

The first pair of gnathopoda is short and pediform, and consist of only six joints; the coxa and basis appear to be closely impacted, but not fused together; the ischium and meros are broad and flattened, the external margin forming a continuous arch, the internal exhibiting signs of an articulation between the two joints; the carpos is pear-shaped, and articulates at its smaller extremity with the external angle of the meros; it is furnished with strong, stiff hairs, all of which are fringed with short, stiff, sub-conical spines; the propodos appears to be fused with the dactylos, between which and it there is no definite articulation, but at the position where it normally exists, there are two large, strong, slightly curved spines on the outer surface, and one similar on the inner; the meros and ischium are similarly armed, but mostly on the inner margin.



FIG. 37.—Second gnathopod of *Stereomastis suhmi*.

The second pair of gnathopoda is as long again as the first, and has seven joints. The coxa is short and broad, supporting a rudimentary mastigobranchial plate (fig. 37), which is very minute, long-ovate in form, and attached to the coxa by a short pedicle; it is furnished with a few short, ciliated, stunted hairs; the basis is short and closely associated, if not fused, with the ischium; the ischium is long, flat, and slightly curved; the meros is narrower and shorter than the ischium; the carpos is one-third the length of the meros, and a little thinner; the propodos is about the same length as the carpos, and not broader; the dactylos is sharp and styliform. The entire limb is fringed with hairs of different forms: on the inner side of the propodos they are short and fur-like; on the inner side of the carpos they are longer and closely set, as they are on the meros, but still longer; on the outer side of the carpos and meros they are long, and fringed with small cilia that are perpendicular to the stalk; the ischium is fringed with a few long ciliated hairs on the outer side, and short, stiff ones on the inner.

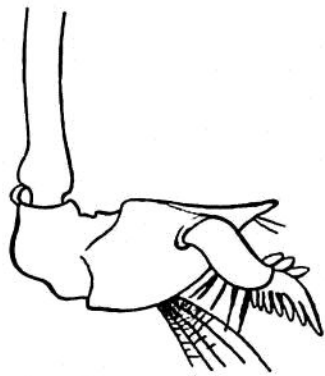


FIG. 38.—First pereopod of *Stereomastis suhmi*.

The first pair of pereiopoda carries no mastigobranchial appendage and only a small podobranchia (fig. 38), but attached to the coxo-pleural articulation are two very small and feeble plumes, the anterior and posterior arthrobranchia, but no pleurobranchia.

The second pair of pereiopoda has a podobranchia of tolerable size, attached to a calcified pedicle, that thins out as a central rib, furnished with a few hairs, but with no mastigobranchia; two larger arthrobranchiæ, and a short pleurobranchia, that is attached very near to the peduncles of the arthrobranchial plumes.

The third and fourth pairs of pereiopoda have podobranchiæ similarly formed to the preceding two arthrobranchiæ, and a pleurobranchia, which are longer than those of the