For THE CANADIAN BEE JOURNAL.

Gomb Foundation.

F late not a little has been written on this subject, but as it is not yet fully exhausted, I hopethe readers of the C.B.J. will bear with me whilst giving my observations as to the most perfect make and proper way of using comb foundation.

Let us first consider this impress of cell bottoms made on thin sheets of wax by machines made for that purpose. Of these, so far as I am aware, there are only the two principles, viz: book dies and the roller mill.

Through close observation, I have years ago come to the conclusion that the book dies or Given Press is the more perfect of the two, and in a few words hope to be able to convince the most sceptic that there is truth in my assertions. It has not been my lot to be a manufacturer of comb foundation, nor have I ever seen a sheet of wax run through a roller mill, but would like to ask those who have it, if the sheet is not considerably longer when it comes out than before it went through. It must be, and if so how can it make a foundation for a perfect cell? True, the dies could be made a little ovaled as it were to help obviate this difficulty; but that would only be guess work, as wax at times will be run through in a softer state than others, and the softer it is the larger will the sheet be when it comes out. But take on the other hand book dies of proper construction, and the formation of the cell will be complete, simply because the sheet of wax will come out the same size as it Went in.

Secondly, we wish to know which way foundation is the strongest so as to sag the least when the bees are working it out; hold a sheet of it to the light and you will observe that one way the walls at the sides of the cells will be Perpendicular, whilst those above and below will be zig-zag, but turn the sheet one-quarter around and the order of things is reversed.

My observations lead me to believe that the former is the proper way to use comb foundation, for if bees are allowed to build their own comb throughout, they will in the majority of cases build in that way.

Thirdly, suppose we have perfect foundation, and placed even the strongest way in the comb frames, it must be in very shallow frames if it doesn't sag somewhat when being drawn in very lot weather, and how is that to be prevented? We hear many say wire, wire, and so says the writer.

It is the wish of every one of us that "when ecanding the hill of prosperity we may never meet a friend;" but it more than surprised me

this spring to meet in the C.B.J. such a man as Mr. Jacob Alpaugh coming down the hill of beeology on the wiring question.

I have become a convert to the wiring system, although having held out long against it. My main objection being the supposed trouble it would be to cut the combs out of the frames when they required rendering; but I find that that has been only a mote in my eye, as the wires will snap almost as easily when the knife is run along as if they were not there. You have only to use a little care in washing the comb afterwards not to get your hands pricked. I claim that wired frames with the wire properly imbedded in the foundation will give the apiarist an easy mind in hot weather as to the danger of it either sagging or breaking down altogether. Another point is, that when foundation is wired it can be used much lighter than if not, and the lighter it can be used the more perfect will all the cells be when drawn out. Has the reader ever noticed that a comb drawn from very heavy foundation will have quite a few cells seemingly too small for the queen to back into to deposit the egg-if you have not already seen that, watch and you will be convinced that I am correct. There cannot be bees working in every cell at the same time, and if they once tackle a cell they mean to keep it until well forwarded, and in so doing seem to crowd too much wax into the neighboring cell.

It is easily understood that wiring takes a little more time than merely to fasten the foundation to the top bar, but "a thing that is well done is soon done," and the short time it takes extra in that respect is very profitably spent.

D, CHALMERS.

Poole, June 22, 1892.

industrial Exhibition at Toronto.

HONEY AND APIARY SUPPLIES.

OMMITTEE.—Alderman Orr, (Chairman),
Messrs. R. McKnight, F. A. Gemmell and
Geo. Vair.

All honey exhibited must be the production of the exhibitor.

The quantities specified in the various sections are the amount of honey on which the award of the prizes is to be made, but this rule does not apply to Sec. 15, in which the quantity is not limited.

Exhibitors selling honey during the exhibition (for which right a small fee will be charged will not be allowed to make any removal from their regular exhibit, but may have a special supply at hand from which their honey sold may be taken.

Exhibitors offering comb honey for sale will