

seven pounds of nectar before there is one inserted underneath.

Mr. Pettit—Of course I don't doubt Mr. Miller's word, but in my experience—although I have not tried the Hedden hive—to make a division in that way it does not seem to me secure from swarming. Another point in connection with the Hedden hive from Mr. Mr. Hoshal's address yesterday, we find that Mr. Hoshal does not take off the outside wintering cases until about the first of June.

Mr. Hoshal—You must remember that there are a lot of things I left out. A great many of the wintering cases I leave on that long if I can; if I can't I take them off before.

Mr. Pettit—A colony wintered in one of those small cases, which would be about half of an eight frame Langstroth brood chamber and not requiring any room until the first of June, the swarming problem would not be a very serious one. Of course, as you all know, I am an advocate of larger hives and the Langstroth combs, and I find that my colonies, the majority of them, in an average year, require supers at the beginning of the fruit bloom or about that time and I give them plenty of room at that time and at the beginning of white clover I give as much room as I think they will need for the whole white clover flow and by this means swarming is kept down to a large extent.

Mr. Miller—May I ask if you are able to control swarming to the extent you can leave your yards without any assistant. This is a large factor in the use of the Hedden hive. We run the out yards simply by periodical visits.

Mr. Pettit—Yes, my yards are all left with no one in attendance except to visit once a week and we have enough bees to keep two men busy these visits.

Mr. Miller—I run three hundred

colonies and do the work alone with the exception of an unskilled helper in the extracting house. No yard help.

Mr. Holterman—The way I run the bees, using a twelve frame Langstroth hive, is to go to the yard once a week unless there is something special. We don't prevent swarming entirely. Probably Mr. Miller doesn't either.

Mr. Miller—I said in my paper from two to three in the yard.

Mr. Holterman—Unless there is something very much to be gained in using the Hedden hive I would not like the impression to go out generally that it is desirable to use another frame which is not in general use. Another objection to the Hedden hive is that an unskilled man may make serious blunders which he would not make with another.

Mr. Hoshal—My idea in presenting the subject to you yesterday was not to present a hive at all. I would like to eliminate the hive question from it entirely. Bees work along certain definite lines. They have a certain instinct and a certain way to work, and the way to accomplish the most with them is to keep along those lines. I don't care whether you do it with a frame hive, a box hive, or a Hedden hive.

Mr. Holterman—In looking for queen cells you find that farther in on the comb there are occasionally queen cells which even when you have the entire side of the comb exposed, are a little difficult to see.

Mr. Miller—It matters not how many cells are built on the side of a comb there is almost invariably a sufficient showing from underneath. I have nothing to do with the cells but to know they are present, then I follow out my work. I am not here to fight for the Hedden hive. I don't wish to convert any man to the use of the Hedden hive, but, as I understand you