

Should a hive in the breeding season become queenless, either through the death of the queen or through her removal by the bee-keeper, the bees at once proceed to develop a successor from the young larvae and eggs on hand, building the cells on the faces of the combs. Should they send out a swarm it will be headed by a virgin, and, of course, the second one will come forth a day or two later.

The facts in the last paragraph give us the key to making increase under the control of the bee-keeper. A simple method, but rather wasteful, is to divide a very strong hive into two parts, leaving one-half on the old stand and setting the other on a new one. The half without a queen will at once start queen-cells. The drawbacks to this plan consists in the probable loss of young brood through neglect in the part that was moved, and in the slowing down of egg-laying by the queen.

Here is a much more efficient way: Remove the hive from the stand and in its place put one containing only empty combs or foundation. Take out the centre comb, then turn to the old hive and look for the queen. When she has been found, set the frame she is on in the centre of the empty hive. Put a queen-excluder above, then on top place the old hive, into which now put the empty comb from the lower one; replace the cover. Leave the combination alone for five days, then look carefully over the combs in the upper body to see whether or not queen-cells have been started. If such are found, carry the upper story to a new stand. We have gained much in the five days. The queen has been stopped but little; much of the brood above has hatched, lessening the cares of the workers there, and there is an army of young bees in the upper division that will stay where they are put. When no cells are started, leave the hives together for five days more. After moving the upper story to a new stand it must be provided with a frame containing larvae and eggs, for, of course, all its own larvae are too old. This frame may be taken from any hive, preferably from one that is noted for good workers. Shake all the bees off the frame, to make certain you do not carry the queen with you.

As many queens get lost in the mating flight, it is always advisable to examine a hive about twelve days after the queen hatches out. If eggs are found, things are probably all right; but if no eggs are present, then give a frame of brood with eggs from another hive, so that, if necessary, another queen may be raised.

## CHAPTER XIII.

### Diseases.

Bee diseases are divided into two kinds, those that attack the mature bees and those that affect the brood.

The adults are liable to diarrhoea, paralysis, and a vague one in the early part of the season that is generally called "spring dwindling." Diarrhoea frequently occurs when the bees have been compelled for several weeks to stay in the hives, especially on poor stores, such as fruit-juices and honey-dew—the latter being an excretion from aphids and scale insects which is sometimes plentiful in the autumn in the coast regions. Honey-dew is usually very dark, often granulates quickly, and has an unpleasant taste. When in health, bees empty their bowels only when on the wing, but when flight is hindered for some weeks the evacuation may occur in the hive. This is the reason why bottom boards should be cleaned off early in spring, so as to get rid of the germs.