

produce a peculiar folding of their integument, increasing in breadth inferiorly and exhibiting here as it were an imbricate appearance. These peculiar cuticular folds, first noticed by the author when describing the fresh-water variety of *Mysis oculata*, Fabr. (*Mysis relicta*, Lovén), occur more or less distinctly developed in all Mysidans, and may to some extent compensate for the absence of true gills, these parts being constantly bathed by the current of water flowing beneath the free parts of the carapace, and chiefly produced by the oscillatory movements of the epipodite of the maxilliped that projects within the branchial cavity anteriorly.

The caudal segments are perfectly cylindrical, without the slightest trace of epimera, and somewhat less in breadth than the anterior part of the carapace. The last segment is much the longest, about twice as long as the preceding.

The eyes (fig. 13) exhibit nearly the same imperfect structure as in the genus *Petalophthalmus*, lacking, as they do, every trace of pigment and visual elements, and constituting merely simple lamellar or petaloid expansions, mounted in a vertical position on short pedicles. As to form, they differ somewhat from those in *Petalophthalmus armiger*, being distinctly hollowed on the outer face, or well-nigh calyciform, their aspect being almost as if the true eye-globe or cornea were extirpated, and only the skin of the pedicle left. Anteriorly they form a slight angular projection, being for the rest of a somewhat irregular oval form.

The antennular peduncle (see figs. 10-12) is comparatively smaller than in the other species of the genus, and has also a more regular cylindrical form, the second joint being simple and not discoidal or cup-shaped. The outer flagellum forms only a slightly defined expansion at the base.

The antennal scale (see fig. 12) is rather large, almost twice as long as the antennular peduncle, tapering toward the apex, which is obliquely rounded, with the outer corner somewhat projecting and dentiform.

The mandibles (fig. 14) exhibit the structure characteristic of the genus, the palp being rather elongate, with its terminal joint narrowly oblong.

The first pair of maxillæ (fig. 15) are also quite normal in structure and agree as regards all essential features with those organs in the other species of the genus.

The second pair of maxillæ (fig. 16) have the basal part rather large, forming inwards a slightly arched and sharp border, densely beset with delicate curving bristles. There are, as usual, three masticatory lobes densely crowded together at the inner corner of the basal part. The exognath is but of moderate size and elliptical in form, fringed with delicate plumose setæ along the outer edge. The terminal joint of the palp is oblong, and has the bristles of the outer edge recurved, as in the other species of the genus.

The maxillipeds (fig. 17) are not particularly powerful in development, and have the basal part of about the same length as the terminal or palp, projecting inward as a narrow, linguiform masticatory lobe. Of the joints of the palp the antepenultimate