

goodly number of her daughters. If he buys queens in large quantities to re-queen an apiary he has a right to feel that he has been cheated if the queens live only a few short months. The practical honey-producer has not this problem to solve. Simply let the bees rear their own queens and they will be as good as any. The queens can be reared artificially, the equal of any, there is no doubt. Most certainly they can. How it can be done has been repeatedly published.

As I said at the beginning, we have a lot of sayings something like the following: "Good queens are the foundation of bee-keeping"; "Bee-keeping all centres upon the queen"; "As the queen lays all of the eggs, of course success depends upon her." It is to combat such ideas as these that I have written. The queen is of no more importance than the hive, the combs or the location. By importance, I mean in this case that which can by some decision or management of the bee-keeper be made to contribute to his success.

W. Z. HUTCHINSON,

Flint, Mich.

Mr. Dickenson—I have pleasure in moving a vote of thanks be tendered by this Association to Mr. Hutchinson for the paper which we have just heard read by Mr. Pettit, and that the Secretary be instructed to forward the same and also our regrets at his inability to attend.

Mr. Holtermann—I second the motion.

The President put the motion, which, on a vote having been taken, was declared carried.

Mr. Pettit—Mr. Chairman and gentlemen, although I read this paper before you, I hope you won't think that I endorse all the points that are to be found in it. The paper was just given me, and I hadn't time to look over very carefully, but there is one point particular that I would like to emphasize. One point Mr. Hutchinson

wishes to make is that we must not attach too much importance to the queen. He seems to think we are laying too much stress on the value of good queens, and yet at the same time he says to be sure we must have queens that are sufficiently prolific to keep the brood-nests full of brood at the time of the year when this is desirable. That is just exactly the kind of queens we want. Then a little further on he says, if the queen cannot fill the brood chamber, make the brood chamber fit the queen. It seems to me that is very poor reasoning. He says it is more practical to reduce the size of the brood nest than to ransack the earth for more prolific queens. It seems a very strange argument to lay before breeders of stock of any kind to say, if I might make the comparison that has been made, that there is no use taking a 12-quart pail to milk an 8-quart cow, and Mr. Hutchinson seems to say that if you have an 8-quart cow, simply get an 8-quart pail and you will be satisfied.

Mr. Hall—It is much easier to reduce the size of the hive than improve the queen, but it is a short-sighted policy. The queen certainly is the mother of the colony, and they take after her, and if the queen is not good it is better to get rid of that queen and breed from your better stocks of queens. I think I have bought three queens in ten years, and I don't want any more. I simply want a little fresh blood, but I think we can raise queens here perhaps better than they can south, but perhaps we cannot raise them as early. Our honey beats them, and most likely our queens do. If you have a poor, miserable queen, pinch her head off and run the risk of getting a better one.

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Denmark exports 2,500,000 pounds of honey a year.

There are 25,000 pores in the hands of a man.