

The quantity, color and taste are materially influenced by the care taken in the various stages of its manufacture, the cleanliness observed in the gathering of the sap, and its evaporation to the graining point. By reason of the high temperature required in the last stages of evaporation, unless great care be taken, it is very apt to be burnt, and acquires a bitter empyreumatic flavor, very different from its own peculiar aroma and taste.

To gather the sap in buckets from fifty or one hundred trees, and carry it by manual labor to the kettles, we know from experience is rather hard work, and we much prefer having previously broken out good roads, to let the conveyance be done in a barrel on a sled drawn by horses or oxen, than carry it ourselves. Much lifting may oftentimes be saved, if the place of manufacture be so much elevated on one side that the sap will run from the barrel or hog-head into the boilers in a steady stream by simply turning a faucet near the lower part of the cask used for its conveyance.

It has also been ascertained by careful experiments that the flow of sap depends more upon the depth of the incision than upon its external size—also that an aperture half an inch in diameter is almost equally as effective as one of double its size; but in the one case the wound readily heals over by the growth of the same season—in the other, the growth of several seasons will hardly close the wound, endangering the vigor and health of the tree.

The experiment to which we refer was made under the direction of the Agricultural Club of Brattleboro', Vt., and is in substance as follows: "In the spring of 1850, a committee consisting of three persons, was appointed to ascertain by actual experiment the proper size and depth of the bore in tapping the sugar maple. They accordingly proceeded to test this question in the most thorough manner, using all sizes of bits, from half an inch to an inch and a half in diameter—each making his experiment independently of the other—and the result of all was, that no difference could be perceived—the half inch giving as much sap as any other. Each one also tapped several trees, setting two buckets to a tree, with a single spile to each, but bored to different depths, from one to three and a half inches; and the results in this case were in every instance, when the weather was sufficiently warm to thaw the tree through, that the flow of sap was in proportion to the depth of bore; and to make the matter more certain, on deepening the shallow bores subsequently, they immediately overtook the others in quantity.

These experiments were repeated in 1851 by a different committee, with the same general results."

The sap of the sugar maple and a few other trees only, yields sugar when taken from the tree before the expansion of the buds and blossoms from their dormant state;—what precise change is induced by the expansion of the buds, whether of cause and effect, we know not. We also know that clear bright days alternating with frosty nights give the greatest flow of sap; and that if mild weather ensues and continues for any length of time, we can only obtain an uncrystalizable syrup as the product.

Supposing your buckets are all in order and readiness—troughs made by the axe we would only use as a last resort, simply because they become such convenient receptacles of dead leaves, &c.—take your spiles or tubes of suitable diameter, with a hole through them of one-quarter of an inch in diameter, with an auger, bore about three inches into the body of the tree, let the tube enter the tree only so far as will be necessary to ensure its permanent attachment; attach your bucket to a nail or peg driven into the body of the tree a little above the spout, and you may feel secure that a casual thaw will not perhaps upset your trough and spill the sap.

Below we give an account of the process adopted by Mr. WOODWARD, who obtained the premium from the State Agricultural Society, in 1846, for the best article of maple sugar. The statement says:

"In the first place, I make my buckets, tubs and kettles all perfectly clean. I boil the sap in a potash kettle, set in an arch in such a manner that the edge of the kettle is defended all around from the fire. This is continued through the day, taking care not to have anything in the kettle that will give color to the sap, and to keep it well skimmed. At night I leave fire enough under the kettle to boil the sap nearly or quite to syrup by the next morning. I then take it out of the kettle and strain it through a flannel cloth into a tub, if it is sweet enough; if not, I put it in a caldron kettle, which I have hung on a pole in such a manner that I can swing it on and off the fire at pleasure, and finish boiling, then strain into the tub, and let it stand till the next morning. I then take this and the syrup in the kettle, and put it altogether in the caldron, and sugar it off. To clarify 100 lbs. of sugar, I use the whites of five or six eggs, well beaten, about one quart of new milk, and a spoonful of saleratus, all well mixed with syrup before it is scalding hot. I keep a moderate fire directly under the caldron until the scum is all raised; then skim it off clean, taking care not to let it boil so as to rise in the kettle before I have done skimming it; when it is sugared off, leaving it so damp that it will drain a little. I let it remain in the kettle until it is well granulated; I then put it into boxes made smallest at the bottom, that will hold from fifty to seventy pounds, having a thin piece of board fitted in two or