

The second pair of siagnopoda (fig. 3*f*) is four-branched, and carries a mastigobranchial plate that extends backwards as a long and narrow process, fringed on the inner side with long hairs that reach to the posterior extremity of the branchial chamber. The other branches are short, foliaceous, and fringed with hairs.

The third pair of siagnopoda (fig. 3*g*) is three-branched, and carries a bilobed mastigobranchia; the inner branch is broad, foliaceous, and fringed with fine hairs, the middle branch is triarticulate and fringed with fine hairs, the third or outer is broad and foliaceous at the base and suddenly narrows distally to a long and tapering flagellum fringed with hairs.

The first pair of gnathopoda (fig. 3*h*) is subpediform and seven-jointed; the propodos is broad and reflexed; the basis carries a long and slender ephysis and the coxa supports a short membranous mastigobranchia without a branchia, but a short arthrobranchial plume is attached to the membranous articulation.

The second pair of gnathopoda (fig. 3*i*) is long, slender, and pediform. The coxa carries a short and rigid mastigobranchia, armed with a small hook but without a podobranchial plume, but an arthrobranchia is attached to the membranous articulation; the basis carries a well-developed but not long ephysis, and the distal joints are fringed with minutely ciliated hairs.

In the only specimen all the pereopoda were broken off previously to my finding it among a number of specimens of *Campylonotus semistriatus*, excepting one of the third and one of the fifth pairs on the right side; these are moderately long, tolerably robust, and terminate in a short and simple unguiculate dactylos.

The pleopoda are biramose, the first pair has the rami unequal, the inner being the shorter. The others are subequal and the inner branch carries a stylamblys.

The rhipidura is well developed, the lateral plates being longer than the telson, and the outer has a diæresis.

*Observations.*—A careful comparison of this species with others of its own genus, and of *Chorismus* and *Merhippolyte*, is instructive as throwing light upon the mysteries of specific variation.

If we compare the external form of *Campylonotus vagans* with that of *Chorismus tuberculatus*, we perceive that it corresponds more nearly to it than to its generic ally *Campylonotus semistriatus*. The only external distinction between them that may be considered to be specific is that *Campylonotus vagans* has the sixth somite of the pleon comparatively longer, and there is a prominence on the anterior margin of the first and on the posterior margin of the fourth somites of the pleon, but an examination of the branchial apparatus shows that, while *Chorismus* has only seven branchial plumes on each side, *Campylonotus* has twelve, and in this respect agrees with *Merhippolyte*.

Had the solitary specimen of *Campylonotus vagans* been a perfect one there would have been little difficulty in determining its generic position, but the first two pairs