

ut having layed an egg. During the three years that I have had these queens and drones, I have never had a *single one* that was ever mated and laying, after the regularly reared drones disappeared in the fall, (about Nov. 5th is the latest I ever had one to lay) nor before they were reared and flying in the spring; April 6th is the earliest I ever had a properly fecundated queen to lay.

Now, will Prof. Cook, or some one else better informed than I am, tell me why queens flying with plenty of drones reared by unfertile queens: queens that had lost their fertility, by being chilled in mailing cages, and drones reared by fertile-workers, during December, January, February and March not to be fertilized, even in a single instance during three years' trial, if such drones are capable of fertilizing a queen? And do not such experiments during three seasons with plenty of such drones flying and present with several queens of various ages, up to even forty days old, (I have never had a queen mated early in April and laying under twenty-eight or thirty days old,) go to prove pretty conclusively that such drones are not capable of fertilizing a queen. It certainly proves it to my satisfaction. That the "active sperm cells, indicate that such drones are good," I don't question, for I consider Prof. Cook, alone, good authority on that point; but I do say, that I can't accept such indications as being better authority on their usefulness, than the trials I have given them the past three years; neither do I think that Prof. Cook himself would accept it as better evidence, had he ever given them the same opportunities of proving themselves, that I have, or any one else for that matter.

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NOTES FROM MUSKOKA-HONEY BEER.

THIS has been the poorest season for honey here in Muskoka ever since I have kept bees. Clover, linden and thistles the main honey resources gave no surplus at all the linden had even no bloom and the poor little bees had enough to do to gather sufficient stores for brooding. Had not the fall been favourable, it would have been a poor look out for bee-keepers. Here as it was, the bees did not only gather enough honey from fall flowers to winter on, but gave quite a bit of surplus, in fact all the surplus I got, I took it then, which amounted to 500 lbs of extracted and a little over 100 lbs of comb honey from 14 colonies spring count. My bees did not winter well last winter. My cellar is very damp, I left the chaff cushions on, the combs got mouldy and most of the colon-

ies] came out weak in the spring some with dysentery. I lost five or six queens the first week the bees were on their summer stands, for which I cannot account. I saw those queens alright when I transferred to clean hives on a very fine, warm day, a week later they were gone. This winter I dispensed with the chaff cushions again, as I believe they are objectionable for wintering in damp cellars. In the winter from 1884 to 1885, I wintered my bees in the same cellar without chaff hives, with only one or two thicknesses of frames, flannel as packing, and they came out clean and strong in spring. I am trying the same plan this winter. On December the 18th I went in the cellar to see how the bees were doing. They were all silent. I rapped on several hives, but received no response. I thought the bees must all be dead, and concluded to open one of the hives to see what became of them. I pulled back the quilts, for they were glued on solidly all round, and, lo! here were the bees in one cluster in the centre of the hive, all in a deep, deep sleep. "Hibernation," I guess, beemen call it. After being exposed to the light for a few moments a bee now and then would raise its abdomen a little, just enough to convince one they were not dead. I trust, by what I have seen, and with the light covering my bees will come out all right in the spring. Many bee-keepers in this Canada of ours, will likely have to winter their bees in just as damp a cellar as mine is, they might try my plan on a couple of colonies, and see if it will not work as well with them as it did with me, and report in spring through the C. B. J. the result, and, perhaps, it will be of benefit to others. Temperature in my cellar never below 40 degrees.

For the benefit of farming bee-keepers, I will give here a recipe for making honey beer. Boil two handful of hops in five gallons of water for fifteen minutes, then strain into an open vessel, let it cool down to 100 Fahr., then mix four lbs. of honey with it and add one or two cupsful of fresh hop yeast, cover up and let it work from twenty-four to thirty-six hours, skim off as often as scum rises; roast half cupful of yellow sugar till it becomes brown, then dissolve it again with water, add this to the beer to give color; then draw off into bottles or casks and cork well. In two or three days it will be ready for use. This will make a most delicious and cooling drink for farmers and field laborers in haying and harvest time.

Cappings will do just as well and even better than honey. When they are well drained of their honey throw them into a tinpail, pour boiling water over, so that the wax will melt, let cool, remove wax, strain and prepare as above, adding less or no honey at all.

E. SCHULZ.

Kilworthy, Jan 10th, 1887.