

little danger of the bees flying again—until they have forgotten their old locations; else some bees will be lost, or some colonies get more than their share of bees.

When the bees have a "cleansing flight" in winter, there is also a likelihood of bees returning to the wrong hives. Then when the bees are unpacked in the spring, and moved to their proper places, there is more confusion and mixing; but I do not look upon this as so very serious a matter. At this time of year, other things being equal, a bee is worth just about as much in one hive as in another. If there is any difference in the strength of the colonies, the weaker ones might be left nearest to where the bees were unpacked.

EARLY PACKING.

Speaking of being compelled to wait about packing the bees until they were not likely to fly again until some time in winter, reminds me that advantages have been claimed for early packing; that the bees in single-walled hives only wear themselves out with frequent flights that are to no purpose, while those that are packed are not called out by every passing ray of sunshine; that the early-packed bees sooner get themselves settled down for their winter's nap, and are in better condition when winter comes.

It is possible that there is something in this, but there were two or three years in which I tried feeding a colony or two as early as the first of September; and I continued to pack a colony every two or three days until the forepart of November, and I was unable to discern any advantage in very early packing. If the bees are protected before freezing weather comes, I believe that is early enough.

SPACE BELOW THE COMBS.

There is one other point that ought not to be neglected in preparing the bees for Winter, whether indoors or out, and that is the leaving a space below the combs.

When wintered out-of-doors, there ought to be a rim two inches high placed under each hive. This allows the dead bees to drop away from the combs to a place where they will dry up instead of molding between the combs.

Then if there is an entrance above the rim there will be no possibility of the entrance becoming clogged. This space under the combs seems to be a wonderful aid in bringing the bees through in fine condition, and I am not certain why.

Weak colonies can seldom be successfully wintered out-of doors. They cannot generate sufficient heat. In the cellar, where the tem-

perature seldom goes below 40°, quite weak colonies can be successfully wintered.

SUMMARY.

As I understand it, this whole matter of outdoor wintering of bees might be summed up in a few words: Populous colonies, plenty of good food, and thorough protecting. Simple, isn't it? Yet there is a world of meaning wrapped up in these few words.—*Country Gentleman*.

READ AT N. A. BEE CONVENTION, ALBANY.

Some Facts Not Generally Known About Rendering Bees-wax.

R. F. HOLTERMAN.

THE subject to which I am about to refer I shall not attempt to clothe in much language, but it is important, and particularly so in view of recent discussions upon the spread of foul brood through wax, and how it is to be prevented.

We know that there is scarcely any, if any natural produce, be it in the animal or vegetable kingdom, which can be heated to any material degree above that in which it was produced, and retain the same properties or nature as it did before so heated, yet we appear to ignore the fact in the melting of bees-wax. The general bee-keeping public do not appear to be aware that wax can be injured by heating almost to the boiling point, or by long and continuous heating at a somewhat lower temperature. Is such the fact? I am convinced that whilst the average wax is rendered with less injury now than in former years, the average wax has lost a portion of the valuable properties which it possessed when first generated by the bee.

Of course, you have a right to ask, is this a suggestion upon the line of which I wish you to experiment and observe in the future, or have I proof? Well, it is both. I believe it will only require careful reflection and a few arguments in favor of my, call it theory, if you like, to lead many of you to at least reflect.

Wax produced in countries considerably south of us, should surely, if anything, be stronger and better able to resist a high temperature, and yet the average bees-wax from the south will break more easily in the hive than our own. After months of reflection, I can only come to the conclusion that the reason is in these localities the methods of rendering are more crude, and it is more liable to injury from over heating in that process. Again, I know and have seen, comb foundation made from wax rendered in the solar wax extractor, put in the hive much thinner than ordinary, and yet, not