

slender, feeble, and chelate. Like all the others except the first, there is a distinct articulation between the basis and ischium.

The third pair resembles the second in size and form, while the fourth and fifth correspond in size, but differ from the preceding in not being chelate, and in having a long, simple dactylos, while the distal extremity of the propodos is furnished on the inner side with a fasciculus of short hairs.

The branchiæ are similar to those of the European *Nephrops norvegicus*, as shown in the accompanying formula:—

Pleurobranchiæ,	.	.	...	...	...	1	1	1	1
Arthrobranchiæ,	.	.	...	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

In *Nephrops thomsoni* the podobranchiæ are smaller plumes than the pleurobranchiæ, and less than their homologues in *Nephrops norvegicus*.

The first pair of pleopoda (*p*) in the male is peculiarly modified for its requirements. It articulates with the ventral surface of the somite, considerably within the line of the posterior pairs, but this is probably due to a modification of the coxal plates. It consists of two joints; the first or basal supports the second, which, although not fused, is rigidly attached to its extremity. The first is transversely triangular; the lower angle running obliquely from the base to the apex; the second joint consists of a thin plate, compressed longitudinally so as to present four carinæ, the one which in the position of the living animal is directed forwards, and lies against the ventral surface of the pereion, having the extremity considerably produced; it is flattened on one side to correspond with the formation of the coxa of the posterior pair of pereopoda, while the other side is curved into a deep hollow, which with the corresponding appendage forms a cylindrical tunnel. At the lower anterior extremity of this semitubular plate is a small wart-like excrescence, which, under a magnifying power, is seen to be a mass of small hook-like spines (cincinnuli). The upper division of the same joint is produced into a strong point. The whole arrangement appears to be modified so as to be capable of assisting in the process of copulation, the extended vas deferens being directed to its position by passing through the channel formed by the two converging pleopoda; the plan being similar to but less perfect than that which exists in the *Brachyura*.

The second pair of pleopoda (*q*) consists of a basal joint supporting two foliaceous plates of a long, flat, ovate form, fringed with long, ciliated hairs; the inner one supports a short, semilunate stylamblys, fringed on the convex margin with short hairs. The third, fourth, and fifth pairs of pleopoda resemble the second, but possess no stylamblys. The sixth pair of pleopoda forms the outer plates of the rhipidura (Pl. XXV. fig. 3); the basal joint is short, broad anteriorly and narrowing posteriorly, where it terminates in