done, but as you know I am a chemist, and I like to have things accurate, I like to get at the facts. However, I am inclined to think the high heating of honey destroys the flavor to some extent. But these are only thoughts of mine, it is only an impression. Now there is a thought which strikes me here. What is it gives the flavor to honey. It contains two sugars, one of which is fluid and one is solid, one levulose and one glucose. I am very sure it is neither of these sugars which gives honey its peculiar flavor. We have clover honey and basswood and golden rod and buckwheat, but I think it is a certain minute quantity of the volatile oils which are secreted , and which are possibly changed somewhat while passing through the bee which gives it its characteristic flavor. Now they can, and I believe do, at high temperature escape, and when they are gone the honey goes. Now I would like to take some honey and seal it up, that is, put a stopper on it, and take another sample and leave it exposed for a number of months or years undisturbed, and I think I could prophecy that you would find the exposed honey would become flavorless while the other would retain its flavor. If that is true it points towards the fact that high temperature would have a disastrous effect upon that fine flavor of honey, although I think myself 158 is not at all an excessive temperature. Probably over that the flavor of the honey will go more quickly. I will try and make some further experiments along that line next year, and see what the results will be.

Question-How long did you keep it at 168?

Prof. Shutt—About fifteen minutes. We warmed it up in water, always in a water bath. We put the honey inside another vessel, and put it in that until the honey has gone to that temperature and then took it away. Then we put the top on and left it.

Another point, this honey was all fluid when we put it in. This honey didn't begin to granulate until about a week or ten days after it was put in. If you have to liquify the solid honey you can't do it at such a low temperature as we keep this fluid at, 122. We found that although this solid honey begins to liquify at a temperature of 90°, between 90° and 100° it needs a higher temperature. The levulose comes into a solution at once, but the dextrose doesn't liquify so quickly, so that while it became in a pasty mass between 90 and 100, it didn't clear up until considerably over 120, so that you see you require to use a higher temperature, probably 150 or 160 at least, but I shouldn't keep it in any longer than just necessary to liquify the honey.

That is how the matter stands. I see one or two points where it might be made more complete, and that is to find out to what temperature it can be reduced without solidifying. However, we have found that light has no effect on solidifying, it doesn't hurry it, neither does it retard. And agitating it doesnt seem to hasten it or retard it, but the heating is quite effective in keeping the honey in a fluid condition.

Now another matter upon which we have done a little work is in the bleaching of wax. I looked up a number of methods and processes that we would try in the laboratory, and I have in these envelopes thirty or more samples of wax which have been treated by the various chemicals. I am not going to take up your time by discussing them all individually, it really isn't worth it. I might say as far as the results are concerned they have for the most part been failures. We have tried sulphuric acid in different strengths and we have tried nitric acid and sulphide of potash and sulphuris acid and hydrogen paroxide, and so

forth these enve most cesst has cent. take exce have it we thing shot best ter v point opera ter tc then it is ] jars one v for a was 1 see th much were expos sunlis lookir ject 1 and 1 ably can t inag had a have way a atmos experi bring Would have very 1 nitric sulphu the wi Que acid it Prof