of pereiopoda have no pleurobranchiæ, but carry an anterior and posterior arthrobranchial plume attached to the pleurocoxal articulation.

The gnathopoda, both first and second, have only a single arthrobranchial plume; but whether they support a small mastigobranchia I have not been able to determine, from a desire not to dismember too largely a unique specimen of an interesting character.

The pleopoda are small and delicate appendages, each consisting of one long and one very short filamentous branch, fringed with long cilia, to which the ova are attached by thread-like fibres. The ova are very large and not very numerous, numbering about twenty in our specimen. Unfortunately these were in too immature a condition to enable me to determine the form and character of the future brephalos, or the stage at which the young are hatched.

The external plates of the rhipidura (or sixth pair of pleopoda) are Anomurous in character, but Macrurous in so far as that the appendages on the two sides are symmetrical.

The telson is peculiar, and instead of terminating as a single-jointed plate, there is a well-defined separation into an anterior and a posterior part by a joint-like line of division; the former has its coxa-marginal lobes, and the termination of the alimentary canal corresponds with its posterior margin, whereas the posterior division articulates with the former, and exists only as a movable plate.

The entire animal suggests its being in an intermediate stage, and bears a considerable generic resemblance to *Glaucothoë* of Milne-Edwards. But this latter has been shown (Brit. Assoc. Report, 1869) to be an intermediate form between the brephalos and the adult *Pagurus*. *Cheiroplatea*, like *Glaucothoë*, not only carries five pairs of pleopoda, but has the posterior pair equilaterally developed. It has, moreover, the dorsal surface of the pleon protected by Crustaceous plates, all of which *Glaucothoë* loses when, with increasing age, it fulfils the habits of its kind—takes to itself the shell of a dead Mollusc, and so passes from a Macrurous to an Anomurous condition.

Cheiroplatea appears in its adult condition to represent an intermediate link between *Cenobita* and the trichobranchiate Macrura. But the remarkable feature appears to be that its nearest allies in the Anomurous group belong to the phyllobranchiate condition of Crustacea. It has an appearance strongly suggestive of its being allied to a *Pagurus* that had failed to obtain a molluscous shell for itself, and had consequently retained some of the Macrurous characters of its youthful condition.

Its general appearance is not that of a swimming animal; we may consequently feel assured that it was brought up by the dredge from the bottom, which was about half a mile from the surface of the ocean, south of New Guinea. In this case the temperature of the bottom is not recorded. It was taken associated with *Eiconaxius acutifrons* and a species of *Ophlophorus*.

The arrangement and form of the chelæ induce me to believe that the little creature inhabited some abode where the flattened claws afforded an efficient operculum. This