

should be as small as possible. Contact with bare earth is very, very bad. Four bricks, one at each corner, are good, so are a couple of pieces of unplanned 2 x 4 lumber a little longer than the width of the hive, one placed under each end of the bottom board. As has already been said, the bottom board must be perfectly level across the frames, but a little higher at the back. No vegetation of any kind should be permitted to grow above its level; better still, destroy it entirely, as all growth interferes with the flight of the bees.

Our first excursion through a bee-hive has been quite a long one and has disturbed the arrangements of the inmates not only to a considerable extent, but possibly to the injury of the young, for in May it is a rather extensive incubator where as many as 10,000 eggs are being hatched, while 50,000 young bees are being brooded. An open hive means the loss of heat; therefore, we resolve that in future we will do the necessary examinations as speedily as possible, and never lift the cover unless the shade temperature is about 65°, or warmer.

CHAPTER V.

The Bee People.

From the dawn of history the greatest intellects have found a fascination in the study of the inmates of the hive, for here is a form of society which closely resembles that of human beings. Only in recent times has its actual organization been understood with all the marvellous activities that are carried on night and day. The subject is an entrancing one, but this is not the occasion to enlarge upon it; our business at present is to become familiar with such facts as will lead to success in our aim, which is the production of surplus honey.

The inmates of the hive are of three kinds—queen, worker, and drone. The queen is not the ruler of the colony, as was for centuries supposed, but is the mother of a big

Fig. 17.



Queen.

Drone.

Worker.

family. Her sole function is to lay eggs, her capacity being literally thousands every twenty-four hours. From October to February she lays very few, but with the advent of the first pollen from the willow in spring she resumes her activity, laying eggs as fast as the worker-bees can take care of them. About May 1st the colony becomes strong enough to permit her to develop her full gait, and this she will keep until the honey-flow in June deprives her of the use of the cells. In the fall, as the cells are emptied, she resumes her laying for a few weeks to provide bees for the winter, then enters upon her period of rest.