

of the mouth," a feature on which Mr. James Yates Johnson founded his genus *Funchalia*.

Posterior to the mandibles lie the two flattened pear-shaped metastomata.

The first pair of siagnopoda is three-branched, the two inner being flat and leaf-like, having the inner margins fringed with short spine-like hairs, and the third or outer articulating at right angles with the preceding.

The second pair of siagnopoda is three-branched; the two inner or basal are biramose, foliaceous, and tipped with short spine-like hairs; the third is short, flat, and pointed; outside this a large mastigobranchial plate is produced anteriorly to a rounded extremity, considerably in advance of the other parts of the appendage, and projects posteriorly, and diagonally outwards, as a valve closing the exit passage from the branchial chamber, the whole being fringed with finely ciliated hairs.

The third pair of siagnopoda consists of a broad, concavo-convex inner plate that is fringed with hairs, a slender three-jointed branch that represents the true limb of the appendage, behind which, and closely associated with it, is a broad membranous plate that at the distal extremity suddenly narrows to a point, and has at its base a broad but short mastigobranchial plate.

The first pair of gnathopoda is subpediform, having the three distal joints reflexed on the inner surface and thickly studded with hairs; the basal joint carries a long ephysis, and the coxa supports a mastigobranchial plate bearing a rudimentary podobranchial plume at the base.

The second pair of gnathopoda is pediform, longer than the first, and extended in advance of the frontal margin; it is generally fringed with hairs and terminates in a very straight dactylos capable of being bent to a right angle. The basis carries a long ephysis, and the coxa supports a mastigobranchial plate that bears a podobranchial plume.

All the pereiopoda are without an ephysis; the three anterior pairs, which are chelate, support a mastigobranchial plate, carrying a podobranchial plume. The two posterior pairs are not chelate and are less robust, the fourth supports a mastigobranchial plate without a podobranchial plume, and the fifth pair has neither.

The arrangement of the branchial appendages is represented in the following table:—

Pleurobranchiæ,	.	.	.	r	1	1	1	1	1	1
Arthrobranchiæ,	.	.	.	1	2	2	2	2	2	...
Podobranchiæ,	.	.	.	1	1	1	1	1	...	...
Mastigobranchiæ,	.	.	.	1	1	1	1	1	1	...
				h	i	k	l	m	n	o

The ventral surface of the female varies somewhat in the different species, but it appears generally to be provided with a hollow or deep depression, posterior to the pointed thelycum, in which apparently at certain periods a membranous substance is developed or deposited, the use of which is yet to be determined (*vide* Pl. XLIX. figs. 2, 3).