

Mr. Smith. If you wait till evening you will never get through.

Mr. Muth. Do you use smoke in that operation?

Mr. Smith. I use no smoke.

Mr. Muth. How long do you keep the bees on the strips of foundation; do you feed them right away?

Mr. Smith. Yes.

Mr. Muth. You don't believe in starving them at all?

Mr. Smith. No, because the bees coming from the fields are loaded with honey.

Mr. Muth. Do I understand that the bees have these bacteria all over them?

Dr. Phillips. Yes, they have the contamination on them. When they are shaken they of course have it all over them, and when they are shaken off they doubtless take the bacteria with them.

The McEvoy system is the radical treatment of shaking twice, which the majority of bee keepers do not use.

Mr. York. If I mistake not, Mr. McEvoy recommends the second shaking.

Dr. Phillips. He recommends the second shaking after the bees begin to drop from starvation.

Question. What do you do with the unhatched brood in the infected hive?

Mr. Smith. My recommendation is to destroy the whole thing.

EFFECT OF RE-QUEENING ON DISEASE

Mr. Dadant. Has removing the queens any value in treating the two diseases? Alexander, Simmins and others have recommended removing the queens. Is this of any value in either disease?

Doctor Phillips. As has been stated before to-day, I spent four weeks last spring with the inspectors of New York State in the field. Both American foul brood and European foul brood are found in that State, but practically the same method of treatment is advocated by the inspectors for both diseases. Colonies found to be diseased are shaken according to the method which has been described several times in this meeting.

In order to save any healthy brood which is found in colonies infected with disease, the sealed brood from several colonies, four to eight, is piled up in hive bodies above a weak colony which is diseased. In seven to ten days all the brood which is worth saving will have emerged and the weak colony will have been changed to one strong enough to treat. This colony is then treated by the

shaking method as were the others. There is no necessity of waiting more than ten days, for brood which was unsealed when the brood was first attacked will scarcely be fed sufficiently to emerge.

In addition to this treatment, the inspectors recommend the introduction of young, vigorous Italian queens from good stock. It has been shown repeatedly that Italian bees are less liable to disease than most of the black bees, especially of degenerate stock, as is so much of the black stock when no attention is paid to improvement. In a pamphlet issued in 1903 by the inspectors of New York, the introduction of Italian brood was recommended. This is not advocated as a cure, however, but merely as a means of protecting the colony against future infection.

Mr. France. I visited a yard last year where there were 22 infected colonies. The owner wished to save some new drawn-out combs that were on hives free from the disease. As an experiment we used foundation with half of the colonies and in the others we put the new combs. Eleven had to be treated again, while the others, right in the same yard, did not. You can kill the germs in the honey, but you have to boil it until it is as black as molasses to do it.

Mr. Louis Scholl (Texas). I do not know that I can say much about treatment in Texas. We do not rely on the shaking treatment at all. Whenever we have had foul brood we have tried something as radical as could be practiced—that is, the burning of the diseased colonies. There is one trouble that we have here in shaking the bees, and that is that if we treat the bees during the honey flow there is so much danger of shaking out the honey and starting the disease again in that way. The other thing with which we have to contend is robbing. During a honey flow there is a good deal of inside robbing almost all the time. Until we find something that is absolutely sure and absolutely a good thing, we shall resort to the burning of colonies whenever we find them infected. The way we use the fire treatment is to inspect the yards and then toward evening we dig a pit about 10 feet wide, according to the number of colonies to be treated, and build a brush fire. By the time we have that burning well we go to the colonies that are to be "treated" and use sulphur in a smoker