

Superior and from there through Michigan state to Lansing, where I stayed with Prof. Cook. He does not keep bees on a large scale, he is more of a scientific bee-keeper and tries experiments with different hives, the results of each of which are kept separate. His object is to teach entomology and bee-keeping to the agricultural students, so as to enable them to commence that pursuit on leaving the college. There are about 300 students at this agricultural college, many of whom are interested in bees. On one afternoon Prof. Cook asked me to take his class of about forty students, and I am glad to tell you that by means of my microscope I was enabled to show them some things they had not seen before. They were generally well educated and intelligent men, who, after leaving the college go out as farmers. The time spent at the college was most agreeable, the Professor being a charming and sterling man. While there I found my way to Mr. Heddon's. He seemed to me a very intelligent gentleman, very quick to seize an idea and appreciate the experience of others. He showed me his apiaries, although he was unfortunately suffering from bee-disease, which affects him in a very peculiar way, namely by producing catarrh, so that he cannot open a hive himself without being attacked by this complaint. However, as I was there, he showed me how the hives were manipulated, the consequence being that he suffered considerably all the evening. He showed me the handling of the shallow hives, and how easy it was to find the queen. I ascertained that he brought his bees through the winter very unsuccessfully and had lost as many as from forty to fifty per cent in wintering. We discussed the merits of the Heddon and Stewarton hives, and in the course of the conversation he stated that last year was a very poor honey season, which bore out the complaint of the Canadians who were over here in 1886. I cannot remember what he said was the average produce, but it was not more than 20 lbs. to a hive at any rate. I found in his district the honey season had been very bad, whilst in some parts of New York state the reverse was the fact, 60 to 80 lbs. per hive being an average yield expected; but there were other districts in which not more than 10 to 15 lbs. were obtained. One gentleman (the President of the Michigan Association) jokingly said that no one would believe I had been to the States if I returned to England without boasting about something, and he further said if I came to him I could boast I had seen the apiary where nearly one pound of honey per hive had been obtained this year. From Mr. Heddon's I went to Chicago and met an old friend, Mr. Newman, who showed me

over his place, which is in the city. Unfortunately, I did not let him know when I was coming, and, consequently, he was unable to get any bee-keepers to meet me, but he was most hospitable, taking me for a five hours' drive through the city, and showing me all the lions of the place. From there I went to see Mr. Dadant. He is a Frenchman, who settled in America some years ago, and with his son carries on the business of bee-keeping. They also make a large quantity of comb-foundation. Last year they turned out 70,000 lbs. of foundation, but this year not more than 50,000 lbs., as the season was such a bad one. It is the best natural-based foundation I have seen in America. They melt about 3,000 lbs. of wax at a time, and in this way are able to get the color uniform. The foundation most in demand in America is the natural base foundation made on the Vandervoorts' machine. They also produce a large quantity of extracted honey, and a little comb honey. They work the extracted honey just as we do, by storifying or putting one hive on another. Their hive is a little larger than the Langstroth hive with supers about six inches deep. These frames are used for extracting. They have 400 hives now. This year has been a very bad year, they having obtained only 9,000 lbs. of honey. I think the bad season is demonstrated by the fact that their issue of foundation this year has been 20,000 lbs. less than last year's. From the Dadants I went back to Chicago and spent a little more time at Lansing. From there we travelled on to Toledo to see Dr. Mason. He was out, but he visited me in the evening, and we had a chat about bees and other matters. I found him a very nice, agreeable gentleman, quite well up in bee matter. Mr. Cutting, Secretary of the Michigan Association, who is a very smart and energetic worker in our cause, accompanied him, and I regretted time did not permit me to stay longer to visit them. From Toledo we passed on to Medina, where we saw Mr. Root and his son, Ernest. Mr. Root is the editor of *Gleanings*, and he and his son made our stay there most pleasant. They are both very intelligent and anxious to pick up information. We spent a very agreeable time at Medina. Mr. Root is a very different kind of man to what I had pictured him. He is short, thin and seems quite worn out with work. He has worked extremely hard and has succeeded better than any one else on that side of the ocean in popularizing bee-keeping and creating a demand for appliances. He employs 150 hands making nothing but hives and appliances. Everything is turned out on a large scale. He has machinery for doing almost everything, and