

# THE USE OF ICE ON THE FARM.

By J. A. RUDDICK.

Every farmer in whose vicinity natural ice is available should store a sufficient quantity for use during the summer months. A supply of ice is worth all it costs, if properly applied in the preservation of milk, butter, meat, vegetables and other perishable articles. The dairy farmer especially will find in a supply of ice a great saving of labour and a positive safeguard in keeping his milk during hot weather. The crudest kind of building, which will keep out the sun and the rain, or the corner of a shed, will serve for the mere storage of ice if dry saw-dust or marsh hay is available in which to pack it for protection against the heat. All that is necessary to do is to provide for some drainage and cover the ice on all sides, top and bottom, with about 12 inches of saw-dust, or 24 inches of hay or cut straw, and protect the covering from the weather.

## THE NECESSITY FOR COOLING MILK.

Patrons of cheese factories or creameries, who wish to keep Saturday evening's or even Sunday morning's milk until Monday morning during the hottest weather, will find a supply of ice indispensable, as well as useful on other nights of the week, if the milk is to be delivered to the factory in proper condition. Proper condition implies not only that the milk must be sweet enough to be accepted, but that it shall not have passed the stage of 'ripeness' which permits of a first-class quality of product being made from it. Milk which is too 'old' or too far advanced towards the stage when it is known as 'sour' will make neither a fine quality of butter or cheese, nor a maximum amount of it. An enormous loss results to the patrons of factories every year in both directions. The amount of waste which occurs from the handling of overripe milk at cheese factories would be astonishing if it could be accurately measured or were more generally known. This waste may be prevented by a proper cooling of the milk at the farms. A supply of ice will facilitate the work and insure successful handling of the milk under any conditions imposed in practical dairying.

A supply of ice on the farm is very necessary for those engaged in a city milk trade. Immediate cooling after milking, to the lowest possible point, is the true secret of preserving milk. Those engaged in supplying milk for direct consumption cannot escape the responsibility which rests on them for exercising every precaution which will enable them to furnish such a necessary and universal article of diet, carrying the least possible danger to public health.

## COOLING WITH WATER ONLY.

The water available for cooling purposes, in the principal dairy districts of Canada, will vary during the hot weather from about 50 to 60 degrees. It is obviously impossible to reduce the temperature of the milk lower than the temperature of the water. In fact, without a specially constructed milk cooler, it is impracticable to bring the temperature of the milk much below the average of the temperature of the water and that of the milk when cooling is begun. Such cooling is sufficient for preserving milk through a period of twenty-four hours or more in the summer.

The effectiveness of water as a cooling medium depends, as has been stated, on the manner in which it is utilized. A very common plan can containing the milk in a tub or tank of water so that water surrounds part of the can. A few figures will demonstrate the measure of efficiency which this plan affords.