

carried on should be of some type that is easily covered, for protection of the contents from dust and evaporation, and for the sake of economy should be small. Those known as watch glasses answer well, but deeper glass dishes with separate covers are preferable. The potash mixture may be had at any drug store, the absolute alcohol, clearing fluid, and balsam, as well as the dishes, may be purchased from any good supply house for microscopical materials. Slides and cover-glasses for the mounts are to be procured at the same places.

In dissecting beetles, the following sequence has been found convenient, though it may be varied in some cases. As each part is cut off it should be placed at once in a dish of clean water.

1. Take off the legs, being careful not to destroy the coxa if it is desired to include that joint in the mount.

2. Remove the elytra and hind wings if they are wanted, otherwise they may be left on the specimen, unless abdominal dissections are required.

3. If the spiracles are to be examined, take the scissors and separate the lower part of the abdomen from the upper, cutting along just below the sharp lateral edge. As a rule the spiracles are found in the upper portion, the lower may usually be discarded.

4. Cut off the head. Remove the antennæ carefully by digging them out of the cavities in such a way as not to injure the basal joints. Take off the mandibles by forcing each one outward with the point of a heavy pin until it comes loose at the articulation. Now split the head by forcing the tip of the scalpel (which should be long and slender) into the posterior foramen or neck, opening and cutting through one side against the soft wooden block, afterwards turning the instrument over and cutting through the other side. This will separate the top of the head from the lower half. Remove the labrum from the upper half. From the lower the maxillæ may now easily be dissected, since their bases are exposed from above, and the labium may be trimmed loose from the remaining tissues. Frequently the mentum is so thick that it is better to study it with a hand lens and to be content with detaching the ligula and palpi for the microscope.

Throughout the process of dissection care must be taken not to allow the specimen to dry, or it will become brittle and permeated with air bubbles. The parts may safely be left in water for a day or two, or they may be started immediately on the processes leading up to the final mounting, the steps being as follows :