

the quieter they keep in their winter quarters the more perfect and healthy they come out in spring. This is a subject that has not received the attention it should have, and while many of us wonder about the spring dwindling, and see some colonies that we set out in spring with only a few bees, they will observe that they go ahead with brooding, and become very strong early, while those apparently much stronger die off rapidly and dwindle away. Who that is troubled with spring dwindling has not opened his hives occasionally and found them there with not bees enough to cover the hatching brood, and could not account for the difficulty, which is this: they just commence brooding in proportion to their numbers, not in proportion to their strength? Bees that have been badly wintered are unable to stand the severe spring weather, and unfavorable days cause many to fly out never to return, then there are insufficient in the hive to keep up the necessary heat, and the result is, some of the brood perishes. This discourages the colony, and as they are frequently inclined to scatter and try to protect more brood than they can possibly do, they often allow more of it to perish than should have been, from the fact of their spreading themselves out too thin. For indoor wintering we would recommend from 20 to 25 lbs. of well ripened honey, for a good strong colony, and from 15 to 20 lbs. for a medium colony. We have frequently wintered a colony on a very few pounds, sometimes over 100 colonies in a repository did not consume more than from five to seven pounds, and as many will now be setting their bees into winter quarters, perhaps we had better say something bearing on this matter.

"PUTTING BEES INTO WINTER QUARTERS."

In putting bees away care should be taken not to give them too much light, nor to jar them, in other words, it agitates them so as to break the cluster and spread out on the combs. This is a great mistake, because after bees have once clustered they should not be disturbed to break the cluster, because alter their quietude sudden disturbance causes them to fill their sacks with unnecessary food. We believe fairly sized colonies have been wintered four or five months on from two to four pounds.

This shows that they could not have eaten very much at a time, or have eaten very frequently. We think that all lids should be lifted off the hives after they are set in. We do not object to a board put directly over the cluster on top of the combs, providing there is room around the board to allow the surplus moisture to escape.

Another point worthy of consideration is humidity of the atmosphere. We have frequently tested this in our bee houses, and are fully convinced that a dry atmosphere is far superior to a damp one. Some claim that a damp atmosphere does not injure the bees, but we claim that dampness injures them more than the cold, and as a proof of this we find that bees wintered successfully in parts of the N.W.T., where the thermometer drops down to 50 or 60 below zero, and we believe it has been as low as 68 at Prince Albert, and yet in that section bees have wintered successfully, simply because the atmosphere is so dry, and there appears to be less spring dwindling in these unusually cold localities than there is here and further south.

GIVING EXTRA STORES."

A friend inquired a short time ago what he would do with a few of his colonies that had not sufficient stores for winter, and yet it was so cold they had refused to take up more. He said he had plenty of sealed combs of honey, but unfortunately they being of a different size did not fit the hives. We know how to sympathize with him, because we have been there ourselves, but got over the difficulty in this way: When the hives were short of stores we took some of the heaviest sealed combs, cut two or three holes through the centre, and placed one over the top of the frames, first placing a stick about half an inch thick around the edge to raise the comb up, and leave a bee space between them on top of frames. We then put a few strips here and there over the frames to prevent the centre from sagging. The bees consume all the honey in the hive and then ascend to this comb and commence eating it out. They will work up through the holes cut in the comb, when they have all the honey eaten from the under side and commence from the top side. If we find that they have scarcely enough we put a second