The Secretary then read an essay from J. H. Martin, Hartford, N.Y., entitled :

## COST OF THE PRODUCTION OF HONEY.

In computing the cost of production, figures should show the cost for several years. I find that the cost of production, in my bee-yards, has varied from 2 cents to 50 cents per pound. I inventory my bees at \$5 per colony.

In 1886 I had 200 colonies valued at \$1,000; and empty combs, hives, fixtures, etc., \$300. Interest at 6 per cent, \$78; hired help, rent of apiary, etc., \$72. My own labor five months, at \$30, \$150—total expenses, \$300. I secured 10,000 pounds of honey, at a cost of 3 cents per pound.

In 1883 my yield was 10,000 pounds from 160 colonies, and the cost per pound was 2 cents. In 1882 my yield from 100 colonies was 200 pounds with expenses of \$100, or equal to 50 cents per pound as the cost of production. This year the yield is 6,000 pounds, at a cost of 4 cents per pound.

Taking the average for a longer series of years, the cost of production would be 5 cents per pound. The above figures are for extracted honey.

I count my time at five months, for during the remainder of the year a bee-keeper may turn his attention to something else, *i.e.*, unless he is producing comb honey, when, if he prepares his own crates, sections, etc., three months more time should be added, and 50 per cent. should be added to the cost, making the cost of comb honey at least 10 cents per pound.

comb honey at least 10 cents per pound. One of my out-apiaries has the following showing for this season. It contained 50 colonies, and was worked for extracted honey. Expenses, \$40, honey produced, 2,200 pounds; cost, 19 cents per pound.

I find that each year I can drop some of my old appliances and take a less number of steps. I think that an expert ought to manage 300 colonies, if in one yard, with little or no help.

The apiarist having surplus combs for every colony, and working for extracted honey, making only a moderate increase, can handle a large amount of honey with ease.

To get the best profits from bee-keeping, but little help should be employed, and fixtures used to facilitate rapid manipulations. The bee-keeper should keep just ahead of the bees, and not spend much time talking to book-agents.

## J. H. MARTIN.

After the reading of the above an essay from Mr. G. M. Doolittle, of Borodino, N.Y., was read, as follows:

## THEIR PRODUCTION.

Ladies and gentlemen of the North American Bee-keepers Association, your Secretary has asked me to furnish a short paper on the cost of honey, as a starting-point to the profound discussion regarding "controlling the price for honey, marketing, etc., to which a whole day's time of the convention was to be devoted. I feel incompetent to perform this task, but realizing that each must add his little if we would have

the muckle in anything, I will make the trial, and if I fail, I hope some wiser head will take it up. In the first place bee-keeping is no ordinary salling in life, and I hope the members of the convention will bear this in mind during the discussion they are about to enter upon. Many seem to suppose that an apiarist is entitled to no more pay than the man who cuts wood, carries the hod, or breaks stone on the highway, whose market value is about \$1.25 per day. If this be so, who, I ask, or what, will pay the bee-keeper for his sleepless nights, passed in planning and framing ideas to be carout in the apiary during days of toil in the hot sun, only perhaps to find his plans were not what he wished, so he had the whole ground to go over again, till success crowns his achievements. There are doubtless many before whom this will be read that have spent more hours, days, weeks and years over a true solution of the problem of bee-keeping than the most noted lawyer or physician ever spent over his calling. If this is a fact, shall they not have as good pay ? and yet some of our number are so insane as to think the bee-keepers can afford to work for the same wages that the hod-carrier does, (he who never spent an hour's thought on his profession in his life,) that dealers n honey may feel a satisfaction in selling it cheaply. Again, the dealer who pays 8c. per pound for extracted honey tells us he cannot afford to sell it for less than 10c. which gives him a profit of 25 per cent., and yet the bee-keeper must furnish brains, interest on capital invested, rent of land and buildings, pay taxes on bees, and pay for the transportation of his honey, besides doing a whole year's hard physical work in producing the honey, all for the remaining four-There is a wrong fifths of the selling price. somewhere about this and the sooner we begin to realize it the better. After carefully looking over the ground I have been led to believe that 45 lbs. of comb honey to the colony on an average is all bee-keepers as a rule, will get, taking one year with another. I formerly thought 50 lbs., but this year has taken some of the conceit out of me. Now, allowing that one man can care for 100 colonies of bees without any outside help, he will get 4,500 lbs. of comb But this honey as the result of a year's labor. is not clear gain by any means, for we have, at six per cent., \$36 interest on the \$600 capital his investment in bees would require, \$4 for taxes, \$25 for sections, \$40 for shipping cases and glass for same, and \$30 for comb foundation to fill his sections. To this add double interest on \$200 invested in hives, which would be needed to keep them in repair, equalling \$24,