

ature varied a good deal, ranging as a rule from 74 deg. to 84 deg. F. Above the latter temperature a good deal of fanning was started, and once, when under some excitement, the heat rose to 92 deg., the bees seemed uncomfortable. Mr. Doolittle, in "Gleanings," quoted in the "British Bee Journal" of October 19, 1899, discusses the question of the heat necessary for brood rearing. He considers 92 deg. as "the lowest point consistent with successful brood rearing," and scouts the idea that bees can be reared at a temperature of 60 deg. From the general run of Mr. Doolittle's figures I take it that he means Fahrenheit. Now in autumn, when, as above stated, I started fresh laying of eggs by feeding, I had the ill luck to break one of the outside sheets of glass. As a result the temperature was lowered, and in the day time stood more than once at 64 deg. It is probable that in the night it went lower. All this time egg laying went on, and without exception the brood hatched out successfully. Hence I think that Mr. Doolittle, admirable guide as he is, is for once in error.

Stimulated by the unexpected food supply, the bees set to work foraging, and propolis being just then plentiful it was brought in in wild profusion. Bees have small sense of proportion; they like to be on the safe side. Yet if a bee-keeper must often lament a good comb ruined from his point of view by having been crammed with pollen, he may console himself with the thought that the hand-to-mouth policy which would suit him very well in the matter of pollen and propolis, would be very disastrous if carried out consistently and applied to honey. The propolis came in packed like pollen in the workers' collecting baskets. But as it is not stored in cells, the load was not so

easily to be got rid of. This bee glue is collected in a soft sticky state, and I do not know how the bees manage to pack their baskets with it. It is evidently difficult to handle, for the loaded bee does not, as far as I can see, attempt to deal with his own load. He walks about the comb, offering, so to speak, his wares, and from time to time a bee bites a portion of it off with his mandibles and chews it up as if it were a wax scale, before depositing it in what it deems a suitable quarter. I have seen a bee so loaded itself bite off a fragment from another bee's load, and walk off chewing up its mouthful. The sticky propolis soon becomes a drug in the market, and in the end a good deal of it becomes smeared about the hive in a fashion familiar to every bee-keeper.

The question of how to mark bees has lately been touched upon in the Journal. Although I marked a good many with both oil and water-color paints, I was not successful. In every case either the color wore off or was got rid of so that the bee was hardly noticeable, or the bee disappeared altogether. I have since thought that there might be some dye that would take effect on chitine, and at the same time would not be seriously prejudicial to the bee, as we know that a bee may be immersed in various fluids for a considerable time and yet quite recover. It is a very important point in observation and should be glad of any instruction.

There need be no fear as to dead bees accumulating in an observatory hive; the bees keep it wonderfully free. Probably under healthy conditions very few bees return to a hive to die. Their instinct tells them that they would be refused admittance or ruthlessly ejected. It is just as well for the want of combination noticeable in many branches of hive economy

omy is  
after ma  
peculiar  
tory hiv  
bees are  
out, the  
dealt wit  
worker  
dragging  
glass an  
the top  
another  
pulls har  
attracted  
striving  
direction  
merrily.  
gets tire  
more be  
first rem  
hand an  
bit they  
drops to  
you can  
dead bo  
It mu  
disappoi  
keepers  
write a  
Bees."  
captains  
mysteri  
read ab  
the capt  
we may  
which s  
of the a  
of legs  
crown,  
bitting i  
atory h  
army, a  
wellous  
It ma  
y wat  
of the  
they to  
were re  
come c  
founc