

5. The Woolverton and Hunter crates are well equipped for shipping the heaped leno basket. As safe carriers of fruit they are more easily adapted to Ontario conditions than the western box, and, although costing more, will undoubtedly make greater net returns in eastern markets. This would not prove true with western shipments if based on a large number of trials.

6. The bushel basket for marketing peaches is not adapted to western markets.

THE USE OF LOW PERCENTAGE OF SALT WITH CRUSHED ICE IN BRINE TANK CARS.

Through the general criticism of the brine tank refrigerator cars by the growers and shippers of perishable products, the attention of the Department of Agriculture was called to the subject in 1913. During that season the transportation companies furnished the fruit growers of British Columbia with approximately 50 per cent of that type of car. While the brine tank refrigerator has been found admirable for the shipment of such perishable produce as poultry, meats and dairy products that require very low shipping temperatures, it has not been found satisfactory for fruits. Many shippers have refused to ship in them altogether, and consignees or prospective purchasers who have had experience with brine tank cars rule against them in ordering carloads of fruit.

It is generally understood that for dressed meat or poultry shipments from 10 per cent to 20 per cent of rock salt should be mixed with crushed ice in the brine tanks. In this way the ice is melted and removes heat from the interior of the car so rapidly that temperatures below freezing are maintained even in hot weather. However, through the supposed danger of freezing, the salt has been omitted in making fruit shipments in brine tank refrigerators, and the ice has been placed in the tanks in block form, after the same manner that the bunker or block-ice type of refrigerator is iced.

By having the ice shut off in the tanks, melting takes place more slowly and high temperatures are resultant. By placing thermographs in brine tank cars iced in this way, it has been found that the temperature seldom goes below 50 degrees F. The thermograph record shown herewith is a fair sample of such shipments. This shipment was made July 19, 1915, with cherries, currants, etc., precooled to 46 degrees F., and shipped to Winnipeg in car No. 284492 C.P. It will be seen that the temperature actually rose during the shipment and a portion of the cherries showed a waste of 10 per cent upon arrival at Winnipeg.

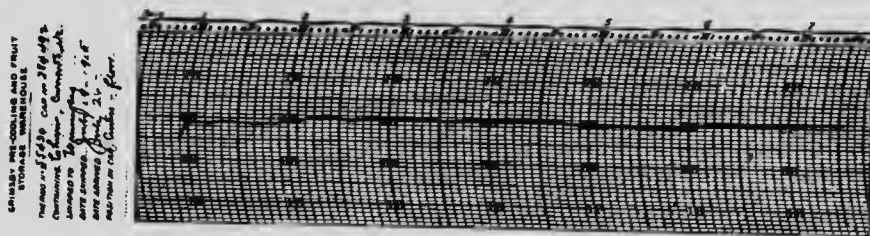


FIG. 1.—Thermograph record. Temperature in a brine tank car, in which no salt was used. Car No. 284,492 C.P.

THE USE OF SALT AND ICE FOR FRUIT SHIPMENTS IN BRINE TANK CARS.

Co-operating with the Canadian Pacific Railway during the spring of 1914, tests were made in Vancouver by the senior author using low percentages of salt, i.e., 2 per cent and 5 per cent of salt with crushed ice in empty brine tank cars. By using 2 per cent of salt the temperature near the tanks reached 32 degrees F., and in the centre