tapering, terminating in a fine spine: the next pair of legs corresponds to the second pair of gnathopoda; it is pediform, long, slender, and in all our specimens is broken off more or less shortly; attached to the coxa is a single subcylindrical branchial sac. The next four pairs are also broken off, but the fragments remaining in the bottle show

<sup>1</sup> Milne-Edwards, *Hist. des Crust.*, vol. ii. p. 482.