

secured, would look into this matter no doubt further light on the subject and something interesting to all of us would be the result. Bees in the fall of the year are not so valuable as in spring, and we think experiments might be made without costing too much to the experimenters. Perhaps some of you will think that this will assist in proving friend Clarke's hybernation theory, but facts are stubborn things and it does not matter to us whose theory it proves or disproves. If we can secure a condition under which bees will exist for a long time without food it is worth while trying. We do not care whether it is called hybernation, starvation or any other name. If we can improve on any system it is our duty to do so. Live bee-keepers should never slumber in their business but make an effort to improve every condition to the best of their ability.

EXAMINE YOUR COLONIES CAREFULLY.

Have you examined your bees within the last week, weighed them and ascertained beyond any doubt that they have plenty of stores for winter? If you have not many will die of starvation long before spring. At one of our bee yards containing a few less than 200 colonies from which we had taken no honey except a little early clover, when the flow ceased there was enough in many of them to winter two colonies and we then decided that they had sufficient and could spare enough for fifty colonies more, so we extracted in some of our other yards more closely than we otherwise would, expecting to take from many of these hives sufficient to winter the others on but judge of our surprise on going over them carefully last week to find that they had, since the cessation of the honey flow, consumed so much that some of them actually required feeding. After equalizing the stores they had we find they will need from 5 to 15 lbs. before they will be ready for wintering. Of course their having such a plentiful supply on hand after the flow ceased caused them to breed more rapidly than those that were extracted and had less stores, so that now they are very strong in bees some of them, we fear too strong, for we find that colonies having too many bees going into winter quarters commence breeding in winter and

frequently consume their stores and starve to death before spring. We prefer medium colonies when wintered in special repository, but for out-door wintering we think there is less danger of loss with those unusually strong. Not having sealed honey to give those colonies as we expected, we placed on about 100 Canadian feeders; about fifteen lbs. of granulated sugar syrup was put in each feeder. This was done late in the evening and by morning the bees had taken it all down except a little in the bottom. They were filled again and in about twelve hours the bees had taken it all down. Good strong colonies in warm weather with plenty of room below to store it will carry down from these feeders about 30 lbs. in one day. We are sending out such large numbers of feeders that we think not a few have decided to try them in preparing their bees for winter yet we feel certain that unless there is great care taken many colonies will die. The consumption of stores in the last two months will astonish many of even our best bee-keepers when they examine their hives. We hope this warning will not be unheeded by any. Have no guess work about it, take your scales, set the hive on them, take the gross weight and then deduct the weight of your hive. We usually weigh several and take the average weight of the hive, frames with bees, comb and stores. After deducting the weight of the hive deduct say five lbs. for bees, comb, pollen etc., then have no less than 20 lbs. in small colonies and 30 lbs. in large ones. We would rather have five lbs. more than one lb. less per colony. Plenty of stores stimulates bees and it is a great mistake to simply give them barely what will carry them through the winter. It might be wise to adopt the suggestion of one of our men who said: "You ought to put in every JOURNAL till bees are set in winter quarters, have you fed? have you weighed your bees? have you examined them, or are you going to guess at it, and suppose they are all right?" This is a very important matter and you should not forget to feed the bees any more than you should your horses. Now sometimes we find the weather cold when we feed and the bees clustered quietly on the combs. If the food is poured into the feeder cold they are not