

it, comparatively little honey at the top in a single case.

Coming back; if we are to arrange our hives so that the bees can store in them according to their instinct. I think it becomes plain at once where the division must be made between the honey and brood departments of our hives. Supposing you were wanting to add space there for the bees to store in, you would add it right along this line. The vacancy to store must be right along where that line comes. Coming back to these cases, I had two hives set up here a moment ago and you will see the analogy between these and the diagrams I have given you. You will notice the single case contains the shallow frames and the brood is practically right at the top of the frame at once. So that if you put a case on top of that hive as it stands there in the bottom your bees have got to cross that body of honey to store above it. Consequently they are working there contrary to their instinct and you get less honey. To get around that difficulty in this double story instead of adding a surplus case to that hive when we start in I take and run the queen into the lower case. We will suppose it is full. You raise the cover and a few puffs from the smoker will send the queen down—you need not hunt for her—out of that upper case into the lower one. As soon as you have her there raise this up and put the excluder under. When I have shut the queen below I have made this upper case the first surplus case on that hive. I allow that case to remain that way until the brood is sealed. Then if the colony needs more room for storing this case is raised up and another one put between it and the brood.

Referring back to these charts again. A great many may never have thought of the reason why we put cases below or next to the brood chamber. Why

not put the case on top? Simply because the bees will not work as satisfactorily if you put them on top. If you remember what I told you a moment ago you will see the reason why. When the case is down here and you put another one above you are compelling them to pass over a body of honey. So in adding cases, when you make an opening for them to store in always make it between the brood and the honey that is in the hive. you notice that there will be no honey below that honey board. By putting that case on they will give you about equal results. If you treat them properly this colony will beat the other one all to pieces.

There is another reason for doing this and that is the cutting off of unnecessary brood. It cuts off a supply of bees that will be thrown on your hands at a time of the year when they are only consumers instead of gatherers, and it prevents them from using a lot of energy in the raising of brood during the season when they should be gathering honey.

We have got these surplus cases on and the question is what to do next. We have to watch these cases. With this single case the management is the same as the double case. When the first case becomes half or two-thirds full we have to add another. That is simply done by, as I said before, raising the under one up and adding an empty one below it. From the diagrams you will understand why the empty one is put below and not above it. Another thing about it is this, the shallower that case is made the more readily your bees will accept it. Now, we let them stand that way until the second case is about two-thirds full. It is raised up and a third one put under and they are left again until that is about two-thirds full and we raise that up and put a fourth one under and you continue that operation as long