

and everything will go on charmingly. (Applause.)

Mr. Armstrong: I suppose after I receive 12 months schooling with the President the brass will be all right. (Laughter).

President Evans called upon Mr. Couse to read a paper on "How one man alone managed 500 colonies for comb honeys in out-apiaries," by Mr. Hutchinson of Flint, Michigan, who, unfortunately, could not be present at the convention.

Mr. Couse read the paper as follows:

HOW ONE MAN ALONE MANAGED 500  
COLONIES FOR COMB HONEY  
IN OUT-APIARIES.

My Canadian Friends,—I had hoped and expected to be with you at this convention, but, when at the Buffalo meeting, not dreaming of a confliction of dates, I promised to attend the meeting of the Minnesota State Beekeepers' Convention, which is now in session. The Chicago meeting which I had hoped to attend, is also now in session. Hoping that I may be with you next year, I will now proceed to tell how one man, alone, Mr. Chas. Keoppen, formerly of this place, but now in Virginia, managed 500 colonies, for comb honey, in out-apiaries.

He bought bees and increased them, and built up to 500 colonies under difficulties that would have discouraged any ordinary mortal. Almost his first experience was that of buying 30 colonies of bees, for \$300.00, and seeing them die of foul brood the next year. He was green at the business and did not know enough about this disease to recognize it. The bees were in chaff hives, and, by the way, he continued to use those hives as long as he remained in Michigan. He disinfected them with a strong solution of carbolic acid; I don't know how strong, but he said that in ate the splinters off the broom with which it

was applied. I presume my friend McEvoy would say that this precaution was unnecessary. Be that as it may, foul brood has never developed in those hives since they were thus treated.

After getting some experience, and a few crops of honey, his enthusiasm and confidence became such that he bought bees, largely going into debt for some of them. Then poor seasons came on, and not only did the bees that were expected to pay for themselves, fail to store any honey, but had to be fed both spring and fall. In one instance he fed the bees in the spring to keep them from starving, and cared for them all through the summer, only to find that they must be fed in the fall, and, rather than do this, he let them go back to the man of whom he had bought them, losing his time and spring feed. It was, under such discouragements that he worked away and built up five out-apiaries of nearly 100 colonies in each. Then came good seasons, and he was able to buy houses and lots and put money in the bank.

The wonderful thing about this is that he has done all the work alone with his own hands. Briefly, his methods are as follows: He winters most of his bees out of doors protected with chaff. He waits until as late as possible in the fall, sets hives in a long row, with boards at the back and front, then packs hives in chaff, putting two inches in front, three or four at the back, and five or six on the top, covering with shade-boards, covers, or wax proof building paper. Some of the colonies are in the chaff hives mentioned, but he does not like them as they are too expensive, and being ing and heavy to handle to the advantage.

In the spring the bees are looked over, stores equalized, and all