

## TO FOUL BROOD

which appeared in this subject, we commend Miller's statement in the Journal that Italians are not because they were not vigorous. It was that immunity meant vigor, or that power to resist disease is at once inactive, and our readers have it quoted in

well worth considering. It can be conceded that even disease is somewhat apart from vigor. Bees vaccinated are not, no matter how long they may be, while length succumbs to it. And so it may be for race of bees, or a few bees, may be immune to disease, while a strong colony yield to it. I have confessed that this was not in mind when I written which our conclusions. The thought, rather, set of bees would be dead brood, while we want it to remain. At the fact that a strong colony attack of European often clean up the while a weak colony will grow worse is hard to believe of the colony is not or in the premises; far out of the way to favor of the individual colony is of still more the mere strength of

hardly the view that taken, instead of the our contemporary has use, if an excuse is the fact that those who are better than others want to be rid of uncommonly use the bees are better at disease." and our contempor-

ary among the number, may say, "We are not considering which bees will do the best at cleaning up the disease, we are considering which are least likely to catch it." And the right to that view must be cheerfully admitted. The question then comes, "Are Italians more nearly immune to European foul brood than others?" As a subsidiary question, it may be asked whether Italians have had a better chance than blacks to become immune. In other words, have Italians been longer afflicted with the disease than blacks, and so had a longer time in which to become immune? Certainly, American foul brood is no novelty to either Italians or blacks. Possibly our contemporary can enlighten us as to European in this regard.

A more important question, perhaps, relates to actual experience. Americans and Australians in general say that Italians are the bees for those who fear foul brood. In Europe it stands the other way, especially in Switzerland. Is one wrong and the other right, or is there a difference between Swiss blacks and American blacks? Frankly, there is a fair chance for difference of opinion, and more light is really needed on the question. An open mind will be found in this locality.

As to the practical part, however, there need be little difference of opinion. If any one happens to have a strain of hybrids or blacks that are above the average, that does not alter the fact that the general experience in this country is that Italians are more vigorous than blacks or hybrids, and so in 99 cases out of a hundred it is good advice to urge the introduction of pure Italians.

As to the Doctor's question, "Are Italians more nearly immune to European foul brood than others?" we are bound frankly to admit that we do not know, our own experience having mainly been with American foul brood, or what we used to call in the Old Country, the virulent type. In those parts of Europe where blacks predominate and are indigenous, we find them displaying the same immunity to disease that is claimed for the Italians in America. The reason for this is clear, at least to ourselves. In the course of ages, the native bees have

acquired the trait of immunity in precisely the same way that human beings acquire it—through the process of the elimination of those strains that are least able to withstand the attacks of disease. On the other hand, a race, under certain conditions, may lose, to a very large degree, this power to resist disease, and such has been the case with the black bee in America. Introduced from Europe many generations ago, this bee has slowly spread over the whole continent, every succeeding swarm, as it proceeded westward, leaving further behind it those epidemic conditions which tended to permit of the survival only of the immune. Thus, in the absence of the selective process, the black race on this continent has apparently become non-immune.

## SPRING FEEDING

J. L. Byer writes in the Review: "It is quite possible to get a crop in most localities I am familiar with, without going to all the trouble and expense of feeding colonies from the time they are set out till fruit bloom. After that date (fruit bloom) feeding is pretty good practice in most cases, but not always necessary to secure a crop, circumstances as to season and locality being the deciding factors in the matter as to feed or not to feed." J.L.B. is "sound," as our mutual friend hath it!

## MISS ROBSON AT LONDON

Mr. Tyrrell writes in the Review:

The convention report would not be complete without mentioning the work of Miss Ethel Robson, who conducts the woman's department in the Canadian Bee Journal. Busy with her notebook all through the convention, yet she was not too busy to contribute her part to the interesting discussions, and what she said would indicate that she had a practical knowledge of the cause she is championing.