

CAPPINGS.

VASALINE.

Vaseline seems to give satisfaction wherever used in bee hives. Many of our British beekeepers recommend it very highly, and we quote the following from the Br. Bee Journal:

"Seeing in the *Bee Journal* of April 23rd reference to the use of vaseline, I thought you might like to hear of the experience of those who have used it. From something I read in the *Journal* last year, I used it freely the greater part of last season, and would strongly advise its use. I found frames, supers, &c., treated with it could be moved with little or no disturbance. Using divisible supers, I found I could put on one crate under another almost unknown to the bees until it was on. I found the sections when taking them off finished, nearly as clean as when put on, and easily taken out of the supers."

MOULDY COMBS.

What would you advise me to do so that I might freshen up over fifty bar-frames filled with comb, as they are slightly mouldy, having come from hives in which bees died during the winter?—H. C. SCLATES, *Littlehampton*.

REPLY.—If the combs are sprayed with salicylic acid solution and dried, they will be all right.—*British Bee Journal*.

Entrances, Ventilation, Etc.

G. M. DOOLITTLE.

A correspondent asks me some questions, and says, "Please answer through the *AMERICAN BEE JOURNAL*." He first wishes to know if two or more entrances are not needed in a hive during the Summer months. "One for the main or front entrance, and one at the rear for ventilation, to be opened during hot weather."

Regarding ventilation, I would say, that I much prefer to make the main entrance large enough to give all the needed ventilation in times of extreme heat, and have it so arranged that it can be easily contracted to meet the requirements of even the smallest colony, when desired.

My reasons for so preferring are, that unless the rear entrance is closed during cool nights, it makes the hive so cool, by the draft of air, that the bees cannot work to advantage at brood-rearing, comb-building, drawing out comb foundation, or evaporating nectar; while to open and close any entrance or ventilation every night or every time the weather changes, is out of the question, except by a person who has the "bee-fever" bad, or a very few colonies. If a person tries such a thing when they first start out in bee-keeping, it soon becomes an old story, when the extra entrances are neglected, and often causes robbing in times of scarcity, if all are left open.

But the worst part of all is that the bees get in the habit of using the back ventilator as an entrance where it is left open all the while, as it usually is during the latter part of the Sum-

mer; so that when it is finally closed, the bees which have been accustomed to use this as an entrance to the hive, go out of the regular entrance, but return to the old place, only to find it closed, thus causing their loss, as they know no other place of their getting into home, having so marked on their first flight.

He next wishes to know if it is not necessary to have an entrance near the top of the hive, which is to be left open all the while when the bees are storing surplus honey, "so that the bees need not have to travel so far as they must of necessity do where they have to carry the honey all the way from the bottom entrance to the top of a two or three-story hive."

It is evident that our friend is laboring under a mistaken impression, and by arguing that such an entrance is a necessity; admits his lack of a thorough knowledge of the inside workings of the hive. The bees which gather the honey are not the ones that deposit it in the cells, as I have several times proven by taking away a queen of one variety of bees and introducing a queen of another variety. For instance, I once took away a queen of a black colony during the month of June, and noted the time the last black bee hatched, and also when the first Italian emerged from her cell.

As young bees do not gather honey until they are 16 days old, when the colony is in a normal condition, if we watch that colony on the fifteenth day in the forenoon, before the young bees go out to play (counting from the time the first Italian hatched), no Italians should be seen going in and out at the entrance, and all should be black bees.

In looking at the entrance on the day named, I found only black bees at work, as I had expected, but an examination of the sections, in which the bees were busily at work, showed scarcely a black bee in them, but all were Italians, which were busily employed building comb and depositing honey. Now, if, as our friend supposes, the field bees carry their loads of nectar and deposit them in the cells, why were not some of those black bees seen doing this, as there were multitudes of these coming in from the field all the while with large loads of nectar.

Again, for several years I used an observatory hive, containing but one comb, and many were the hours I spent in watching this to see what I could find out about our p. ts.—what they usually did "in the dark." During one of my experiments with this, I had black bees as field bees, and young Italians for the inside work.

By watching the entrance through the glass, I could see the loaded black bees come in, and when one came on the side next to me, I could easily see what it did with the load of honey it had. The bee would pass along on the comb until it came to a young bee, when it would put out its tongue or proboscis toward this young bee. If this young bee had no load, it would take the load, when it was given up to it.

If the light was just right I could see the nectar sparkle as it passed from one to the other, on or through their tongues. The field bee then rested a little while, when it would go for another load. Thus it will be seen that any entrance leading directly to the surplus arrangement (as is now used by a few), is of no use, but on the contrary a positive damage, as in cool nights it causes the bees to leave the boxes or