

movement, poison—deadly animal alkaloids—is given off or produced by them, and it entirely depends on the stamina and vigour of the subject whether the strain on the vital parts caused by the fever can be borne or not, whether death or victory result. Well, then, to apply this to my subject, animals brought northward from warmer, kinder climates bring with them tender susceptibilities to attacks from the microscopic enemies which swarm in the suitable conditions of their own habitat. Becoming interbred with their northern species, they hand on to their progeny the peculiarity or idiosyncrasy which disenables them to resist particular diseases: this is the compensation demanded by Nature for some of the benefits resulting from assisted cross-fertilisation, and it effects many species in the plant world, following the same law. We may now perhaps see the rationale of the argument that foul brood is materially assisted by, if not entirely the result of, the importation of bees which may be all right at home, but in our climate succumb to attack, and propagate disease."

In reference to the above, would ask Prof. Cooks to give us his opinion. We must say that we very much doubt the theories advanced by some in reference to foul-brood. It is cured so thoroughly and easily, by the fasting or changing system, or perhaps it might be better understood if we said, by any system which consumes all the diseased honey in their abdomen before it is placed in the cells of combs, or prepared in the food for larvae. We have yet to know a single case of foul-brood from the bees themselves, after the above has been properly carried out.

An Experiment.

HOW THE BEES WERE SHIPPED SUCCESSFULLY 2500 MILES IN THE DEAD OF WINTER.

FRIEND ROOT:—When I first reached this place with my bees I wrote you a card saying I had met with unexpected success in getting them here. I have now to report unexpected failure to keep the bees in good condition after getting them here. I have lost over half of them from spring dwindling, and those left are weak; but I have bought as many as I have lost, and propose to know what the honey resources are here, and hope to be able to winter them here all right. I believe they will breed very much longer here in the fall, and thus go into winter quarters with many more young bees in each hive.

It has been an unusually late and backward spring here, I am told, although bees that were wintered here seem to be almost ready to swarm. Alfalfa is knee high, and will begin to blow out in a few days. Wild flowers are quite plentiful already.

I will now give you an account of how I prepared my bees for shipping, and brought them through so well, nearly 2500 miles, with the loss of only seven stocks, and very few dead bees in each hive. There were only six or eight combs loosened from their frames in the whole lot, and yet there was not a wired comb among them. A very large share of the combs were those that had been transferred from box hives, and were, of course, fastened all around—an important factor in keeping them whole.

Last fall, some weeks before the hives were prepared for the cave in which I wintered them, I took burlap, old carpet, etc., and folded it so as to fill the space between the frames and covers, so that the covers, when pressed down, would hold the frames secure. Then I took a strap of sheet iron, and bent over the cover and screwed one end to each side of the hive, setting the screws so that they drew the cover down tight. I then took old burlap and cut it up in strips about four inches wide, and dampened them with water so that they would pack tight; then I turned the hive bottom side up, and, with a broad-pointed putty-knife, packed the burlap, that had been dampened, between the ends of the frames and the hive in such a way that the frames were held very firmly. This at the same time made a cushion that broke the jar of the train endwise, as when coupling cars and stopping and starting the train, which at times was very severe, so that it seemed as if every frame must be broken, so great was the shock and jar as the cars came together.

The bees thus prepared were ready for the cave in which they were wintered. I then took a half-story full of empty comb, and prepared (to put under each hive) in this way. I covered one-third of the bottom with wire cloth, and the remaining two-thirds I covered over with half-inch lumber, nailed on so as to leave a chance for the air to circulate under each hive clear across it, the wire cloth being above the strips of lumber, so that, when the hives were piled on top of each other, the air could circulate clear through under each tier of hives.

The wire cloth and strips of wood were fastened on the bottom of each one of the half-story hives during the winter; and lugs made of sheet iron were screwed to the sides of each