diæresis similar to that which exists on the outer plate of the rhipidura bisects the appendage.

The mandibles (d) are strong; the molar process is robust and obliquely truncate, and from the lower side a thin wall fringed with hairs passes in a curve to the psalistoma, which is tipped with two or three small sharp teeth; it has no synaphipod, and the apophysis is matted over the outer surface with fine cilia.

The first pair of siagnopoda is thin-lobed; the inner and central lobes are broad, foliaceous, and fringed with hairs, and the outer short, curved, and tipped with one or two long hairs.

The second pair (f) of siagnopoda is bilobed; the inner lobe is broad and long-quadrate, it is biarticulate, and has the inner margin of both joints closely ciliated; the outer lobe projects anteriorly nearly as far in advance as the distal extremity of the inner and is produced posteriorly to an obliquely truncate extremity that supports a large number of very long free hairs. The rest of the margin is fringed with shorter hairs, those on the posterior portion are the shortest, and those on the anterior distal margin the longest; the posterior portion extends as far back in the branchial chamber as the second pair of pereiopoda, and sends the long hairs as far as the posterior extremity of that chamber.

The third pair (g) is bilobed; the inner lobe is broad, matted with hairs on the inner surface, and has the margin fringed with long closely packed curved hairs; from the posterior margin of this lobe a uniarticulate process projects that I take to be the rudimentary homologue of the true appendage, the outer distal angle of which is produced to a tooth-like point, and the inner surmounted by a small fasciculus of hairs. The outer lobe is quadrate, and the distal and inner angle is produced into a long flat process with parallel margins and a rounded extremity; the entire margins are fringed with hairs, of which those at the base are the shortest, whence they gradually increase in length until they reach the distal process, where they attain an extreme length; on the inner margin between the two lobes the hairs are more numerous and form a double mat-like fringe.

The first pair of gnathopoda (h) is subpediform; the coxal joint supports a well-developed podobranchia and a fasciculus of hairs; the basis is long and supports a two-jointed ecphysis, of which the distal joint is multiarticulate; the ischium is short, and the meros still shorter; the carpos is produced above the propodos and has the distal inner angle fringed with hairs; the propodos is broad, short, lunate, and reflexed against the meros, ischium and basis, the anterior edge is concave and thickly fringed with stiff hairs, amongst which the short, broad and marginal dactylos is immersed.

The second pair of gnathopoda (i) is four-jointed and pediform; the coxa or first joint carries a moderately developed podobranchial plume and a tubercle capped with long hairs; the second joint is long, curved, and carries a long two-jointed ecphysis, which