

then bent backwards. Between the outer and inner line on each side, is a series, beginning at the apex, and running back for a considerable way, of somewhat semilunar-shaped tubercles (Pl. III. fig. 6); while between the two inner lines is a close series of fine curved transverse lines, below which may be seen—by altering the focus—another series of similar lines, whose direction from side to side is a little different. If the organ is viewed in profile, the appearance is altogether different, as each maxilla exhibits on one side a series of comb-like teeth, which, beginning at the curved apex, runs back for a considerable way (Pl. III. fig. 6, *a*). What I conceive (perhaps erroneously) to be the real structure of the organ is this. Each maxilla consists of a fine tube, longitudinally open on the inner side and fringed on the outer (from the apex for some distance), with fine back-pointing hairs. The fine curved transverse lines which are seen in the central longitudinal space of the organ are fine curved hairs, which cross from one maxilla to the other, and of which there are on each maxilla a series both above and below (Pl. III. fig. 5, *a*). The semilunar-shaped tubercles are the comb-like teeth viewed directly from above, and which can only be properly made out when the organ is seen partly in profile. On tracing the organ further back, but while it is still included in the rostrum, both the back-pointing lateral hairs and the comb-like teeth disappear, but the inner series of curved hairs are continued. On tracing them backwards into the head the maxillæ can be seen to gradually diverge, and each of them then appears as if finely transversely striate in the middle line. Gradually and slightly dilating, and continuing to diverge, they can be traced backwards into the mesothorax for some distance. The breadth of the maxillæ a little behind the apex is in *sericeus* about .025 mm. and in the larva of *hayanus* about .014 mm.

The under side of the head is flatly convex, with a concave hind margin. The gula is broad, reaching to the hind margin. In form it varies somewhat in different species; sometimes the sides are slightly elevated, and sometimes there is a central longitudinal obtuse keel.

THE THORAX.

The thorax constitutes by much the largest part of the body, and increases in width more or less from the front to beyond the middle.

Of the three segments which compose it, two only can be easily distinguished, since the mesothorax and metathorax are coalesced, while the prothorax and mesothorax are quite distinct from each other.

The Prothorax.

The Pronotum is transverse and collar-like, the length in the middle being two to three times less than the breadth, which is less than the head with the eyes. The front margin is usually rather strongly concave between the eyes to receive the head;