

OUR FRENCH EXCHANGES

[By C. A. Procnier]

More Than One Queen in a Hive

We continue in this number the publication of a very remarkable article of the Rev. Father Guyot on this interesting question. We know that researches are being made in many places to make the introducing of more than one queen in each hive practicable and easy. In our June number we shall give the first results.—Editor.

"The colonies which have many laying queens," says A. K. Ferris, a bee-keeper, "do not seem to be able to work hard enough to please themselves. They rush on the nectar as long as the harvest lasts with an unknown zeal. One does not see this in those colonies with only one queen, and there follows as an inexplicable result these colonies with more than one laying queen never attempt to swarm."

"The act," says Alexander, "of keeping two or more laying queens in a colony at one time has, according to our experience up to the present, completely prevented swarming, for never did one of these colonies attempt to swarm while they had two or more laying queens, these queens having each access to all parts of the hive."

This is a point that we have understood with difficulty, for we should think that these strong colonies would be the first to swarm. To prove to ourselves whether we could provoke a very strong colony to swarm last summer or not, we introduced four good laying queens at one time. We examined them at the end of five days, and found the four queens living and in good harmony, having all the cells of the combs filled with eggs. This colony served us during the remainder of the summer for the raising of queens. Now and then we would take three or four queens for introducing in other colonies. Sometimes we would put five or six in a hive at a time, and there never were any quarrels or "balling."

I ask permission to deduce a theory of swarming from these facts, which at the present are unknown. I give it for what it is worth, but it seems reasonable enough to me. The motive which makes the swarm issue has been much discussed. Is it the queen which gives the signal of departure? Do the bees animate the queen? Each opinion has its partisans. Where is the truth? Here is the proposition which I believe possible to lay down:

The swarm is a massive flight of bees, caused by the terror of the queen in the face of an imminent death—terror which she succeeds in making the bees share.

These are the bees which prepare the swarm when, for whatever cause, they find themselves constrained, ill at ease. Their instinct shows them that they ought to leave a queen in the hive after the departure of a swarm. When there are many queens their instinct is defeated, and it does not search farther, however they may be constrained; they wait quietly that one of their sovereigns may give the signal of departure, but each of the latter do not dream of this; they are in a calm, peace, tranquility; they remain in the hive. But this is not so in a colony where there is one queen. There the bees construct a number of royal cells and carry the eggs to them, for I believe that the queen never lays them there—lay eggs of enemies! Some she sees its cradle enlarged. She strives to destroy it, for her instinct makes her know that the virgin queens will massacre her without pity. Everywhere the bees are stopped, confusion is in the hive, the laying of eggs is suspended or greatly diminished, and the bees, highly excited by the terror of the queen, do not work much. But soon the cells are sealed, and then her terror reaches its climax—there is not any further means of escaping death. Fly! Fly! Even if she should be pained to withdraw herself—even if she should fall at the door of the hive without being able to take flight—it is necessary to fly.

And now, having concluded of the what are the principles by which the queens in one hive

1. As we have the mother and are numerous. V Dr. Bruennigh queens which co side with her daughter and then sudden

2. When two unite they keep explains the great

3. When a swarm into a habitated hive 4. In the case of calamity.

5. When a queen secundation flight, strong hive, she is

"I had," says a nucleus placed of hybrids. A little should have taken the disappeared. S

two Italian queens and one of them and well marked, and lost, and I could not find it."

6. When in the experienced bee-keeper happened to me on inspecting a hive that never came back.

"I secured and by the first import was then an inexperienced management of

I lost sight of my great surprise queen with yellowing hive on the comb."

(To be continued)

Do not neglect before placing