

other. In my opinion the season has more to do with the quality of the honey than the processes of ripening. If we decide to extract oftener, the hive we have already added (if both contain two thousand or more cubic inches) is probably all the room the bees will need, but if left on during the season, one more and probably two will be needed. In putting on the third story I do not use the dummies, for by this time the weather has got so warm and the bees so numerous that they will spread out so as to occupy the whole of the extra hive. This hive should be put on when the bees have the combs in the second story sealed along the tops of the frames or soon after you would commence extracting if working the other way. Many say raise up the second story and place this third hive between the two; but after repeated trials of both I prefer placing it on top, for I think the bees will occupy it just as quickly if the honey flow continues, while if it from any cause should be cut off at this time or soon after, we are in much better shape in not having the honey scattered through the three hives with few if any combs full. If a fourth story is needed, put on the same as the third, when after the season is over you will begin to carry the honey to the honey-house and extract.

To get the honey off I find it is the best way to go to a hive and blow a perfect deluge of smoke down on the bees from the tops of the combs, and as soon as the bees have run below take off that story and set it on your wheelbarrow or honey cart, not attempting to get more than one story from one hive, at the same time; for, if we do, the bees will return to the next story before you can get it off, when smoke is of little use to drive them. Before extracting save plenty of good, full combs for wintering and spring feeding. If the weather is cool, when you wish to extract, place the combs of honey in a small room for three or four hours previous, in which the temperature is kept as warm as 100°, when you can take them as you wish to uncap and extract them, doing this work as easily as on a hot day in July or August.

In the above I have given a brief outline of how I work for extracted honey, and as a proof that it is an average plan at least, will say that I have taken as high as 566 pounds of honey from a single colony in one season.

In conclusion I will say that the getting of multitudes of bees, just at the right time, has more to do with the successful working for honey than any thing else, and when all realize this and work for the same to the fullest extent one-half of the colonies will gather as much sur-

plus as the whole do under one present management.

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From the American Bee Journal.

The Queen-Excluding Honey-Boards.

WHEN I began producing comb honey the first "snag" I ran against was brood in the sections. So long as the sections were over an old-established brood-nest filled with comb, there was no trouble, but when I began hiving swarms in a contracted brood-nest, and transferring the sections from the old to the new hive, then the "circus" began.

I had no metal queen-excluding honey-boards, and something had to be done at once. I took one of Mr. Heddon's slatted honey-boards, and tacked a strip of tin lengthwise of each slat, letting the tin project beyond the edge of the slat until it lacked $\frac{1}{2}$ of an inch of reaching the adjoining slat. This was, I believe, the first combined wood and metal queen-excluder ever made. Five years ago I made several of these; they are still in use, and answer every purpose.

The strips of tin were tacked to the under side of the honey-board. It was considerable work to tack on the strips of tins and have the spaces sufficiently exact, so I tried making honey-boards of strips of wood $\frac{5}{8}$ of an inch in width, placed $\frac{1}{2}$ of an inch apart. These worked well when new, but the bees soon filled the spaces with wax.

Next I tried perforating a very thin board with a saw, cutting a kerf exactly $\frac{1}{4}$ of an inch. These work quite well, and I have about fifty of them that have been in use three years. The only objectionable feature is that the openings must be cleaned out each spring. If wood were of sufficient strength so that it might be made as thin as the zinc that is used, it is possible that it might be made to answer the purpose as well. I am not certain that it is the thinness of the metal that induces the bees to refrain from filling the openings with wax; possibly the character of the material has as much to do with this as has its thinness.

During the past two years I have been using the combined wood-and-zinc honey-board, as first invented, I believe, by Dr. Tinker. They are *par excellence*; I ask for nothing better. I have sometimes thought that the perforated wood might be made to answer if the edges of the openings were chamfered so as to make the wood quite thin. I have not advanced beyond the "thinking stage" in this matter. The only advantage would be the cheapness.