CYATHOCERIDÆ.

CYATHOCERUS.

Antennæ (Tab. IV. fig. 18a) very short, not so long as the width between the eyes, inserted on an elevation close to the eye at its lower inner margin, and received in repose into a depression at the outside of the front of the head, while their sensitive apex is received into a hollow at the front of the prothorax; they are very short, and consist of four joints, of which the first three are minute, the basal one being a little larger than either of the two following, while the fourth joint is very large and has somewhat the shape of an irregular cup, its apex is truncate and shows a large subelliptical space covered with sensitive pubescence; when the antenna is mounted in Canada balsam it is seen that the third joint projects somewhat into the interior of the large terminal joint.

The head is of very peculiar form, a little similar to that of the genus Megalops; the front is perpendicular, and the eyes are placed at the upper part and are very widely separated. There is no external appearance of a mouth; but the lower part of the head is somewhat prominent, and when the underside is carefully examined there is seen to be a plate marked off by a curved suture; this is the labrum, which is thus placed on the underside of the head; the curved portion of the surface into which it fits is the front of the mentum, which on examination is found to be a large plate, occupying nearly the whole of the prominent portion of the under surface; the other parts of the mouth are entirely concealed in the interior of the head, and thus, owing to the accurate coadaptation between the labrum and mentum, there appears to be no mouth; in what way the mouth opens I can form no opinion, possibly there may be a slight retraction of the labrum so as to form a small chink for the passage of liquid food. The labrum is broader than long, truncate at its connexion with the clypeus, curved at the sides and narrowed to the front, its anterior margin being slightly truncate; but when the labrum is in its natural position the front and sides apparently form a continuous curve.

The mentum (Tab. IV. fig. 18b, labium) is large, but, owing to the irregular sculpture and inequalities of the under surface of the head, its contour and proportions cannot be observed till it is extracted, the sutures between it and the neighbouring parts being quite inconspicuous; it is, however, transversely quadrate, not greatly broader than long, and in front is emarginate in a curvilinear manner in adaptation to the front of the labrum; the ligula is apparently excessively minute; and so far as I have been able to form an opinion about its structure, it is that of a transverse section of a hollow cylinder; it projects from the front of the mentum; the minute labial palpi are two-jointed; the apical joint is quite small, and the basal joint is apparently also small, but differs much in the two preparations I have obtained of it; in the one in which the ligula is still attached to the mentum this joint appears slender, while in a detached ligula it appears very broad.