

principle, if not the entire cause of the difficulty. The location or position in which they were placed to fast, had much to do with the results, or time required for fasting. Again we found that queenless bees, if made queenless at the time they were put away, did not fast or consume their honey as evenly as those which had queens, and when they were placed where the light could shine in, some of them would rush about the hive or fasting box, over the wire cloth attempting to escape, and in their vain efforts to escape would exhaust their food and perhaps worry themselves to death in one or two days, while others that remained quiet would not have all the honey in their abdomens consumed in perhaps 6 or 7 days. Soon we found that it was necessary to place them in a dark place in order that they should all remain quiet alike, and as they were all clustered together, they would usually fast more evenly. The bees would become perceptibly smaller, their abdomens get very small and slim and the cluster would also get smaller, and when kept hanging in that position in a dark room until all the honey in their abdomens was thoroughly consumed we never have found a case of foul brood to return. We have even fasted them longer and found it to return, and in looking for the cause we well recollect finding that they had built combs, and in some instances filled it with honey or put some honey in it. For instance, after fasting them for many days, in shaking the bees out of the fasting box we found this comb, and on examining it we found honey in the cells. We took this honey and fed it to a clean nuclei to ascertain if it would give them the disease, and we had no difficulty in starting the disease in any hive in which we fed this foul honey left by the bees in their comb. While fasting, repeated experiments proved to us that the honey they carried in their abdomens when they were taken from their affected colonies, they deposited in the combs they built in their fasting box. When they did build the comb and so deposit, the honey would give the disease to any clean colony that it was fed to. When they were brood rearing these experiments were varied and carried on sufficiently long to satisfy us that we were not mistaken. After becoming thoroughly convinced that by fasting the bees all the honey was consumed and putting them in disinfected hives that the cure was certain, we went to an apiary containing over 150 colonies, all affected with foul brood, some of them so bad that it was difficult to handle the combs and shake off the bees, so loathsome was the stench arising from it. We placed this number of colonies in the fasting

box, rendered the combs into wax, boiled the hives and frames to disinfect them, made the wax into foundation, put foundation back into frames, and when the fasting was complete, returned the bees back to their own hives, frames and comb made of foundation. In not one instance did the disease return to any of these colonies. Now if the queens or bees carried the disease in any way, why was it that the eggs they laid were not infected with the disease? Why was it that the disease did not get into the body of the bees, or from wherever it lurked in the food fed to the larvae which again would cause the disease. Now, this one instance which I mention is not the only proof. I could mention fifty others. Some argue that it is carried by the bees and scattered in the fields amongst flowers, but this apiary of over 150 colonies, which was diseased for 2 years, was less than one-half mile from a smaller apiary which never had a case of foul brood. Now if the bees from this large apiary, which visited almost every cloverhead and other flower in that vicinity, carried the disease and scattered it in that way, is it not strange that this smaller apiary, situated close by and gathering honey from the same flowers, flying over the same yard to and from the apiary and gathering their stores all around, should not have been affected. It is a well-known fact with our best beekeepers of America that fasting until the honey is consumed in their abdomens, disinfecting hives and frames by boiling, rendering the combs into wax by boiling, and even boiling the honey will disinfect it so that it may be fed with impunity to any colony. Now if our foul brood in America is not the same as that in Europe I would like to know it, and I will ask as a favor that some of our European friends will select some of their worst foul brood that they can get and forward it to me safely packed and I will endeavor to get some Canadian foul brood and forward to them in return. I will infect colonies with the European plague, then try after they become thoroughly affected our various cures. I have an isolated spot with no bees near that I can operate with perfect safety, and they can infect their colonies with our American foul brood and see if it is not the ordinary European foul brood. We believe that it first came from Europe, but there are points which must be remembered. The atmosphere in some localities in Europe being so damp with their excessive rains and fogs, might make the disease operate more rapidly. Our atmosphere being dry there might be some slight difference in that respect, but if our European friends should find out as Mr. Root, of Medina, Ohio,