

queen cells, which are considered best when they are reared under the swarming impulse. It is well to rear as good queens as opportunity offers, and keep them on hand in nuclei, so that if a queen fails, there is always one to take her place. If I discover a colony of inferior small black bees, I do not let them increase. If I have a nuclei containing a good queen, I build it up into a strong colony by giving combs of chipping brood, from an inferior colony. This keeps it from increasing, and when having an opportunity I remove its inferior queen and substitute a better one. In an apiary of any size there are always some colonies far ahead of others in storing honey, and these are the ones to propagate from. They may possess stronger wings, fly faster, or have longer tongues to reach the nectar, than others in the apiary. A good deal of care and watchfulness is needed to keep an apiary in profitable working order. If a colony is small lift out the combs and find the "why." If it has a laying queen, it will pay you to unite it with queenless ones. I found such an one, and in the evening removed the empty combs, leaving those containing brood. In the morning I

REMOVED A QUEENLESS COLONY, and put this one on its stand; then I removed the combs containing honey from the queenless one, and filled the other hive with them. Then the bees were brushed from the remaining combs in front of their old stand, and jarred from the hive. They united peaceably, and have been doing well since. The bees remained with their queen on their new stand, and the queenless ones remained at their old stand. If the queenless bees had been removed to the stand of the laying queen, they might not have remained, but might have flown back to their old stand, or entered other hives creating a disturbance, and the bees of the laying queen might have looked upon them as invaders; but when they had been removed from their old stand, they had something else to think about. It is bad management to try to build up queenless colonies by giving combs of brood taken from the strong ones. Many times they have no nurses, and eat up the eggs instead of rearing queens. Better let them perish, and use the hive for a swarm. Good strong colonies are the only ones that pay the rent for their hives.

Swarming Notes.

CARE OF SWARMS—HOW TO INTRODUCE QUEENS AND QUEEN CELLS—SUNDRY DIRECTIONS.

IN opening hives from which swarms had issued, in order to preserve the queen cells, I was surprised to find so few such cells. When

the sun shone for a few hours there was quite a flow of honey, and the colonies which had been fed were populous. Why had they built so few cells, and such diminutive ones? They evidently had not contemplated casting after swarms. During poor honey seasons bees do not swarm and few queens are reared. The great mortality of bees during the past winter may in part be due to old enfeebled queen whose progeny lacked vitality. Why should one colony living upon the same kind of stores and in the same temperature as those that died, come out strong in the spring? If the bees do not intend swarming again, they permit the first queen emerging from the cell to tear open the side of the cells of the embryo queens and sting them to death. That is why she is provided with a sting; she never uses it on any other occasion. When the workers contemplate swarming they protect the queens, and occasionally feed them through openings in the capping. The capping may be cut loose all around, yet the workers compel them to remain inside, feeding them until the first one that issued leaves with a swarm. Occasionally a colony will swarm three or four times in as many days. These small swarms are valuable only for young queens which accompany them, and if left to themselves will perish next winter.

AFTER-SWARMS OR CASTS.

One great swarming year, I was very sick during the swarming season, and everything in the shape of a swarm was hived; colonies literally swarmed themselves to death. When I was able to be out in the apiary, I went to work with these colonies. In the swarmed-to-death ones, I found a young laying queen and not more than a teacupful of bees, with the combs full of honey and pollen. I took all but two of these combs out. Usually there was a little brood in one comb; I left this and a comb of honey, and confined it to the side of the hive with a division board. The combs of honey I extracted, and used the combs as follows:—I would open a strong colony, and remove a frame of capped brood, brush off all the bees and insert it between the two combs of the little colony, removing the division board just enough to give the desired room, putting the extracted combs in place of the combs of brood. This brood of course needed no feeding, being capped, and in a few days it would be covered with downy bees. I continued in this way until the hive was full. The colonies from which the brood was taken did not appear to be injured in the least, and I always found the comb given to them, full of brood. The after-swarms had been hived upon combs, had laying queens and a little