

at any one time, and they will be saving. I quarrel with the teaching that a colony should be provided with twenty-five pounds of honey, or even twenty. I am well pleased with twelve pounds, and not troubled if it is only eight pounds, and sometimes I send them into the winter with as few as four pounds. Of course you understand there is more in the comb closet ready to be put in when their scanty supply is gone.

Now as to the mode of operating. You may suppose, if you pleas, that I have obtained somewhere in the apiary ten combs with at least a pound of honey in each, and that I have them in the carriers, sitting in the house in a warm place. I prepare an empty hive (as hereinafter stated) and bring four colonies in their hives and set them conveniently near. As a next move it is sometimes best to wake the bees up thoroughly by smoking them. Sometimes it is well to smoke them quite awhile before the rest of the operation begins. Sometimes it is best not to smoke, except the few puffs usually given when taking out frames. The weather, and the mood the bees happen to be in, will determine this. Two of these colonies are to be united with each other and put on one side of the partition of the empty hive, and the other two in like manner on the other side. Into one of the apartments put two combs from the carrier, placing them on the outsides, with room for the other three between. Open two of the colonies and shake a frame from each directly into the apartment, between the combs. If the first frames are not well covered with bees use two from each. Next put in the three center frames and close the top. Shake the rest of the bees in front, running them in much like a swarm, only continually mix them by taking from each hive alternately. It is to defend their home that bees fight, but in the predicament that these little fellows find themselves in a strange hive, all the combs with a foreign scent, and themselves mixed with strange bees, they do not feel that they have anything to defend. While filling the first apartment a piece of board is temporarily fastened in front, dividing things into two front yards.

At the end of the operation I have twenty-eight combs out of which to select ten for the next batch of colonies. The remaining eighteen are hung in the comb closet, to be swapped as they are needed in the spring, or during mild days in February. If the colonies are weak, as at the end of a bad season many may be, put in three colonies on each side. You don't know what a lot can be got in until you try. In this latter case there will be forty-two combs to choose from, and thirty-two to put in the closet.

I have never yet had my combs so empty, in the fall that I could not by selecting the heaviest make this method work. I have a location in which (owing to large pollen resourcation in which (suppose) bees multiply like mice. On this account the large reduction in the number of colonies does not signify as much with me as it would in some apiaries. The average yield of honey per colony in this region is so small that it absolutely wont pay to feed sugar in such quantities as often advised. It is every man's business to know his own location, and to keep his knowledge in mind when laying his plans.

If it will pay to buy twenty pounds of sugar per colony, why do so. If you know pretty well it will not pay, the above plan avoids the destruction of bees, and keeps things in shape that one can quickly get back to the original number of colonies in the spring if he desires. One year I used a modification of this in which six or eight colonies were put in one hive without any partition. This of course sacrifices many more queens, and is less desirable on that account.

I do this work rather late in the season, and I have found so few bees to insist on their old location that there is no serious trouble on that account. It is well to leave the stand they were taken from without any hive there, else bees might gather in on warm days.

As to queens, I have a strong impression that the queen survives when all are shaken together, and that my selection is very apt to be incorrect. If you wish to destroy the superfluous ones yourself it is better to do that part of the work on a previous occasion. Let me state my theory as to why the best queen survives in a contest. It may not be correct. Victory depends not on strength, nor on agility, nor on luck, but on which queen first becomes infuriated enough to sting. And this again depends on the amount of real vitality and vim the lady happens to have in store. It looks reasonable that a poor declining queen should have comparatively less of that peculiar royal jealousy which distinguishes queens.

Bees packed in two chambered quarters soon seem to acquire a common scent, or at least to get used to each other to such an extent as to feel at home on either side of the partition. If the honey is unwholesome, and the bees dwindle, most of the survivors are apt to collect on one side, leaving on the other only the queen and a nucleus of bees. This is sometimes a disadvantage, but sometimes an advantage. In setting them apart in the spring you can let the weaker lot keep the homestead, and set the stronger lot in a new location. Bees enough will then return to do considerable towards evening up things.

Now as to preparation of the hive. I have elaborate bottom boards for winter, with sawdust bedding, small open chamber, vertical entrance, and various do-funnies which I do not think important enough to recommend. The ordinary bottom boards, a simple partition, and two bits of wood to close the rabbits on each side where the partition comes up, will do, I think. The partition is an outline of thin strips of wood holding two thicknesses of enamelled cloth. Bees on each side cuddle up against it and form what in reality is but one cluster, although each side has its separate queen. Thinly shaved wood, will, I presume, do well for partitions. Have the combs quite a little further apart than in summer providing you are going to have bees enough to fully occupy the room. If not, better leave only about the usual space. A space will hold more bees than most of us are apt to plan on. If the hive is a small one, and will not hold ten frames with a partition, I put in only four combs in each apartment. The very narrow eight frame hives I presume cannot well be used, so the brethren who have no other hives than these will not find my plan of any utility to them."