

APPENDIX No. 1

THE IMPORTANCE OF QUICK COOLING.

Now, I want to give you one illustration as to the advantage of the quick cooling of these early varieties. You have all heard of the famous Gravenstein apple as grown in Nova Scotia. It grows, of course, in other districts of Canada, but it grows particularly well in some parts of Nova Scotia, and I think the reputation of Nova Scotian apples has been made as much by the Gravenstein as by any other. In 1909 a very large percentage of the Gravenstein apples arrived on the market in a wasty, unsatisfactory condition. It was warm weather at the time of packing, and there were other peculiarities of the season which contributed to the condition in which they arrived on the market. They were put in barrels in a fast ripening condition and shipped to the Old Country and to other markets, and arrived very much out of condition, and there was a great deal of loss as a result. Last fall, as a part of a representative exhibit from the different provinces at the National Apple Show which was held at Vancouver, I arranged with some of the fruit growers in Nova Scotia to prepare some half dozen boxes of Gravensteins, along with other varieties, and send them to Ottawa as soon as they were picked. They were then put in cold storage here and shipped to Vancouver on the 22nd of October by express, just in an ordinary express car, which was warm of course. Those apples were on exhibition in Vancouver until the 5th of November when they were returned to Ottawa. They were in good condition for three weeks after they reached this city. Every apple in the box was sound and in good condition. That was a very much more severe test than they are subjected to when placed on the market in the ordinary way, and shows the value of prompt cooling. Provision for cooling the Gravenstein, as well as other choice early varieties, would add greatly to the profits in growing or handling them, and tend to still further enhance their reputation.

Now as to the cold storage for later varieties. If I were asked why I think cold storage is useful in handling late fall or winter varieties I would put the case something like this: A large percentage of all apples become more or less wasty and over-ripe before they reach the consumer. Now, that is partly the result of injuries which the apples receive in the picking and handling, and it is partly because they are held for a few weeks at too high a temperature. Even our latest varieties are exposed to temperatures which are not sufficiently low to check these life processes in time, and in consequence a large percentage of the apples become over-ripe and wasty before they reach the limit of their season—the season that they may be expected to be good in.

COLD STORAGE WILL NOT PREVENT ALL WASTE.

Cold storage will not prevent all this waste, not by any means, and I do not want any one to get that impression from anything I may say, because I think there is really as much room for improvement in the handling of apples so as to prevent bruises and skin punctures of one kind and another, as there is in the application of cold storage. If you have your apples perfect, sound in the skin, with no bruises and no punctures of any kind so that the moulds cannot find entrance, winter varieties will keep a long time even without cold storage; but with the aid of cold storage you can extend their season, and those which are not quite so perfect will be preserved in better condition. We notice that apples keep very much better some seasons than they do in others. I am speaking now of the winter varieties. In 1909 it was found that the Northern Spy, which is one of our prominent varieties, as you know, kept very badly, it turned out badly early in the season. There was reason for that and I think it was simply this: that at the time of harvesting and after the apples were packed, while they were still in the barrels lying round, the weather was unusually warm, and that meant of course that there was a very rapid deterioration. Now, if these apples could have been chilled, and without any delay, at the time they were harvested, it would have meant a considerable saving to the apple growers and