

themselves they can be put on to the foundation, and the whole yard will be cleared of foul brood. Of course it would be necessary to have sealed stores to give them a little later on when being prepared for winter quarters, and if the owner of bees did not have them he would probably have to buy. Doubtless a request through THE JOURNAL would secure a sufficient number of the right size. It would not make any difference even though dark honey was used, and there are very many who would perhaps be very glad to dispose of combs filled with dark honey at a very reasonable figure.

We know that if bees are worn out when they go into winter quarters, even though they survive the winter in good condition, they are only left to enjoy a few flights in the spring, and a large colony of such bees will not live long enough to perform the work of replacing themselves by young bees, requiring about a month's time. If this plan of treating bees is carried out we do not know that it will entirely destroy the theory of having plenty of young bees for winter. By young bees is meant bees which have not worn themselves out by exertion, and which have not lost their vitality to such an extent that they are weak and unable to give an account of themselves in the brooding in the spring. Is it not a fact that bees which have clustered from the cessation of the honey flow until the time for winter packing will be nearly as strong as young bees which are reared after the honey flow is over? The former do little or no work, and are not nearer exhausted than bees would be after six weeks or less of ordinary labor.

Is it not reasonable to suppose that the nearer we can get bees to a state of quiescence immediately after the honey flow has ceased the stronger they will be to go into winter quarters. If so it is quite possible that we may yet learn a means of keeping them quiet so that the necessity of fall brooding may be done away with.

FOR THE CANADIAN BEE JOURNAL.

Uniting Bees vs. Destroying Them.

I HAVE been much interested in Mr. Hasty's article on uniting bees in the fall, (which appeared in THE JOURNAL for October

15th) so much so that, had I received THE JOURNAL before preparing my bees for winter I would have given his plan a trial; although, judging by my own experience, the united colonies would consume more honey than one ordinary colony, and be in no better condition in the spring; still I am willing to learn, and if there is the least advantage in such uniting I would rather do so than destroy those not needed, but, if as I expect, there is no advantage in it, but rather disadvantage, I would shuttle off the surplus colonies as I have done the past two seasons. The first five years of my experience among bees was with the large Jones hive, and each fall the colonies would be all sizes, from five frames up to ten, and I frequently noticed that the large ten-frame colonies would be mere nuclei in the spring, and would be beaten the following season by the five-frame colonies, while usually the average ones on seven or eight frames would be in best condition. Only last fall I put a colony into winter quarters which filled an eight-frame hive. It had not swarmed all season, and had been working in two upper stores. That colony wintered in good condition, but was no better in the spring than many others which had no more than two thirds the quantity of bees when put away in the fall. Many bee-keepers claim that large colonies will consume very little more honey in the winter than an average one, but I believe where one colony contains twice the quantity of bees contained in another it will consume nearly twice the quantity of honey. I know a bee-keeper who placed a very strong colony in winter quarters one fall with over forty pounds of honey, and it starved before spring.

Just such things as this turning up every year compels me to pin my faith to good ordinary colonies, just such as are got by practising Heddon's contraction system, which I have done for the past four years. I wish to say, however, that I refer to indoor wintering altogether, as my experience with outside wintering has been very limited, although successful; but I am acquainted with bee-keepers who winter outside and who hold the same opinion. I should like to know if Mr. Hasty winters his bees inside or out, and also how much honey is required to carry one of his strong united colonies through from Oct. 15th to May 15th. I like all my colonies to have at least 25 lbs. of honey to cluster on, and after they are all prepared for winter I don't expect to see the inside of some of them for seven months, and to place them in winter quarters with four, or eight, or even twelve pounds of honey, as Mr. Hasty speaks of, I should consider a very wasteful method of de-