

fall a reply in this direction, mention the superiority of the leather colored queen as to prolific qualities. Four of the five banded queens have already been superseded which does not speak well for their longevity, several were also lost in introduction. We notice that the Vermont State Bee-Keepers are at their coming Convention to discuss, if it is advisable in view of the prevalence of bee-paralysis in the South to purchase queens from there. If those wide awake Vermont bee-keepers begin to doubt the wisdom of such purchases the rest of us may well hesitate. Do not let us add another disease to battle with.

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On Friday February 1st, Mr. Jacob Alpaugh, formerly of St. Thomas, now of Galt, Ontario, leaves  
 A long Trip. by Canadian Pacific Railway for California.

His journey will be via Toronto, Winnipeg, Calgary and Vancouver from thence down the Pacific to Los Angeles stopping at Seattle, San Francisco and other points. We shall watch Mr. Alpaugh's movements with interest, he is well known in Canada as one of our most advanced, brightest and best bee-keepers. He is pushing and energetic and his many friends will wish him a profitable and pleasant journey.

### A Suggestion.

GALT, Jan. 1, 1895.

FRIEND HOLTERMANN.—Are not the initial letters "C. O. F." occurring twice in C. A. Slater & Co's. letter on page 25 of this month's C. B. J., also on line 10. first column of page 413, a misprint? I may be wrong; but I cannot make out the meaning of the initials, and have the fancy that they should read C. I. F., abbreviating a very common business expression applicable across the ocean, viz: "Cost, Insurance and Freight," meaning that the goods are sold these three items paid. Wishing you and the journal a prosperous New Year.

I am yours faithfully,

R. W. McDonnell.

### QUEEN-REARING.

#### The Result of Three Years' Experimental Work.

[Continued.]

[2077.] Many people have written on this subject of queen-rearing, but their plans are either those of the gentlemen already named, or some modification thereof, or they were troublesome and unsatisfactory. I have tried them all exhaustively, and under all conditions, and for experimental purposes have raised queens only to destroy, many of them at different stages of their growth to see practically what they were made of, and to set at rest some point on which I desired to satisfy myself.

Henry Alley, now over thirty years ago, was the first to point out that the then methods of raising queens were not satisfactory, and gave the bee world a new system of doing so by cutting worker cells containing eggs and very young larvae, and giving same to queenless stocks having no unsealed brood to raise queens from. This was a marked step in advance, quickly followed by others on the same lines, and after careful experiment, I am bound to say good queens can be raised by his method. Dr. C. C. Miller was, I believe, the first to suggest the transference of eggs and larvae to naturally built embryo queen-cells, but it was reserved to Mr. Doolittle to perfect the method which was proved, in the hands of others as well as mine, to be most satisfactory, and to produce the finest results. It is his method—with some slight modifications of my own—that I propose to lay before your readers. No doubt it entails a lot of work, and requires an amount of care which, to some minds, may seem unnecessary with no small an object in view as the raising of a queen-bee, but when we consider what may be the result of working out a plan by which a superior race of so useful an insect as the honey bee may be obtained, it is, to my mind, worth twenty times the trouble and care required. It must also be borne in mind that once the routine of the work is learnt, and the requirements fully grasped, it comes as easy to carry out the necessary manipulations as the ordinary handling of a bar-frame hive. If the eyesight be good and the fingers deft, the task becomes easy, and, to me, all-absorbing. It is certain that when our advancing bee-keepers have tested the qualities of the queens raised by scientific