

advantages which seems to me must certainly be gained by one of the leading features of Mr. Heddon's inventions and system of management viz: The DIVISIBLE BROOD CHAMBER."

The above sentences prove conclusively that Father Langstroth recognized at once the originality and newness as well as the superiority of the divisible brood chamber. This is all.

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### Fixed Versus Hanging Frames.

READ AT THE A. B. K. CONVENTION.

**A**BOUT the time that Mr. Heddon's divisible brood chamber was made public, and the merits and demerits were discussed through the papers, we ordered of the inventor one of his hives. Bees were gotten into it as soon as possible; and almost every time I had occasion to go into the apiary I would manipulate that hive, try the "shake-out function," handle the separate frames, etc. While I was not particularly struck with the advantages of the divisible brood-nest, or the shake-out function, I was greatly surprised at the rapidity and ease with which these little closed end-frames could be handled.

I have, through Gleanings, related some of my experiences in raising bees. Whenever it became time to move an apiary I always dreaded it. Frames had to be fixed up so that they could not be shaken about, or else, without fixing, such careful driving had to be resorted to, that it usually took three or four hours to make the trip back, when it ought not to have taken over two hours. And then there was all the time spent in fixing the frames. Indeed, our President, Hon. R. L. Taylor, in convention at Columbus, Ohio, before the association said something to this effect: "I do not see how any sane man (speaking of the hanging-frame hive), can tolerate such a rattle-box." The remark struck me at the time as being very caustic; but the more I thought of it the more I became impressed with the truth of the comparison. A hanging-frame hive is, to a certain extent, a rattle-box.

Another thing: I had trouble in getting the boys in our yards to space the frames properly. Beginners would invariably space them too near together, or too far apart. The result would be, combs bulged, and others thinned down or scooped out, as it were on the side; and, worse than all, was the nuisance of interchanging them. Then, too, in buying up bees, a great many colonies had to be rejected because the farmer bee-keepers would not take the trouble to space their combs rightly. You may give them printed instructions, written books, and

when you visit them tell them how far to space, and yet, as a general thing, they will make poor work of it.

When I contrasted the smooth and even appearance of the little Heddon combs, and the often irregular ones of the average hanging-frames, and the inconvenience of the latter in moving, I hardly rested easy. I was well aware that a great majority of the bee-keepers—at least of the West—were using and advocating the hanging style; and it seemed to me that I should be wasting time in experimenting, or even investigating into the subject. I know that Elwood, Hetherington, and those other mammoth bee-keepers, used closed-end frames, similar to the Heddon; that Elwood said he could handle the Quinby as rapidly as any one could the suspended Langstroth. Although I had great respect for anything coming from the pen of Mr. Elwood, the statement seemed to me utterly preposterous; and yet, when I came to handle the Heddon frames out in the yard, it did not seem so impossible after all.

I reasoned in this way: If what Mr. Elwood says is true—yes, and I might say almost all others who have used closed-end frames—is it not possible that those who are using frames not fixed are losing many advantages that might accrue immensely to their benefit by the use of fixed frames? The hanging style without fastening will not bear moving, except with careful driving, good roads, and steady horses. There are a few who have all these conditions under perfect control. What we want, then, is frames at fixed distances, that will give us true combs—no burr-combs—and, perhaps, most important of all, ease of manipulation.

Without any disposition to repeat what I have already said through the journals, I will simply state, in order to bring the matter more clearly before the reader, that I personally saw Mr. Elwood, Mr. Tanieliff, Mr. Hoffman, and several other bee-keepers using fixed frames, handle them just as rapidly, and perhaps more so than you or I can the old style suspended; and, along with that they have all the other advantages that come with their use.

I believe that the bee-keepers of the West have generally thought that Elwood and Hetherington, and all their colleagues, using fixed distances, were either greatly behind the times, or else so conservative that they would not change their frames even if facts and figures were against them.

But right here just take note of this: These men with their fixed distances somehow manage to handle large apiaries with less help than ourselves. If they had a cumbersome, awkward system, they could hardly do this. On