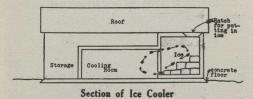
## Ice Storage on Fruit Farms\*

## J. A. Ruddick, Dairy and Cold Storage Commissioner, Ottawa

I BELIEVE that a small room where berries and tender fruits could be cooled, held over Sunday, etc., would be a very useful adjunct to many fruit farms. I would not advocate a low temperature for such rooms, possibly not lower than fifty degrees, because of the damage that would result from "sweating" when the fruit was removed for shipping if lower temperatures were employed. At a temperature of fifty, it would be practicable to have a cement concrete floor and to get some cooling from that source, which is a great advantage.

The walls should have one course of matched lumber and siding on the out-



side, with damp-proof paper between, and double boarding and paper on the inside, with a space of twelve inches between the inside and outside sheathing to be filled with shavings. About onethird of the building should be set aside for the ice chamber with a partition between the ice chamber and cooling room with same insulation as for the outside walls. An additional course of matched lumber on the inside, making a one-inch air space, is advisable for the ice chamber. The air space in this case is to prevent moisture from the ice penetrating the insulation.

The floor of the ice chamber should be constructed in the same manner as the floor in the basement of the cold storage, (See last issue of THE CANADIAN HORTI-CULTURIST), with a slope of one inch in four feet to a gutter at one side to provide drainage from the melting ice. The drainage outlet must be trapped to prevent the passage of air. The floor of the ice chamber should be covered with a wooden grating on which the ice will rest. No covering or packing material is used on or around the ice in such a chamber. Provision is made by means of openings in the partition between the ice chamber and the cooling room, at the ceiling and near the floor, for the circulation of air through the cooling room and over the ice. As the air is chilled, it deposits some of its moisture on the surface of the ice, thus making a fairly dry cold storage. Neither the ice chamber nor the cooling room should be ventilated. The air is changed sufficienly by the occas-ional opening of the door. Ventilation

\*Part of a paper read at the last convention of the Ontario Fruit Growers' Association. Mechanical refrigeration was dealt with in the May issue. means the introduction of warm moistureladen air, which causes dampness. The circulation over the ice tends to keep the air purified.

It is permissible to have small windows in the cooling room, but they should be located at the ceiling, and have at least double sash, each double glazed. There should be an ante room which can be used for storing empties, tools, etc.

Fruit growers will be able to determine individaully whether one of these cooling rooms would be of use to them or not.

## Mistaken Ideas in Fruit Growing B. H. Lee, Berwick, N.S.

Last season was very warm and fruit for some reason did not keep or ship well. Many lots of choice apples left here and arrived in England in very poor condition. This is not an unusual thing in ordinary years, but last season there were very few reports of apples arriving in good condition. There were some lots, however, which did arrive in good condition and brought most excellent prices. This was especially noticeable in the case of one of our Kings County growers, and has led a great many of his neighbors to the conclusion that they are making a mistake in not adopting his methods, which are not generally considered orthodox among fruit growers.

His methods, briefly, are: Keeping the orchard partly in sod; leaving a strip ten or twelve feed wide in sod at the trees, and cultivating and fertilizing the remainder; very little or no pruning; picking the fruit as soon as the seeds commence to turn black; and storing in a cool place. As a result he gets a medium sized but very much firmer apple which carries well and has for a number of years brought the highest prices and last season netted him more money per barrel than any company or individual shipper.

We are growing what has always been considered by us a much better fruit, as we have been educated to believe that the large apple (colored well, if possible) is what we need. Money is what talks in this business and this man's success seems to proclaim with no uncertain sound that we are making the mistake of catering to the English market with an overgrown apple that will not stand the knocks it is bound to get in transit. In such a season as last, it is sure to carry bad. On the other hand, we will make no mistake if we put such fruit upon our local markets, which demand the kind of apple we are growing.

The varieties intended for foreign shipments should be planted in blocks, so that they may be given the treatment required. Pruning and thinning, under these conditions and with some varieties, may not be such important factors as some would lead us to believe.

We are making a mistake in not getting after the younger trees and heading them in so as to more easily spray, prune and pick. Many farmers are still clipping off all fruit spurs near the trunk and compelling the fruit to develop at the top of the tree and at the tips of the branches.



Cultivating the Apple Orchard in Ontario in the Spring On farm of Mr. F. C. Hoar, Bowmanville, Ont.