

*Nephrops*, Leach.

The anatomical characters of *Nephrops* almost coincide with those of the genus *Homarus*, and but for the great dissimilarity of form of the first pair of pereopoda, the two genera would probably be classified as being only specifically separate.

The branchial arrangement is identical, the structure of *Nephrops* approximating to that of *Homarus* more nearly than to that of *Nephropsis*.

*Development.*—The brephalos of the species of this genus has hitherto escaped observation, but a short time since Professor Sars<sup>1</sup> captured what he considers to be the "second larval" stage of *Nephrops norvegicus*, L., about 8 mm. long, and a second form but little larger, 11 mm., that of a "young *Nephrops*," in its "first postlarval stage."

Of the latter specimen there can be no hesitation in accepting Professor Sars's diagnosis, and if the former should, by observation of the brephalos direct from the ovum, demonstrate the correctness of this also, we shall find the apparently universal plan of development in the Astacidea modified by a new arrangement in the middle of the tribe.

Assuming that Phyllosoma is only a peculiar form of Megalopa, the young of *Nephrops* as shown by Sars is an intermediate form between the two. Thus we find that a modified condition of the Megalopa stage characterises the brephalos of all the families of the Trichobranchiata as far as is known, excepting the genus *Spongicola*, in which it is hatched in the Zoea condition.

The discovery of Professor Sars is undoubtedly one of considerable interest, as hitherto the development of *Nephrops* has been unknown. I have long been making efforts to get possession of specimens carrying ova in an advanced condition, but in a large number that I have received from the Rev. Dr. Haughton and others, there was not a female so laden. Nor were there any attached to those of *Nephrops thomsoni*.

There are one or two points in Professor Sars's specimen that require notice.

First, in general appearance it bears a resemblance to that form which we have considered to be a stage in the development of *Aristeus*, figures of which may be seen on Pls. XLVI. and XLVII. of this Report.

Secondly, it is noticeable for having the appendages of the cephalon and pereion in an advanced stage of development.

Thirdly, the several pairs of pleopoda are as yet only in the bud condition, and the rhipidura does not exhibit any evidence of being present.

Fourthly, the telson is formed on the type of that in the Brachyura rather than on that of the Macrura.

It is remarkable that animals so nearly allied as *Nephrops* and *Homarus* should exhibit

<sup>1</sup> *Archiv f. Mathem. og Naturvidensk.*, p. 150, pl. i., Christiania, 1884.