

pay more attention to the manner in which the winter stores are arranged I see no reason for not dispensing with the device, as well as the new quilt, and using the ordinary propolized quilt instead, especially in a hive no deeper than ordinary standard Langstroth or new Heddon hives, at least I have been able to do so.

I am not given to making extensive experiments without first trying the same on a small scale, and propolized cotton duck quilts, no matter how thickly coated, are now allowed to remain in the hives with as much success as formerly, to say nothing of the extra expense of a new supply each year.

As to wooden covers, I have always looked upon such with suspicion. I have, however, tried some partly as the result of necessity, and partly on account of neglect, in not preparing early enough, but remember in neither case are the quilts, nor the wooden cover sealed tight, in fact I take particular precautions to see that the wood cover especially are loosened and then raised at the back end by inserting a few leaves, so that an aperture of at least 1 1/16 of an inch is allowed for the escape of moisture, the whole then being covered with leaves to the depth of 8 inches. When the old quilts are used I generally pull them back about half the length of the hive, and allow them to again fall back into position, using the same amount of leaves on top as before, and placing the flat wood cover on top of them. Now one must use some judgment, and recollect that leaves do not pack so closely as chaff or sawdust, and therefore a smaller quantity of the latter is required, at least such has been my experience. Now in regard to the material used for packing. I am yearly becoming more and more convinced that it don't matter so much about what kind of material is used, providing the stores are good, and are properly distributed, or as Mr. McEvoy puts it "So long as the constitution of the hive is correct." Recollect 5 or 6 solid sealed combs of honey is better than double that number, containing the same amount, and empty combs for the bees to cluster on are not a necessity. A good colony can be crowded so as to cluster on combs of honey, and winter in first-class shape. However, if there are those who doubt they can very easily furnish a good place for the bees to cluster underneath the combs of honey by putting a 2 inch run under the hive or furnishing a space behind a division board, for as soon as the extreme cold weather approaches, the bees soon occupy a small space between the combs of honey, which are of course never too cold to cause them to become

chilled by confining honey unfit for winter consumption, therefore the mortality is so slight that the few bees which do die of extreme old age, are of little or no consequence.

In concluding I might just state, my preference under ordinary circumstances for packing material is forest leaves or cut straw, aside from the fact that they are more readily obtained. Saw dust except for spring protection, finds less favor with me than almost any other material, principally on account of its liability to become damp if in the least favored in that direction.

STRATFORD, Ont. March 23rd, 1891.

The Heddon Hive.

Written for the C. B. J., by A. G. Willows.

A dealer has lately sent me one of his catalogues of the "New Heddon Hive" and with it Mr. Heddon's catalogue for 1890. On reading the very strong claims made for this hive and system and the many highly flattering testimonials given by prominent bee-keepers I am led to wonder wherein I failed in making the hive a success.

I purchased the right to make and use from the D. A. Jones company when they held the right for Canada. The first year I made up about 25 hives and put bees in most of them the first summer.

The great objection I found to their use was that burr combs would be built between the various sections of the hive and also from below to the honey board and to the cover and the whole filled with honey. Then, instead of being the most easily handled hive made and with least exposure to robbers, as is claimed for them, they were about the worst in these respects. I think one of the most disagreeable jobs I ever had in the apiary was opening these hives when in the above condition and the bees inclined to rob.

I cannot see how the results can be any different with the top and bottom bars of frames made according to dimensions given in "Success in Bee Culture," that is 18-16x4. The bee space allowed between the different sections of the hive—fully 1/2 inch would, it seems to me, make matters worse.

These light frames also allowed the combs to sag considerably when filled with honey. Then on being reversed they would in a short time sag in the opposite direction. This fact also made matters worse in regard to the burr combs. The frames were wired.

Now, I would like if some of those who have made a success of the hive would give their experience in regard to these troubles