

On the middle of it is a tubercle whose apex looks backwards and downwards, and is pierced by a somewhat transverse perforation. All the species, and both sexes, are furnished with this tubercle, though in some specimens it is scarcely visible, from the segment being retracted below the mesosternum.

What may be the nature of this tubercle, and its use, must remain uncertain until observations have been made on the living animal. There is nothing, so far as I am aware, corresponding to it in any other true insect. It is possible that its homologies may be found in the "ventral tube" of the Collembola. If such be the case the use may be to secure attachment to the animals on whose juices *Halobates* doubtless feeds, but it is somewhat idle to speculate on the origin and use till actual observations have thrown some light on the nature of the organ. (See note in the Appendix.)

The sixth segment is longer (sometimes much longer) than the others, and the sides are produced obliquely backwards to clasp the sides of the first genital segment. In all the segments the hind margins on the ventral surface are nearer the base of the abdomen than the hind margins on the dorsal surface.

#### *The Abdomen of the Female.*

On the *dorsal surface* it is, on the whole, similar to the male abdomen, with the exception of the differences in the structure of the pleuron mentioned in the description of the thorax.

On the *ventral surface* (Pl. I. fig. 7 ♀ *ab. b.*) all the six segments are ring-like. The sixth is prolonged a little at the sides. The first segment is furnished with a tubercle as in the male.

#### *The Genital Segments of the Male.*

*The First Segment* is, on the dorsal surface, ring-like, and similar to the last abdominal segment, but not so broad. Below it is nearly as long as (or even sometimes longer than) the whole of the abdominal segments taken together, while in shape it is transversely oblong or nearly square.

*The Second Segment* is almost hidden, both above and below, by the first, the only parts usually visible being a small, crescent-shaped, or semilunar plate above, while below all that can be seen is a long horn-like process on each side.

On dissection the true form of the segment is seen to be as follows:—

Above (Pl. III. figs. 20 and 21), transversely oblong, about four times as broad as long; hind margin much prolonged in the middle, the prolongation (the apex of which is the only part visible without dissection) presenting a rounded outline posteriorly.

Below, the middle of the hind margin is concave, giving rise near each side to a long horn-like process which lies along the side of the next segment, and reaches to or beyond