

from these, in the coxal joint wanting the luminous globule, and in the terminal joint being simply linear, and furnished with similar bristles to those on the preceding joints.

The three succeeding pairs of legs successively diminish in length, but exhibit otherwise precisely the same structure as the second pair. The last of these pairs, or the fifth in the series (fig. 19), has the joints somewhat more slender, and generally so bent that the terminal part, when the legs are extended, curves in an opposite direction. The gills attached to these legs are much more complex in structure than is the case with those on the preceding pairs.

Of the two last pairs of legs no trace can be detected exteriorly. Only on dissecting the animal and separating the two posterior pairs of gills (see Pl. XI. figs. 9, 11) does a minute non-articulate stem, apparently the rudiment of the leg, become perceptible, affixed to the inner side of each gill. This stem (fig. 12) is provided with a few simple bristles, and would seem to represent the endopod rather than the exopod.

The gills (see Pl. XI. fig. 5) are true "podobranchiæ," being attached to the outer side of the coxal joints of the legs, and thus, apparently, representing the modified epipods. There are seven pairs, wholly uncovered, as stated above, by the carapace, projecting at some distance beneath its inferior margin, and arranged in a dense series along each side of the trunk, partly overlapping each other posteriorly. They continue increasing in size posteriorly, and the last pair are very much larger than any of the others, and partly project along the sides of the first caudal segment. As to their structure, the four anterior pairs (see Pl. XII. figs. 16, 18, 20, 21) are much simpler than the three posterior, consisting merely of an inferiorly and anteriorly curving stem, from which issues posteriorly a regular series of slender, digitiform, or filiform appendages, diminishing gradually in length towards the apex, which appears more or less curled up. These appendages, representing the true gill elements, exhibit internally, in spirit specimens, a fairly regular double series of small globular corpuscles (fig. 22), which, apparently, are blood-cells, arranged according to the centrifugal and centripetal course they take through the appendages during life. The fifth and sixth pairs of gills (Pl. XI. fig. 9; Pl. XII. fig. 19) are divided into three branches, the two outer of which exhibit precisely the same structure as each of the anterior gills, while the inner branch is distinctly bipinnate or furnished with a double row of gill appendages. This branch, too, being the largest, is, as in the *Lophogastridæ*, bent in beneath the trunk, meeting the corresponding branch on the opposite side in the median line. Finally, the last pair of gills (Pl. XI. fig. 11) is far more complex in structure than any of the others, the outer branch being very large, and more or less richly arborescent; or it may send off numerous secondary branches, each of which presents a similar structure to that of the anterior gills.

In what manner the ova, immediately after being discharged from the ovaries, are carried by the females of this genus, I am unable to state, none of the specimens examined having been furnished with external egg-bags.