

the third joint, but in the latter the furrow is finely transversely wrinkled. The integument of the fourth joint has several rows of a few rather stout hairs with tubercled bases.

*The Mandibles* (Pl. III. fig. 4) seem to be triquetrous, with one side broader than either of the other two, and are scarcely dilated at the apex, which is very hard but not extremely finely pointed. On the outer edge, between the narrow sides, is a row of saw-like, back-pointing teeth of unequal length. These teeth gradually increase in length from the apex backwards, the fifth or sixth being the longest; after that they rapidly decrease in length till they become little more than slight elevations of the edge of the mandible. In number they vary in different species, but the average number is probably about twelve. In one species (*wüllerstorffi*) the breadth of the mandible a little behind the apex and across the narrower side is about .012 mm. and on the broader side about .024 mm.; in another species (*sericeus*), the breadths are respectively about .012 mm. and .018 mm. The mandibles can be traced back from the base of the rostrum into the head. On entering the head they suddenly diverge, the space between them being about as broad as the base of the rostrum. They then go nearly straight backwards to a point on a level with the base of the antenniferous tubercles, and are then suddenly bent forwards and outwards, the portion after the abrupt bend being either gradually dilated or split into several portions which diverge a little. This is the appearance presented by specimens mounted in Canada balsam, and lack of material has unfortunately prevented me from attempting to dissect out the parts.

*The Maxillæ* (or the organs which in the Hemiptera are supposed to represent the first pair of maxillæ) are much more complex in structure than the mandibles. Though often, like the mandibles, protruded from the apex of the rostrum, they can be retracted at least so far as that their tips reach only to the apex of the third joint of the rostrum. Though not inseparably united to each other, the two maxillæ are yet for a considerable portion of their length so closely connected that they form but one organ. Moderately magnified and viewed directly from above, this appears to be a rather blunt and stout bristle lying between the mandibles, but when a higher magnifying power is used, the structure is seen to be rather complex. As the specimens which I have examined are mounted in Canada balsam, and all the parts do not lie in the same plane, and as moreover I have not had an opportunity of making transverse sections, the following description (made with the aid of an amplification of 900 diameters), is probably only approximately correct. Viewed from above the organ presents the appearance of four parallel lines, the distance between the inner two being rather greater than between the outer and inner on either side (Pl. III. fig. 5). Towards the apex the outer and inner line on each side approach each other, and form a point which curves rather abruptly inwards, the point on one side overlapping and touching the point on the other, thus forming a rather blunt apex to the organ. On the outer edges, from the tip for a considerable way backwards, are a series of fine, rather irregular hairs, at first directed outwards and a little backwards, and