

extremity of the ophthalmopod when at rest; the second joint is shorter than the first, and the third is as long as the two preceding put together, and bears at the extremity two long flagella, of which the inner is slender and thread-like, and the outer thicker and gradually increasing in size until near the extremity, when it rapidly decreases to a fine point; along the thicker portion the flagellum is fringed with membranous cilia.

The second pair of antennæ (*c*) in our unique specimen has the flagellum broken off at the extremity of the peduncle, which is tolerably robust and nearly as long as that of the first pair. The first or coxal joint articulates freely with the metope, supported on the outer side by a strong tooth; and supports a prominent and well-defined phymacerite.

The mandible (*d*) is large, having a smooth incisive plate, and a short, strong, three-jointed synnhipod.

The first pair of siagnopoda (Pl. XXIII. fig. 1*e*) consists of two single foliaceous plates, fringed on the inner distal margin with a double row of short, closely planted spines and a few short, stiff hairs within, both on the upper and under surfaces; also a group of longer ciliated hairs on the inner basal margin. The plate is articulated to a short joint, which from analogy I take to be the basis, on the outer side of which articulates an ephysis, terminating in a flagelliform lash ending in two long, sweeping hairs. At the base of the branch is a small bundle of ciliated hairs.

The second pair of siagnopoda (fig. 1*f*) consists of three plates, besides the mastigobranchia; two are foliaceous, divided, and fringed on the inner distal margins with a thickly-set brush of hairs, some of which are stiff and simple, some ciliated, and some curved; the third plate is narrow and gradually tapers to a point, which turns slightly inwards and terminates in two or three long, simple hairs; the mastigobranchia is foliaceous, produced anteriorly as far as the extremity of the slender tapering ramus of the same appendage, and is fringed anteriorly with long ciliated hairs that are curved like a hook at the extremity, and posteriorly with a few that are much longer than the rest.

The third pair of siagnopoda (fig. 1*g*) has three branches and a mastigobranchia. The inner is foliaceous and fringed on the inner margin with a copious brush of thick hairs, and with a second row evenly arranged behind it on the outer surface: the middle branch is slender and biarticulate, fringed on the outer margin with a few stiff, simple hairs, and on the inner with others that are long and ciliated: the outer branch is also long and slender, half as long again as the middle; it is likewise divided into two parts: the basal is fringed on the outer margin with numerous short, ciliated hairs, the inner side is smooth; the distal division of the branch is multiarticulate, and terminates in a few long, simple hairs; the mastigobranchia is short, broad, and of extreme tenuity, sparsely protected by a few isolated simple hairs.

The first pair of gnathopoda (fig. 1*h*) is subpediform and seven-jointed; the coxa