

on the middle or northern parts. I have tried to raise it in the northern districts and gave it up and found extracted honey much more profitable.

Mr. Holtermann : Don't you think you can account for that in part by the fact that you know a great deal more about it now than you did?

Mr. Smith : Yes, but in the northern districts we are apt to have cold waves and cold nights especially and unless you gave it special protection very often when the bees were working well in the sections and would probably get them almost ready to snap a cold wave would come and drive them out of the sections and you will find you have a large percentage of culls left on your hands.

On motion the Convention adjourned at 6 o'clock p. m. to meet at 7.30 o'clock p. m.

### The Hive Considered as a Honey Manufactory.

The honey collected by the bees from flowers contains a large percentage of water, and for this reason readily ferments. It is sometimes stated that bees inject their sting-poison into the honey to prevent fermentation, but we have no reason for believing that they ever use their poison for this purpose. Sealed honey is always of a nearly uniform density, and consistency that will not ferment; and if the bees could prevent fermentation by any other means than by evaporation, they would not always evaporate before sealing. Bees are careful to keep their poison away from their combs, and even from the interior of the hive. Every bee-keeper who has manipulated bees to any extent, must have noticed that when, for any reason, the hand is required to be inserted among their combs, they will not sting unless the hand is suddenly brought in contact with them;

nor are they disposed to sting the hand when on the alighting board. Mice sometimes get into the hive, and if they can reach the quilts they will tear them up and make a nest in the combs, and eat honey with impunity for a length of time. When the worker bees want to get rid of the drones they will keep driving them out of the hive for a week or more. Two or three workers may be seen marching out a drone, which is almost certain to go straight back and to be marched out again; but the workers will not sting the drones in the hive or on the alighting board. When bees cluster round the queen or ball her, as it is termed, the object is to avoid stinging. If we take the ball of bees from the hive, and separate the bees with smoke, or by dropping the ball into a pail of water, the bees will quickly sting the queen, but they will not sting her in the hive. Mr. Doolittle states that he has seen a queen sting workers in the hive. In 1867, taking a queen by the wings from a black colony, I was going to change to Italians, I dropped her on the alighting board of a queenless colony (a second swarm, the queen of which failed to return from her excursion trip), and the queen stung and killed the first three bees that approached her before she entered the hive. Whether she stung any bees in the hive or not I could not tell, but she established herself as queen of the colony. Bees know that if they cluster in numbers around their victim they can accomplish their object without being stung. When Maeterlinck ascribes to the worker bees more humanity than his ancestors ever possessed, he is, to say the least, drawing a terribly long bow. If bees get alarmed for their safety by finding strange bees in the hive they will sting in the hive, but for some reason they seem to avoid it.