jointed **antennae.** It has a mouth over which is a pair of rotary **feeding brushes** formed of stiff bristles; the brushes cause a whirling current of water by which small particles of food are strained into the mouth. The food consists of algae and small organic particles, the larva feeds below the surface of water. The thorax is globular, its segments are fused together. On the head, thorax and abdomen are paired bristles, some of them forming bushy **tufts** especially on the thorax. The abdomen is slender and has nine segments, on the first seven abdominal segments are tufts of bristles. The eighth segment has a chitinous and tubular **respiratory siphon,** at the tip of the siphon are two spiracles leading into tracheal trunks. Around the spiracles are five leaf-like hydrofuge flaps. Thus the respiratory system is **metapneustic** in which only the last pair of abdominal spiracles are open. The larva, though aquatic, breathes air through the siphon and comes to the surface to take in air. When resting, the larva pierces the surface film of water by its siphon which projects just above the surface. The movement of flaps around the spiracle is passive. They are separated automatically, when above the water surface, by surface tension forces, thereby exposing the spiracle. Air is then exchanged through the spiracle. The flaps close over the spiracle when under water. Larva hangs by the siphon with its head downwards but it is inclined at an angle. The siphon on its ventral side has two tufts of bristles, and two rows of flat spines each called a **pecten.** On the eighth segment is a patch of small scales in one or two rows forming a **comb.** In some species of *Culex*, the comb has scales in several rows. The ninth segment of the abdomen is slender and covered by a chitinous **dorsal plate.** At the end of the ninth segment is an **anus** surrounded by four leaf-like **tracheal gills** which differ from true gills in having tracheae instead of blood vessels. The ninth segment has a tuft of **dorsal bristles** at its tip and ventrally a bushy tuft of bristles called **ventral brush.** The larva sinks in water being heavier, and it rises by wriggling movements of the abdomen. After the fourth moult the larva changes into a pupa.

Pupa—The pupa is comma-shaped and is often called a **'tumbler'.** It has a large cephalothorax formed by the head and thorax. On the mid-dorsal side of the cephalothorax is a pair of prothoracic tubular **respiratory trumpets** which are broader at the distal end, they communicate with the anterior pair of thoracic spiracles. By means of the trumpets, the pupa hangs from the surface film of water and takes in air through their distal ends which project slightly above water.