

to structure, the carapace is rather thin and pellucid and very flexible, not at all calcareous, and without any trace of external sculpturing. It is composed of two distinct layers, an outer chitinous coat, and a soft membrane lining the inside of the carapace. Between the two layers there is a system of hollow spaces anastomosing with each other, and forming together a complicated network of canals, in which the blood circulates.

The eyes (Pl. I. fig. 1, *O*; fig. 3) are movably articulated to a short segment, lying in front of the antennal segment, and are partly covered by the rostral plate, projecting obliquely at each side (see Pl. II. fig. 1). They are rather large, nearly as long as the rostral plate, slightly curved, and somewhat tapering, and not as in *Nebalia*, expanded at the end. The upper edge is slightly convex and densely denticulate, the denticles increasing somewhat in size toward the tip of the eye; the lower edge is almost straight and quite smooth. The eye-pigment is black, and does not completely fill up the outer part of the eye, forming a narrow, oblong central mass, from which the small, rounded crystalline cones project all around. There is no distinct faceted cornea similar to that found in higher Crustacea.

The antennulæ (Pl. I. figs. 1, α^1 ; fig. 4) are rather powerful organs, almost pediform in character, and more or less projecting in front of the carapace, immediately below the eyes. They consist each of a strong, four-jointed peduncle, geniculate at the middle, and two terminal appendages movably articulated to the same. The first joint of the peduncle is rather firmly connected with the antennal segment and of a nearly quadrate form, without any spines or bristles. The second joint is almost twice as long, and rather movably articulated to the first, forming with it a more or less distinct elbow-shaped flexure. It is slightly dilated towards the end, which exhibits on the upper side an obtuse projection, at the base of which several slender bristles are affixed; from the lower side, close to the end of the joint, moreover, four rather strong and recurved ciliated setæ arise. The third joint is somewhat shorter than the second, constricted at the base, and likewise very movably articulated, so as generally to form with the preceding joint a strong geniculate bend. At some distance from the extremity there is a slight prominence, and between this prominence and the terminal edge a great number of slender, diverging bristles occur. The fourth joint is much shorter, and has only a very restricted mobility in relation to the preceding joint. It is produced along the anterior side to a compressed lanceolate expansion (fig. 6) freely projecting from its end, and strongly serrate along the outer edge. The serrations, from twelve to fourteen in number, are pretty regular, and increase in size toward the tip of the expansion, each of them being finely denticulate at the upper edge. At the base of this expansion a few slender bristles are affixed to the inner surface of the joint. Of the two terminal appendages, the outer one has the form of an oblong-oval lamella clothed along the anterior side and apex with a great number of unequal-sized slender bristles, forming together a dense brush. The inner appendage, representing the true flagellum, is more cylindrical in form, and also