

over the hives and pack all round and on top with dry saw-dust or chaff. Each can have a little shingled roof, and these will do from year to year with care. I can say from experience that any labor and money expended in this direction with other proper management will bring satisfactory returns. Especially is it necessary to take extra care in the spring of the colonies intended for the production of comb-honey. For some years I have been in the habit of selecting the hives for comb-honey early in the spring and giving them extra attention by packing them up, cozy and warm, and giving them abundance of stores. It pays. You see, in order to get the best results in comb-honey you *must* (this is imperative) have your colony strong to overflowing when the honey season commences. Then if your subsequent management is right you will not fail to get comb-honey. I am glad to see that friend Hutchinson emphasises this point, and he is one of our very best comb-honey producers. Of course if it pays to nurse up colonies for comb-honey in this way, it also pays to nurse the colonies for extracted honey as well. But what I wish to impress strongly is this: Although you can get extracted honey in plenty during the course of a good season without this extra spring nursing and management, you cannot successfully get comb-honey without it. And right here let me say I am altogether in favor (and always have been) of raising both comb and extracted honey instead of either exclusively. Of course the beginner can mostly confine himself to the production of extracted honey for a time till he acquires knowledge and skill, for be it known to all men (and some women) that the successful production of comb-honey requires both knowledge and skill.

In going over the hives in the spring, handle carefully and avoid jarring, or "balled" queens may be the result. A neighbor of mine had five good strong colonies last fall, but through mismanagement, lost all but one in wintering and that one he has now lost by frequent handling since he set them out. Bees ought not to be handled much in this season or any other season of the year when honey is not coming in. When the first overhaul is made in the spring, certain essential matters ought to be noted in the record to obviate the necessity of much, if any, subsequent handling till the season opens. The matters to be noted are—first, is there a good queen? Second, is there sufficient food? Third, is the drone comb, if any is present, on the outside of the brood frames, furthest from brood nest, and fourth, is the colony strong enough to take care of itself and pull through? If, on examination, you can answer these four questions

in the affirmative, you need not bother opening that colony again for some time to come. When a colony is found queenless, unite it to some weak colony with a queen, and requiring assistance. As to uniting weak colonies with fair queens in the spring, I gave it up for the most part, as it seldom yields satisfactory results. Nor have I found the system of spring "equalization" yielding satisfactory results. I mean robbing the strong to build up the weak and equalize all. The plan works well enough if you can succeed in getting all in first class condition when the season commences, but the result is, you generally get all in fair condition and have none first class. Given, a dozen colonies, I would rather have six of them in first-rate order when the honey flow begins and the balance rather weak than to have all of them fair to good.

A very important and essential point in spring management is to give the queen full swing till the honey season begins and a little later on. That is, give her abundant room for brooding. As the honey season is rather long in this locality, I prefer to let the queen do her best till the colony swarms which, as a rule, will not be very long after the flow begins. Then I want her highness to let up a little in her domesticity and to keep up this moderation through the heavy part of the harvest and up to the time for fall breeding. She ought to be confined to, say six Jones' frames, six Langstroth, five Gallup, five Improved Thomas, or one brood section of the New Heddon Hive. I know of no way to do this effectually without the use of the perforated zinc which I regard as one of the greatest achievements of modern bee-keeping.

In making ready for the honey harvest there is much to be done outside the hives and yard. Receptacles for extracted honey and a proper place for the comb honey ought to be gotten in order; sections with foundation ready in cases; brood frames wired and filled with foundation or merely starters as the case may be; hives and stands ready, extractors and knives in order, etc., etc.

A word in conclusion, as to the proper receptacles for extracted honey and the proper place for comb honey. For the former, I am discarding the use of barrels and large vessels of all kinds. If you ship your honey they are too cumbersome to handle, and if you take it out for sale as you require it there is entirely too much labor in getting granulated honey out of a large or any other vessel where you cannot melt it in the vessel. The best receptacles to store extracted honey in are the tins of different sizes, especially the 60 lb. tin, as that is about enough to handle on and off the stove or range, and is