3d, when a drop taken hot from the kettle, on being let fall from the edge of the skimmer or spoon into one inch of cold water will pass directly through the water without mingling with it, and rest upon the bottom in the form of a flattened hemisphere: 4th, when a drop taken upon the finger on being touched by the thumb will draw out a thread from one-fourth to one-half an inch long: and 5th, when a small quantity taken into a saucer or spoon, and thoroughly cooled, will granulate, so that it can be detected by the eye, the taste, or when crushed between the teeth; then it may be removed from the fire for "it is done." These tests, particularly the 3rd and 5th, are useful to beginners as aids in forming a correct judgment; but one long practised in the business seems, intuitively, to recognize the time when the grain will form, and the boiling should cease.

The liquid sugar may now be "turned off" into vessels to cool and granulate. If a fine grain is desired, rapid cooling in shallow pans, with rapid stirring while the crystals are forming will produce the result. If coarse sharp crystals are preferred, leave it undisturbed, in larger quantities until the crystalization is completed. There will be a portion which will not granulate, but will remain as dark coloured molasses filling all the spaces between the crystals of sugar. The quantity of this varies with the season, being greatest near the close; and varies somewhat in different seasons, owing probably to the varying quality of the sap, and the skill used in the process of manufacture.

To obtain a dry sugar, after the granulation is completed, throw the whole into a tub or barrel, prepared for the purpose by boring the bottom with several holes, these holes to be closed until the crystals are well compacted together, say one or two weeks; then remove the plugs and allow the molasses to drain away. The draining will be more perfect, and consequently the sugar of lighter colour, if a wet cloth is spread upon the surface of the sugar, and renewed daily until the draining is completed. The moisture from the cloth, gradually settling down into the sugar, dilutes the molasses, rendering it more liquid, and of course it passes away more thoroughly. A little of the sugar becomes dissolved and carried away by the descending water, but this is not lost, as it mingles with, and becomes a part of a very good molasses. The draining should be done in a warm room, for cold also renders the molasses more liquid and the draining more perfect.

Instead of barrels or tubs with perforated bottoms, inverted pyramidal, or hopper-shaped boxes are sometimes used in draining. These boxes may be 12 or 15 inches square at the top, by two inches square and open at the bottom, and three feet long; with a hole at the smaller end for the escape of the molasses; to be suspended like a hopper. These are better than those barrels, for the reason that the quantity of sugar near the bottom, where the drainage is always imperfect, is comparatively small.

Thus we have a crude sugar equal in every respect to the corresponding grade of cane sugar; and superior to it in this, that we know it has been prepared under circumstances far more favourable to cleanliness than exists on Southern plantations, where the operators are driven to their tasks, and care only to avoid the dreaded lash.

It was my intention to offer some suggestions upon the subject of refining, a branch wholly distinct from the manufacture of crude sugar; but the undue length to which the subject has already extended leads me to forbear a further trespass upon your columns. I stop here the more willingly from the fact that the further process of refining, adds nothing to the real value of the sugar, but rather the reverse; for by it weight, and the peculiar maple flavour are, in a measure, sacrificed for an improvement in colour.

Osier Willow.

To H. C. Thomson, Esq.,

Secretary, Board of Agriculture.

Dear Sir,—The following paper on the culture and management of the "Osier Willow" has been reprinted in England from the *Rural New Yorker*. It is a subject which every common farmer may easily understand, and there are hundreds of places in Canada well adapted for planting the Osier Willow with success and profit; therefore, without further preface, the following is a copy of the printed paper:—

"Having lately seen several inquiries respecting the Osier Willow and its culture, and being asked almost daily, 'Do you think it will pay?' I have concluded to send you my experience in its cultivation. Three years ago this spring after corn-planting, I set two acres of the French Osiers, placing them in rows three feet apart, at a distance of one foot from each other; the first year I cultivated and hoed the same as corn, and many of the shoots attained the height of four feet. The next spring I cut them, but having no machine for peeling lost the crop, except a few used for sets. Last spring I cut, and commenced peeling by hand, which I found rather an up hill business, and almost resolved to abandon their culture if they must be peeled in this way. About this time a machine was invented for peeling willows. I immediately procured one, which worked to my entire satisfaction, and with it finished peeling my crop, which when ready for market, in-