

her eggs, she imparts the swarming impulse, and is among the first to leave the hive. If, however, the queen is ever so well accommodated by young queens hatching, and thereby making room for her, and yet the bees are crowded for the want of room to deposit honey, *they* create the swarming fever when the queen is one of the last leaving the hive. We know that all the honey gatherers except those in the field are gone with the swarm.

No honey will be collected for a week or two, and the honey-chamber should be placed on the new swarm as soon as hived. There is no excuse for a bee-keeper allowing a second and third swarm to issue, as it is an easy job to look over the brood-chamber on the tenth day, or earlier, and to make use of the surplus queen-cells or destroy them as the case may be.

Honey being the object, we make a mistake depending upon natural swarms for an increase, as we thereby deprive our colonies of their force of foragers during, perhaps, the best flow of honey; and if a bee-keeper does so, he shows a neglect, of which, I admit, any one of us may be guilty, or he betrays a lack of knowledge, or, perhaps, a fear of the "tail end" of the bee.

As stated above, I want a large hive and a large colony of bees. I make no early swarms, but equalize my colonies before the harvest commences, taking, however, no frames of brood and adhering bees from any colony until it is very strong, near the point of swarming, and no honey-chamber is put on until the 10 frames of the brood-chamber are filled with brood. If this equalizing cannot be done with every one of my colonies before the season opens, I leave those weak colonies to fill their side combs with honey until they can be exchanged for combs with brood from strong colonies, when *their* honey-chamber is put on also. We cannot prevent queens entirely from entering the upper story, but by an observance of the above, it is the exception rather than the rule to find combs filled with brood in the upper story. When producing extracted honey exclusively, brood in the upper story does not bother us any. When comb honey is produced, a zinc division-board will prove a pretty certain preventive.

When the combs of the upper story are filled with honey, I exchanged them for empty ones, and whenever a comb with brood is found, it is placed on the left side in the honey-chamber. When done with all, and extracting is over, those hives having brood in the upper story, get another overhauling. When the number of brood-combs in any one honey-chamber indicates that the queen has been neglecting her business below, the brood-chamber is looked over, and

combs with honey and bee-bread, if any there be, are exchanged for combs with brood from above. Otherwise those combs with brood and adhering bees are used to strengthen up weak colonies to form nuclei, or to make colonies by division. The parent colonies are thereby not deprived of any of their foragers, as all the old bees return. My colonies made by division consist of 20 combs, if possible containing brood and honey and adhering bees. A queen-cell or queen is given them on the following day. If the latter is the case, the new colony needs a looking over in the course of a week, or earlier, as the case may be.

The same process is gone over in the same manner when the combs are filled again, and so on to the end of the season. The result is that old colonies and new swarms are alike well provided, and that the latter gave me as much honey as any, in proportion, and natural swarms have not bothered me any. The queens having had ample chance to deposit their eggs, contract their brood-nest with the close of the season, honey takes the place of brood in the side-combs, and if the necessary winter stores are not accumulating in the brood-chamber, it is accidental and caused by the season. Extracting is never done too closely, and honey enough is left in the upper story to give each colony its full supply, and to provide for unexpected emergency the following spring. We never calculate these combs as part of the crop of the season, as we want our bees to be self-supporting if possible.

I do not want to winter my bees on sugar syrup, and I fail to see the advantage and the good policy in doing so. It is uncertain, of course, what the next winter may bring, but as far as wintering is concerned *with* pollen or *without* it, and with natural stores, I will run a race with any one of you syrup-feeders.

With the above method I verily believe that my bees, *not* my hives, have gathered as much honey as the bees of any of you. The interests of sugar refiners have not been benefited at the expense of the bee-keepers; my neighbors do not suspicion me of producing honey from sugar syrup, and my labor has not been excessive, but has met all the requirements of my colonies. If labor and expense are worth any consideration, my apiary proves, in only a fair season, the most grateful of any of my investments.

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When placed under a microscope the sting of a bee presents a polish of dazzling beauty; but when placed in the end of a man's nose the polish is missing, and the appearance more like that of a rat-tail file dipped in vitriol. This is official.