

and giving them a brisk blow with a mallet. Ground sharp at the wide end, they are easily driven into a tree.

Never allow the sap to stand in pails twenty-four hours—the fresher it is when boiled the purer will be the sugar. While boiling, large quantities should not be poured in at a time, as that will stop it, and make irregular work; but a reservoir should be placed above the boiler, from which the sap may be drawn in a stream through a faucet, just fast enough to supply the evaporation. A little practice will enable the operator to judge how large this stream should be. Two boilers are better than one if the fire is made to pass from under one to the other—the first or hottest being chiefly for boiling down to syrup, and the second or coldest for heating the sap and doing the first evaporating. The faucet of fresh sap runs into the first, and a pipe of syphon, with faucet, conveys it to the second. Cook's patent sugar evaporator is very valuable for boiling the juice of sorghum, as it reduces the juice to molasses in less than half an hour by a continued process, and would be very useful for maple sugar, but less indispensable. It is on a principle similar to that of the two boilers above described, but more complete and perfect; the sap enters one end and flows from one side to the other many times by means of intercepting partitions, till it reaches the other end, by which time it is reduced to syrup, the proper current being given by raising or depressing the end, as the case may require.

Kettles are poor boilers—they waste fuel and make poor sugar. Shallow sheet-iron pans are much better. They may be kept cleaner, they evaporate more rapidly, make finer sugar, and effect a great saving of heat. In all cases, the boilers should be so set that a thin sheet of flame may pass under them. For example,—a sheet of flame, two inches thick under a boiler, is as good as if a foot thick—the same amount may therefore be spread over six times the surface, and consequently be about six times more economical.

We have some good home-made pans, used for boiling sorghum successfully, made by nailing good thick sheet-iron to plank, so that the sheet-iron formed the bottom and ends, and the plank the sides—the sheet-iron was secured to the plank by two rows of closely driven nails. The pans were about 8 feet long, and 4 wide, and 6 inches deep. These would be cheap and very good for making maple sugar. The fire place should of course be a little narrower than these pans. The chimney should be high enough to cause a good draught.

To make good syrup, the sap must be reduced to one-twentieth or one-thirtieth of its bulk, or be boiled twice as much as sorghum juice. The syrup is then to be strained through flannel, and placed aside to cool and settle 12 to 24 hours. Then return it to the pan, and to every gallon add and stir a beaten egg and a gill of milk to clarify it, keeping it carefully from boiling till the scum has risen and has been skimmed off. Then boil it carefully until it will harden, which may be known by dropping some from a spoon into cold water. When this takes place, the liquid sugar may be then

poured into proper vessels, and then the cakes placed in a box to drain. To make the sugar perfectly white, lay a few thicknesses of flannel on the top of the cakes while it is draining, these flannels to be wet and washed daily with cold water—they will thus absorb and wash out the colouring matter.

A hundred good sugar maple trees will usually make in a season from two to three hundred pounds of sugar, if well managed; and if every precaution is observed to ensure cleanliness, prevent souring, boil speedily and without burning, and to clarify properly, a larger quantity of sugar will be made, it will be more saleable, and command a higher price; or if intended for home use, the smiles of the farmer's kind wife, when she sees such a beautiful article make its appearance, will more than repay him for all the pains he has taken to secure such excellent success.

There are many small things that require attention in winter. A gate not kept fastened by a good self-fastening latch, and swinging in the wind, will be more injured in a short time, than by months of legitimate use. An equal injury is sustained if the gate has sagged and the latch strikes some other part of the post. Take a mild day and attend to all of them. It is important to keep latches and hinges greased; and in order to have grease always at hand when wanted, bore an inch hole in some part of the gate-post, put in a lump of tallow and plug it up. It is then always ready.

Every farmer knows that a gate is rapidly twisted to pieces when it has settled and has to be dragged over the ground every time it is opened and shut. The same injurious result is produced when snow drifts form an obstruction to its motion. All farm gates should therefore be so constructed as to be capable of being raised a foot or two, to avoid the snow. The raising of the gate is accomplished in various ways. One, which answers well where the amount of snow is small, is to make a screw and nut for the lower hinge, so that by turning the nut the hinge is lengthened, and the latch end of the gate raised several inches. Another way is to have two sets of holes through the hinge post, so that the hinges may be changed for summer and winter. A third is to have the gate so made as not to come within a foot and a half of the ground, sliding in a wide board into a groove in the posts whenever small animals are to be shut off.

Examine stove-pipes, and see that they are all firm and safe. Do not allow the soot to accumulate in them, so that when it gets on fire some windy night it may set the house in flames. Never allow a stove-pipe to pass near wood. Burn the soot out of chimneys at some time when the roof has been wet with rain or melting snow, by lowering a bundle of straw or two from the top, and dropping a blazing wisp upon it. Probably nine-tenths of the houses that are burned in the country are ignited by the soot taking fire when the shingles are dry, and portions of it dropping on the roof. Keeping the soot well burned out of the chimney, and all that part of the roof near it, or the whole, whitewashed with a mixture of