

weeks of this labor, it dies from the wear and tear of life. This generally happens out in the field, when, under a full load of honey, it is too feeble to reach home ; or its career may be cut short by the toad that lives under the hive, or by the kingbird, or its feet may be stuck fast in the gummy pollen of the milkweed. But in winter and spring they live eight or nine months.

The drone or male eggs are laid in cells a third larger than the worker cells and, when capped over, are much longer. The drones are bulky and have the proportions and habits of the alderman of tradition. They fly about in the middle of the day to sharpen their appetites, and when in the hive, do little but gobble and sip honey. They can neither sting nor collect food. However, when food does not come in rapidly, they are bundled out of the hive ; often a wing is torn off and they are given a hint to go. This happens every fall and, at that time, the drones will be found all by themselves on the outside combs, hiding from their termagant sisters, after the manner of men in house-cleaning time. When expelled, they are often found in some warm place like a hot-house.



Fig. 50. The queen and her retinue.

The queen, curiously enough, is hatched from a worker egg, and is often developed from a worker maggot. When bees wish to rear a new queen, they choose three adjacent worker cells, cut out the partition walls, and throw them into one. The cell is turned downward and looks very much like a peanut. Two of the worker maggots are destroyed and the third is supplied with about half a thimblefull of very strong food, called royal jelly. The worker grub, two or three days old, is to be changed into a queen. Sometimes when worker eggs or maggots cannot be found, bees will, without giving up hope, try to rear one from a drone grub, which, however, dies from the strong food. Two days feeding on this food, alters her color, curves her sting, doubles her size, deprives her of wax pockets, lengthens her life to three or four years, and reverses all her instincts. When she leaves the cell in which she has lain head downwards, she takes a sip from an uncapped cell ; and then runs around and stretches her legs. She hunts for other queen cells of which there are about a dozen. If the workers permit her, she tears a hole in the side of the cell and stings the inmates because queens will not tolerate a rival. If another queen is found they fight, the workers standing around, and not interfering. Queens very often are afraid to leave their cells ; and in that case they pipe—making a plaintive cry, a sort of “peep, peep,” that may be heard several yards from the hive.

If nectar and pollen are coming in in large quantities, the queen will sometimes lay two or three thousand eggs a day, producing during her lifetime between a million and a million and a half. The hive, of course, becomes overstocked by the amazing fertility of the queen ;