

water; but you can easily understand if materials were added to that honey to adulterate it, that were lighter or heavier than the specific gravity, they would not necessarily give you the percentage of water in the honey. It is with that qualification. If you are not looking for anything further but just the percentage of water, and that you go on the assumption that the rest of the honey is genuine as prepared by the bees, then the specific gravity test will give you approximately the data that you wish, the data that you will obtain by analyzing the honey and ascertaining the per centage of water. Is that clearly understood?

One or two remarks made by Mr Darling I would like to correct, for I must not go on these minutes as being misunderstood. When I was spoken to with regard to this question I did not get up as an authority, but I mentioned the fact that I was quoting from memory, that I had not come prepared to speak upon the subject, but Mr. Darling misunderstands me when he thinks I suggested a standard. I did not suggest a standard. I am of the opinion that we have not sufficient data as yet to establish a standard. I said that I believed in England they hold genuine honeys contain somewhere in the neighborhood of from eighteen to twenty per cent of water, but there were genuine honeys on record which ran as high as twenty-five per cent. What I say is this, if there is sufficient data to show that genuine honey does not reach beyond a certain limit then there is room for legislation on the question. It is a question of chemistry entirely and it seems to me that the data that has been put forward in that bulletin is about our only collection of Canadian data on this subject; it is extremely valuable but it has not been taken up with that point in view and it probably will be highly desirable to have such a committee appointed as Mr. Holtermann has suggested, which will undertake to secure genuine honeys from various sources over large geographical areas at points distant from one another and honey collected by different races of bees and from different kinds of flowers, basswood, clover, etc., analyze those and see if any conclusion can be arrived at, if any deduction can be made, as to this question of the per centage of water in honey. I do not think there would be any injustice in making twenty-five per cent. the limit. You must know that milk fluctuates very much and there are plenty of cases of genuine milk, which would be accounted adulterated by law. If there

is milk sold in a city with two and a half per cent. butter fat and eight per cent. solids, not fat, the law says that is adulterated; the man swears that that milk is just as it came from the cow; the law says, we cannot help that, the law has fixed that standard. But, that is an isolated case. If you take the milk of the whole herd it will come up to three per cent. of fat at the very lowest. That is the way in which these matters are arrived at. In regard to that word "genuine" in Mr. MacFarlane's report, I am not here to interpret it, I hesitate to do it, but really I do not believe he put down that word "genuine" having that in his mind with regard to the per centage of water in that honey; what I think he meant by that word was that it had not been admixed and had added to it glucose, syrup, cane sugar or other saccharine matter. I think that was what his idea was, that there were not extraneous sugars or sugar compounds added to that honey, and I think when he comes here and you ask him the question, he will say that was really the idea that was uppermost in his mind when he used the term and that by the use of the Polariscope and by various tests they had been unable to find any glucose, syrups or other materials that are frequently in other countries added to honey.

Mr. J. B. Hall—It means that the honey is genuine, that it simply has water in it.

Mr. Gemmell—I think that is generally understood, that it has no foreign admixture put in it.

Professor Shutt—If you read that bulletin you will see that Dr. MacFarlane covers this point of water. I am not insinuating anything, but I do say this, that Dr. MacFarlane was very guarded, because in that bulletin you will see that he says he could not, from the data that was at hand, come to any conclusion as regards the percentage of water. He did not feel himself able from the data on hand just to say what percentage there should be and if he had not come to any conclusion as to that it is certain that he did not intend that to be included by the word "genuine."

Mr. Gemmell—Does Mr. Holtermann think the honey he saw in Ottawa was adulterated with the addition of water by those retailing it or was it the produce of those who harvested it?

Mr. Holtermann—I have seen it from year to year and it is bottled and corked there like a pickle bottle and I have every reason to believe that it was unripe when put upon the market.