

Some one chances to winter a colony on five pounds of stores, (candy in the case I have in my mind), and he believes he has solved the problem and proclaims the solution to the world. The next spring, however, we do not hear his voice, and, on enquiry, we find that after consuming on the new five pounds of candy system, fifteen pounds per colony, his bees have starved. How many similar cases I could give is well known to all who have followed the leading bee journals for the last ten years; so that I need not mention more here. And the facts remain the same: the problem is not solved.

For the last six or seven years in my own recollection bee-keepers (the big guns, I mean) have declared that all the terrors of winter are gone; and that fifteen pounds, twenty pounds, twenty-five pounds of honey with certain packing, and certain temperature, and certain other things will carry the bees through in what you call "the best possible condition." (By the way, I'd like to know just what this condition is). Men stand up at our fairs and conventions and aver that they can bring every colony through in good shape; but we hear nothing more of these men's voices until they say the same thing next season. When we enquire how they did last winter they say:—"Well, er,—you see, er—I was experimenting and I, er—made a mistake and forgot—and er—my thermometer was wrong—and er—and—or they would have come through on just the amount of stores I intend for them and been first rate; but I can do it every time." But the facts remain the same, sir, the facts remain the same; the problem is not solved.

Toronto, Oct. 20, 1890.

G. B. JONES.

P.S., Oct. 22.—Since writing the above I note what you say under "Our Own Apiary" in C. B. J. for the 15th. That 17 lbs. is a large part of the 20 or 25 you can winter on; but the instance you mention is only a sample of a great many all over Canada this fall. I'll put up a silk hat to a felt one that this colony went winter from harvest to harvest on 40 lbs., and a felt one to a silk one that it will use over 50 lbs. to be in full strength by May 15th, 1891.

G. B. J.

Perhaps if the bees did not get anything except what was put in the hive during the harvest they *might* consume the amount you mention, but they always get more or less honey in the fall and early in the spring. We will suppose, for argument's sake, that every bee-keeper throughout the country rids himself of his entire stock of bees at the end of the honey harvest; the next year he buys a fresh lot of bees, and immedi-

ately the honey harvest is over again disposes of *them*. We cannot see where all the profit is coming in, the combs which are saved over from the first year will be all right for the second stories the second year. The third year you will have, say, double the number of combs, or sufficient for third stories, but after you have gone that far you will have as many combs as you require, unless you go on doubling the number of bees you purchase each year. Of course if you buy bees by the pound after the first or second year you can get over this difficulty, which relates more particularly to extracted honey. If you take comb honey you will have little or no use for the great surplus of comb which you will soon accumulate. We hear someone say, let them swarm and thus use the combs, but the average bee-keeper knows the greater number of swarms the less honey in proportion. Of the many first-class bee-keepers whom we know we have yet to find one who practices destroying bees in the fall and purchasing fresh supplies in the spring. If it is going to pay better why not let us all do it. But then, see the enormous demand which would be created; and as our neighbors down South are as cute as the average of mankind, up would go the price to a figure which would at once make the whole matter totally impracticable. Many bee-keepers have tried the experiment of moving bees to the South for the fall, and bringing them back in the spring to more northerly latitudes, but there are very few who have made much of a success of it. We should really like to hear from Mr. Pringle, Mr. Emigh, Mr. McKnight and some others of our leading bee-keepers on this matter. One point in connection with this subject which your arguments go to prove, is that where there is very little fall pasturage bee keepers should invariably confine the queen to a very small brood space during the honey harvest, so that a large number of useless bees may not be raised to become consumers at the close of the harvest; or if the queen is allowed full play, then remove the combs as we have been doing in the experiment spoken of elsewhere, when the old bees will probably die off leaving only young bees to go into winter quarters.