

brought correspondingly to a higher state of perfection, these opportunities and neglected advantages will be embraced, and under keen competition, migratory bee-keeping, pursued with systematic diligence.

Titusville, Pa., Sept. 1st, 1898.

Advanced Methods of Comb Honey Production.

The subject assigned me by your worthy Secretary is an important one.

The greatest difficulty in dealing with it consists in the large number of supposed to be superior systems and every one wedded to his own. But for all that the advancement recently made in the fine art of taking comb honey is marvelous indeed, and I often admire men and methods. Presuming, the object your secretary had in view was that this paper shall be helpful rather than a delineation of many and conflicting methods I shall in the main confine myself to my own system, believing it to be the best.

First of all, quality and reputation must be maintained even if necessary at the expense of quantity. The foundation must be faultless. The filling of the brood chamber at the approach of the clover flow or main crop with sugar syrup I regard as a most pernicious practice. I state this with due respect for the views of others. Later on I will give a better way. May I digress long enough to state that the Statutes of Canada, when any such syrup reaches the supers and is offered for sale, make such practice a wilful adulteration and the Government at its own charges will do the prosecuting. It is no digression to state that perfect wintering is a mighty factor in the production of comb honey. It is not enough to bring ninety five or even one hundred per cent of our stocks through the winter alive. We should see to it that they are practically in the same condition that they were at the approach of winter with plenty of stores, healthy and strong; and able to rush out and catch the first and every honey flow coming within reach. And then the spring management must be such that the brood chamber at the time of giving section supers is practically full of brood from side to side and from front to rear. Briefly then, brood spreading, timely and judiciously, with some uncapping, must be practiced. And now for the better way, when the spring flow sets in sharply, in order to leave the whole brood chamber to the queen

and to provide against the practice of feeding sugar syrup, extracting supers must be given; these with their contents are left on to keep up brood rearing until clover yields freely. These supers are then removed and comb honey supers take their place. Generally, at this time if the work has been well done the brood chamber will be practically full of brood which will be of far greater value than sugar syrup and it cost nothing, and your comb honey will be pure and your reputation unswayed. With this management neither bait combs, half supers nor double brood chamber will be wanted. The bees will go up for standing room, and go to work with a right good will. I must not forget to state that at the time of changing supers the comb containing the most and youngest brood should be placed next the sides of the brood chamber. This will make more room for the queen, retard swarming and force the honey into the sections; then when swarms do issue their numerical strength will gladden your weary hearts and cause you to rejoice in hope of a rich reward. The large entrance has become an indispensable necessity in my practice. For that purpose I use the wedges so often referred to, and the dividers for creating a double bee space at the outside of the sections, is also indispensable. The former distributes the bees and the latter holds them just where wanted, so much so that sometimes the outside and rear sections actually get ahead of those near the entrance, but that is not the rule. The habit of the young bees meeting the field bees above the entrance near the centre is so strong that a cluster is sometimes formed and the field bees continue to go up at the centre, but a little cool weather will usually break that up and a proper distribution will follow. Hive swarms on starters, in hives contracted to about two-thirds of their size by the use of dummies, let them remain upon the old stands, and at once transfer the supers to the new swarms. A queen bar or excluder must be used, give shade and a lot of top ventilation, which should be closed the fourth or fifth day in the cool of the evening. We may yet learn how to continue top ventilation with profit. What seems to me to be the most difficult thing is to give the right amount of super room. I would say, be careful to give enough and be just as careful not to give too much. But what's enough and what's too much? How shall we know? Well I reckon from existing conditions and prospects. Years of careful observation will guide us pretty well. Want of space forbids giving many useful