

scum from the barrel and give it to Prof. Shutt. If he strains that through cheese cloth I would be very much surprised if it is anything more than you get from beating the white of an egg.

Mr. McEvoy—Although the honey is double strained through cheese cloth I sometimes take half an inch off several barrels. I will have half a pail full of fine little specks. You may think it is nothing, but I don't want even that.

Mr. Smith—Do I understand Mr. McEvoy, that the scum is half an inch thick?

Mr. McEvoy—No. (Laughter.)

Mr. Smith—Has Mr. McEvoy ever noticed any difference in honey from the bottom of the tank and what he finds at the top.

Mr. McEvoy—Yes.

Mr. Holtermann—And the longer it stands the greater the difference.

Mr. Armstrong—What is the cause of that?

Mr. Dickenson—When you skim a barrel or tank those skimmings soon turn into honey. You get another skim. You don't have to go very far down into the skimming. I mean after you get a pail or dish, or whatever you put your skimming into, you will find it is honey.

Mr. McEvoy—Answer Mr. Armstrong's question, Mr. Holtermann.

Mr. Holtermann—There may be several causes why honey at the top of the can is thinner than at the bottom. When you extract, a portion of what you extract is thin nectar from the combs that does not readily distribute itself and give an even specific gravity. The tendency is for the thin nectar to rise to the top and the heavier to go to the bottom. At the same time the farther it has to go, and the less difference there is, the more it gets distributed and equalized. The greater the difference of the honey in the combs, the more the tendency will be for the top to be thin and the bottom to

be heavier. That is one reason. But there is, I believe, quite often another reason, and that is that the moisture is absorbed at the top of the can, and the longer you leave it exposed, the more there will be of thin honey at the top of the can.

Mr. Fixter—To make the analysis which Mr. Holtermann suggested worth anything you would require three samples out of the can, from the top, from the centre and from the bottom.

Prof. Harrison—If you examined that with a magnifying glass it would tell you if it were air bubbles.

Mr. Armstrong—I would venture to say that most of that froth, if you call it that, or white scum, is the greater part comb.

Mr. Holtermann—No.

Mr. Armstrong—I think so. If I take and skim the top of a can and put it into a vessel when it is partly granulated, to liquify, I always find that there is a little more scum comes on top, and that after it is thoroughly liquified it is perfectly clear. If you take that little scum that comes to the top and put it in your mouth and chew it the same as a piece of wax, you will come to the conclusion that there is a great deal of wax in it.

Mr. Holtermann—If you are running honey into a vessel, and you take a colender with fine holes in it and put your honey through that, and let it go in fine streams down into a vessel you will have a great deal more of that white scum than if you dropped it in quickly. If that is wax, can wax be produced by that process?

Mr. Dickenson—I think probably that wax theory would hardly satisfy me. Of course, I strain through milk-strainer wire. I don't know whether any wax would go through or not, but the scum forms on top of the can all the same.

Mr. Darling—There has been a good deal said about this scum. I am somewhat inclined to think with Mr. Dick-