

articulates with the metope by a strong, smooth, nodular tubercle, visible on the upper surface at the outer angle of the antennæ, near which a slight opening defines the passage to the auditory apparatus; the two succeeding joints are short and narrow, but the third is longer than the second; the flagella are of the same length and size, both being fringed with long, fine, sparsely-planted hairs, among which I have not been able to detect any of those membranous organs that I believe to be auditory cilia.

The second pair of antennæ has a peduncle longer than that of the first. The first joint is short and wide, and supports a large wide-mouthed phymacerite; the second joint is as broad as and longer than the first, particularly at the anterior margin, where, on the inner side, it is produced forwards to a strong point, while the scaphocerite articulates on the outer side. This latter is a stiff curved appendage, smooth on the outer side, and denticulate with several sharp, strong teeth on the inner and distal margins; the joint which supports this appendage is firmly anchylosed with the preceding, but may be determined by a well-defined line marking the boundary between the two; the terminal joint is long and narrow, reaching to the extremity of the peduncle of the upper antennæ, and the flagellum is robust and long, equal to the length of the entire animal.

The siagon or mandible is large, broad, strongly denticulate on the incisive margin, and furnished with a narrow molar ridge on the inner surface; the synaphipod has two joints, of which the first is curved, the second straight but articulated at a right angle to the rest of the appendage; it is directed beneath and within the oral apparatus, and impinges against the molar ridge on the underside.

The first pair of siagnopoda (Pl. VII. fig. 1, *e*) has three branches; the inner one is directed laterally inwards, thin, narrow, and tipped with stiff hairs; the second is directed forwards and inwards, narrow at the base, and wide at the extremity, and fringed with spines and short hairs; the third is two-jointed: the first joint is narrow, strong, and directed forward; the second is slender, whip-like, and directed outwards. The whole organ presses closely against the under surface of the mandible; near the outer basal margin is a thick bunch of ciliated hairs.

The second pair of siagnopoda (*f*) consists of three foliaceous and one styloid branch, together with a short, rounded mastigobranchial plate; the outermost plate which is an anterior prolongation of the mastigobranchia is foliaceous, long, narrow, and thickly fringed with short plumose hairs on the apical and inner margins; the second is styloid, fringed with a few hairs on the outer margin near the base, after which it is smooth, and terminates in a sharp point curved slightly inwards; the next branch is biramose, the outer ramus being the larger, is foliaceous and terminates in a fringe of thick, strong teeth and a few fine hairs; the inner ramus is similar but narrower; the fourth or innermost plate is biramose like the preceding, and resembles it in its foliaceous character, but is rather smaller. The mastigobranchia is flat, thick, and fringed with short plumose hairs.

The third pair of siagnopoda (*g*) consists of three foliaceous branches, and a