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Feeding Back to Have Sections Finished.

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I HAVE heretofore called attention to the fact that a large proportion of the 4½ sections put upon the hives in the average season, come off in a state of incompleteness. Many persons have asked what to do with them, and they have been told by some to extract the honey and save the combs for another season; while others have advised to render them into wax. It is a well known fact that combs brought over from the preceeding season, and refilled, do not make first-class honey in fancy shape. The honey is stored too fast in the empty section combs, and perhaps sealed too soon.

At any rate I have noticed, and many bee-keepers bear me out in the experience, that section honey completed in this way is more apt to sweat and damage in appearance and flavor, than other honey. The fact is I hardly think it advisable to use any more of them than is necessary to start the bees promptly in the section cases. One of these drawn combs put into each row of sections in the case is a good thing, but to use them largely has never given satisfaction in my apiary. Bee-keepers have been quick to overcome all defects and difficulties that may confront them. But it seems to me that this matter of partly filled sections has baffled the skill of honey producers, or perhaps they have not brought their enquiries to bear upon it. For several years I have wondered how this can be, when the reports show that a large number of sections are left uncomplete every season, and consequently thousands of dollars are lost to bee-keepers annually, from this cause. From what I have seen in print on the subject, only some crude experiments have been made. Our friend Mr. Hutchinson has written something on the subject, but while what he did write was interesting, he left the impression that his experiments were not satisfactory. And I am free to say that if I had given my experience at the time Mr. H. wrote, mine also would not have been satisfactory. But I silently worked on regardless of costs ncurred by mistakes, till now I hold the key to the situation.

To succeed in feeding back you must know just when to begin the work. Here is where I made my first fatal mistakes. The feeding back must begin right at the close of the honey flow, and while the bees are in comb building plite. If you pospone the work till the bees have become lean and pinched in condition, you must feed at considerable cost and loss, to bring them in condition to build comb. Hence the proper thing to do is to commence when the bees are in condition, just as the honey flow is drawing to a close, and the bees show signs of wanting to rob. I make an inventory of the probable number of incomplete sections on the hives, and proceed to select as many colonies as will be able to finish them up, allowing 200 unfinished sections to the colony. Then if I have 500 unfinished sections I would employ but two colonies to finish them, but if there were 600 I would prepare three colonies for the work. The fewer colonies used in feeding back, the cheaper the work can be done if you do not over tax them. Last season I made one colony finish up 256 sections after doing their part in gathering an average honey harvest. As all of these sections were trimmed and uncapped when any part of their surface was capped, the whole of them had to be drawn out and capped to finish them up. So this one colony capped a surface of 8,192 square inches, or a little more than 56 square feet of comb surface. Representing a space as large as the ceiling of a room 7x8 feet. I mention this to illustrate what an enormous amount of work a good colony of bees is capable of doing under favorable circumstances. Now let us return to the practical part of the experiment. As soon as the bees begin to rob at the close of the honey harvest, as many colonies as are to be used to finish up the sections, are put into condition for the work. Full size hives are used holding 10 frames. Bear in mind that the queens lay eggs very sparingly when the workers are crowded with a continuous flow of honey, for this reason I remove all the combs containing brood but six, these are placed in the centre of the brood chamber and the sides are filled out with combs of sealed honey. No excluder is used. The feeder goes directly on the top of the brood chamber, and the section cases are tiered on the feeder. My feeders are made the same size of the section cases, as to their outer structure, except as to length. They are made so as to project at the back of the hive to give room for the feed holes. Each feeder contains two feed boxes 2 inches deep, and are filled with climbers adjusted a half inch apart. The climbers in my feeders are not made of single thin boards as most feeders are made, but each climber is made of three narrow pieces cleated together a fourth of an inch apart, so that the bees when working in the feeders can move at right angles as well as vertically.

I regard this as very important in a good feeder. When feeding back separators in the case are essential to nice work. Therefore I use tin T cases with tin separators. All the sections