

a long distance with very little fatigue. If there are more than two steps leading into the cellar, a good plan is to rest one end of a plank on the third step, and the other end as far in the cellar as you can. This will be the next best to going in on the level. Have a cushion or something soft to rest the hand-barrow on when exchanging at the door (if there are four carrying), or in the cellar before placing the hives in position. No doubt the less jar the better. By this arrangement you can take two ordinary hives in at once, or double that number if nuclei.

(190) G. A. DEADMAN,

Brussels.

For the CANADIAN BEE JOURNAL.

A Few Corrections of American Apicultural Errors.

WAX PRODUCTION.

IN your "Practical" papers on bee-keeping, page 767, you say in all the experiments made to determine how much honey was consumed to make a pound of wax, the bees were not confined to their hives, also that Huber put it at 20 lbs.

If you will carefully read Huber, you will find that he confined his bees something like thirty days, cutting out the comb every five days, only allowing them to fly in a room from which they could not escape, and that he got from coarse sugar made into syrup an average of nearly one-sixth of its weight of wax; or, in other words, $6\frac{1}{4}$ lbs. of sugar would produce one pound of white wax. This, compared with honey, would place the outside at 8 lbs. of honey to 1 lb. of wax, which, from my observations, is the utmost limit I should place it at.

I once noticed Mr. G. M. Doolittle credit Huber with saying that bees used 20 lbs. of honey to make 1 lb. of wax. It would do this gentleman good to study Huber thoroughly; he would find it very interesting, if only for the fact that his particular method of queen-introduction is mentioned as a plan of M. de Reaumur's.

American bee-keepers are apt to think contemptuously of a *blind* man, who wrote on bees 100 years ago, being able to tell them anything, yet no man has since done as much to enrich our stock of knowledge on bees as he did, even if he was *totally blind*.

TEMPERATURE OF BROOD NEST.

I have been much amused at reading American bee papers lately. With what unanimity the different writers quote 65° as the correct degree of temperature of the brood nest! I think it was first used in the *Review*, second column, page 74, in reviewing Mr. Cheshire's book.

I will refrain from mentioning the various writers by name who have used it; they can be found in all the trans-Atlantic bee-papers.

The *correct* temperature of the brood-nest is 95° . Huber first determined this as the *minimum*, and 97° as the *maximum*, and surely anyone who has put his hand under the quilt of a strong stock should know it was warmer than 65 degrees.

I offer a solution to the cause of the error. The compositor in setting up " 95 " turned the " 9 " upside down and made it a " 6 ," and " 65 " was overlooked by the proof-reader as being a mistake. Then writers, finding it as given by a big authority, take it as correct, and use it as correct, without troubling to refer to other authorities or testing it himself. Just as Prof. Cook might be quoted as authority that "the queen like the worker bees is developed from an unimpregnated egg." See "Observer's" notes for December 5, page 726.

I must say it reflects very little credit on the various writers for not at once seeing through the error. Truly the Americans may justly lay claim to being the most go-ahead people in the world while not one of them has had time to halt in the race to correct it—yes, an error that may next summer and winter result in the death of hundreds of thousands of stocks; even then I am afraid they would have no time to do anything but talk, so I take the liberty of writing a word of warning from the "Old Country" to put them right, if they are not in too big a hurry to read what I say.

ARE PURE ITALIAN BEES YELLOW-BANDED?

In your "Practical" papers you seem to think that all Italian bees are yellow-banded, and Mr. J. E. Pond, page 733, December 5th, thinks pure Italians once could be got from Italy, but doubts if they can now, and both he and yourself agree that brighter and yellower bees can be produced by selection than any ever imported.

In Frank Benton's article on Carniolans, which you reprint from his "Bees," he says: "Black bees, natives, too, and not imported, are found in Italy." It is a pity you did not reprint his article on Italian bees as well. In that article he explains that the yellow-banded bees are in a district to themselves; that they are entirely surrounded by black bees, with neither water, mountains, or other barrier between them, and that from a yellow-banded centre they shade off through every shade of hybrid to pure blacks. This is what Benton says, who has travelled right through them. From other authorities who have been to Italy, I make out that most of the bees even in *Liguria* itself, are