outer side, where it is armed with one slender sharp-pointed tooth, beyond which is a long, narrow, transverse slit or opening leading to the auditory chamber. On the inner side the margin thins out and curves upwards to a crest, and is fringed with four anteriorly-directed teeth, of which the posterior is the smallest and the anterior the largest; the second joint is shorter and narrower than the first, and the inner anterior angle is produced to a sharp tooth; the third joint is shorter and narrower than the second, and has also the inner anterior angle produced to a sharp tooth; the surfaces of these three joints are sparsely covered with short thick hairs: the inner flagellum is about as long again as the outer, it is more robust, and divided into numerous small articuli, each of which bears three or four small stiff hairs at every articulation.

The second pair of antennæ (fig. c, c) is situated on the outer side of and a little below the first pair; it consists of only four joints, the second and third being fused together: the first joint is closely impacted in the metope but not fused with it, and carries a long curved phymacerite that passes inwards and upwards, terminating in an obtuse extremity that is laterally flattened against a sub-membranous depression on the under side of the first joint of the first pair of antennæ; the second joint is diagonally fused with the third, which carries on its outer angle a short lanceolate scaphocerite, the extremity of which reaches beyond the penultimate joint of the peduncle; the fourth and fifth joints are cylindrical, and terminate on the inner distal angle in a small tooth: the flagellum is slender, and resembles in length and form the longer branch of the first pair of antennæ.

I did not dissect the oral appendages in this species, inasmuch as the specimen, which is a very beautiful one, is unique, and I expected to obtain similar observations from other species of which specimens were more numerous.

The second pair of gnathopoda (i) is six-jointed, the basis and ischium being apparently fused into one. The coxa is furnished with a short, curved, rigid mastigobranchia, sparsely fringed with hairs on the convex side; the basis is fused with the ischium, and carries no ecphysis; the ischium is long and robust; the meros also, but not so stout or so long as the ischium; the carpos is short and small; so also is the propodos, but longer than the carpos; and the dactylos is styliform and as long as the propodos; the inner and outer margins of all the joints are fringed with hairs.

The first pair of pereiopoda are much larger than the rest. The coxa is large, being broader in diameter than the basis, which is narrow and curved, so that the ischial articulation is directed outwards and slightly backwards; the ischium is round and small at the basisal articulation, and gradually enlarged and flattened towards the meros, with which it articulates; the meros is longitudinally arcuate, flattened, increases in breadth, and again narrows and thickens towards the carpal joint; the carpos is triangular, narrowest at the meral extremity, broadest at the propodal, and is armed with a small tooth at the inner distal angle; the propodos is long, broad, and flattened, widest just beyond the carpal extremity, where it bulges out to give insertion to the flexor muscle of