

tar and using them for legs to the bee stand would be a sure preventive. The way to support them is as follows:—Take wooden pegs the size of the hole in the tile. Drive them in the ground until they do not project quite as far out as the tile is long; then drop your tiles over them. This stick prevents them from tipping over and makes a very firm stand. Coal oil, or surface oil, (if they are dipped in it) will answer as well as coal tar. This would prevent cock-roaches, ants, spiders or any vermin from bothering. The tile absorbs and retains the offensive odor for a long time and would only require dipping in the oil or tar once or twice in the season. The hive may be raised and the legs lifted off the sticks and dipped and returned in a moment whenever desired.

WHY DIVISION BOARDS DO NOT RUN TO THE BOTTOM OF HIVE.

Several persons wish to know why we do not make our division boards run to the bottom of the hive, while they fit tightly against the side. The division board should not come lower than the bottoms of the frames, so that the bees can pass under it to take honey out from behind when partially filled combs are set in. It is very convenient to feed behind the division board when one has no feeders, and also for strong colonies. If the division board goes to the bottom it is almost impossible to adjust it without killing bees. Those on the sides of the hives may be shoved down but the difficulty is to keep them out from under the bottom, and in strong colonies we can adjust twenty-five division boards in less time than a person who is used to it can adjust one that goes right down, all that is to be done is to slide it in place as quickly as a frame and the bee-space under prevents mashing. Even though they are crowded out from under it they soon run back and the use of these becomes a pleasure. No valid objection can be made to the opening under the board. There are so many advantages in its favor that we use them exclusively. We have had spaces of different widths, but we prefer the half inch because the sides of bee-hives are liable to shrink in time and become slightly shallower even though the timber was apparently dry when they

were made. This shrinkage causes the division board to come nearer the bottom and if bee space only is left a little shrinkage makes them too close and bees are killed, besides there may be bees on the bottom of the division board and also on the bottom of the hive. Any one who will use division boards as above we think will be pleased with them.

HOW LONG BEES WILL LIVE WHEN IN PROPER CONFINEMENT WITH RIGHT TEMPERATURE, ON THE FULL OF THEIR SACS ONLY.

Some time ago we prepared some more bees for trial to see how long they would live on one meal, but as the weather became cold the bees turned quite cross and as soon as the hive was smoked they apparently refused to fill their sacs with honey. We then put them in a box of about 3000 cubic inches inside measurement. They clustered in the centre of it and hung down like an ordinary swarm clustered on a limb. The front part of the box was covered with wire cloth so that they had all the air that was necessary and perhaps even more than they required. They were kept in a temperature from 45° to 50°, and we believe that this temperature, from this experiment is too warm with as much ventilation as we gave them. After being eighteen full days in this condition, on the morning of the nineteenth we found them weakening and some of them not able to hold on to the cluster. Now, we feel satisfied that they had too much air and if they had been in a smaller box where they could have clustered more easily they would not have consumed their stores so quickly. Others that we gave more ventilation to and which were more exposed and had less food in their sacs when they were put in the cluster required taking out in a shorter time. If we knew the right temperature to place them in and the right kind of a box or repository and if we could get them to cluster in a way that each would not have to support the weight of another we believe they could be kept for a very long time. By hanging in such a cluster it seems to us so much less exertion would be required on their part that the consumption of food would be much smaller and