

hive and the end bar of the frame and using it as a lever. Now insert the frame first taken out, pushing it into place, then the follower. Many bee-keepers insert a wedge between the latter and the wall of the hive, but this is not necessary, excepting when the hive is to be moved in a vehicle of some kind.

THE BOTTOM BOARD.

The foundation of the bee-home remains to be examined, and to do this we must lift off the hive-body. Where shall we place it in the meantime? Certainly not on the ground or any other flat surface, as there we might mash bees. A good support is a shallow empty box without a cover, so we place one handy and set our hive across it. Should the bottom board be glued tight to the body, insert the hive-tool between the two at a rear corner, then with a slight twist force them apart.

We now find that the bottom board—so the foundation of this bee-house is called—is of the same width as the hive, but a few inches longer, the projection being in front so as to form a landing-place for the bees. Cleats are nailed to the sides and end, forming a resting-place for the body, at the same time securing a clear run for the bees underneath the frames, thus facilitating free communication in all parts. Just how high these cleats shall be depends on the judgment of the bee-keeper. At one time $\frac{3}{4}$ inch was usual—a bee-space, in fact—but in recent years the pure-air agitation has influenced bee-men, and so we find most of them preferring cleats at least an inch high, while some have gone as far as 2 inches. Here is the point: Bees breathe, so they must get fresh air, and this enters only through the doorway, the foul air being expelled through the same channel. A fixed shallow entrance leaves no room for extension, whereas a deep one can be readily contracted at any time. But the big space under the frames is a great temptation to comb-building, especially during the honey-flow season. Bee-keepers differ on many details; this is one of them; but in the meantime the tendency is towards giving plenty of room for the admission of pure air. On the surface of the bottom board there will likely be lots of waste matter, such as comb-capping, dead bees, and all of it should be scraped away.

THE HIVE-STAND.

Lift the bottom board and see what it rests on. Its life is dependent on the absence of two enemies, water and ants; therefore the bearing surfaces of the supports 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 degrees, or warmer.