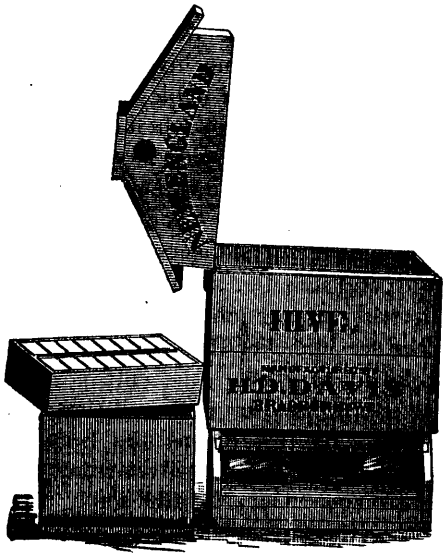


THE SAFE WINTERING OF BEES.

THIS is one of the most important topics with which we bee-keepers have to cope, and my success in this regard has been such that it may benefit your readers to consider carefully the following.

In this communication I shall hope to supply some needed information regarding a properly constructed hive and *healthful food* for bees as these are inseparably connected with success in wintering and no art or skill can remedy the defect or mistakes in this particular.



The hive that I use is called the New England, No. 7, hive and one upon which I have been employed for a number of years and embodies many and oft-repeated experiments. The hive is constructed in sections: the cap, two sections and the base. The brood-nest is disconnected from the hive being separated therefrom both beneath and at the sides so that it can be removed by hand without any disturbance of the outer case. The space between the brood-nest and hive is packed during the entire year with buckwheat or India-wheat or dry sawdust or any other material that is dry and fine. The object of this packing is to protect the bees from the extremes of both heat and cold. The packing beneath the brood-nest is serviceable during winter in that it inclines the bees to seek the bottom of the hive (which is the warmest part of it) instead of at the top. In this case when the bees drop from the combs they do not die of exposure but finding a place among the cluster are warmed and revived. It is also an advantage to have bees at the bottom of the hive in spring as their being there protects the brood above from the

draughts of air.

In my locality the last harvest of honey is gathered from basswood. As soon as my surplus from basswood is properly sealed, I remove it and put a set of extra combs in its place. I then feed *strictly pure* granulated sugar food (in the proportions of four pounds of sugar to one quart of water) until the combs are filled therewith. In preparing this food I pour the water in a boiling state upon the sugar and stir it until it is dissolved. Having these combs filled at this time in the season serves the double purpose of stimulating bees to rear young brood for winter use and also to thoroughly ripen the sugar syrup food which is of the utmost importance. On no account should any but an expert attempt late feeding, which, as a rule, is unadvisable and a detriment to the bees.

Before the fall harvest of honey is gathered, I remove these combs filled with sugar syrup food to the storehouse and also lift out of the brood-nest all of the frames of honey that are not filled with brood, replacing them in the centre of the brood-nest with empty combs or frames filled with foundation. If the bees gather a large quantity of fall honey the bee-master must use his judgment in the matter, supplying room for surplus.

After the colonies have finished storing fall honey and the brood is all hatched out, I remove the fall honey to the storehouse keeping it for the young swarms to use while rearing their brood. In place of this fall honey thus removed I give combs filled with sugar syrup food. Upon this the colonies will feed during the winter. As a final arrangement I lay two one inch square sticks cross-wise over the frames to enable the bees to pass from one comb to the other, then cover with two thicknesses of burlap or porous cloth and cover the whole with packing such as has been described to the depth of four inches except over the centre of the brood-nest. Thus fed and packed on the summer stands no colonies need be lost during winter.

In 1882 I went into winter quarters with sixty colonies. In 1883, I had eighty four colonies and I did not lose one of them. Nov. 15, 1882, I put into the cellar a number of colonies of bees in old hives with movable frames, fed on sugar syrup food, (as by my former description). By some mistake one colony was left in the cellar until June 29, 1883, when my little girl informed me there were bees in the cellar; and upon examination I was wonderfully astonished to find the colony in a perfectly healthy condition, lively and no traces of dysentery which was remarkable as the colony which was a small one, had been confined about 224 days and was removed