

theories on the secretion of beeswax, I felt very much like making a few observations, and it was not long before an opportunity presented itself. It was a very warm morning in the swarming season. Mr. M. was called from home and I was left alone to care for the bees. In a short time the swarming note was sounded and "the bees had swarmed." We were making use of some drawn-out combs at the time, and I got a hive, filled it with some of them, and I loved the bees; then I wiped the sweat from my face and returned to my labor. This was swarm No. 1.

I had hardly got settled down to work when "buzz, buzz," and out came another swarm of bees. "Ha, ha," I said to myself, "now is my time to experiment a little." So I went and got a hive, filled it with empty frames, hived swarm No. 2 and then awaited results.

The next day I went to look at them. Swarm No. 1 I found very busy at work bringing honey from the field, and depositing it in the combs; and on the alighting-board and bottom of the hive there was quite a quantity of those little wax scales; but it was very difficult to find any scales in the wax pockets on the bees. Then I went to No. 2 and found there were not more than half as many bees going and coming from the field as there were from No. 1. I very gently raised the cover and looked in, and found the rest of them hanging in festoons to the top-bars, quietly working at their trade of comb-building, while those that came from the field seemed to be bringing honey for them to consume, to produce the wax to build the comb from; and the secretion of wax was very plentiful on the bees, but there was none on the bottom-board nor around the entrance of the hive.

They worked on in this way for a few days and built comb very fast; then the yield of honey in the field diminished, so they could get but a little; and although they were still inactive, the wax secretion diminished, and comb-building progressed very slowly. Therefore, I think consumption causes production; and if circumstances are such that the bees consume a large amount of honey, they will secrete a large amount of wax. But this is no saving; for, if the honey that they consume to fill the hive or boxes, were stored in surplus boxes or comb, it would pay for combs or foundation to fill a number of hives.

## OBSERVER.

[My good friend, you have given us a most valuable experience. First, it indicates beyond question that a colony will store more honey for the extractor when they have a full set of combs. Sheets of foundation would probably come next to full combs; but empty frames are away behind. Our older readers may remember that I made experiments in just this line nearly twenty years ago. A new swarm with a full set of empty combs, does, however, secrete quite a little wax. They put it on top of the top-bars, extend out the length of the cells wherever the space will admit of it, and often put little around the end bars. The point of great value to the bee-keepers is this: A new swarm, hived on empty frames, will at once—at least the greater part of them—hang idly until the wax scales are secreted; whereas, with full sets of combs, nearly all these bees could go at once to the fields for stores].

## PREVENTING ROBBING OF WEAK COLONIES.

Mr. T. C. Kelly, in the A. B. J., gives the following plan to prevent robbing of weak colonies:

Having read an article from the pen of our esteemed fellow bee keeper, G. M. Doolittle, in the American Rural Home, on the prevention of robbing by bees in the spring, I will give my method:

When I find a colony that is being robbed, I close the hive for a few minutes, until a number of bees collect at the entrance, and in the meantime get a handful of flour, then open the entrance (by this time the robbers are loaded with honey), and the little rascals will make a rush for home. As they come out, give them a good dusting with flour, until they look like "millers," then keep your eye over the apiary till you see the white-coated chaps entering their hive, then close the hive that is being robbed again, and let it stand ten or fifteen minutes. By that time the most of those engaged in the business will be gathered around the entrance trying to get in.

Take the hive that the robbers came from, carry it to the stand occupied by the weak colony, remove the weaker one from the stand, turn the hive around, brush all the bees off of it, and set the hive containing the strong colony on the stand. Pick up the hive containing the weak colony and carry it to where the strong colony was, making it look as much like the other one as possible; return to the strong one and change its appearance by placing a piece of colored cloth in front.

You can then sit down in the shade and watch the proceedings with pleasure and amusement—and it is amusing to witness the humble supplication of the little fellows on their return to the old stand, and the humiliating attitude they assume, standing on their four legs, with the business portion of their anatomy elevated in the air, and pleading for admission and recognition from those whom, a few minutes before, they had been trying to rob. If there are more colonies than one engaged in the robbing process, I change them with others that are not so strong.

Now, this is no theory, as I have practiced it for several years, and always with success, and if there are any suggestions, improvements or criticisms from our bee-keeping brothers, they will all be accepted in a spirit of friendship.

Slippery Rock, Pa.

## REMEDY FOR BLACK ANTS; HOW TO GET RID OF 'EM

If they are the large ones get a cent's worth of tartar emetic and mix about a quarter of it in a little honey (about an ounce or two), and place in their haunts. After they have eaten it you will see no more of them for about three or four months, when they will begin to come back. A second dose has cleared our house for three years. It will not work on the small ants, for they won't eat it; and if the coal tar (page 101) will clean out the small kinds, then with both you can be "ant clear," both in the hives and the house. This recipe came from the *House-keeper*, Minneapolis, Minn. Don't let the bees eat it for it may lay them up till the harvest is over.—*Gleanings*.