

disposition and you would then have a large number of old bees as honey gatherers-

Editor C. B. J.—Will you please explain the following: I had two swarms of bees come off last week, they were both weak and neither of them had a queen, upon examining the hive I find only one queen in each and they also are weak. How do you account for it and what would you advise. Do you think it best to purchase two new queens or to put all four into one hive.

JAS. THURSTON.

Would advise you to double them up and not purchase queens for weak colonies, for this reason: before brood would hatch out, from the young queen in sufficient numbers to make a good colony, the present bees occupying it would be dead and spring dwindling would likely follow and it is very questionable whether they would build up this season. It is better to have one strong colony than four weak ones as the profits would be greater and the results more satisfactory.

Please answer the following question through C. B. J.

(1) What depth of a frame is best for a hive in Summer, when another depth is used for Winter? (2) What depth of a frame is best for wintering on, when another depth is used for summer? (3) How many cubic inches should a colony occupy for winter if 2000 cubic inches is the size of your hive? (4) Will bees feed up as quickly in the spring on a deep frame as on a shallow one? —E. T. BAINARD.

(1) This depends entirely on the system of management. It would be impossible for me to decide without knowing what system of management you propose to adopt. For instance, if you wish to take comb honey, a shallow frame like the New Heddon, Langstroth or Combination hive, if for extracted honey, we would prefer the Combination, but we do not see clearly the advantage in using one kind of frame in summer and another style in winter. The winter frame we presume you expect to place above the brood chamber and have the comb filled and sealed with good honey for winter stores. (2). There is no doubt but the best style of frame for winter is one that will give you the bees in the most compact form. The size of frame depends solely on

size of the colony. If you are going to have all your colonies good and strong, we prefer a frame similar to what is termed the Jones frame, which is about  $10\frac{1}{2}$  by 13 ins. inside measure and hangs in the hive, when eight frames are in, making a square brood chamber about 12 by 15, inches, this includes top-bar and space under frames. It allows the stores to be above the cluster of bees, the heat ascends and the stores are always warm as the bees pass up and consume them. But we would think it a mistake to attempt to use two styles of frames, and as the Combination frame which is about  $10\frac{1}{2}$  by  $12\frac{1}{2}$  ins. inside measure, is a happy medium between the deep and shallow, we would prefer it for both winter and summer in your section of country. (3). This depends solely on the time you examine them, if they occupy the entire 2000 cubic ins., to its fullest extent, during warm weather, when very cold weather sets in, and they get properly clustered, they would not probably occupy more than half this space. (4). Yes.

## The Production of Extracted Honey.

### FIRST PAPER.

IN running an apiary for extracted honey it is generally supposed to require less skill in management than the same apiary would for comb honey. This is a mistaken idea. It is true that in the production of comb honey many bee keepers have trouble in getting the bees started in the sections; and others use no care in preparing it for market; but how much blundering there is done in the securing of extracted honey that is never known. The honey is sold—it may be good, but of one bad; but it is extracted honey, and many who buy it do not know what good extracted honey is. If this was the only difficulty in connection with the extracted honey problem, it would be bad enough; but the inexperienced bee-keeper too often leaves his bees in disorder and confusion only to die—it may be even before the winter is come. I have known bees to die in the fall after the extracting season is over, their owner supposed them to be gathering lots of honey. I therefore in this paper give what I believe to be good advice on the production of extracted honey. Before I describe the different systems by which extracted honey can be taken profitably, I would mention two things which I believe to be best, no matter what hive you use. First, I would say: Do not extract