and a half as long as their peduncle; the outer is rather the more robust, and both are entirely free from hairs or cilia of any kind.

The second antenna has the peduncle reaching beyond that of the first, but not quite to the extremity of the rostrum, and the flagellum is longer than the entire length of the animal from the extremity of the rostrum to the posterior margin of the telson. The first joint of the peduncle is short and broad, and supports a not very prominent phymacerite, the aperture of which is directed anteriorly, and protected by a small but strong calcified ridge; the second joint is also broad, armed at the outer distal extremity with a short, sharp tooth, and supports at its extremity a scaphocerite, which is scarcely longer than broad, rounded on the inner margin, which is fringed with small, thickly-set, ciliated hairs, and straight on the outer, where it terminates in a short tooth; the third joint articulates with the second obliquely-longitudinally on the inner side for about one-half its length, the other half articulates reversely in a similar manner with the inner side of the fourth joint, and is armed with a small, sharp tooth on the under side; the fourth joint is subconical in form, having the smaller end towards the base, where it articulates with the second and third joints, the former at the centre, the latter obliquely on the inner side; the fifth joint is not so long as the fourth, and scarcely longer than broad; the outer side is rounded, while the inner is compressed to a carina-like margin, fringed with a row of thickly ciliated hairs, which commences at the distal extremity, beneath a short, broad-based, sharply pointed tooth, and continues along the inner margin to near the basal extremity of the third joint. At the extremity of the fifth joint the long, somewhat compressed flagellum is articulated.

The siagnos or mandibles (Pl. XXVI. d) are smooth, concavo-convex, spoon-shaped appendages, with a molar ridge traversing the base of the internal surface; into the hollow formed by it and the anterior incisive margin a three-jointed synaphipod folds. Posterior to the mandibles the metastoma (posterior lip) exists in the form of a double-lobed appendage; from the inner side of each a strong and firm process arises, that folds round the posterior surface of the mandible.

The first pair of siagnopoda (e) is small, and consists of two foliaceous plates, fringed on the distal extremity with small blunt spines, and laterally bearing a two-jointed, slender appendage.

The second pair (f) consists of four foliaceous plates, fringed with short fur-like hairs, and a broad, distended, foliaceous mastigobranchial plate, divided into an anterior and a posterior portion.

The third pair of siagnopoda (g) is formed of two foliaceous plates fringed with hair, a reduced flagelliform appendage, and a long mastigobranchia, fringed with minute hairs and short, sharp, spinules.

The first pair of gnathopoda (h) is subpediform, and consists of seven joints. The coxa carries a mastigobranchia sparsely covered with fine, long hairs, and at the base a