

believe the leaves are all right. I have wintered more in the cellar than outside and I prefer cellar wintering. I would like to ask Mr. McKnight if he ever tried the system of blocking the hives up?

Mr. McKnight: No, I never did.

Mr. Sibbald: I have tried both and I am in a position to know, and I know from actual experience the air does pass in the back, up through the cluster and out the front, because at the front of the entrance you will often see drops of moisture and at the back you will find it quite dry, and I thought from that that the air was surely passing from the back up through the cluster and out. Whether the air would be heavier after passing through the cluster or not, I do not know, but I always thought when the oxygen was taken out of air it was heavier and passed down. I may be wrong. At all events, the fresh air coming in the back would force the foul air out the front entrance.

Mr. Gammell: It carried the moisture down to the entrance?

Mr. Sibbald: Yes.

Mr. Smith: I think if Mr. Sibbald's temperature was high enough in his cellar he would see no drops of water.

Mr. Hall: It makes no difference about the scientific question as to oxygen or nitrogen. I raise mine in winter because it is more convenient. I raise them from one and a half to two inches. The reason we do it is the combs come out sweet and clean in the spring instead of being mouldy; I do not give a rap whether the moisture goes in or comes out.

Mr. Smith: I think if Mr. Hall would loosen the quilt a little at the bottom it would answer just as well.

Mr. Hall: I couldn't do it, sir. You wouldn't loosen my quilt. We look a little ahead. We don't meddle with the stocks of bees when we put them in until it is warm enough for them

to fly. If we want to look at them we look at the bottom, not at the top. I don't care anything about where the oxygen goes out or the nitrogen comes in, I know it keeps the combs from moulding. I have a board cover; as the bees leave it, we prefer it that way.

Mr. Smith: If Mr. Hall would loosen the cover the least bit, with temperature right, the bees would all leave the bottom board, anyway, that is a little on the slope.

Mr. Hall: My bees are hanging down below the bottom. The temperature in my place is 50 and as quiet as it is in this room. The temperature doesn't make so much difference if the atmosphere is pure. We have a door and window with a dark screen in it and if you put your hand to the chimney you will find a tremendous draught of air; it is pure; If the temperature goes up to 50 degrees they don't mind it; if you keep them down to 44 they want to get out, they want to fly.

Mr. McKnight: I once saw a bee hive in the garden of the State of New York and it had no bottom and the combs were hanging down below the edge of the hive proper.

Mr. Hall: I will tell you a story about that. I went to a friend of my wife's—I didn't know the old gentleman till I got there—he was seventy-eight years of age; he had a row of bees, there might have been twenty or thirty. The fence formed the back of the shed and then there was a roof to it and he had the hives two deep on it; he had four poles running from end to end of this shed, and his box hives were set on these poles and the combs were hanging down fourteen, sixteen and seventeen inches. His reason was on account of the moth and in that way the moths did not destroy his bees.

Mr. Armstrong: I was going to ask