

the matter I found that colonies I pronounced "exactly alike" on May 15th. would not be so at the time the honey harvest was at its best. The trouble was I did not have a thorough knowledge regarding the working force of my bees at all times, nor of the interior of the hive. For instance, the colony which I called the best on May 15th. might become the poorest by July 10th, at which time the honey harvest arrived. This might be owing to two causes, one of which would be the failing of their queen, and the other that the colony would reach its maximum of strength some time previous to the harvest, either of which is sure to lessen the yield. I have often noticed that a colony which winters extremely well, and goes to breeding rapidly in early spring, is generally sure to produce less honey than the colony that begins to breed rapidly from forty to fifty days previous to the honey harvest. The reason seems to be, that the queen in such a colony as breeds rapidly very early ceases her prolificness to a very great extent by June 5th. to 10th, thus allowing the bees to put the first honey coming in into the brood-combs, rather than forcing it into the sections, as does the queen which arrives at her maximum egg-laying at this time. If this is not the case, the colony becomes demoralized by becoming too strong at this time, and so goes loafing around, or, what is still worse, contracts the swarming mania, either of which is against a large yield of honey. If the bees become over anxious to swarm, or the queen ceases to be prolific, so that the bees get the start of her and store honey to any great extent in the brood-chamber during the first of the honey harvest, that colony will be an unprofitable one. The remedy is, to keep the queen on only a few combs early in the season, or take away a part of her brood to strengthen other colonies till the right time has come, when her extra powers will raise bees that will come at just the right time; then coax her to do her level best, and you will succeed. At this time give all the combs the hive will contain, and let her spread herself to her greatest capacity; then the colony will reach its strongest point just when the harvest is on, and thus bend every energy at storing in the sections rather than crowding the queen or loafing around. Again, the giving of a colony a large amount of surplus room to start with has a tendency to make the colony an unprofitable one, which has not a force of bees large enough to occupy the whole of the surplus apartment at once. They seem to become discouraged, and, instead of taking possession of a part of it, they will often cluster on the outside, and crowd the

brood out with honey, never entering the sections at all. I usually give only section room, or room in the surplus apartment to the amount of 15 to 20 lbs., and a part of this space has combs in it left over from the previous season, thereby coaxing the bees into the sections with their first loads of new honey. In a week or so, more room is given, and so I continue to give surplus room as needed. In this way a good yield of honey is obtained from all the colonies. If the season is so any colony gives a good yield. It is the attending to the little items in bee culture that gives success.

## CROOKED COMBS.

In a paper which I recently picked up I found the following words:—"In the fall, after extracting the honey from the partly filled sections, and recasing the sections of empty combs (as we use no separators), the combs are not always perfect in these sections. When we find one side a little fuller than the other, we put the two full sides together, and the hollow sides together. No matter if the full sides of the combs should touch each other; when the bees begin operations the following season they will cut right through, building out the other sides equally, and the occasional crooked ones are thus made straight." Upon reading the above I began to wonder if the writer had ever practiced the plan given, and, if so, how it could be that his experience was so much different than mine had been when trying the same plan. In every case where I ever put two combs in sections or brood-combs even, so that they touched each other, I have found that the bees always left little bridges of comb from one comb to the other, so that, when the combs were pulled apart, the capping of one or both combs was broken, thus setting the honey to running and making the sections unsalable, unless put back on the hive for the bees to recap the cells. In doing so, the bees nearly always remove the honey out of these damaged cells, so that the whole process requires nearly half as long as it does to fill a section from the start. This causes a great waste of time to the colony, for they are thus kept fussing over a bad job instead of doing new work. My plan has been to place such crooked combs at the top of a warm room, on a piece of canvas, until thoroughly warmed through, when the combs can be bent and straightened to the perfect satisfaction of the operator. In this way I have a sure thing of it; and as the work is performed in the winter it is much more cheaply done than in having the bees make a "botch job," of it in the summer.

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Gleanings, July 2.