

is folly to attempt making a living by the keeping of bees. To attempt to make a poor honey locality a desirable one by planting for honey is still greater folly. If the conditions are such that it will pay to raise honey producing crops for the crop alone, such crops will be raised—otherwise not. Where three, four or five years of failure come in succession, it is foolhardy for men to cling to bee-keeping alone, hoping that "next year will be a better one." In fact unless the purse is a long one, necessity will compel the adoption of some other business. If one has kept bees so long that he would feel lost without them, and I am one of that class, he can take up some other vocation as his main business, letting the bees become a side issue. It is astonishing to see with how little care an apiary can now be managed. It may be almost reduced to this; setting the bees out of the cellar, putting on the supers, hiving the swarms, taking off the honey and putting the bees in the cellar. Possibly the swarming may yet be done away with.

To sum the matter up in a few words, bee-keeping in the early days was a side-issue, then it became a speciality and will remain such in favorable localities, but over a large portion of the country it will again become a side-issue; but improved hives, implements and methods will make of it a more desirable and profitable avocation than it was in days gone by.

W. Z. HUTCHINSON.

Flint, Mich.

### An Offer.

To increase the circulation of the CANADIAN BEE JOURNAL yet more rapidly, we make the following offer to new subscribers. The CANADIAN BEE JOURNAL from now until end of 1895, fifty cents. Please draw the attention of bee-keepers to this. Remit to

GOULD, SHAPLEY & MUIR Co., (Ltd),

Brantford, Ont.

My bees have come through the winter in good order. All wintered out doors in Long Idea Doolittle hives placed in individual packing cases, with flat galvanized iron covers. No fooling with wooden covers for me. Eight inches chaff for bees. Take covers off two or three times on fine warm days to dry out chaff. Only found one dead so far out of 37 colonies.

H. SMITH.

New Hamburg.

### Bees, How Long do They Live?

Picking up a paper lately, I read of a colony of bees which had lived in a certain log for twenty years, the language used showing that the writer of the item believed that the same individual bees had resided in that place for the length of time mentioned. In another paper I found that the life of the worker bee in the summer season, is but thirty days. Seeing, that there is so wide an opinion on the subject, I thought it might not be amiss to say a few words on the subject in THE CANADIAN BEE JOURNAL. I have several times conducted experiments along this line to see if I could arrive at the truth in the matter. Before any of the yellow races of bees came to our shores this was a matter hard to determine, but with their advent, all became plain, for we now had a chance to prove from their color which were old bees and which were young, a matter heretofore only guessed at. The experiments which I have tried were as follows: Take a black colony of bees, and about the tenth of June or when honey comes in freely, introduce an Italian queen into it. In twenty-one days the last black bees will have hatched, and the first Italian put in an appearance, provided the Italian queen commences to lay as soon as she is introduced by some plan of direct introduction. Now mark the date on the hive and it will be found that on the forty-sixth day from the time nothing but Italian bees can be found in the hive. At forty days many black bees will be seen going out and in at the entrance, but on the forty-fourth day only now and then one can be seen, so that we may safely say that forty-five days is the length of a bee's life in the working season. Bees wear out, or die of old age, just in proportion to the labor they perform, and so it happens that what holds good with them in the busy season does not apply at all in the fall and winter months when they go into a state of repose or partial hibernation such as the apiarist calls a quiescent state. We now find that a bee lives from fall to spring; or to be more exact, if we introduce an Italian queen into a colony of black bees during the forepart of September we shall find some black bees in this hive if they winter well, the first of next June, thus showing that during the winter season bees may live eight months. Because bees swarm in July, many seem to think that this comes on account of the old bees all