

Agriculture and Colonization.

course, my opinion may be very far wrong, simply because I do not know much about bees, but my idea is that the right line is quite in the opposite direction. All the efforts of bee keepers in the past have been to keep the bees warm. Now, I am trying to keep them as cold as I can. I know that I have had in my office two bees which stood 20 degrees below zero without any protection at all. They crawled out of the combs which had been put in a cold open shed to destroy bee-moth grubs. These combs were put in a very cold dry shed for this special purpose and these two bees it was found had crawled into the combs. They must have been kept in that shed for about a week, during which the thermometer was below zero all the time, and for two days touched 20 below zero. When the combs were brought in they were noticed and pulled out with a pair of forceps. I kept them in my office, where it was, of course, warm. The next day they were sufficiently recovered to sip honey and water from my fingers. From that circumstance, I am led to the conclusion that bees will stand much more cold than is supposed, and I think the nearer we can bring the conditions of our hives to those in which wild bees pass the winter, the more successful we shall be.

By Mr. McGregor :

Q. They will hardly stand the cold, if the Chairman's Bill, now before the House, prevents us from feeding them with sugar in the fall?—A. We will feed them with honey then. I think our bees have been very successfully wintered by Mr. Fixter. As to other things, I have followed the general methods. As to weight, I have tried to get them as near as possible to 50 pounds per hive or colony when put in the cellar for the winter, and we have had no trouble in wintering them. Last winter we lost only one colony, and we could not find out what the cause of this was. It was probably a weak colony or may have had no queen. Mr. Fixter, who has the practical management of the apiary, is here to-day, and I am sure he would be glad to give you any further information that members might ask for with reference to this matter.

Q. We have been keeping our bees for some years in the house?—A. Yes; that is a common practice.

Mr. JOHN FIXTER, Experimental Farm Foreman, called and examined.

By Mr. Carpenter :

Q. This is a new experiment, is it not; I think you have only been keeping bees about a year?—A. Two years.

By Mr. McGregor :

Q. How many hives have you?—A. About 23.

Q. And what is about the average of the honey taken at the time?—A. Last year we had \$97. That is about 54 pounds to the hive.

Q. 54 pounds to the hive?—A. Yes.

Q. And how many new colonies did you start of the 23?—A. In the spring we had 15.

Q. 15 new colonies?—A. Yes. The \$97 worth of honey is what we sold and then, of course, these sections which have been kept for experimental purposes are not included in that at all.

Q. Then you had about \$100 of honey from 23 hives?—A. About \$110 worth I think.

Q. \$7 a hive is considered a good product?—A. Yes.

Having examined the preceding transcript of my evidence I find it correct.

JAMES FLETCHER,

Entomologist and Botanist of the Dominion Experimental Farms.