

The President declared the paper open for discussion.

Mr. McEvoy—One point in the paper read was as to shaking bees on to comb. Some people complain that these colonies would grow weak in a few days after, but my plan is to put a cone bee-escape across the front after five or six days for a few hours; the bees come out and they cannot get back into it again. Then you can send your bees where you want to. Another point is that the queen destroys the young queens because the guards are off the cells. The first queen that hatches will do it.

Mr. Holtermann—I think that the subject that we have here to-night is one of the most important subjects that is going to be brought before this convention, that is, the control of the increase. We have had different methods given to us. The paper, I think is a very good one and very exhaustive. I think that there is a method which can be given in addition to what has been here. Some four or five years ago I began bee-keeping again, and the writing of the Dadants had made quite an impression on me, for I always looked upon them as very successful bee-keepers, and good sound reasoners; and their observations led me to adopt a larger hive. I had been a strong advocate of the eight-frame Langstroth hive up to that time, and I adopted a 12-frame Langstroth hive. That Mr. Stachelhausen says is correct. I think the basis or the beginning of the successful control of increase is large colonies. Now there are several features which come into play in the control of increase. First of all the general impression is that it is time to note the swarming impulse when the eggs are deposited in the queen-cell cups. I think in that practice we make a mistake. I think that the first indication towards swarming is the drone-brood; but we will let that

alone, because in a great many cases they may not swarm at all. But the next is when cell-cups are built. I have had men say to me: "I see cell-cups built in many cases and no swarming." That is true. The conditions may change, and so on, so that they will not swarm when cell-cups are built, but that is the very reason why we should note that. In my manipulation in the apiary, when I see cell-cups built, I take it as a hint that the bees are drifting very closely towards swarming, and that is the time, in my estimation, that the brood should be taken out, if at all, unless you are approaching, as far as you can tell the close of the honey season, and then you do not need to do that.

The next point I find, and I think where bee-keepers make such very great mistakes, is in the amount of super-room given to the bees. I don't know how it is over here, perhaps as fully as it is in Canada. But the general method is to give an extracting super to a colony of bees. I am satisfied as long as we think we can run our bees successfully with only one super, so long we will not make the most out of our bees, or succeed in keeping down swarming to the greatest extent. No one should think of taking extracted honey without having at least an average of two supers to the hive.

Then there is the matter of ventilation. I would like to take you into a frame building on a hot summer day with a  $\frac{3}{8}$  inch board roof, and very little ventilation, and put you at work extracting; and yet there are nine-tenths of the bee-keepers who consider it economy to have half that, and have no more protection than that  $\frac{3}{8}$  inch board; and they have what is equal to a stove in addition in that building, in the young bees and brood in the hive. I consider it a very gross extravagance to use a hive with as

(Continued on Page 158.)