

tune times make spring dwindling? And is that all there is of spring dwindling? Is it simply the fact that a number of bees have flown out and become lost? That is not spring dwindling according to my observation. It is something more than that. I don't know that I know what that condition is, but I will say this much about it, that when you find spring dwindling I think you will almost always find that the number of bees present in the hive compared with the amount of brood is always small. Now, I would like to know, as a matter of fact, whether the observation of my friends here agrees with that. Is that the common thing? It has appeared to me to be the case that, whenever I had a case of spring dwindling, there were too few bees in the hive to take care of the brood that was there. Now, if that is a common thing, I would like to know it.

H. L. Case, of New York—A few years ago, in the latter part of April and forepart of May, I lost 80 colonies of bees by what I called spring dwindling. The fall before, my bees gathered a large quantity of honey-dew, and the winter was a severe one; it kept them in the hives perhaps four months without giving them a flight. Now, I believe the reason I had spring dwindling that winter, or that spring, was on account of improper food, and the conditions were improper for their prosperity; if they had had one or two good flights in the autumn, so that they could fly right out on a warm day, and have a good flight, I think it would have been better. I saved only 20 small colonies, and after the first good day that we had when the bees could fly out I didn't lose any more bees to speak of. Now, I agree with Mr. Hutchinson, that improper feeding and the conditions through winter,

confining them to their hive and they, consuming too much food, made them lazy, and they could not get out to relieve themselves, and the result was that I lost the 80 colonies.

Pres. Root—It is very evident that there are a good many causes that induce spring dwindling.

Mr. Kluck—Would the gentleman state the time when the bees gathered that honey-dew?

Mr. Case—It was the forepart of September. I went bee-hunting at the time. I spend some time in the fall hunting wild bees, and there was so much honey-dew on the forest leaves in my section that they would pay no attention to honey. I could not get a bee to return to the box and you could go into the forest and it would seem as if there was a swarm of bees, and they filled their hives full, from 25 to 30 pounds of that honey dew in the course of, as I remember, five or six days, and they sealed it nicely, but I couldn't get much, and let it go, with the result that I have stated.

Pres. Root—How many have had experience with spring dwindling?

Dr. Miller—Now I wish, Mr. President, you would ask how many have had cases of spring dwindling in which little or no brood was present in the hive.

Pres. Root—If I understand the Doctor, he finds a condition which sometimes find in our apiary along March, when the bees evidently show that their numbers are small, and that they must have some brood to keep up the animal heat, and the queen lays a little more than they can take care of, and they spread out and die on the outer edges. I have seen the bees spread out on the batch of brood that they would all die.

Dr. Miller—Further than that

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