

and they are in all degrees of strength from that up. Those wintered in single sections are more uniform throughout and pretty much the same as you put them into winter quarters. Another point I would like to emphasize and that is the feeding in the fall. It seems to me the Association looks upon it as a tremendous job to feed bees. To me this is one of the simplest things in the world; it would make very little difference in the work between supplying them with a case filled with honey or supplying them with liquid food to be taken up from the feeder. I use a bottom feeder; it is a Hedden feeder put underneath the hive and arranged with a rim so that it can be used there. It is simply a matter of lifting the single case from the bottom board and setting the feeder on it, and then in the evening, just about sundown weighing out the amount of syrup that your bees want.

Mr. Holtermann:—When you are putting that half storey in the cellar how do you prepare it, and how does it stand in the cellar? What is there on top and what underneath?

Mr. Hoshal.—I have tried that two or three ways. We have a couple of triangular blocks cut, in the winter time. There is a stand, first of all, in the cellar and the hives are piled four deep on top of that with the bottom board on; I have tried just letting them stay there without anything else; we have no cover on them, nothing but the regular outside cover and bee space between sealed down tight; the only difference outside of that is to take the front part of the hive from the bottom so as to lift the space between it and the bottom board up, simply prying it up and slipping under one of those entrance blocks, which will be about two inches.

Mr. Gemmell—Do you put any rim underneath them outside?

Mr. Hoshal—No.

Mr. Walton—When they are in the cellar will they not do with their natural entrance?

Mr. Hoshal—I have wintered the two ways, one with the full entrance to the hive, with the entrance block off; another way is, I raise it up from the bottom. I really could not see any difference one way or the other, and I have simply come back to the way I do in the summer.

Those wintered in the single sections were more uniform than those wintered in two.

Mr. Holtermann—I must confess that I have never quite accepted that theory. If bees wintered properly, and so long as they are wintered properly the queen bees will not want to breed, and if you have to use that means—that is, give them no empty

cells—it would be to me an indication of wrong wintering; and then your bees are beginning to consume and as they begin to breed there will be a larger number of cells becoming vacant and a greater amount of room. I would rather think that the strength of a hive lies in this, that your queen has not the desire to lay and does not lay for that reason; but your stores, in the condition in which Mr. Hoshal mentions are well covered by the bees; you know that if a portion of that hive is away from the bees, the bees throw off moisture and that becomes cool, and that moisture from the bees is absorbed by that honey that is not covered by the bees and the stores become sour and of course deterioration sets in. Isn't that the case?

Isn't this also the case that as the bees winter poorly they become restless. They consume more stores and at the same time there is a loss of vitality going on. The result is that the brood rearing sets in and that would appear to some to be an effort of nature to replace that lost vitality, and not being able to fly when they are brood rearing, that instinct is only intensified.

Mr. Hoshal—In stating what I have to say I am merely stating facts; I am advancing no theory, but, as it comes up, I might state that one of the things to be kept in view in wintering bees, no matter whether it is a Hedden hive or any other hive, is to make the hive of such a capacity that the bees that are wintered in it will fill it and entirely cover all the combs; that is, there is no space inside but what is occupied.

Mr. Gemmell—I think the question was asked last night, whether bees could be wintered on such shallow cases as five inches deep. Of course they can. If you don't believe it just try it. I have done it and I never had bees winter better.

The President—We have the honor of having with us His Worship Mayor Fleming of Toronto; we are certainly pleased to have him with us. I presume the time at his disposal is very limited, but I have no doubt he would like to say a few words to us and I am sure it would be a great pleasure to you to listen to whatever he may have to say. I have much pleasure in introducing his Worship Mayor Fleming to you. (Applause)

MAYOR FLEMING.

Mr. President:—I have more sense than to intrude upon your time with making any lengthy remarks. I regret very much that I had not an earlier opportunity of dropping in to listen to your discussions here, but I am an extremely busy man, and scarcely know what to do first. I have read with a great deal of pleasure the reports of