

just how profitable it is I do not know. There is no chance at all of putting up sweet preserves or jams and sending these from Canada to compete with those made in Britain. The cost of the sugar and the cost of the glass and the tin packages are so much less there than here that we are out of the trade.

Mr. BRODIE.—I might mention one matter in connection with shipping apples in cold storage. The moment they are taken off the trees and put in a barrel they should be put in cold storage immediately, because if they are left a couple of days the ripening process goes on and they will be a total loss to the shipper.

TRANSATLANTIC TRANSPORTATION.

The PRESIDENT.—As the questions seem to come in the line of transportation, I think it would be well to take that subject up now; and as you have had so much to do, Professor Robertson, in the transportation of fruit, I would ask you to open the discussion, and then others who are desirous of speaking on that subject will be gladly heard.

Prof. ROBERTSON.—What I have to say on this subject will be rather suggestive than didactic. The more quickly an apple ripens the more quickly it rots. Ripening of apples goes on only when the fruit is held at a high enough temperature. If the temperature be put down low—say to 36° Fahr.—the ripening process practically stops. Now, unless some external means are taken to reduce the temperature, the ripening process goes on; and the ripening itself produces heat, and, therefore, makes the ripening go on still faster. I did not know one of the main uses of cold storage until I learned this morning from the paper read in the convention that the cause of the ever increasing heat in apples was traceable to the actual presence of the Devil in the fruit. (Laughter.) Then I began to see that the Devil himself, accustomed to a warm place, could not go on working in a very cold room. (Laughter.)

Mr. PATTISON.—Some of the commission men should be put in cold storage also. (Laughter.)

Prof. ROBERTSON.—The reduction of temperature would certainly destroy the works of the Devil in the apple, and that in a general way is said to be the highest use of human talent. Apples in ripening do create heat, and there must be a chance for letting the heat that is generated escape and also a means of stopping the production of heat.

The early ripening apples should be cooled down to below 50° Fahr. just as soon as they can be cooled after they are taken off the trees, and then they should be cooled down as low as 40° Fahr. as soon as may be after that. By that means even the very earliest ripening sorts could be landed in Great Britain in first-rate condition. Now, if they are put in barrels at even 60° Fahr. and headed up close they will get up to 70° Fahr. in the centre of the barrel in a short time. If they are put in the hold of the ship, the whole place gets above 70° Fahr. in a short time, and then the apples arrive as "wets" and "slacks."

In 1897 a lot of over 500 barrels was sent; the half that went into cold storage sold for 18s. a barrel, and the half that went not in cold storage sold for 8s. a barrel at the same time. There is no way of carrying these tender apples across except in cold storage. Other varieties of apples can be carried in cool ventilated holds.

Our large apple trade, to say nothing of the tender and early-ripening and early-decaying sorts, is not in a good way; it is not on a good basis. I think I am quite within the mark in saying that 60 per cent of the apples that go to Great Britain fetch less than two-thirds the price they could fetch if they were properly