

know much about queens. Please let us know, through your valuable paper, what it is. If a queen, whether an old one or not.

We sent it to Friend Brodie and here is his reply :

BOMBUS, CONSIMILIS. *Cress.*

Order HYMENOPTERA. Family APIDÆ.


This is one of our common "Bumble bees" denuded of the yellow hairs, which ornament the abdomen. Specimens are often found toward the close of Summer pretty well rubbed, but I do not remember ever capturing one so completely nude as this. Evidently, in some way, it has been very roughly handled. The fertilized female bumble bee survives the Winter, males and workers dying in the Fall. Soon after the life-giving warmth of Spring has roused her, she provides a nest in which she builds some five or six cells, depositing one egg in each. She gathers honey, feeds and attends to these larvæ just as honey bees do, and a brood of workers mature in about a month. The queen seldom goes out now but gives her time to the more especial duties of maternity within the nest. Soon the workers are increased, sometimes to 100, when the whole effort of the community is expended in rearing queens and drones. From ten to thirty pairs is given as the product of a hive. The greatest number I ever found was twenty-seven.

W. BRODIE.

Toronto, Ont.

For the CANADIAN BEE JOURNAL.

MOULDING WAX.

 NOTE your comments in No. 14, of C. B. J., on the adulteration of wax. With all due respect for your experience, may it not be that some of the grease is all on the outside? People generally use anything that comes handy, from a coffee cup to a wash tub, in which to mould their wax, and to prevent it from sticking they grease the inside of the vessel. Some are so liberal with the grease that much of it will adhere to the wax cake, and this has, perhaps, often given rise to the suspicion about adulteration.

Now, let me give you my method of moulding wax without grease. For small quantities I use small flaring tin pails, in which I can mould a cake of four lbs. or less. For larger quantities I use a common five gallon coal oil can with the top cut off. The can must have no projecting inside seams, (as some of them have) but be as smooth as possible. Although the sides are straight there is no difficulty in getting the wax out, as such a large cake will shrink sufficiently

to be perfectly loose, when it has cooled off. I quote from an old article of mine in the *Pacific Rural Press* :

"My strainer is made of a one inch board, with a circular hole, cut with a compass-saw, a little smaller than the top of the the pail. A piece of grain-sack is laid over the board; the round piece of board placed on the cloth and forced down into the place from which it was cut out. The cloth is now fastened with sixteen tacks around the hole, trimmed off, the round board removed, and the strainer is ready for use." After melting the wax, it is set aside a little while and then skimmed off. "Having previously provided plenty of boiling water in my tea kettle, I now carry this and the melting can to where the moulding cans are standing. I now place the strainer on one of the pails, pour about one half pint of boiling water through the strainer, then one-half of the wax. When the wax has nearly gone through, I pour the same quantity of water into the other pail (not through the strainer) quickly move the strainer over on that and pour in the remaining wax, until the refuse under the wax comes to the rim of the can; then stop. If the strainer becomes clogged, I pour the contents back into the melting can."

The pails are covered with a board to prevent the too rapid escape of heat, which would cause the wax to crack. The strainer is cleaned by pouring boiling water on its underside. "No grease is wanted in any of the cans. The steam from the boiling water prevents the wax from sticking to the tin." For a larger quantity of wax, a proportionally larger amount of boiling water must be used.

WM. MUTH-RASMUSSEN.

Independence, Cal., July 21st, 1885.

If we could ship you a few barrels Friend M. you could cut the cake in two and find that the grease was through many of them while others had grease in the centre with good wax all around. None of this wax came from California or the United States. We are compelled to cut open the cakes in order to determine the amount of adulteration and depth of sediment. Your method would take out all the coarse dirt or sediment, but we have been wondering if some of the fine sediment would not pass through the cloth. We like the plan of keeping the wax hot for a long time that the sediment may settle