

styles and sizes of brood frames, I finally decided in 1886 that the 7-inch frame (I had near 40 colonies on the 7-inch closed end invertible frames at this time) gave the best results with the queen excluder in working for comb honey. I then tried a 7-inch Langstroth brood frame and it worked so well in all respects that I transferred all my bees to these frames and I have been better and better satisfied with them and the results to be obtained with the queen excluder every year since. In that year also decided that a brood chamber having a capacity of about 830 square inches of brood comb, was the most servicable and especially for swarms in working for comb honey. I had been aware that a good queen was capable of occupying about 1400 square inches of brood comb with brood before white clover bloom and as I deemed this amount of brood a great advantage I found it was to use a brood chamber, perfectly adapted to the use of the queen excluder, I would have to use two stories in the spring for breeding, and this result would have followed and the new system which has grown out of it would have been developed the same if Mr. Heddon had never invented a hive at all. Instead of further improving his hive and developing a practical system he stopped with his patented hive in 1885 and has not made an inch of progress since.

Now I desire to say further, that my interests in the new system of management have been, and are still the interests and the prosperity of American beekeepers, and though I do not expect to profit from its introduction to any great extent, except in my own apiary, it will be my pleasure to see others profit by a system that I have labored so long and so hard to develop and perfect.

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New, Phila., O.

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Establishing An Apiary.

IN selecting a locality for an apiary we are undertaking a very important and difficult task, and a little extra outlay in money and time before finally deciding, may repay us with a very heavy percentage of interest. Let us first study the case from a geographical standpoint. I have come to the conclusion that three miles from a lake—a large lake—gives us great advantages. In spring the blossoming of flowers is retarded for some distance inland owing to the cold air from the water, and when apple blossom is in full bloom, in fact when the petals of the flowers commence to drop, they will just be commencing to open on the lake shore. Other

flowers earlier and later the same, yes, right down to golden rod in the fall. Again, the fall frosts are, nine seasons out of ten kept back through the warmth coming from the water in the fall, and when every blossom has succumbed to cold, eight or ten miles from the lake, along the lake shore they may be still untouched. It will readily be seen of what immense advantage this may prove to be during the honey season. Of course we all know the advantage of being in a country with low and high land in the vicinity; also of having light and heavy soil within reach. It not only gives us variety of pasture but lengthens the seasons also, and gives us a surer crop. In selecting an apiary I should prefer cultivated and uncultivated land in the same vicinity for the same reason. Won't we have to come down to permanency of location. We have an instance within seven miles of here, the village had no grist mill until lately, one man decided to try one and now there are three in process of erection. A person can scarcely conceive of such folly, yet it is so. With an apiary there is yet a greater danger when a beekeeper establishes an apiary, and on account of his adaptation and knowledge is able to get good results, every Dick, Tom and Harry, in the vicinity, commences to think he can do as well without knowledge and without devoting any time to his bees; and the man who has devoted his time to beekeeping, or largely so, can move to fresh fields and raise another crop of beekeepers. Now I must confess, I believe the beekeeper is open to blame for this. he refuses to sell bees, he is not candid in giving information, and his neighbors think if he tries to keep others out of the business it must pay well, better than it does. But to my subject. In establishing an apiary it should be done in such a way that one may move without very much loss, that is, if beekeeping is first in occupation, other things secondary. For a location, good to-day, may three years from now be valueless for an apiarist, and then he sells his property, perhaps at a sacrifice. In selecting a place for an apiary I do not ignore the advantages to be derived from good schools, intercourse with God's people, etc. We do not live to gather honey any more than dollars, and however strong the temptation may be, living with the aforesaid advantages are better for ourselves and families than plenty and to spare without them.

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