

two hives, one a double case full of honey and brood, and beside it another hive, a single case of brood and honey, and I am asked the question, which of those hives will give the best results during the season by putting a case on top? They will give about equal results.

Mr. Holtermann—What length of season?

Mr. Hoshal—My season begins about the 10th June and goes to the 20th of July. You would naturally suppose this double one, with twice the bees and twice the brood, would give, if not double, at least better, results. It will



THE HEDDON HIVE

not do so. To get around that difficulty and make this double one exceed the other is what we are after now in our management. This larger one corresponds more with the general hive that is used. You would naturally expect from the other hive pretty much the same results as you would from an ordinary movable frame hive. To get at how to deal with that I have prepared two or three charts. If you have observed your bees you know it is natural for them to store their honey at the top of the hive, and the brood is reared immediately next to it and below. In other words, I have

sketched a frame, what may be called a deep frame. I have marked a line just as a matter of convenience to indicate the point where the brood and honey meet. That is the separating point between the two. Above this little dotted line is the honey, below it is the brood. I don't know whether I have exaggerated that drawing or not, but I presume in a deep-framed hive you will find about that much honey. Then your bees in working, as the season goes on, as the brood along the top of this line hatches from the cells, if the honey is coming in sufficiently fast, will fill these cells with honey. Consequently this honey will be extended downward, extending downward all the time. They store it between the brood and the honey, and with it the brood is extended at the bottom downward until there is no more room. On the other hand, if the honey is not coming in fast enough to keep that space filled where the brood is hatching, the queen fills it with brood again. They are continually working to keep the brood and honey connected there. I have another drawing here, on which I have illustrated it a little farther. There is another frame of medium depth, Langstroth. Notice where the line on that comes. The depth of honey at the top of that frame is not so great; it is shallower, in other words; the shallower your frame the less depth of honey there will be at the top of it. Carrying it on still farther into what we call a real shallow frame, I have illustrated it here with this drawing. In that frame the quantity of honey at the top of it is not as great as in those others. Maybe you think that is not fair, that we should put in at least as much honey there as in the top of the others. There is not as much honey at the top of that frame as at the top of the others. You will find about what I am showing you here in