

222, Oct., 1884, Mr. Demaree gives his plan of taking honey with queenless bees where he uses shallow cases of brood frames tiered one above another, and tells us that in taking comb honey one shallow case at the bottom might catch the pollen and keep it out of the sections, and says:

"Hence I shall work a set of shallow frames under the cases. As my shallow frames for extracting are worked in cases the same size of my section cases, they will work all right together. I propose hereafter to substitute the cases of shallow frames for full sized hives in obtaining extracted honey."

These facts will show the material for such a hive, and Mr. Heddon has used that material and combined the many good points in one hive. If he has patented separately what is common property and can legally prevent us using what we have used, we are all interested and want to know it.

I may appreciate his hive more from the fact that I have been using for six years the Hoffman partly-closed-end, hanging frame, and following Demaree's idea had planned to cut down these frames to fit my shallow, wide-frame cases, and use both for extracting supers, and for brood nest for new swarms, giving empty brood frames, perforated zinc honey board, and two tiers of sections filled with full sheets of foundation on the Hutchinson plan. Had also thought of giving a case of sealed honey for wintering after removing sections. Had ordered my frames and cases, and had got so far when this new system came out.

These Hoffman frames can be wedged up and inverted if required, but I do not expect to practise tipping brood upside down just to get combs built to bottom bar, or to spread brood when I can do it just as well without. Honey will be carried up and brood brought close to sections, or spread by simply interchanging cases, and as to giving combs built in frames down to bottom bar, I shall use full sheets of foundation snug all around, and so fastened by hot wax to frame and wires that in these frames it will not sag. When using starters only will put a narrow one all around frame, top ends and bottom, and if it don't work I will report.

The advantages of these cases over the Heddon style are these: I use ten frames, or less as required, thus get more room on top for sections, and movable division boards, which shut off bees from wedge or screw. Frames are 2 $\frac{1}{2}$ inches deep, so can use cases for either wide frames or brood frames, or both, end bar being but two-thirds closed; the open third gives bees access to bee space behind ends of frames.

With Heddon's hive frames are deeper and but eight in number, giving less room on top. At end of frame is a space inaccessible to bees, but large enough to harbor moth worms I should suppose.

Mr. Alves, in *American Bee Journal*, asks if shallow cases of hanging frames will not do just as well. Mr. Heddon's friend answers "No," but gives no reason why. I should say "yes," especially if you use the Hoffman frame.

We are all greatly indebted to Mr. Heddon for modernizing, perfecting and so plainly bringing to our notice the many advantages of the system given in his new book, which contains much that will be new to all and will be found nowhere else.

ALSIKE CLOVER.

All writers for Agricultural and Bee Journals agree as the superior qualities of Alsike over other clover for pasturage or hay. Having fine stalks and little woody fibre it is eaten clean by all stock and yields heavily, often producing three tons of good hay per acre. It is said as a fertilizer for land it has no superior, if an equal.

While it pays well as a farm crop it is also our best crop for honey, and all bee-keepers recommend it in the highest terms, as will be seen by reading the reports of all the Bee-Keeper's Conventions held this winter.

It is claimed that as great yields may be obtained from it as from basswood and the quality of honey much superior. Mr. J. M. Hicks, of Battle Ground, Ind., says, in a late article in *CANADIAN BEE JOURNAL*, "we have no hesitancy in saying that Alsike clover will produce 500 lbs. of the richest and best honey per acre in a good season."

As a seed crop it pays well, the seed bringing, at wholesale, from \$6 to \$7 per bush., and an acre frequently yields 4 bushels of seed.

Mr. C. M. Goodspeed, Thornhill, N. Y., gives the net profit on his crop as \$60.00 per acre and speaks of the hay as the best he ever fed.

If the bee-keepers of R. I. are to supply the state, they will have to offer something better than dark honey, and if each one will distribute among his neighbors every spring a bushel or two of this clover, I believe we would soon be able to compete with any honey in the country, and to keep one hundred colonies with profit in the same area that now supports but ten. Vermont produced 160 tons, and Maine 192 tons, of honey the past season, and much of it was from clover.

Alsike clover does better on clay or wet land and is sometimes unsatisfactory on dry or light soil. It is said to be hardy and does not easily winter kill; from 4 to 6 lbs. are sown per acre. Part of the piece can be mowed before it blossoms.