

see if this granulated honey would melt in the cells without the combs following suit, we placed the sections near the ceiling not far from a stove and pipe in which a fire was constantly kept. The building has ten inch walls, and walls, floor and ceiling are packed with saw-dust, rendering the place absolutely frost proof in the coldest weather. A little fire kept the temperature in the region of the sections from 90° to 110° and occasionally as high as 125°. This heat was maintained for days and though the cappings would become soft and melt, the honey made no offer to liquify. Testing with the knife showed no appreciable difference from its condition when first placed there. Since then we have no hopes that bees can reduce granulated honey to a liquid condition.

We think all bee-keepers will feel grateful to Mr. Pringle for his timely warning. He is a close observer and his hints are in time to counteract the difficulty.

For the Canadian Bee Journal.

#### EXPERIMENT AND EXPERIENCE.

**I**N a warm climate, and especially in a heated season as the present season has proven to be, it becomes a problem as to the best method of protecting spare combs from the ravages of the moth larvæ. Having reduced the number of my colonies owing to the decade of dry seasons, the past spring found me with about 500 spare combs, standard L. size. These are good straight combs mostly drawn from foundation and are reckoned as a valuable part of the apiary outfit. These combs were kept in supers during the past winter in the best of order, and they gave no trouble till the heated season set in, which began in the early part of July, and then the work of the moth miller began. The combs were brought together and such of them as showed signs of moth depredation were subjected to the fumes of sulphur and the work done thoroughly. The fumes of sulphur will destroy the larvæ of the moth miller before they are entrenched in the combs, but when a few of the larger ones become encased in their webbing it is a slow business to reach them with the fumes of sulphur. And further, the sulphur fumes do no harm to the unhatched eggs, hence the fumigation must be repeated about once a week. My experiments in this line were not satisfactory when speaking of good results. This season's experience has convinced me that the sulphur

remedy is most unsatisfactory. With a small tight room or closet fitted up for the purpose, and with unflagging attention, combs can be saved in this way, but they come out in a filthy condition ready to send up a disgusting sulphurous stench when subjected to a warm temperature. This matter has not been as closely investigated as it should have been. A better remedy is needed, and I have no doubt but it can be found if the genius of bee-keepers is set to work in this direction. I quit the sulphur business early in August and began to tier the combs in supers on the hives, notwithstanding the hives had the usual surplus cases on them. I found that a good colony of Italian bees will protect all the combs that can be handily stacked over their brood nest. For want of room on the hives for so many combs, I made up a lot of nuclei—just one frame of brood with adhering bees, and gave each of them a queen cell to screw up their courage. These little nuclei have taken care of from ten to twenty L. combs each, and kept them in "band-box order," and the young queens they have nursed in the meantime have more than paid the expenses of the food consumed by the nuclei.

To see how a mere handful of Italian bees will keep a comb surface ten times greater than their immediate wants demand nicely cleaned and polished ready for future use, speaks volumes in their favor as a general utility race of bees.

#### YOUNG QUEENS AT MATING TIME.

It is pretty generally understood that there is a large per cent. of young queens lost at that period of their lives when they venture into the outer world in quest of a mate. But the immediate cause of this mortality at so interesting a period of their lives seems to be poorly understood even among those who are supposed to be the closest of observers. No author of our standard works on bee culture, in the old or new world, has given any feasible cause for the untimely end of so many young queens. Their counsel is to "paint the hives of different colors, keeping the hives at some distance apart, etc." Some writers advise the hanging up of something like a red cloth or a sheet of paper as a sign for the young queen to recognize her home by. All this is a plain case of the "blind leading the blind."

I will not say that no young queen ever entered the wrong hive on her return from her wedding flight, and that no young queen is ever lost from this cause, for nothing I believe is wholly exempt from accident. But I do say, after long and careful observation and experiment, that such a mishap is as rare as anything under the sun. And when speaking in a general way, it never