

inverted cone, though they are seldom seen perfectly symmetrical, but usually more or less twisted and deformed, especially at the posterior end; the mouth is everted, and below this anterior rim there is a slight constriction, then a slight expansion, below which it tapers to the posterior pointed end; they are joined into colonies by the posterior end of one lorica being attached to the interior face of the rim of the one immediately below it, without any intermediate pedicle; very often the ends of two loricae are inserted into one, and this produces dichotomy. Empty loricae like this are found in large numbers, either connected or floating free during the time of the year already mentioned; but in many cases the zooid itself is to be seen attached by its delicate transparent ligament to the bottom of the lorica, and rarely exerted. In shape the zooids are elongate-oval, with the two flagella coming off quite close together from the anterior end, and on a little lip-like projection is situated the reddish eye-spot. According to Stein, the oral aperture is close beside the point of insertion of the two flagella. By the aid of these flagella they propel themselves rapidly through the water with a rolling motion, and as they sail across the field of the microscope, with their shapely loricae, oval green bodies, red eye-spots, and rapidly vibrating flagella, they present one of the most beautiful objects to be seen in the microscopic world. The length of the separate loricae as given by Kent is $\frac{1}{256}$ " , and of the contained zooid $\frac{3}{256}$ " ; but these measurements have always been found too small. The average length of the lorica is 0.033 mm. (= 0.0013") and of the contained zooid 0.0132 mm. — 0.0176 (= 0.000528" — 0.0007").

On one occasion two separate zooids were seen in one lorica, one in the usual position at the lower end, and the other just at the mouth partly extruded. This most probably was the result of fission, and the newly formed zooid had not yet secreted its protecting calyx.

The spheroidal encystments recorded by Bütschli and Stein have also been observed. They are to be seen at the mouths of otherwise empty loricae, and also floating free. They are of a yellowish-brown colour, and consist of an outer dense cuticular cyst enclosing a smaller more or less eccentric one with protoplasmic contents. No eye-spot was observable. At one point on the outer capsule there is a little conical protuberance standing out prominently from the rest