

they gather the nectar and pollen from the flowers, secrete the wax required in comb building, construct the combs, prepare food for the young larvae, carry large quantities of water, ventilate the hive and guard it against all intruders. Nectar and pollen are gathered simultaneously from the flowers, the former is carried, like water, in a sac or bag in their abdomens and is regurgitated into the cells on their return to the hive. Pollen or "bee-bread" is carried in basket-like cavities on the bees' posterior legs, and is, so to speak, kicked or rubbed off into other cells in close proximity to the larvae for which it is intended. Propolis or "bee glue" is carried in a similar manner and is obtained from the buds of certain trees like the balm of Gilead, horse-chestnut and others. This sticky substance is used to fill up all cracks and crevices in the hive. Wax is secreted between the rings of the bees' abdomen, on the under side, and is in the form of thin white scales about one-sixteenth of an inch in diameter and somewhat circular in shape. These scales of wax are removed with the claws on the bees' hind legs and conveyed to their mouths and are then applied to the surface where comb building is in progress. The thousands of larvae in the hive are carefully looked after and fed by the workers during the six days of their larval existence, after which the cells containing them are covered over with a thin and porous capping consisting of a mixture of wax and pollen, thus allowing the air to penetrate to the occupants in the chrysalis stage, which pure wax would not do. Pure wax is however used by the bees in capping their honey because it requires to be impervious to the air.

The drones are unlike the queen or workers, their bodies are large and clumsy and without the symmetry of either. They are quite unable to defend themselves, having no sting, and can consequently be handled with impunity. Their tenure of life is exceedingly uncertain and often terminates very abruptly. Should the condition of the weather be such that the honey flow is suddenly cut off the worker bees may, and probably will, decide to destroy not only all the drones in the hive, but also all the drone larvae, and when this is done swarming is indefinitely postponed. In ordinary seasons drones in varying numbers will be found in all strong hives from May to about September, though after swarming is over they may be destroyed any day. The final destruction of the drones usually takes place towards the end of August, and it is no uncommon sight to see the worker bees in a dozen different hives in the apiary all persistently chasing the drones and ruthlessly turning them out to die. It is said, and I am inclined to think with some truth, that they actually sting them to death if other means fail.