How to Reverse a Comb.

A frame has two sides, so you had better look at the other one too. Your most natural impulse will be to cant the frame over, but don't do, for as you tilt it up to the level the weight of the comb is apt to break it away. Try it thus: lower one hand, say the right, until the top bar is perpendicular (Fig. 14); turn the frame half-way round, using the top bar as a pivot (Fig. 15); then raise the hand that was lowered (Fig. 16). Your frame is now upside down with the second side towards you. Here is another method that can be carried out without a pause: Let the lugs of the frame rest on the middle fingers of each hand, these being bent towards the chest. Turn the comb end for end by swinging the left hand to the right of the right hand, then swing the comb up to the position shown in Fig. 16. To get to the original position, reverse the movements.

Replacing Frames.

When through with this frame, replace it in the hive, pushing it tight against the vacant side. There is no excuse for placing it on the ground. If you have changed it so that you have forgotten which is the front end, just look at the brood, for the bees prefer to have their young towards the entrance of the hive, but the honey at the rear. When you have examined as many frames as you want, push them over to their original position by putting the hive-tool between the side of the 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 ⅜ 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-cappings, maybe 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