

to get a big crop of honey, and the supply must be kept up by giving ample breeding room. If this is done in the brood chamber, and swarming is prevented without causing the bees to become loafers, in a good season I should expect one-fourth more honey in the first mentioned ten hives, provided always the season was a good one.

ALLEN PRINGLE, Selby, Ont.—It would depend a good deal upon the character of the season and the quality of the queens. To answer this question with any approximation to definiteness it will be necessary to presuppose a good honey season and a good prolific queen in each colony. Assuming these two conditions, and also equality of queens and colonies, I should say about 40 to 50 per cent. more of honey would be received from the colonies with confining the queen. But you would certainly get more swarms from the colonies without the zinc when the queen had full swing.

EUGENE SECOR, Forest City, Iowa.—I don't think you would get any more honey from the ten having the perforated zinc, possibly not quite so much. The reason for using queen excluding honey boards is not that we get more honey, but because what we do get is more free from taint of brood and bee bread; the combs are more easily cleared of bees when extracting if no brood is in them and the operator can work faster and more pleasantly if he does not have to try to avoid uncapping brood. Unless the brood chamber is of ample proportions I think the tendency to swarm is slightly increased by the use of the perforated metal.

G. W. DEMAREE, Christianburg, Ky.—I do not use the perforated excluders with the view of obtaining a greater quantity of surplus honey, and whoever does use them with that end in view will be disappointed. *Hive fixtures* do not gather honey—the bees must do that. I use perforated excluders to prevent the queens from entering the surplus department of the hives. Observation and experience teaches me that I cannot take the very best quality of honey with the honey extractor if there is brood in any quantity in the surplus combs, because the bees are sure to have more or less of watery (thin) honey deposited in the cells contiguous to the brood, and this thin honey and other impurities connected with brood rearing will *sling out* with the finished honey and damage it. Judging from my own experience, the perforated excluders do not affect the quantity of honey gathered, nor do they affect the inclination to swarm. When producing comb honey in section cases, I do not use the excluders, as they are not necessary.

WM. McEVoy, Woodburn, Ont.—I never used any perforated metal, but I believe that in a good honey season, if the same combs were kept on each colony all summer and that all were extracted every time as soon as ready, the ten with the perforated metal on would produce about 250 lbs. more than the ten with no perforated metal on. The queens would go up in the top storeys of the ten which had no perforated metal on and start so much brood that there would not be much space left until the brood hatched out, which would take about

three weeks, and that right in the honey season, the very time that we needed the storage room the most. As to which ten would swarm the most in the season, I think the ten with no perforated metal on would, because they would be the most crowded with both bees and brood. The ten with the perforated on would have no brood in the top storey, and each time the honey was extracted it would give plenty of room for more. When I find the top storeys so full of brood that there is very little space left for honey, I make artificial swarms and use the brood in the top storeys to make them; or if any of them swarm I take off the top storeys full of brood and hive the swarm in it. I then put the swarm on the old stand and put the old hive on a new stand. I then put a hive half full of combs on top of the new swarm. I spread the combs apart and put comb foundation in between each comb, the very place where the bees will soon make it into the most perfect comb. As soon as the brood in the old hive is hatched I take the combs out and extract them, and exchange them for a top storey full of brood. Those empty combs, put in the top storey where the brood was, will give the bees plenty of space for honey, and when the brood from the top storey hatches out in the old hive, it will make a strong colony. For section honey I always take the top storey full of brood to hive the first swarms in so that the bees will have nothing to do but go right to work at once in the sections, which they always do, and as the brood hatches the colony becomes stronger every day, so that the bees will keep right on at the sections until the very close of the season. By hiving first swarms in hives full of brood, I always got more section honey and better filled sections than I ever could any other way. Where a bee-keeper works mostly for extracted honey and doesn't want much increase in bees, I think the perforated metal would be just the thing to use.

If you extract from the top story alone, should think the yield would be double with a good queen, as she would fill both chambers with brood were there no honey board on. If you extracted from both stories there would not be much difference. The ten with the metal would swarm the most.

Amount of Dead Bees from 100 Colonies.

QUERY No. 208.—One hundred good colonies put in a good dry and dark cellar about the 10th of November, and the thermometer to keep steady at about 45°. About how many quarts of dead bees would there be on the cellar floor by the 10th of March?

J. K. DARLING, Almonte, Ont.—If colonies were wintering well, about ten or twelve quarts, and none in the hives.

JAS. REDDON, Dowagiac, Mich.—Perhaps a