

Summer Management.

My experience in the apiary has been mostly in the line of comb honey production, and it is from that standpoint that I will write. I prefer to have the bees make a start in the supers before swarming. If swarming is thus delayed, larger swarms are the result; and as I get nearly all of my surplus from the swarms, instead of from the old colonies that have swarmed, I get better results if the great mass of workers can thus be kept together where the sections are. For this reason I use every possible means to induce the bees to turn their energies early toward the supers. For this purpose I know of nothing better than the use of drawn comb in some of the sections, the more of them the better. I should be glad to give each colony a super of drawn comb in the spring. Where the harvest opens with a rush, and the bees are at once forced into the sections before there is time to make preparations for swarming, the drawn combs may not be of so much importance, but where the flow comes on gradually, and the bees are Italians, with their reluctance to store honey at a distance from the brood nest, drawn combs are nearly as valuable as combs of honey. When the flow is light, the bees will begin storing honey in drawn combs long before they draw out foundation for this purpose. When the bees begin storing their surplus, then they are inclined to continue storing it. This early storing of honey in the supers relieves the pressure upon the brood nest, and thus allows of the raising of more brood, and at the same time retards swarming.

As soon as the sections in the first super are one half or two-thirds empty, and the flow of honey remains good, I raise the super and put under another super, having sections furnished with full sheets of light foundation. Getting the bees started in the sections early in the season, giving them plenty of surplus room and shading them so that the heat will not drive them out, will usually keep bees from swarming until they can swarm to advantage. Under this management I have known one-half of the colonies not to swarm at all. But in the majority of cases it eventually comes.

The management of swarms in a large apiary is really one important matter. I have tried leaving queens unclipped and allowing them to go with the swarms, until I am heartily sick of it. The climbing of trees, the chasing of running

swarms, the straightening out of "mix ups," that result from the simultaneous issuing of several swarms, would, it seems to me, drive any man to control his bees by controlling their queens. I will admit that "mix ups" will often result when we have control of the queens, but so long as we have our thumb on the queens, we are master of the situation. I have tried both the clipping of queens and the using of queen-traps, and my preference is for the latter. It saves the time and trouble of hunting up and clipping the queen, the time and trouble of hunting for and caging her when the swarm issues, and there is no danger of her being lost by the swarm coming out when no one is present to care for it. Many of the "mix ups" that occur in a large apiary, may be avoided by the use of swarm catchers. A swarm catcher is simply a light frame work covered with cloth. The frame is about three feet in length, eighteen inches square at the outer ends, and tapering to three by ten inches at the other end. The outer, or large end, is covered with a movable door of wire cloth. The smaller end nicely fits over the entrance of a hive. As soon as a swarm is seen issuing, the small end of the catcher is clapped over the entrance, and when the swarm has been caught the catcher is removed, a flap of cloth buttoned over the entrance, when the catcher and its contents may be set aside in the shade and the bees hived at leisure. By having three or four catchers scattered about in different parts of the yard, nearly all of the swarms can be caught if desired.

My practice is to hive the swarm upon the old stand, in a contracted brood nest, with starters only in the brood frames, and to transfer the supers from the old hive to the swarm. By this plan, the bees are back in the supers at work again within 20 minutes after they left them. As there are no combs in the brood nest in which to store honey, and the brood nest is of the capacity of only 5 L. frames, the honey must of necessity go into the sections. I use a queen excluder, otherwise the queen, too, would go into the supers. The bees at once begin to build comb in the brood nest, and as fast as it is built, the queen lays in it. The result is that the honey goes into the sections, and the brood nest becomes a brood nest indeed. I prefer starters in the brood nest to foundation, and drawn combs I have found to be of no advantage—in fact, a disadvantage. Drawn combs the bees quickly fill with honey, and are then very loth to begin work in the sections. When