

stroth, I much prefer the honey stored in the back ends of the frames, leaving the front end of frames empty for the bees to cluster on when placed in winter quarters. This can be secured by raising the back ends of the hives, when the bees are storing, to an angle of from 20 to 30 degrees. The honey being thus stored in back end of frames allows the bees to begin their winter confinement at the front of the hives close to the entrance. It also brings the cluster up close to the cushion or packing, which retains the heat in the cluster, and as the winter advances the bees slowly move back and follow up the honey without breaking cluster.

There has much been said against the presence of pollen in the combs, some claiming that it is the main source of our winter troubles. Last year I run 325 colonies in North Hastings, and after basswood bloom the weather for ten weeks was too hot to handle them in ear lots. So they were not moved till the first week in August. During that time practically no honey was gathered but there was hundreds of acres of waste land thickly covered with mullins and I never saw bees store such quantities of pollen, there was some combs in all of them filled solid with pollen. They were then moved to buckwheat and all well filled with honey for winter and I never had a lot of bees winter as well. They came out clean and dry and not a spot on a single hive.

August 5th, 1899.

Notes and Pickings.

[For the C. B. J.]—D. W. HEISE.

"Please watch what bees do when the queen is taken away, and see if they make the mistake of choosing larvæ more than three days old, for queen rearing. I'm watching, and so far they have chosen only young larvæ. Here's what I think: That bees will never select larvæ too old

if those of proper age are present, but queenless bees are not satisfied to stop with what they first start and afterward, for want of better, use larvæ that are too old for good queens." Stray Straw Gleanings.

The harvest is past, the summer is ended, our tanks and crates are empty; and so are a large number of our hives, that is, "of honey." I reported some time ago that the prospects were good for the bee filling up for winter, but at this date I am forced to report another disappointment. After weighing all the hives I find the winter supply ranging all the way from five to sixty pounds, and after equalizing by taking from those that have more than they require, and giving to the lighter ones, I will still have considerable feeding to do, that all may be well provided for the winter. The condition that prevails in my own yard is no exception to the generality of Apiaries throughout this whole section; and unless bee-keepers attend well to equalizing and supplying deficiency, few bees will be left to hear the sound of the whip poor will in the spring of 1900.

Gleanings 535. Mr. E. W. Brown gives S. T. Pettit great credit for giving to the bee-keepers the use and benefits of his "divider." But he wants to know why Mr. Pettit should stop there? Why not put "dividers" in the brood chamber and encourage the maintenance of brood in the outside combs, to the exclusion of honey, at a time when we want all the honey above? Would not this also form a sort of ante-room for the comfort of the bees on rainy days and at night? And would it not have a tendency to keep the bees from getting that silly notion into their heads that they are too numerous to live in one hive? Let's not give up this swarming business as long as Doolittle doesn't know any better than to waste time on it. Doolittle admits that the Pettit divider is probably a good thing for the purpose for which it was intended. This is encouraging. Now Mr. Pettit see what you can accomplish with your dividers in the brood-chamber. May be you can get Mr. Doolittle thoroughly interested in these things. You have put dollars in my pockets, may be you will in his? The foregoing is indeed flattering Mr. Pettit, and he is offered another field for experiment. But I think the experiment which Mr. Brown suggests