

those capped first we produce a small quantity of extracted honey and the bulk of it in comb.

Mr. Jackson—When you have both your queens in the bottom brood-chamber and allow them full range, how do you keep them apart? If your brood frames drop, can they get together?

Mr. Ferris—My ten-frame hive has a solid partition that goes clear to the bottom, and they meet, so that when I put the one story on top of the other the division boards sit tight, and I lay cloth over the top.

Mr. Hatch—I think we are losing sight of one point mentioned here, the influence of drones in casting swarms. In my observation a colony will never cast a swarm unless there are some drones present. Another idea was, we should look for drone comb, as well as queen cups. I know one of the most successful bee-keepers that uses small frames, 12 inches square and 7 inches deep. He starts in the spring with one queen and then puts on another section. He is very careful to have no drone comb but worker comb in any of his hives. As the honey season advances he goes and pries the top hive off and he reasons, "There is some drone comb; they are preparing for swarming." He takes that off and puts an empty section between them, and they are quiet for ten days; that colony won't swarm. He didn't look for queen-cells.

Swarming is an indication of vigor, strength and power. The point is not to stop that, but to turn it in the right direction. Just merely controlling in this way is not what we are after. We want to control it in such a way that we shall not lose our honey crop, or diminish it. I have tried a good many ways, and I have never yet found one satisfactory way that was controlling the queen, but what was at the expense of the honey. I have tried the plan of putting the queen on two frames and she will sulk, and wear herself to death

and when you release her again it will only be a few days before she will be superseded. I have tried shaking the bees off onto comb, and onto full foundation, but with the same result. I would rather pay a man \$5 a day to sit in my apiary and watch for swarms and hive them, than to try any plan of controlling increase that I have discovered yet.

Mr. Holtermann—I very emphatically oppose any method which forces the bees not to swarm. As Mr. Hatch has said, direct their energies in direction of producing honey.

Mr. Hatch—Do you think it is possible for a colony to swarm without any drones being present in the hive?

Mr. Bratz—I have had them swarm without.

Mr. Holtermann—I don't think that any man is in a position to say that there is actually not a drone present in the hive.

Mr. Hershiser—I have had bees swarm quite frequently without drones when I had set them out in the spring.

Mr. Aspinwall—I received a challenge from Mr. Taylor just now, that we had not heard from the comb honey man. But as I am set down for a talk on the non-swarming hive I thought it best not to say anything. I am working on a different line. I agree with Mr. Holtermann in respect to the queen cells, rudimentary ones that are new in the spring—the old ones are cut down. In the matter of drones I have tried with artificial comb, and that factor is one that produces swarms, but there are a great many factors that enter into and constitute the swarming impulse. If we remove one of them, that is a help; but in an apiary of a number of colonies drones will intermingle quite frequently and for that reason drone comb is a troublesome expense.

When you come to size it up there has been quite a conglomeration here,