

office a frame of artificial comb sent us by Eckermann & Will, of Syracuse, which they are making under the Weed patent. They sent the frame along for us to test in actual use, but it came too late to be of any use last season. We fear that Mr. Robbins is too sanguine with regard to his invention. It may be *practicable*, but that it will ever be *practical* we very much doubt.—The item to which you refer in your last paragraph, escaped our notice, or we would have corrected it at the time.

FOR THE CANADIAN BEE JOURNAL.

Foul Brood and Other Topics Discussed

DO subject pertaining to the apiary has received so much attention of late as that of the disease or ailment called "foul brood." In an experience of fifteen years as a modern apiarist, and twenty more years as a bee-keeper, I have never seen a case of foul brood. But this does not make me wholly ignorant of the nature and ranges of the aforesaid disease. The books and bee periodicals have told all that can be expressed in words on the subject, and I have had access to all of them. It seems to me that it has not occurred in a general way, to those who do have practical experience in the matter that climatic (with all this word means) causes must have something, if not everything to do with the malady. If there has ever been a case of so-called "foul brood" in Kentucky, unless I except a few cases bordering on the Ohio river, I have never been made aware of it. In fact in all the information I have been able to gather from all sources I have never known the disease to prevail where bees are *universally wintered in the open yard*. Some cases of the disease have been reported in places or localities where the climate is so moderate that bees are never wintered in crowded cellars, but such cases have always been charged to importation, and soon disappears in such locality. It may be admitted that conditions antipodal to the causes indicated by me, may produce the same results, (i e) furnish a home for the malady. But in any event, the hints deductable from the facts I have pointed out opens a wide field for investigation. Has it ever been demonstrated that the *spores* detected in decaying brood commenced their work of destruction on the *healthy living larvae*? If not there is room for suspicion that the larvae may perish from some other cause and afterward become a fit substance for

the survival and growth of the *fungi*. In my opinion it will be hard to demonstrate that perfectly healthy larvae fairly swimming in perfectly healthy food, free from all taint or decay, is congenial soil to nourish the growth of *spores* or *fungi*, but as Dr. Miller would say, "I don't know."

THE PROPER SPACING OF BROOD FRAMES.

A great deal of interest has been manifested of late concerning this matter. I am not sure that any fixed distance from centre to centre of the combs is necessary or even desirable. I prefer to have my combs movable so that I can exercise my best judgment when spacing them. When combs are being built by the bees I place the frames as nearly $1\frac{1}{2}$ apart as is practicable, for thereby I get straighter combs, having fewer waves and kinks, whether built from starters only, or from full sheets of foundation. But after the combs are fully completed I prefer to work them $1\frac{1}{2}$ inches from centre to centre in the brood nest and $1\frac{1}{2}$ apart in the extracting supers. Colonies that are worked with the brood combs as wide as $1\frac{1}{2}$ inches apart from centre to centre always come through the honey season in better condition than do colonies that have the combs worked closer. This is a matter of very great importance to me. The colonies which come out of the honey season in the best condition are always my best colonies the following spring. Combs that are to go to the extractor may be worked $1\frac{1}{2}$ inches apart. Such combs are heavy and plump. They are rapidly uncapped and turn out in quantity of honey with less labor than do combs closer spaced, to say nothing of obtaining the same quantity of honey with fewer combs which of course means less expense. When producing comb honey closer spacing in the brood nest is less objectionable because bees are *able* to fuss with bar and brace combs when *storing* comb honey.

PERFORATED QUEEN EXCLUDERS.

There seems to be some opposition to the new device. I think the cause must come from the lack of information in a practical way. I do not use them when producing comb honey because my queens do not invade my *section* cases. But they are indispensable when *taking* honey with the extractor. If you want to produce the clear article, thoroughly evaporated by the bees, you must practice the tiering up system and keep the queens in their own *chambers*. The presence of brood in the extracting combs is objectionable on account of its being in the wrong place, taking up room that should be filled with honey, and more, because the *stunted*