

ways arises from the bees in cold weather enters the unsealed honey and dilutes it, making it very unwholesome. Our only resort, therefore, for feeding in cold weather is to make candy and use it. This is a very good and healthful food if properly made and administered. It is made from granulated sugar by melting it, adding a little water—no more than will thoroughly melt the sugar—when it is boiled a few minutes and poured out into cakes or slates of three or four pounds each. When cool this becomes very hard, almost like rock candy. In feeding this it is placed on frames just over the cluster of bees where they can have access to it at all times. When in this position it receives the heat arising from the bees and they remain on it all the time. It is so hard that it will last them a long while. This candy may be given bees at intervals during winter, and colonies may be brought through in good shape that would have otherwise perished. This, or any other work that is necessary to do with bees in winter, should be done on warm days. It will not do to molest them on a cold day, but it should always be done on days when the bees are flying.—
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The Width and Thickness of Top-Bars.

THEIR RELATION AS AFFECTING THE BUILDING OR THE PREVENTION OF BUILDING BURR-COMBS.

WITHIN the last few months there has been considerable said about the prevention of burr-combs above and between top-bars by means of having the top-bars of unusual thickness up and down. The first that I remember of hearing of anything of the kind was at the national convention at Toronto, when that bright Canuck, J. B. Hall, of Woodstock, Ontario, showed me his top-bars, which were, if I remember rightly, one inch square. I did not feel particularly interested in the matter at the time, because I had on hand a large number of frames, and I would not change anything of the kind without very strong reasons. Besides, I had no trouble with burr-combs, for I used the Heddon slat honey-board, which kept the bottoms of sections placed over the brood-frames entirely clean. I have always valued highly this slat honey-board; but within the past three years it has gradually failed to be effective, and the present year I have had bad work with combs and honey filled in between the slat honey-board and the bottoms of the sections. In former years every section was entirely clean from burr-combs. Why the difference? The only explanation I can think

of is this: In former years, before putting on the honey-board I scraped off clean the tops of all the brood-frames, and cleaned off the honey-board at the close of the honey-harvest. Latterly I said the bees would only have extra work to fill again these spaces, so I left all the burr-combs on. You may be sure I shall clean them off next year. So if you use the honey-board, profit by my experience, and, before putting it on next summer, make a thorough job of cleaning of all propolis and wax above the upper surface of the top-bars. Perhaps I may do well to tell you how I have done it.

I take a common garden-hoe; and while an assistant blows over the top-bars just enough smoke to keep the bees down out of the way, I hoe off every thing, leaving the top bars clean. The hoe also makes rapid work in cleaning off the honey-boards. Lay them down inside a shallow box, or in some way so they are held firm; and after you have hoed them off, clean out the space between the slats by means of a flat garden-trowel, which may be used, indeed, for the whole of the cleaning. If the honey-boards are cleaned off immediately upon taking from the hives, you will have a sticky mess, and may have trouble with robbers. To avoid this, loosen up each honey-board a day or a week before taking off. Pry it up at different points, so that you are sure you have broken loose all attachments, and then leave it closed up as before, and in 24 hours no honey will be found on the honey-board.

But, to come back to my starting-point. I am quite anxious to know whether thick top-bars will allow me to dispense with honey-boards entirely; for notwithstanding the high value I have set upon them, there is no denying the fact that they are decidedly in the way when you want to lift out frames; and from my experience I think they must be taken off and cleaned at least once a year, which is no little trouble. I think the editor made the objection to thick top-bars, that he didn't want to use any unnecessary wood, but, pray, isn't there any extra wood in the honey boards? Besides, thick top-bars are less expensive and more substantial, and surely there is less machinery about them. I should really like to know why a honey-board prevents the building of brace-combs. Some claim that it is the break-joint principle. This year have given considerable attention to this point; have had many cases in which there was no break-joint, but the space between the top-bars corresponded with the spaces of the honey-board, and I could not see that the break-joint was any better than the continuous passage. I wonder if it is not the simple matter of distance