

- dissecting needle. Observe how it is hinged ; cut or break it off.
6. This lays bare the true jaws, or **mandibles**. Examine their black, toothed tips with a lens ; find, by prying, how they move. Study their action in the live grasshopper, raising the labrum. Study carefully the way in which they move, and how they are hinged ; then remove with the forceps, and again examine thoroughly.
  7. Back of and between the mandibles is the brown **tongue**.
  8. Turn now to the back of the lower part of the head ; pry back the lower lip, **labium** ; carefully remove it.
  9. Attached to the base of the labium is a pair of short, jointed appendages, the **labial palpi**. What is the relation between the tongue and the labium ?
  10. If the above-named parts have been carefully removed, there will remain one pair of appendages, smaller jaws, called the **maxillæ**. Make out that each maxilla consists of three parts : —
    - a. An outer, jointed part, the **maxillary palpus**.
    - b. A spoon-shaped piece covering c.
    - c. The brown, in-curved maxilla proper. Examine with a lens, then with forceps remove the whole maxilla, being sure to get the basal part.
  11. Cut the head off a fresh specimen ; lay it on the table and make a careful drawing of the face, naming all the parts.
  12. Draw the head as seen from the side.

#### THE THORAX.

1. The wide collar, or cape, back of the head is the **prothorax** ; make a drawing of it as seen from the side.