

weight of certain numbers, etc., and I weighed several lots to determine this point. My determinations varied between 4,500 and 5,000 bees to the pound. I preferred, however, to give the series of determinations by Keys, who wrote nearly one hundred years ago, and who gives 4,640 bees to the pound. He also gives the number of drones, etc. See Dictionary, page twelve.

I was led to give Keys as the authority, because 4,000 bees to the pound was the number adopted by dealers generally. It impressed me at that time, that if these dealers were correct, then the bee under cultivation by them (which is almost always the Italian), must be larger than the bee of 100 years ago, in the proportion of 4.5 to 4 (the inverse ratio of the number per pound). But not being quite satisfied as to the trustworthiness of the dealers' data, especially in view of my own experiments, I did not embody this inference in the article, or allude to it.

Now comes Mr. A. I. Root with a new and carefully made determination, in which he gives 5,333 bees to the pound, instead of 4,000 as previously published by him; but he estimates that if the bees had very much honey in their sacs, the number might be reduced to 5000 to the pound. If we accept these data as correct, it is evident that the bee has not increased in size during the last hundred years.

Keys tells us that the results of such weighings will never come out twice alike, owing to the difference in the fullness of the bees. Collin gives 5,000 bees to the pound, when in their normal condition, and 4,300 when filled with honey—a difference of 800 bees to the pound. Keys, no doubt, gave an average, and he has struck very nearly midway between the two determinations of Collin. An exact number would have been 4,700 instead of 4,640.

Numerous attempts have been made to increase the size of the bee, by increasing the size of the cell, and when foundation was brought forward, it was thought that this question had been solved; but the plan did not work. Neither does the bee seem to deteriorate in size by the gradual filling up of the cells with the cocoons of the young bees. However careless Nature may be of individual bees, and individual colonies, she seems to be wonderfully careful of her types.—JOHN PHIN in American B. J.

Send five cents for samples of our lithographed and other honey labels. It pays to have your packages bear your name and address. Honey tastily labelled sells ready sale.

COMB HONEY.

HOW TO CARE FOR COMB-HONEY, WHERE TO KEEP IT, ETC.

AS the season for caring for honey is here, and as I am convinced by conversations with some bee keepers, as well as people generally, that a great many do not know how to care for honey, a few words may not come amiss at this time on the subject.

In the first place, there is no hurry about taking it off the hives. The bees can care for it more cheaply, and even if it is not quite so white as when taken off earlier, its flavor is improved by perfect ripening, which to my mind, more than compensates for the slightly darker shade which the comb presents.

If taken off during warm weather it will sometimes be spoiled by the larvæ of the bee-moth. The combs can be fumigated with sulphur in a tight box or room, but this is seldom necessary, and is not practised to any extent by the best honey producers. If comb honey is produced by the best methods there will be scarcely any pollen cells in it, and in the absence of these the moths do little harm. A worm is seldom seen in surplus honey unless there is pollen in some of the cells. When honey is taken off the hive, if in small sections containing only one comb each, it can be held up to the light and every cell of pollen detected. If these are kept by themselves and used or sold first, the rest will be comparatively free from moths.

Honey should never be kept in a cellar—neither comb nor extracted. That is the worst possible place for it. It will gather moisture or "sweat," and soon become "off flavor," if not positively sour. Store it in a dry, warm room if possible (safe from mice), then it will keep ten years. It will not granulate so soon in a warm room, and its flavor will improve. I now have some that is three years old, and it is not candied, but is so thick that it will not run. Extracted honey cannot be kept in too warm a room.—EUGENE SECOR, Forest City, Iowa, in Iowa Homestead.

BEE NOTES.

BEES NEAR A HIGHWAY—CROSS BEES—FALL HONEY, ETC.

BEES should not be placed near a street or driveway. If a person is so situated as to be compelled to keep them in such a place, a high board fence is quite a protection against trouble; or a row of high trees or a building—in fact anything that will compel them to rise high, when they fly from the hive. When they are thus situated, persons