

CAPPINGS.

CUT FROM A VARIETY OF COMBS.

Moving Bees Short Distances.

PROF. Cook gives his experience in this line, in a late issue of the New York Tribune. This is just what we have been wanting, but we are afraid that it will not always work. We cannot say that we have tried *exactly* the plan here given, but so near it that there is little difference, the main principle being the same—that of so changing the surroundings as to make the bees “mark the location.” However, try it;

If the bee-keeper wishes to move his colonies a short distance—less than half or three-quarters of a mile—he may do so with slight inconvenience.

While fixing our ground last season, we had to move ours twice, 8 or 10 rods. We did this just at nightfall, after they were done flying. The first day we moved about half of them, taking each alternate colony. In the new position we placed the entrance facing the opposite direction from that of its previous position. We also drove a board into the ground just in front of the entrance.

The new position of the hive as to points of the compass, and the new object in front of the hives, caused nearly all the bees to mark their new position and return to it. The few that went back to the old place joined the colonies still there, and strengthened them. After the bees first moved had had a good flight, we moved the others, at similar time, and in similar manner as before, only leaving 4 colonies, one in each quarter of the old place, to receive any bees that might return. Soon these four were moved and so far as we could see, we suffered no loss or inconvenience.

The point to be observed is so to change the aspect about the hive that the bees when they come out will note the new surroundings sufficiently to charge their memories; then they will come back to the new home, and not to the old one. Changing from an open ground to a grove will accomplish this.

PASTES FOR STICKING LABELS ON TIN.

The following recipes appear in the last issue of Gleanings:

“Flour, 1 lb.; gum arabic, 2½ oz.; sugar lead, powdered, 1½ oz.; alum, 1½ oz.; water, 2 qts. The gum, sugar lead and alum, are dissolved in the water, then proceed as when making ordinary flour paste. Scratching the tin with sandpaper, or washing with diluted muriatic acid, is also helpful.”

“To make labels stick to new tin with ordinary paste, rub a sliced onion over the tin.”

FOUL BLOOD.

We extract a few of the important paragraphs from the Bulletin on the

above subject, issued by the Michigan Agricultural College, under the direction of Prof. A. J. Cook:

WHAT IS FOUL BROOD.

This is the result of the growth and development in the brood of bees, of a bacillus, which has been named by Mr. Cheshire, “*bacillus alvei*.” These bacilli look like short rods, and when magnified 1,000 times, appear about one-fourth of an inch long. Thus we see that they are exceedingly minute—only 1-4 000 of an inch long; and yet the spores are even smaller—from one-third to one-half as long. I have stained specimens taken directly from diseased brood, and from cultures in tubes, where a little of the decayed brood was placed in preparation of beef decoction. In this last case the media in the tube was soon swarming with the bacilli. All look just alike, and just like those from the decaying brood.

The larvae may never be capped over, but if attacked late in its development, it usually will be. This cap, however, will appear sunken or concave, instead of being convex or rounding out as the cappings of brood always are when the brood is healthy. These sunken caps are always suspicious, and should always lead to close investigation. Little, irregular holes in the cappings are often observed, which also should awaken suspicion.

Another indication, not always marked in the early stages, is a rank smell, which has been compared to the odor of decaying brood that has been chilled. Often this odor, in severe cases, is very marked, and can be detected while the hive is closed, and several feet from the one perceiving it. I have had many samples of foul brood sent me, and often my children would speak of foul brood, detecting it by the odor, even before the package was opened.

We see, then, how we may surely determine if our bees have this terrible malady. If the bees languish, and we find the dark, stringy, *salvy* mass, which is elastic, in the cells; if many of the caps are sunken and pierced with irregular holes, then we may be sure of the presence of foul brood. If the foul, nauseating odor is present it will also aid in the determination; though it will not be very conclusive early in the attack, before the affection becomes extensive.

The spores might also be introduced by giving combs containing the diseased brood, or which had previously contained it, to the bees, and so now would have the dormant bacilli or spores. Undoubtedly foul brood is usually first introduced through the honey, while it is often spread rapidly by an exchange of combs in an apiary where only a few of the colonies are affected.

APPEARANCE OF THE BROOD.

When the larval bee is once affected, it is disturbed, lies differently in the cell from the healthy larvae, soon turns yellow or straw color, then to brown, while the skin seems loose and flabby. Later the mass becomes thick and viscid, and turns dark brown, the color of coffee before any cream is added to it. It then dries up, and at last forms a thin layer over the bottom of the cell. While in the putrid coffee-