

## Notes For Beginners.

There is perhaps no one thing which has tended in greater degree, to failure in bee-keeping with beginners, than excessive swarming. No honey crop, robbing, winter losses, all follow more or less excessive swarming. Just as boils, pimples and the like do not originate on the surface of the skin, but are simply an indication of bad blood and a disordered digestion, so no honey crop, robbing and many losses in winter, are frequently the result of excessive swarming. Let me explain.

One who has corresponded with and met thousands of bee-keepers all over the country, can only know to what extent this idea prevails with beginners, and those not beginners, but who foolishly think they cannot afford a Bee Journal. They tell us their bees are doing well, and when you ask for particulars they give the extent of their increase. "I have increased from five to fifteen." "I began the season with one swarm and now have five." Such ideas show crudeness of information upon the subject. Some may argue "but I want to increase my apiary." I do not care what you want you want to do, the idea is wrong. A system of management under which such can happen, is all wrong nine hundred and ninety nine times out of a thousand. To enlarge your apiary, and especially applicable is this to the inexperienced, the worker forces want to be kept together. Instead of a handful of bees in each of a dozen hives, or even a very light swarm in each of a dozen hives, I would prefer the same number doubled up, or better, never divided, and giving three or five colonies, comfortably filling the hive.

The system has been this. A beginner in the production of honey, begins at the top product and he generally drops through to the production of nothing, before he gets through. By that I mean, he decides to produce what requires the most skill and experience to produce. He begins with comb honey. Now in the production of comb honey, he thinks it is less trouble and he does not require to purchase, or have a honey extractor. What are the facts? to produce nice comb honey, is the highest test of skill in the apiarist.

I shall take up again the production of comb and extracted honey, but to illustrate my point. For comb honey you must have strong colonies, and to get well finished sections, you must keep them close to the

swarming impulse. Give them abundance of room and you have in all probability, a lot of cull section bringing a price yielding no profit. Crowd the section too much and the bees swarm. It is a very difficult matter to see that narrow course between the two, no inexperienced bee-keeper can tread that narrow path. In extracted honey plenty of room, within moderation, does no harm. One way to prevent excessive swarming then, is to begin producing extracted honey. Another way is to put supers on in time, and use enough of them. The practice too often, is to allow the bees to swarm before the upper stories are put on, this gives early and small swarms, as soon as the lower part of the hive, the brood chamber, becomes crowded, which is indicated by full combs. Of course, a cell with only an egg in it, is to the bees a full cell, bits of new comb built along the top bar, and fresh looking capping along the top bar. When this is the condition of the brood chamber, put on upper stories. You may say this delays swarming, and we want early swarms. "A swarm in May, is worth a load of hay." Well we do not believe this always holds good, we want large swarms as early as possible, but only when they swarm after certain things have been done to hold swarming in check, resulting in large swarms. Again instead of using only one upper story, as so many do, we use several. This prevents swarming.

### VENTILATION.

Many hives throughout the country have too small an entrance and are nailed, or fastened to the bottom board. We want an entrance the full width of the hive, you can easily contract it by means of blocks. There are many reasons why the bottom board should be loose. Mr. Pettit has a system of ventilating hives when crowded with bees and the weather warm: he takes an inch strip the length of the side of the hive, then rips this diagonally across, giving him two wedges the length of the hive seven-eighths inches at one end, and tapering to a point at the other. When the bees become uncomfortable, he raises the front of the hive from the bottom board and inserts this wedge, wide end at the entrance, under each side, thus enlarging the entrance  $\frac{2}{3}$  of an inch, the full width of the entrance. Mr. C. W. Post has an excellent way of ventilating, he puts a wire screen under the brood chamber and on top of the bottom board. The frame of the screen, has an entrance the same size as the bottom board. When the bees get uncomfortable he draws the hive and screen back on the bottom board, and a current of air can